

**MONTGOMERY COUNTY PLANNING COMMISSION
November 14, 2012**

SITE VISIT AGENDA

NO SITE VISITS SCHEDULED

5:30 PM Dinner @ El Gran Rodeo, Laurel Street, Christiansburg (next to O'Charleys)

MONTGOMERY COUNTY PLANNING COMMISSION
November 14, 2012 @ 7:00 P.M.
Multi-Purpose Room #2, Government Center

A G E N D A

CALL TO ORDER:

DETERMINATION OF A QUORUM:

APPROVAL OF AGENDA:

APPROVAL OF CONSENT AGENDA:

PUBLIC ADDRESS:

PUBLIC HEARING:

1. Review of the following public facility for conformance with the Montgomery County Comprehensive Plan in accordance with VA Code Section 15.2-2232:

Appalachian Power's proposal to construct approximately 7.5 miles of 138 kV transmission line, known as the Falling Branch-Merrimac Project, to reinforce the transmission grid that serves customers in Montgomery County, the Town of Blacksburg and the Town of Christiansburg. The project will connect to the existing Merrimac and Falling Branch substations. The company's application to the VA State Corporation Commission (SCC) identifies a Preferred Route – a 500' wide corridor in which ultimately a 100' right of way will be located. The SCC hearing examiner has recommended the approval of the preferred route. The new facilities will be constructed using a combination of single pole structures with an average height of 100 feet in more developed areas and H-frame structures with an average height of 80 feet in more rural areas. Both types of structures will require a 100 foot-wide right of way. The project is located in the mid-County area of Montgomery County in areas designated as Rural, Resource Stewardship, Residential Transition, Urban Expansion and Urban Development Area in the Montgomery County 2025 Comprehensive Plan.

- a. Staff Presentation (Steven Sandy)
- b. Public Comment
- c. Discussion/Action

OLD BUSINESS:

NEW BUSINESS:

- Election of Officers
- Tourism Council Liaison Appointment

WORKSESSION:

- Comprehensive Plan- Transportation Chapter Discussion (Steve Sandy)
- 2013 Work Program Discussion (Steve Sandy)
- NRV Livability Update (Steve Sandy)

-OVER-

LIAISON REPORTS:

- Board of Supervisors- Chris Tuck
- Agriculture & Forestal District- Bob Miller
- Blacksburg Planning Commission – Frank Lau
- Christiansburg Planning Commission – Bryan Rice
- Economic Development Committee- John Tuttle
- Public Service Authority – Joel Donahue
- Parks & Recreation- Cindy Disney
- Radford Planning Commission- Bob Miller
- School Board- Bill Seitz
- Planning Director's Report- Steven Sandy
 - Safe Routes To School Grant Application

MEETING ADJOURNED:**UPCOMING MEETINGS:**

- November 21, 2012 Planning Commission Regular Meeting (Cancelled)
- December 12, 2012 Planning Commission Site Visit (To be determined)
Planning Commission Public Hearing (7:00 pm)
- December 19, 2012 Planning Commission Regular Meeting (Tentatively Cancelled)

**MONTGOMERY COUNTY PLANNING COMMISSION
CONSENT AGENDA
November 14, 2012**

A. APPROVAL OF MINUTES

- October 10, 2012

ISSUE/PURPOSE:

The above listed minutes are before the Planning Commission for approval.

B. SCHEDULE THE FOLLOWING ITEMS FOR PUBLIC HEARINGS BEFORE THE PLANNING COMMISSION ON DECEMBER 12, 2012 AND BOARD OF SUPERVISORS ON DECEMBER 17, 2012

No public hearings to be scheduled

AT A MEETING OF THE MONTGOMERY COUNTY PLANNING COMMISSION ON OCTOBER 10, 2012 IN THE BOARD ROOM, SECOND FLOOR, COUNTY GOVERNMENT CENTER, CHRISTIANSBURG, VIRGINIA:

CALL TO ORDER:

Mr. Lau, Chair, called the meeting to order and welcomed Bryan Katz to the Planning Commission.

DETERMINATION OF A QUORUM:

Mr. Tuttle established the presence of a quorum.

Present: Frank Lau, Chair
Joel Donahue, Vice-Chair
John Tuttle, Secretary
Bryan Katz, Member
Robert Miller, Member
Bryan Rice, Member
Cindy W. Disney, Member
Jeanne Stosser, Member
Chris Tuck, Board of Supervisors Liaison
Steven Sandy, Planning Director
Dari Jenkins, Planning & Zoning Administrator
Brea Hopkins, Planning & Zoning Technician

Absent: William Seitz, Member
Jamie MacLean, Development Planner

APPROVAL OF AGENDA:

On a motion by Mr. Rice, and seconded by Ms. Stosser, and unanimously carried the agenda was approved as amended with discussions regarding the Transportation Chapter of the Comprehensive Plan and the Texas Road Park being added to Worksession.

APPROVAL OF CONSENT AGENDA:

On a motion Mr. Donahue, and seconded by Mr. Tuttle, and unanimously carried the consent agenda was approved.

PUBLIC ADDRESS:

Mr. Lau opened the public address; however, there being no speakers, the public address session was closed.

NEW BUSINESS:

Mr. Lau read the proposed Resolution of Appreciation for Walt Haynes.

On a motion by Mr. Miller, seconded by Mr. Rice and unanimously carried the planning commission approved the following Resolution of Appreciation for Mr. Haynes:

WHEREAS, Walter "Walt" Haynes provided dedicated and distinguished service to the people of Montgomery County as a member of the Montgomery County Planning Commission from March 2005 until his death on June 9, 2012; and

WHEREAS, Mr. Haynes provided leadership while serving as elected Chair (2012), and Vice-Chair (2008, 2009, 2011) of the Planning Commission; and

WHEREAS, Mr. Haynes commitment to better planning was evidenced by his participation in the development of the six (6) village plans, the Village Transportations Links Plan (VITL) in 2007, by his service as liaison to the Parks and Recreation Commission and the Blacksburg Planning Commission; as well as his achievement of Certified Planning Commissioner; and

WHEREAS, the wise council of Mr. Haynes, which has always been for the betterment of the citizens of Montgomery County, will be missed by his fellow Planning Commissioners and Planning Staff.

NOW THEREFORE, BE IT RESOLVED, that the Montgomery County Planning Commission hereby expresses its appreciation for the outstanding, and dedicated service that Walter "Walt" Haynes provided to the people of Montgomery County.

Appointment of Nominating Committee:

Mr. Lau appointed Mr. Miller, Mr. Tuttle, and Mr. Donahue to the nominating committee.

WORKSESSION:

On a motion by Mr. Donahue, seconded by Mr. Rice and unanimously carried the Planning Commission entered into worksession.

Shawsville Area Route 11/460 Corridor Study Plan

Mr. Sandy stated the NRV PDC had been working on the corridor plan to complement the Lafayette Area Plan and to address issues with the Alleghany Spring Road intersection. A draft plan has been prepared and Mr. Sharp is here to discuss the plan.

Mr. Elijah Sharp, NRV PDC stated the study was conducted in partnership with the PDC and County. at no cost to the County. He reviewed the area studied and noted existing plans or policies would be considered such as the Shawsville Village Plan and the Village Transportation Links Plan. Issues such as inconsistent spacing of entrances/intersections, sight distance, flooding, etc. have been identified and classified based on meeting the current standards. He noted that 60% of the entrances do not provide good sight distance. Potential improvements to the corridor could include a reduction in the number of crossovers and entrances, additional turn lanes, and additional signage or devices to alert motorists to potential hazards such as flood prone areas.

Ms. Disney discussed issues at the entrance to the rescue squad.

Mr. Katz stated it might be beneficial to look at a higher classification of roadways and implement some of those strategies, because of the potential for upgrading the corridor. For example, a "Minor arterial" might be a more appropriate classification for this roadway.

Mr. Sandy stated VDOT has also initiated a study and this information would be submitted for inclusion as part of their plan. Further discussion with them may lead to a change in the road classification. This information can also be used to assist in rezoning/sup requests. Mr. Sandy suggested that this plan not be adopted until VDoT has completed its study in Spring 2013.

Transportation-Comprehensive Plan

Mr. Sandy discussed an amendment to the Code of Virginia Section 15.2-2223 requiring a transportation plan be included in the County's Comprehensive plan. The plan shall include a map, be consistent with the Statewide Transportation Plan, and be reviewed and approved by VDoT. Currently, there is a transportation resources chapter in the comprehensive plan; however, it will need significant updates to meet the new state code requirements. This will require bringing together all the various transportation plans that have been previously developed. In order to address this project staff proposes the following: (1.) securing an intern to assist with information gathering, (2.) notify VDoT of the plan update in 2013, (3.) work with various agencies to develop a Montgomery County transportation map, (4.) update the transportation resources chapter of the comprehensive plan and (5.) conduct public meetings/hearings as necessary.

Mr. Sandy noted that there are several major road projects in design phase and will be underway in the next years. These projects will need to be considered in the development of a new transportation plan.

Keeping of chickens in residential zoning districts

Ms. Hopkins stated a possible amendment to the zoning ordinance was discussed previously which would allow chickens in residential zoning districts. The Planning Commission had requested some additional information prior to proceeding with the amendments. Staff had developed a map which shows parcels zoned residential within the County. Of those parcels, there are approximately 255 lots greater than five (5) acres in size. 81% of all residentially zoned parcels are two (2) acres or less in size. She discussed options to allow chickens in a residential area including; developing a sliding scale where the number of chickens allowed would be proportionate to the number of acres, or setting a minimum lot size in order to have chickens. Should the Planning Commission choose to not proceed with an amendment, property owners of residential parcels may apply for a downzoning to Agriculture or Rural Residential (based on lot size) if they desire to have chickens.

The planning commission discussed the options available, the number of people impacted, and the other options available to property owners if they did not proceed with amendments to the ordinance.

Texas Hollow Park

Mr. Sandy stated the property known as Texas Hollow Park in Plum Creek was dedicated as open space for a park and donated to the county in 1995. The County initially spent \$50,000 to open the park not including maintenance expenditures. The park has had problems with vandalism, drug use, etc. for years and is very costly to maintain. The Sheriff's Office is continually called to the area because of suspicious/illegal activity. He reviewed a map of the park. The county is in the process of selling surplus properties and this property was among those identified for being offered for sale. There are legal issues since it was part of a rezoning request and was accepted by the board. He stated the options to sell the property would still need to be researched. The park will need to be rezoned to eliminate the proffered conditions that apply to the parcel and the Village Plan would likely need to be amended since the parcel is identified as a civic area. Mr. Sandy noted the other park in the area, known as Plum Creek Park was developed in the late 90's and is in a location that is more visible, monitored during the day, and is utilized more which prevents the vandalism and illegal activity.

On a motion by Mr. Tuttle, seconded by Mr. Miller and unanimously carried the Planning Commission exited worksession.

On a motion by Mr. Tuttle seconded by Mr. Miller the Planning Commission recommended not to proceed with an amendment to allow keeping of chickens in residential districts.

Ayes: Miller, Tuttle, Lau, and Katz

Nays: Rice, Stosser, and Donahue

Those members voting in favor of the motion believed that this was not a problem that needed to be addressed at this time by creating additional regulations. Those members voting in opposition suggested that additional research and consideration should be given to this issue.

LIAISON REPORTS:

Board of Supervisors: Mr. Tuck reported that the Prices Fork Elementary School had been deeded to the County. Currently, they are in the process of obtaining appraisals for demolition of the building and the value of the land. There has been a development proposal which would preserve the school and consist of commercial space with an amphitheater in rear of property. The Board of Supervisors also held a discussion regarding the Prices Fork Park proposal. Several people are in opposition due to traffic concerns and the park being secluded. The property owner has stated it will be a park whether turned over to the county or kept private.

Agriculture & Forestal District: No report.

Blacksburg Planning Commission: Mr. Lau stated the Town was considering additional student housing within town limits.

Christiansburg Planning Commission: Mr. Rice stated the commission discussed rezoning on 114 for business zoning. There have been some personnel changes. Randy Wingfield is now the Assistant Town Manager and Nichole Hair, is the Planning Director.

Economic Development Committee: No report

Public Service Authority: Mr. Donahue stated the PSA discussed the joinder agreement. The Riner sewage treatment plant has been upgraded. There was a large water break near Rowe Furniture; which was fixed by the PSA. It does appear that the line belonged to Rowe Furniture, so they will be seeking reimbursement.

Parks & Recreation: Ms. Disney reported the Texas Park issues were discussed.

Radford Planning Commission: No report.

School Board: No Report.

Planning Director's Report: Mr. Sandy noted that staff was working on scheduling a joint meeting with the Town Planning Commissions to discuss regional issues, transportation, growth areas, etc. All Planning Commission members are invited to the courthouse grand opening on November 7th @ 10am. A 2232 review may be required for AEP's proposed new power line. The CIP plan has not been presented to the planning commission because there have not been many projects; however, in the future the commission will need to be involved with that process.

There being no further business the meeting was adjourned at 9:25 pm.



MONTGOMERY COUNTY PLANNING & GIS SERVICES

755 ROANOKE STREET, SUITE 2A, CHRISTIANSBURG, VIRGINIA 24073-3177

MEMORANDUM

November 8, 2012

TO: Planning Commission members

FROM: Steven M. Sandy, Planning Director *Steve*

RE: VA Code 15.2-2232 Review of APCo Falling Branch-Merrimac Power Line

Background

According to VA Code Section 15.2-2232 (copy attached) the planning commission of a locality is to approve any public facilities as being substantially in accord with the locality's adopted comprehensive plan before it is constructed, established or authorized. Further, the Commission shall hold a public hearing in conjunction with the determination at the direction of the Board of Supervisors.

According to a fact sheet prepared by Appalachian Power Company (APCo), APCo plans to construct approximately eight miles of 138-kilovolt (kV) transmission line to protect the electric service in the area of Montgomery County, Town of Blacksburg and the Town of Christiansburg. The project is needed to meet growing electrical demands and to prevent overloading facilities that serve thousands of customers. The line will be constructed using a combination of single pole and H-frame structures, depending on terrain and right-of-way constraints. The total project is estimated to cost about \$15 million.

Appalachian Power developed preliminary 500-foot-wide study corridors for the project. The study corridors were reviewed by the public, local government, and state and federal agencies. Based on these reviews, APCo has developed a preferred 500-foot wide corridor, and a preferred 100-foot-wide right of way within that corridor to take to its regulators, the Virginia State Corporation Commission (See attached maps). Throughout the state process, and by working with property owners, Appalachian plans to identify the best 100 foot-wide right of way for the power line.

The Montgomery County Board of Supervisors passed a resolution on July 14, 2008 supporting the northernmost routing alternative proposed by APCo (See attached resolution R-FY-09-04). The Board supported this route because it was viewed as having the least impact on existing businesses, residences and viewsheds. In addition, they encouraged APCo to follow existing

railroad and power line rights of way whenever possible. On October 22, 2012, the County Attorney notified the Board of Supervisors of the SCC Hearing Examiner's Report and the Planning Commission's requirement to determine if the facility is in substantial accord with the County's Comprehensive Plan. It was the consensus of the Board that the Commission should conduct a public hearing before making their findings.

APCo filed an application with the State Corporation Commission (SCC) of Virginia on February 9, 2012. The SCC Hearing Examiner issued an opinion and recommendation on the proposed power line on October 5, 2012 (See attached).

Comprehensive Plan Analysis

The Montgomery County Comprehensive Plan was adopted in October 2004 and does not specifically address this proposed public utility facility. However, the Utility Chapter of the Plan discusses the provision of electric services in the County. On page 232, the Plan states, in part, "...The provisions of electric and telecommunication services are basic to any development occurring in the County. ...However, when providing any of these services, the impact upon the natural environment must be mitigated. Examples include overhead power lines in residential subdivisions and telecommunication towers in important view sheds or environmentally sensitive areas."

In addition, Goal 2.0 of the Utility Chapter of the Comprehensive Plan (page 236) states, "UTL 2.0 Electric, Telecommunication and Gas Utility Goal: Provide for the orderly extension of electric service, telecommunication service (land line, wireless and/or cable) and natural gas service in a manner that supports growth and development without negatively impacting the natural environment."

The preferred route identified by APCo and supported by the Board of Supervisors begins at the eastern end at the Falling Branch Substation. As the line begins west it enters the unincorporated area of the County at Blake Drive near Interstate 81. The future land use for this area is designated as Rural on the Policy Map of the Plan. The line crosses over I-81 and aligns with the railroad tracks at the western edge of the Isaak Walton League property. The line runs along the railroad tracks for nearly two (2) miles. This area does include an Agricultural and Forestal District (AFD) however, there is expected to be no impact to the AFD if the power line is constructed within or adjacent to the existing railroad right of way.

After leaving the railroad right of way the line cuts across Ellett and Yellow Sulphur Roads to the County's Landfill location where it runs along the eastern and northern sides until it again connects with the railroad right of way. The future land use in this area is predominantly Rural on the Policy Map of the Plan.

The final segment of the line crosses route 460 through the mid-County business district (Urban Expansion Area) and through the center of the newly created Merrimac Urban Development Area to the connection with the Merrimac substation.

The proposed line appears to be substantially in accord with the adopted Comprehensive Plan and the resolution adopted by the Board in 2008. Staff supports the findings and recommendations of the SCC Hearing Examiner's Report dated October 5, 2012. Staff does suggest several recommendations be forwarded to APCo and the SCC to ensure compliance with County land use concerns as follows:

- Proposed line should be routed to have least amount of impact on existing businesses, residences and view sheds.
- Proposed line should follow railroad and power line rights of way wherever possible to minimize additional negative impacts particularly when crossing an AFD.
- The proposed line should be located along property lines to the maximum extent possible to avoid bisecting parcels.
- APCo should coordinate with the Montgomery Regional Solid Waste Authority for any pole placements within the landfill property.
- Proposed power line structures should be designed and located to have the least visual impact and to accommodate telecommunication antennae placement by telecommunication providers to further the goals of the County's Comprehensive Plan for co-location.
- Tree and vegetation removal should be limited to only those areas necessary for pole placement. Mitigation of forest loss should be provided on at least a one-to-one basis.

For information about the proposed APCo Falling Branch-Merrimac Transmission Line Project go to
<https://www.appalachianpower.com/info/projects/MajorPowerLines/FallingBranchMerrimac.aspx>

In accordance with 15.2-2232 B, the Planning Commission's findings in this matter will be communicated to the governing body, indicating its approval or disapproval with written reasons. The Board may overrule the action of the commission by a majority vote of its membership. The Board is not required to hold an additional public hearing as in rezoning cases.

Please feel free to contact me if you should have any questions or need any additional information regarding this matter.

Enclosures

§ 15.2-2232. Legal status of plan.

A. Whenever a local planning commission recommends a comprehensive plan or part thereof for the locality and such plan has been approved and adopted by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. Thereafter, unless a feature is already shown on the adopted master plan or part thereof or is deemed so under subsection D, no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than a railroad facility or an underground natural gas or underground electric distribution facility of a public utility as defined in subdivision (b) of § [56-265.1](#) within its certificated service territory, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the commission as being substantially in accord with the adopted comprehensive plan or part thereof. In connection with any such determination, the commission may, and at the direction of the governing body shall, hold a public hearing, after notice as required by § [15.2-2204](#). Following the adoption of the Statewide Transportation Plan by the Commonwealth Transportation Board pursuant to § [33.1-23.03](#) and written notification to the affected local governments, each local government through which one or more of the designated corridors of statewide significance traverses, shall, at a minimum, note such corridor or corridors on the transportation plan map included in its comprehensive plan for information purposes at the next regular update of the transportation plan map. Prior to the next regular update of the transportation plan map, the local government shall acknowledge the existence of corridors of statewide significance within its boundaries.

B. The commission shall communicate its findings to the governing body, indicating its approval or disapproval with written reasons therefor. The governing body may overrule the action of the commission by a vote of a majority of its membership. Failure of the commission to act within 60 days of a submission, unless the time is extended by the governing body, shall be deemed approval. The owner or owners or their agents may appeal the decision of the commission to the governing body within 10 days after the decision of the commission. The appeal shall be by written petition to the governing body setting forth the reasons for the appeal. The appeal shall be heard and determined within 60 days from its filing. A majority vote of the governing body shall overrule the commission.

C. Widening, narrowing, extension, enlargement, vacation or change of use of streets or public areas shall likewise be submitted for approval, but paving, repair, reconstruction, improvement, drainage or similar work and normal service extensions of public utilities or public service corporations shall not require approval unless such work involves a change in location or extent of a street or public area.

D. Any public area, facility or use as set forth in subsection A which is identified within, but not the entire subject of, a submission under either § [15.2-2258](#) for subdivision or subdivision A 8 of § [15.2-2286](#) for development or both may be deemed a feature already shown on the adopted master plan, and, therefore, excepted from the requirement for submittal to and approval by the commission or the governing body; provided, that the governing body has by ordinance or resolution defined standards governing the construction, establishment or authorization of such public area, facility or use or has approved it through acceptance of a proffer made pursuant to § [15.2-2303](#).

E. Approval and funding of a public telecommunications facility on or before July 1, 2012, by the Virginia Public Broadcasting Board pursuant to Article 12 (§ [2.2-2426](#) et seq.) of Chapter 24 of Title 2.2 or after July 1, 2012, by the Board of Education pursuant to § [22.1-20.1](#) shall be deemed to satisfy the requirements of this section and local zoning ordinances with respect to such facility with the exception of television and radio towers and structures not necessary to house electronic apparatus. The exemption provided for in this subsection shall not apply to facilities existing or approved by the Virginia Public Telecommunications Board prior to July 1, 1990. The Board of Education shall notify the governing body of the locality in advance of any meeting where approval of any such facility shall be acted upon.

F. On any application for a telecommunications facility, the commission's decision shall comply with the requirements of the Federal Telecommunications Act of 1996. Failure of the commission to act on any such application for a telecommunications facility under subsection A submitted on or after July 1, 1998, within 90 days of such submission shall be deemed approval of the application by the commission unless the governing body has authorized an extension of time for consideration or the applicant has agreed to an extension of time. The governing body may extend the time required for action by the local commission by no more than 60 additional days. If the commission has not acted on the application by the end of the extension, or by the end of such longer period as may be agreed to by the applicant, the application is deemed approved by the commission.

(Code 1950, §§ 15-909, 15-923, 15-964.10; 1958, c. 389; 1960, c. 567; 1962, c. 407, § 15.1-456; 1964, c. 528; 1966, c. 596; 1968, c. 290; 1975, c. 641; 1976, c. 291; 1978, c. 584; 1982, c. 39; 1987, c. 312; 1989, c. 532; 1990, c. 633; 1997, cc. [587](#), [858](#); 1998, c. [683](#); 2007, c. [801](#); 2009, cc. [670](#), [690](#); 2012, cc. [803](#), [835](#).)

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AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF THE COUNTY
OF MONTGOMERY, VIRGINIA HELD ON THE 14th DAY OF JULY, 2008 AT 6:00 P.M.
IN THE BOARD CHAMBERS, MONTGOMERY COUNTY GOVERNMENT CENTER, 755
ROANOKE STREET, CHRISTIANSBURG, VIRGINIA:

R-FY-09-04
APPALACHIAN POWER COMPANY
FALLING BRANCH-MERRIMAC
138 kV TRANSMISSION LINE PROJECT

On a motion by James D. Politis, seconded by Gary D. Creed and carried unanimously,

WHEREAS, Appalachian Power Company (APCO) is in the preliminary stages of identifying proposed study routes for the Falling Branch-Merrimac 138 kV transmission line project; and

WHEREAS, The Falling Branch-Merrimac 138 kV transmission line project is proposed to be approximately 8 miles long beginning at APCo's existing Merrimac Substation (south of Blacksburg), traveling through the existing Hans Meadow Substation (Christiansburg) and terminating at the existing Falling Branch Substation (east of Christiansburg); and

WHEREAS, APCo is accepting comments and suggested alternative routing options through July 18, 2008; and

WHEREAS, The Montgomery County Planning Department has reviewed the maps and other available information provided by APCo with regard to the Falling Branch-Merrimac 138 kV Transmission Line Project and there are numerous potential routes identified by APCo that are located within the Towns of Christiansburg and Blacksburg as well as the unincorporated area of Montgomery County; and

WHEREAS, There are segments of these proposed routes that could potentially impact existing businesses, residences and view sheds in the County; and

WHEREAS, There are segments of these proposed routes that appear to follow existing rail road and power line right of ways; and

WHEREAS, The Board of Supervisors request that APCo review and consider the proposed more northern routes that will have the least amount of impact on existing businesses, residences and view sheds in the County and when possible for those proposed routes to follow existing railroad and power line right of ways; and

WHEREAS, The Board of Supervisors request that APCo notify the property owners that may be effected directly or by adjoining the proposed study routes as soon as possible so that they may be informed and able to comment and be involved in the selection process.

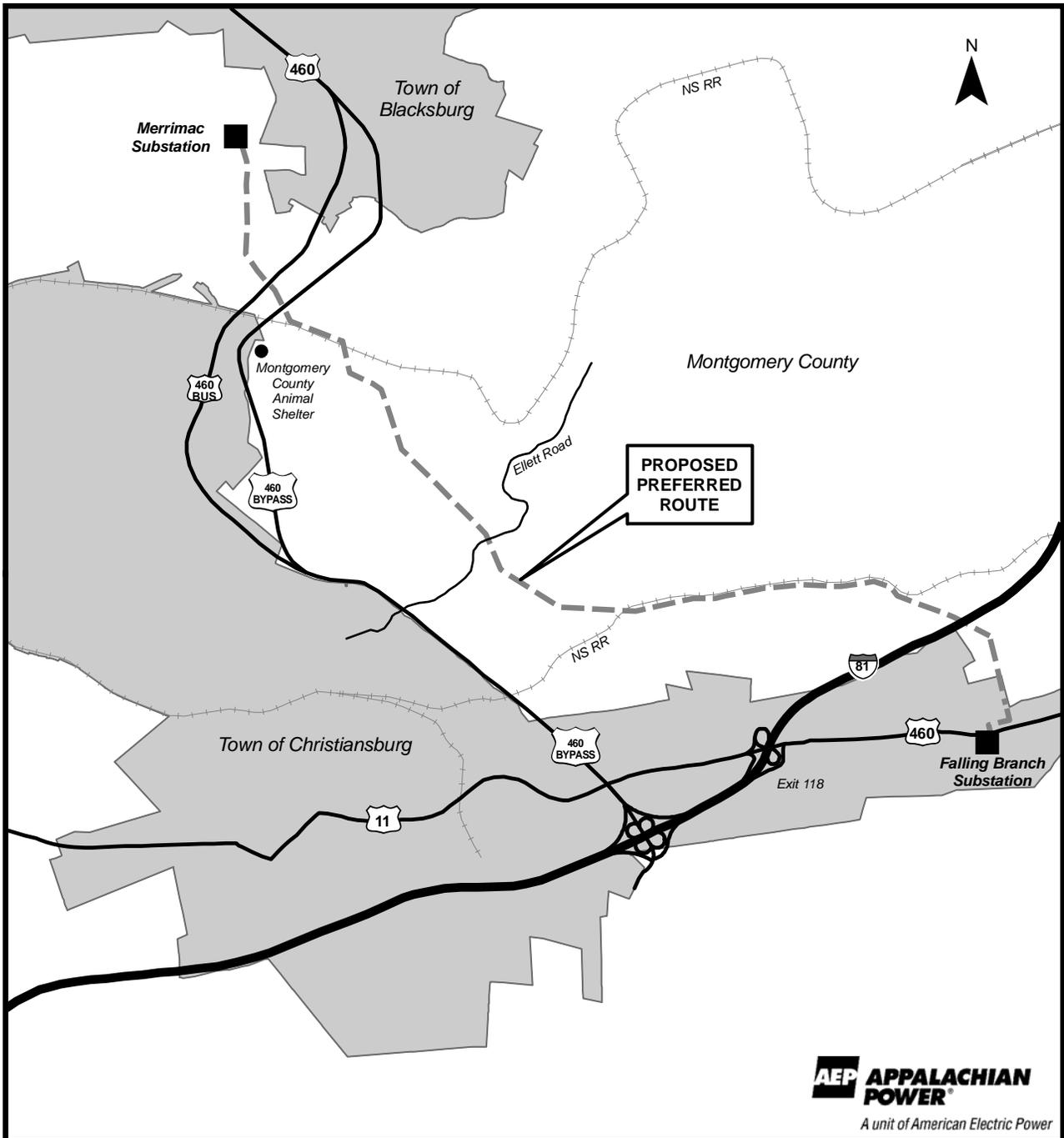
NOW, THEREFORE, BE IT RESOLVED, By the Board of Supervisors of the County of Montgomery, Virginia that the Board hereby requests that APCo review and consider proposed more northern routes to locate the Falling Branch-Merrimac 138 kV line project in Montgomery County that will have the least impact on existing businesses, residences and view sheds and when possible for those proposed routes to follow existing railroad and power line right of ways.

BE IT FURTHER RESOLVED, By the Board of Supervisors of the County of Montgomery, Virginia, that the Board hereby further requests that APCo notify all property owners that may be effected directly or by adjoining the proposed study routes as soon as possible so that the property owners may be informed and able to comment and be involved in the process.

The vote on the foregoing resolution was as follows:

<u>AYE</u>	<u>NAY</u>	<u>ABSENT</u>
Gary D. Creed	None	Mary W. Biggs
James D. Politis		John A. Muffo
William H. Brown		Annette S. Perkins
Doug Marrs		

ATTEST: B. Clayton Goodman, III
B. Clayton Goodman, III
County Administrator



Proposed Falling Branch - Merrimac 138kV Transmission Line



Falling Branch-Merrimac Transmission Reinforcement **138kV Transmission Line**

Appalachian Power plans to construct approximately eight miles of 138-kilovolt (kV) transmission line to protect the electric service in the area of Montgomery County, Town of Blacksburg and the Town of Christiansburg. The project is needed to meet growing electrical demands and to prevent overloading facilities that serve thousands of customers. The line will be constructed using a combination of single pole and H-frame structures, depending on terrain and right-of-way constraints. The total project is estimated to cost about \$15 million.

Why are these new facilities needed?

The project is needed to prevent potential single contingency overload scenarios that could occur. The transmission system in the area primarily consists of 69 kV transmission lines and a radial 138 kV line. The company needs to close the loop on the 138 kV system to prevent overloads.

How many customers are served by these overloaded facilities?

The 138 kV system is a delivery source for thousands of customers in the area.

How will these facilities increase electric reliability?

Electric service in the area is primarily supplied by a single 138 kilovolt (kV) line and multiple 69 kV lines. Between 2003 and 2010, peak electric demand in the area increased by 34 percent to 278 MW and is expected to continue to grow steadily.

The addition of the new power line, which ties together existing electric substations and establishes a looped 138 kV system, will help prevent overloads and reduce the likelihood of interrupting electric service to the region. With a looped system in place, Appalachian can isolate problems when they occur and limit the disturbance they cause to customers.

How will the line route be chosen?

Appalachian Power has developed preliminary 500-foot-wide study corridors for the project. These study corridors will be reviewed by the public, local government, and state and federal agencies. Ultimately, the company will develop a preferred 500-foot wide corridor (or corridors), and a preferred 100-foot-wide right of way within that corridor and take that to its regulators, the Virginia State Corporation Commission. Throughout the state process, and by working with property owners, Appalachian will identify the best 100 foot-wide right of way for the power line.

What kind of structures will the line use?

Appalachian will use single pole and H-frame structures on the new line. The average pole height will be about 100 feet tall.

What is the timeline for the line?

Appalachian is collecting information to identify issues, concerns and identify a preferred corridor. The company intends to file its request with the Commission in the Fall.

How much will the line cost?

We estimate the total project will cost approximately \$15 million.

What will be the environmental impact of this line?

A 138kV line requires a relatively small structure footprint and a 100 ft. right-of-way. The disturbance caused by this project will be limited to moderate tree removal and other line-clearing activities.

Can the line be built underground?

Appalachian Power does not support the practice of putting electric transmission lines underground, except when extenuating circumstances exist, and then only for a short distance. Building transmission lines underground can cause problems and delayed repairs when equipment fails. With overhead facilities, crews can see problems, assess problems and make repairs quickly. When equipment is buried the response time, and in turn the reliability of the equipment suffer. In addition to being less reliable than overhead power lines, underground facilities are much more expensive to build. Utility commissions typically only allow utilities to recoup costs of overhead construction.

Are there health risks from exposure to magnetic fields near high voltage power lines?

All electrical equipment carrying a current generates electric and magnetic fields (EMF). This pertains as much to the electrical appliances in our homes as it does to power lines, power stations and their related equipment. Questions have been raised over the past 20 years about a possible link between exposure to EMF and certain kinds of health effects. While numerous studies have been conducted, as a body of work they have failed to link EMF to specific health effects. More recent studies have cast further doubt on the hypothesized link.

Where can I get more information?

Additional information about the Falling Branch-Merrimac Project is available on-line at AppalachianPower.com, or you can contact Appalachian Power at 1-800-956-4237.

APPLICATION OF

SOC-CLERK'S OFFICE
REVENUE CONTROL CENTER

APPALACHIAN POWER COMPANY 2012 OCT -5 P 3: 31 CASE NO. PUE-2012-00007

**For a Certificate of Public Convenience and
Necessity Authorizing Operation of the
Falling Branch-Merrimac 138 kV Transmission
Line**

REPORT OF HOWARD P. ANDERSON, JR., HEARING EXAMINER

October 5, 2012

On February 9, 2012, Appalachian Power Company ("APCo" or "Company") filed with the State Corporation Commission ("Commission") an application for a certificate of public convenience and necessity seeking Commission approval to construct a new 138 kV transmission line located primarily in Montgomery County, Virginia, with a small portion being located in the Town of Christiansburg, Virginia ("Application"). Prepared testimony, exhibits, copies of correspondence, and other materials were filed in support of the Company's Application.

The Company's Application requests authority to build approximately 7.5 miles of new, overhead single-circuit (6.25 miles) and double-circuit (1.25 miles) 138 kV transmission line between its existing Merrimac and Falling Branch Substations. Both substations would require improvements to support the new line. The Company plans to construct the transmission line within a 100-foot right-of-way (ROW) and utilize a combination of steel monopole and H-frame structures with an average height for the monopoles of approximately 100 feet and an average height for the H-frame structures of approximately 80 feet.

According to the Application, the project is needed to meet growing electrical demands and to prevent overloading facilities that serve thousands of customers in the Blacksburg-Christiansburg area. The Company estimates project costs to be approximately \$25 million and desires to have the project in service by June 1, 2015.

On April 2, 2012, the Commission issued an Order for Notice and Hearing ("Order") in which it, among other things, prescribed notice of the Application; established a procedural schedule; set a hearing date of June 27, 2012; and appointed a hearing examiner to conduct all further proceedings.

On May 15, 2012, Knollwood Associates, LLC ("Knollwood Associates") filed a Notice of Intent to Participate.¹ No other Notices of Participation were filed.

¹ Jeanne Stosser, managing member of Knollwood Associates, filed its Notice of Participation. Knollwood Associates did not file testimony or attend the hearing. Company counsel Clemo, in his opening remarks, noted that representatives of the Company had met with Ms. Stosser and, to the best of his knowledge, Ms. Stosser's concerns had been addressed by Company officials. (Tr. 17).

On June 18, 2012, the Montgomery Regional Solid Waste Authority (the “Authority”) by counsel, filed written comments regarding the Company’s proposed transmission line (“Authority Comments”). The Authority is a refuse collection and disposal authority created under the Virginia Water and Waste Authorities Act (the “Act”) that owns and is responsible for post-closure care of the former Montgomery County Landfill. Pursuant to a permit issued by the Virginia Department of Environmental Quality (“DEQ”), the Authority maintains and monitors the capped landfill, utilizing facilities that include a leachate collection system, gas extraction wells, gas probes, and groundwater monitoring wells (collectively, the “facilities”).

The Authority received notice of the Company’s Application which stated that the proposed transmission line would follow the edge of the Montgomery County Landfill. However, the Company’s Application states:

[T]he Preferred Alternative Route crosses the property of the former Montgomery County Landfill. This facility has been closed and capped. No impacts to this facility are anticipated; nevertheless, APCo will coordinate with the appropriate officials to avoid impacts.²

The Authority informed DEQ of the potential impact to the landfill and its facilities. DEQ responded to the Authority as follows:

If the proposed utility lines will require disturbance of the cap or any of the landfill monitoring networks or remediation systems, the Post-Closure Care Plan, and or monitoring plans for the facility will need to be updated to reflect the changes. Depending on the amount of disturbance and the documents impacted would determine whether the amendment would be considered a major or minor modification. The DEQ recommends the Authority work with AEP to relocate the line away from the waste management unit and monitoring systems to avoid impact. There is no problem with the utility poles being located on the property but it is preferred if they are located in an area that does not require disturbance of the landfill cap, monitoring systems and remediation systems.³

The DEQ, in its Environmental Report to the Commission, made the following recommendation to the Commission regarding the Landfill:

[The Applicant should] [c]oordinate with Montgomery Regional Solid Waste Authority for pole placement that does not disturb the landfill cap or disrupt gas or groundwater monitoring since these disturbances may result in the requirement that [the Authority] modify its post-closure care plan, landfill gas monitoring plan or the groundwater monitoring plan.⁴

The Authority explained in its comments that, in order to fulfill its obligations under its DEQ permit, it has drilled a number of groundwater monitoring wells and gas monitoring wells on

² Environmental Impact Analysis & Alternative Route Development, Application -Volume 2 of 2, Section 5.13.

³ Authority Comments at 2.

⁴ Ex. No. 11, Section 5(e).

its property. The Authority noted that in the future, it may be necessary to install additional wells and gas probes which would involve the use of drilling equipment and the related danger of such equipment coming into contact with the overhead power lines of this project.

In meeting with Company representatives, Authority officials learned that although poles would not be located on the Landfill, the lines supported by the poles would hang over these sensitive areas. Company representatives advised Landfill officials that the power lines on or near Authority property could be “shut down” for a period of time; however, the Authority would prefer a route that entirely avoids its property.

The Authority requests that Commission approval be conditioned on the following:

- construction and maintenance of the project will not cause any physical disturbance to the Landfill facilities or require that any DEQ permit be amended;
- the Company will stipulate that (1) it agrees to these conditions and (2) any easement or right-of-way agreement entered into between the Company and the Authority shall provide that the Company will indemnify and hold the Authority harmless against any and all loss or damage, accidents, or injuries, to persons or property, resulting from the Company’s breach of these conditions.⁵

Four residents of Blake Drive, Bill Veith, Vickie D. Haskins, Roderick B. Smith, and John W. Raines, filed comments in opposition to the preferred route because it would cross Blake Drive. The residents point out that all utilities in the subdivision are to be placed underground.

Stephen Brumfield of 1255 Montgomery Street in Christiansburg commented that, in view of the current weak economy, the proposed transmission line should not be built.

Arthur Hamrick, Jr., of 2150 Palmer Street in Christiansburg, commented that the proposed transmission line should not be considered until the Company’s substation on Cambia Street is improved

The hearing was convened as scheduled on June 27, 2012. George J.A. Clemo, Esquire, and C. Carter Lee, Esquire, appeared as counsel for the Company. Paul C. Jacobson, Esquire, appeared as counsel for the Authority. The Authority filed comments but did not file a Notice of Participation. Alisson O. Pouille, Esquire, and Fred Ochsenhirt, Esquire, appeared for Commission Staff. Representatives for Knollwood Associates did not appear.

SUMMARY OF THE HEARING RECORD

Public Witnesses

Two public witnesses, **Katrina Poovey** and **Carroll Poovey**, testified at the hearing. Mr. and Mrs. Poovey have resided at 43 Blake Drive in the Blake Forest Subdivision for seventeen years. Mrs. Poovey opined that the Company’s environmental impact analysis was based, at least in

⁵ Authority Comments at 4.

part, on gross and misleading representations of the facts in order to justify the Company's preferred alternative route.

Mrs. Poovey claimed that the analysis overstated the adverse visual impact of Alternative 3 to the U.S. 11 corridor. Mrs. Poovey presented photographs of the intersection of Alternative 3 and the Route 11 corridor showing that there is substantial visual impact already present.⁶ Specifically, Mrs. Poovey's photographs, which were taken at the same location as the Company's simulations but from a vantage point fifty feet farther back, show numerous existing power lines at the location. Mrs. Poovey maintained that addition of the proposed power line would have little additional impact on the Route 11 crossing.⁷

Conversely, Mrs. Poovey stated that the Company's characterization of a moderate visual impact to Blake Forest from Alternative Route 1 is understated and extremely misleading. Mrs. Poovey believes the principal impact to the Blake Forest neighborhood would not be the conductors, but the clearing of a 100-foot wide swath of forest located directly between two homes. Mrs. Poovey concluded by requesting that the Blake Forest Subdivision remain free of transmission lines.⁸

Carroll Poovey pointed out that the Company ruled out Alternative Routes 3, 4, and 6 that would not encroach on Blake Forest Subdivision because of possible radio frequency hazards from radio antennae located approximately 300 feet from the routes.⁹

Dr. Poovey testified that he had conducted a Google search on radio frequency interference with electric transmission lines and could find no evidence of interference with any lines of less than 500 kV. Dr. Poovey stated that the radio towers in question are within a quarter mile of the Route 3 alternative.¹⁰

Route Descriptions

APCo retained GAI Consultants, Inc. ("GAI") to: (1) develop preliminary study segments and alternative routes, (2) evaluate these segments and routes for environmental suitability and feasibility, and (3) select a route that reasonably minimizes adverse impact on the environment and is consistent with the project siting criteria. Six alternative routes were considered; Alternative Route 1 was selected as the preferred route. Descriptions of the routes considered follow:

- Alternative Route 1 is approximately 7.5 miles long and is the shortest of the routes studied. It is the northernmost route and is located in a largely rural area to avoid urban areas to the south and west as well as areas of biodiversity interest to the east. From the Falling Branch Substation, the route proceeds northwest utilizing a combination of new and existing ROW and parallels two sections of railroad ROW.

⁶ Exhibit No. 1.

⁷ Tr. 7.

⁸ Tr. 8.

⁹ Application, Volume 2, at bottom of p. 17.

¹⁰ Tr. 11, 12.

- Alternative Route 2 generally follows the same alignment as Alternative Route 1, but crosses the highly developed U.S. Route 460 Bypass and business corridor in a different location. For this reason it utilizes 0.3 mile less existing ROW than does Alternative Route 1. It is approximately 7.7 miles long.
- Alternative Route 3 is approximately 8.1 miles in length. It exits the Falling Branch Substation to the south and follows an existing APCo 138 kV line westward before proceeding north on new ROW across the heavily developed I-81 and U.S. Route 460 business corridor to intersect with the Alternative Route 1 alignment. It then follows the Alternative Route 1 alignment to the Merrimac Substation.
- Alternative Route 4 is approximately 8.3 miles long. It follows the Alternative Route 3 alignment southwest from the Falling Branch Substation to the intersection with Alternative Route 1. It then follows the Alternative Route 1 alignment northwest to the Alternative Route 2 alignment, which it then follows across U.S. Route 460 Bypass and business corridor to the Merrimac Substation.
- Alternative Route 5 is approximately 9.7 miles long. It follows the Alternative Route 1 alignment out of the Falling Branch Substation northwest for approximately 4.5 miles. It then proceeds west and north on new ROW across the heavily-developed U.S. Route 460 Bypass and business corridor and adjacent areas, enters the Town of Christiansburg, and then follows an existing APCo ROW into the Merrimac Substation utilizing a western approach to the Merrimac Substation.
- Alternative Route 6 is approximately 10.0 miles long and utilizes a combination of southern and western routes between the substations. From the Falling Branch Substation, the route follows the Alternative Route 3 alignment, a short portion of the Alternative Route 1 alignment, and then the Alternative Route 5 alignment to the Merrimac Substation. It is the longest of the routes.¹¹

Company Witnesses

The Company supported its Application with the testimony of Mohammed Ahmed, Timothy B. Earhart, Richard Gutman, and George T. Reese.

Mohammed Ahmed, employed by American Electric and Power Service Corporation (“AEPSC”) as a manager I of transmission planning, testified that his primary role is to ensure adequate and reliable service to customers served by the APCo transmission and subtransmission (below 138 kV) systems. American Electric Power (“AEP”) and PJM Interconnection, L.L.C. (“PJM”) conduct annual planning studies on behalf of APCo to ensure the adequacy of the present and future APCo transmission system reliability.

Mr. Ahmed explained that the proposed project is essential to address a projected summer of 2015 overload during certain single contingencies as indicated by the Company’s load flow modeling, contingency analyses, and reliability assessments. If the proposed project is not

¹¹ Ex. No. 4, at 5-7.

completed, Mr. Ahmed stated that the projected overload would jeopardize service to over 160 MW of Christiansburg-Blacksburg area load beginning with the summer of 2015 and thereafter. He concluded that the proposed new 138 kV transmission line connecting APCo's Falling Branch and Merrimac Substations is the superior planning option.

Mr. Ahmed summarized the benefits of the proposed project:

- Resolves the projected summer of 2015 overload of the Midway-South Christiansburg 69 kV circuit due to certain single contingencies and provides additional transformer capacity at the Merrimac Substation;
- Enhances operational performance and improves reliability of service for over 160 MW of load;
- Provides a source for future distribution substations in the area of growth and allows for economic growth in the area;
- Provides two-way 138 kV service to the existing Vicker and Merrimac Substations;
- Reinforces the existing 69 kV system that serves as the backbone of the Christiansburg-Blacksburg area electrical system; and
- Reduces the summer of 2015 single contingency loading on the 138/69 kV North Blacksburg transformer, which will otherwise exceed 78% of its allowable thermal rating.¹²

Mr. Ahmed noted that the impact of transmission outages that occurred in the area in 1994 and 1999 would have been significantly reduced if the proposed project had been in place. The proposed project would have provided a high capacity source into the center of the Christiansburg-Blacksburg area.

Timothy Earhart, supervisor of transmission line engineering, testified that the proposed project will be a new, single-circuit, three-phase design transmission line with nominal phase-to-phase voltage of 138 kV. The proposed line will utilize monopole, H-frame, and three-pole steel structures with either a darkened or weathering finish.¹³

Mr. Earhart explained that 0.6 mile of an existing 69 kV transmission line would be removed in association with the preferred alternative route. Over the years, approximately 19 residences and five businesses have encroached onto the ROW for a 0.6 mile portion of the existing Merrimac-Midway 69 kV transmission ROW. By continuing with a double-circuit structure for an additional 0.5 mile and building approximately 0.3 mile of new 69 kV single-circuit line, these ROW encroachments can be eliminated. Mr. Earhart maintained that from an engineering and ROW management perspective, this is a practical solution and more cost-effective than displacing 19 residences and five businesses.¹⁴

Mr. Earhart described the substation improvements including the installation of breakers, dead-end structures, busing, and one transformer. To accommodate these improvements, the existing yard at the Merrimac Substation would be expanded approximately 100 feet to the west and

¹² Ex. No. 8, at 3-4.

¹³ Ex. No. 6, at 3.

¹⁴ *Id.* at 4-5.

120 feet to the north; the existing yard at the Falling Branch Substation would be expanded 30 feet to the northeast. Mr. Earhart noted that all work at both substations would be contained within existing APCo-owned property.¹⁵

Mr. Earhart explained that the Company engaged in extensive public notification campaigns that culminated in public workshops attended by approximately 100 participants. Further, the public was able to comment electronically and obtain additional information regarding the proposed project through the Company website. The Company also met with several interested landowners privately at their request. Finally, Mr. Earhart noted that the Company and GAI made extensive contacts with federal, state, and local government agency representatives to solicit input.¹⁶

George Reese, senior environmental manager at GAI, an environmental consulting firm hired by APCo for this proceeding, explained the methodology it employed to develop and evaluate alternative transmission line routes. In general, GAI's methodology consisted of the following five steps:

1. Identification of the study area;
2. Development of siting criteria;
3. Data collection;
4. Development of alternative routes; and
5. Evaluation of alternative routes and preferred alternative route selection.¹⁷

In an effort to obtain local official, public, and agency input, two public workshops were held on June 5, 2008, and July 26, 2011. GAI utilized the resulting input to develop, analyze, and modify the study segments and routes.

Mr. Reese testified that GAI found Alternative Route 1 to be the superior route because:

- Overall Environmental Impact - Alternative Route 1 most reasonably avoids or minimizes adverse impacts on the scenic assets, historic districts and environment of the area concerned. It is located in a largely rural area that avoids the highly developed areas to the south and west, as well as areas of biodiversity interest to the east. Additionally, Alternative Route 1 minimizes potential visual impact to the Huckleberry Trail corridor, and due to its rural location and paralleling of existing ROWs, minimizes the overall visual impact to sensitive receptors in the project area.
- Residential Impacts – The number of dwellings within 500 feet of each alternative centerline is as follows: 127 (Alternative Route 1); 105 (Alternative Route 2); 174 (Alternative Route 3); 152 (Alternative Route 4); 202 (Alternative Route 5); and 249 (Alternative Route 6). Alternative Route 2 has the lowest number of dwellings with 105. However, as compared to Alternative Route 1, Alternative Route 2 traverses a future development area, includes greater engineering challenges, and utilizes 0.3

¹⁵ *Id.*

¹⁶ *Id.* at 6.

¹⁷ Ex. No. 4, at 3.

mile less existing ROW. Alternative Route 1, which has the second lowest number of dwellings, results in the removal of approximately 0.6 mile of existing 69 kV transmission line, under which 19 residences and 5 businesses have encroached, thereby reducing overall residential impact.

- Shortest Route – Alternative Route 1 is the shortest of the routes studied between the substations (7.5 miles), thereby minimizing environmental impacts associated with ROW construction.
- Paralleling/Using Existing Rights-of-Way – Utilizing existing ROWs, as recommended by Commission and federal siting guidelines, should be given priority, with the purpose of “minimizing conflict between the rights-of-way and present and prospective uses of the land on which they are to be located.” Approximately 3.2 miles (45%) of Alternative Route 1 is located within an existing transmission line ROW or is adjacent to existing railroad ROWs. Of all the alternatives considered that do not traverse major portions of developed areas within the Town of Christiansburg, Alternative Route 1 has the greatest amount of paralleling or use of existing ROWs.
- Present and Future Land Use – Alternative Route 1 avoids conflict with present and future land use to the greatest extent practicable and thereby reduces socioeconomic impacts. Interviews with landowners and local agencies indicated greater land use conflict with Alternative Routes 2 through 6.
- Stakeholder Preference – Local government agencies, most public workshop participants, and other comment providers indicated a consistent preference for Alternative Route 1. The Montgomery County Board of Supervisors adopted a resolution in support of the preferred Route. In contrast, strong opposition was expressed to the other alternative routes due to potential effects on developed areas including adjacent residential areas.
- ROW Acquisition – Alternative Route 1 is the shortest alternative, thereby requiring the least amount of ROW acquisition of all the alternatives considered. Alternative Route 1 also eliminates existing and significant ROW encroachments. In contrast, the non-preferred alternative routes impact more residents¹⁸ and have greater conflict with existing and future land use. The preferred Alternative Route 1 crosses the fewest number of parcels, 71 as compared to 94, 93, 116, 98, and 120 for Alternative Routes 2 through 6 respectively.
- Engineering – Alternative Route 1, as compared to the other alternatives, requires fewer structures and angles, thus reducing unnecessary engineering challenges and costs.¹⁹

¹⁸ Alternative Route 2 impacts 105 dwellings and Alternative Route 1 impacts 127 residences. However, Alternative Route 1 includes the removal of 0.6 miles of existing 69 kV transmission line under which 19 residences and 5 businesses have encroached.

¹⁹ *Id.* at 7-10.

Commission Staff

W. Timothy Lough, principal utilities engineer in the Division of Energy Regulation, conducted an investigation of the Application and sponsored the Staff Report. The Company seeks approval of a 500-foot wide corridor based on the centerline of its preferred alternative route. The Company had explained that the centerline represents an optimal location for the final 100-foot ROW based on current data. Staff noted that the 500-foot corridor would allow for the refinement of line and pole location based on design needs, minimization of resource impacts, detailed ground survey, and consultation with affected landowners.²⁰

Staff noted that improvements required at the Merrimac and Falling Branch Substations include the installation of new breakers, dead-end structures, busing, and one new 138/69 kV autotransformer at the Merrimac Substation. The height of the dead-end structures at each of the two substations is approximately 40 feet. To accommodate the improvements, the existing yard at the Merrimac Substation will be expanded approximately 100 feet to the west and 120 feet to the north. The existing yard at the Falling Branch Substation will be expanded 30 feet to the northeast. All yard expansions would be constructed on property currently owned by the Company. The proposed improvements at the Falling Branch Substation would require the installation of two new breakers at APCo's Edgemont Substation, however no yard expansion would be needed at Edgemont.²¹

Staff stated that the Company plans to use approximately 55 to 65 galvanized steel structures with a weathering finish to support the proposed line. Double-circuit monopole structures (approximately 100-foot height, approximately 20-foot width at the cross arms) would be used to support the proposed 138 kV and the existing/relocated 69 kV circuit for approximately 1.25 miles.²²

DEQ Report

The DEQ conducted a coordinated environmental review of the project by interested federal, state, and local government agencies. The following agencies and planning district commission participated in the review: DEQ, Department of Game and Inland Fisheries ("DGIF"), Department of Agriculture and Consumer Services ("VDACS"), Department of Conservation and Recreation ("DCR"), Department of Health ("DOH"), Department of Historic Resources ("DHR"), Department of Transportation ("VDOT"), Department of Forestry ("DOF"), Department of Aviation ("DOA"), Department of Mines, Minerals and Energy ("DMME"), Marine Resources Commission ("MRC"), Virginia Outdoors Foundation ("VOF"), Montgomery County, and the New River Valley Planning District Commission.

The DEQ Report listed all of the permits or approvals likely to be necessary prerequisites to project construction. Based on the information and analysis submitted by the reviewing agencies, DEQ offered several recommendations for consideration by the Commission in its deliberations on

²⁰ Ex. No. 10, at 1.

²¹ *Id.* at 4.

²² *Id.* at 5.

the approval and certification of the proposed project. In addition to requirements of federal, state, or local law or regulations, DEQ recommended the following:

- Prior to commencing project work, all wetlands and streams within the project corridor should be field delineated and verified by the U. S. Army Corps of Engineers, using accepted methods and procedures;
- Wetland and stream impacts should be avoided and minimized to the maximum extent practicable;
- Solid waste at the source should be reduced, re-used and recycled to the maximum extent practicable;
- The Company should coordinate with the DCR Karst Program regarding its recommendations to protect karst features;
- The Company should coordinate with DGIF, with respect to its recommendations to protect aquatic resources and wildlife species;
- The Company should coordinate with the DOF regarding mitigation for potential adverse impacts to the Commonwealth's forest resources;
- Herbicides used in or around any surface water should be approved for aquatic use by the U. S. Environmental Protection Agency ("EPA") and should be applied according to the label directions by a licensed herbicide applicator. A non-petroleum based surfactant should be used in or around any surface waters to limit the use of herbicides and pesticides to the extent practicable; and,
- The Company should coordinate with the Authority for pole placement that does not disturb the landfill cap or disrupt gas or groundwater monitoring.

Company Rebuttal

On rebuttal, Mr. Reese addressed the DOF forest mitigation recommendation in the DEQ Report. The DOF found the project will significantly impact forest resources as it will result in the removal of approximately 52 acres of forestland. DOF recommends a mitigation ratio in excess of 1 to 1, with more than one acre of land reforested or protected for every one acre cleared for the power line ROW.

Mr. Reese argued that very little of the forested land crossed by the preferred route could accurately be characterized as actively managed working forest land, and only approximately five acres of the forested land within the 100-foot ROW is included within an Agricultural and Forrestral District. Mr. Reese stated that the forested land within the 100-foot ROW is mostly second growth mixed forest and shrubs not under active management and therefore not timberland that is likely to be harvested.

Mr. Reese noted that clearing within the transmission line ROW would actually promote local biodiversity. He stated that once a transmission line is constructed, the Company's ROW maintenance methods permit the retention of compatible low growth shrubs and trees where reasonable and practical.²³

²³ Ex. No. 5, at 2.

Company witness Earhart, in his rebuttal testimony, assured the Landfill officials that the Company intends to comply with the recommendation of DEQ that it coordinate with the Landfill to ensure that pole placement for the project does not disturb the landfill cap or disrupt gas or groundwater monitoring. Mr. Earhart pointed out that Company representatives met with Landfill officials on June 13, 2012, and agreed to adjust the preliminary centerline of the 100-foot ROW within the 500-foot corridor so that it appears that impacts to the Landfill can be adequately mitigated.²⁴

The DCR Division of Natural Heritage and the Virginia Karst Program recommend that APCo “manually control vegetation or use a wetland certified herbicide for right-of-way management.”²⁵ Based on prior discussions between Mr. Earhart and Wil Orndorff, karst protection coordinator at DCR, APCo requested the following clarification:

In areas within the boundaries of a karst feature and any channelized drainage way (perennial or intermittent) draining to a karst feature, manually control vegetation or use only wetland approved herbicides in accordance with label and manufacturer directions.²⁶

The DGIF recommends maintaining “naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams, where practicable.”²⁷ Mr. Earhart stated the Company opposes this recommendation because it may present safety and service reliability risks due to the potential for wire contact from tall tree growth.

Where reasonable and practical, Mr. Earhart stated that the Company will utilize selective clearing methods to retain low-growth shrubs and other compatible vegetation within (1) 50 feet of all year-round streams and ponds or wetlands, (2) 50 feet of road crossings, (3) 100 feet of water supply wells, and (4) 25 feet of karst features and outcrops of limestone or dolomite rock. Mr. Earhart pointed out that the Company has used these mitigation guidelines on other transmission line projects and has found them to be adequate and effective in protecting streams, wetlands, wells, and karst features. Furthermore, Mr. Earhart stated that maintaining a 100-foot undisturbed buffer within the ROW would require taller and heavier structures and additional line length, thereby unnecessarily increasing costs.²⁸

DGIF further recommends that the Company conduct any significant tree removal and ground clearing activities outside of the primary songbird nesting season of March 15 through August 15. Mr. Earhart argues that this time-of-year restriction would prevent clearing for almost half the year during the prime time months for such activities. Accordingly, Mr. Earhart argues that such a restriction, except as may be necessary to accommodate endangered species, is unduly burdensome and impractical and would potentially raise costs and increase worker safety concerns due to a greater likelihood of clearing occurring during the adverse weather conditions of winter.²⁹

²⁴ Ex. No. 7, at 9.

²⁵ *Id.* at 2.

²⁶ *Id.*

²⁷ *Id.* at 21.

²⁸ *Id.* at 2.

²⁹ *Id.* at 3.

DEQ requested that the Company use the least toxic pesticides or herbicides effective in controlling the targeted species. In response, Mr. Earhart stated that the Company uses only herbicides and pesticides that are registered with the EPA and VDACS. He further stated the Company strictly adheres to labeled application rates and application techniques at all times.³⁰

The New River Valley Planning District Commission recommended that APCo work with a consultant to develop tower locations that are sensitive to environmental and scenic concerns. The Company urges rejection of this requirement because it has already contracted with GAI as an environmental consultant. GAI assessed existing land use, including the presence and proximity of dwellings, schools, daycare centers, hospitals, businesses, commercial structures, churches, and airports. Future plans for residential, industrial, and commercial development were also considered. Additional factors considered by GAI were the presence and proximity of natural, visual, and cultural resources including wetlands, streams, forests, prime farmland soils, previously documented architectural and archaeological resources, and rare and endangered species.³¹

Mr. Earhart stated that conserving and protecting Virginia's natural, cultural, and visual resources are of high importance to APCo. Company witness Earhart stated that with the exceptions noted above, the Company concurs with the recommendations listed in the DEQ Report.³²

DISCUSSION

The Company estimates that it will take 30 to 36 months to complete the project. The Company plans an in-service date of June 1, 2015. The estimated cost of all facilities to be included in the proposed project is approximately \$25 million.

On July 12, 2012, I traveled to Christiansburg to view the proposed and alternate routes and meet with interested parties on Blake Drive at the residence of Dr. Carroll Poovey and his wife Katrina, who spoke as public witnesses at the hearing held in Richmond. I was accompanied by Staff counsel Alisson Pouille and several Company officials. The meeting consisted of residents' questions of Company officials regarding the proposed transmission line crossing of Blake Drive and probable pole placement.

Statutory Requirements

The statutory requirements governing the Company's Application are found in Title 56 of the Code of Virginia ("Code"). Section 56-265.2 A of the Code provides that "[i]t shall be unlawful for any public utility to construct . . . facilities for use in public utility service . . . without first having obtained a certificate from the Commission that the public convenience and necessity require the exercise of such right or privilege."

³⁰ *Id.* at 4.

³¹ *Id.* at 8.

³² *Id.* at 1.

Section 56-46.1 A of the Code requires the Commission to consider environmental reports issued by other state agencies, local comprehensive plans, the impact on economic development, and improvements in reliability before approving construction of electrical utility facilities:

Whenever the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact . . . In every proceeding under this subsection, the Commission shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to Article 3 (§ 15.2-2223 *et seq.*) of Chapter 22 of Title 15.2. Additionally, the Commission (a) shall consider the effect of the proposed facility on economic development within the Commonwealth, including but not limited to furtherance of the economic and job creation objectives of the Commonwealth Energy Policy set forth in §§ 67-101 and 67-102, and (b) shall consider any improvements in service reliability that may result from the construction of such facility.

Section 56-46.1 B of the Code further provides:

[a]s a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned. . . In making the determinations about need, corridor or route, and method of installation, the Commission shall verify the applicant's load flow modeling, contingency analyses, and reliability needs presented to justify the new line and its proposed method of installation.

The Code also requires the Commission to consider existing ROW easements when siting transmission lines. Section 56-259 C of the Code provides: “[p]rior to acquiring any easement of right-of-way, public service corporations will consider the feasibility of locating such facilities on, over, or under existing easements of rights-of-way.”

Need

The need for the line is unchallenged. The Company states the proposed project is necessary to improve service reliability and support projected load growth in the Christiansburg-Blacksburg area. The Company's load flow modeling, contingency analyses, and reliability assessments indicate that certain single contingency transmission facility outages would jeopardize service to over 160 MW of load if the proposed project is not approved.

In particular, the Company predicts that during projected summer 2015 peak load conditions, the Midway-South Christiansburg 69 kV subtransmission circuit will exceed its maximum allowable thermal limit upon the occurrence of a single contingency outage of any one of

the following facilities: (a) the Merrimac 138 kV Tap line, (b) the Merrimac 138/69 kV transformer, or (c) the North Blacksburg 138/69 kV transformer. In addition, the 138/69 kV North Blacksburg transformer will exceed 78% of its acceptable thermal rating upon the outage of the Merrimac 138 kV Tap line.

Staff, through interrogatories, obtained additional information regarding verification of historical summer peak loads for the Christiansburg-Blacksburg area, descriptions of the load growth studies, load flow studies, and contingency analyses supporting the Company's conclusions.

Based on the Company's responses, Staff found the Company's analyses to be reasonable. Staff attempted to verify the Company's conclusions from load flow studies and contingency analyses that certain facilities/equipment could overload or exceed acceptable thermal ratings during projected summer 2015 peak load conditions. In particular, Staff reviewed the Company's power system modeling output showing power flows for the 2015 summer peak loading conditions under certain single contingency conditions. Staff concluded that the Company's power system modeling output appears to be reasonable and confirmed the Company's conclusions.

HB 1319

House Bill 1319 ("HB1319") of the 2008 Regular Session of the Virginia General Assembly, as amended,³³ established a pilot program to construct four qualifying electrical transmission lines of 230 kV or less, in whole or in part, underground. To date, the Commission has approved three transmission line projects for inclusion in the pilot program. One more qualified transmission line of 230 kV or less may be approved for inclusion in the pilot program from utility applications filed before July 1, 2014. Under the Act, a project is qualified to be placed underground, in whole or in part, if it meets all of the following criteria:

1. An engineering analysis demonstrates that it is technically feasible to place the proposed line, in whole or in part, underground;
2. The estimated additional cost of placing the proposed line, in whole or in part, underground does not exceed 2.5 times the cost of placing the same line overhead, assuming accepted industry standards for undergrounding to ensure safety and reliability. If the public utility, the affected localities, and the State Corporation Commission agree, a proposed underground line whose cost exceeds 2.5 times the cost of placing the line overhead may also be accepted into the pilot program; and
3. The governing body of each locality in which a portion of the proposed line will be placed underground indicates, by resolution, general community support for the line to be placed underground.³⁴

Additionally, Subsection 10 of House Bill 1319 requires that utility companies granted a certificate of public convenience and necessity for a proposed transmission line not included in the underground pilot program, or not otherwise being placed underground, to implement low-cost and effective means to improve the aesthetics of new overhead transmission lines and towers.

³³ 2011 Va. Acts ch. 244 (extending the program for two years).

³⁴ Ex. No. 10, at 12-13.

To this end, Staff notes that GAI located the preferred route in a generally rural landscape that includes a variety of intermixed land uses. Extensive viewshed and sightlines are not present due to the topography and widespread forest vegetation. GAI determined that compared to the alternative routes, the preferred route would cause the least visual effect to the surrounding landscape.

In its Application, the Company did not request consideration of the project as an underground pilot project under HB 1319.³⁵ Company witness Earhart, in his prefiled testimony, stated that the Company engaged Power Delivery Consultants, Inc. (“PDC”), a firm that specializes in underground lines, to determine whether a route placed entirely underground was technically possible. PDC concluded that an underground route following existing major roadways through the center of the Town of Christiansburg was possible, but estimated the cost would be over six times the cost of placing the same line overhead. The Company determined it is not technically feasible to place the entire project along the preferred alternative route underground due to the rolling terrain and rocky geology of that route.³⁶ Due to the high cost, Staff does not believe the proposed project is suitable as an underground pilot project. I concur that the proposed project is not suitable for underground construction.

Economic Development

Company witness Ahmed testified that the proposed project is essential to support ongoing economic development within the Christiansburg-Blacksburg area. Without the project, Mr. Ahmed stated that customers would have a significant and growing risk of experiencing diminished or interrupted electric power supply. Mr. Ahmed pointed out that economic development in the Christiansburg-Blacksburg area is dependent upon the reliability of the transmission system.

Staff agreed that the project is essential to support ongoing economic development within the Christiansburg-Blacksburg area. Further, the preferred route is not expected to affect the location of potential development activities. Staff stated that since much of the project will parallel existing transmission and railroad ROW and is in compliance with Montgomery County’s Comprehensive Plan, Staff foresees no negative impact on economic development in the study area.³⁷

I find, based on the improved reliability provided by the proposed project, that it will have a positive impact on economic development in the area.

Blake Drive

George Reese, senior environmental manager at GAI, testified that at the crossing of Blake Drive, the conductors would be 100 to 110 feet above ground. This factor would, in the opinion of Mr. Reese and the Company’s forester, allow for a substantial buffer and woody vegetation to remain in the ROW. Mr. Reese testified that there are approximately six oak trees in the vicinity of Blake Drive that would have to either be trimmed or removed. Mr. Reese emphasized that the

³⁵ 2008 Va. Acts ch. 799.

³⁶ Ex. No. 6, at 8.

³⁷ Ex. No. 10, at 14.

remaining vegetation, trees that do not present a danger to the conductors and understory vegetation, would be allowed to remain within the ROW.³⁸

The preferred route crosses Blake Drive over two vacant, heavily wooded lots. One of the lots has a sink hole and is probably unsuitable for building. Because of the favorable ridge structure (the preferred route crosses the ridges in the area perpendicular to the slope), fewer transmission line structures would be required. Specifically, there would be no pole structures visible to the Blake Drive residents and the conductors would cross the road at a height of 100 to 110 feet, requiring removal of only a few trees and preserving all of the understory growth.

I find that the impact of the proposed project on residents of Blake Drive has been reasonably mitigated by the Company's proposed design of the line.

Use of Existing Right-of-Way

Federal and state guidelines and Va. Code § 56-259 state a preference for using existing ROW wherever possible. The preferred Alternate Route 1 utilizes approximately 3.2 miles of existing ROW (45% of its entire 7.5 miles length). The existing Merrimac–Midway 69 kV ROW would be utilized for 0.75 mile and the preferred Alternate Route 1 would be adjacent to the Norfolk Southern Railroad.

During the early phases of the Company's study, two other options using or paralleling existing ROW were evaluated. Rebuilding the existing 69 kV line between APCo's South Christiansburg and Merrimac Substation as a 138 kV line was reviewed and rejected because a rebuild of the South Christiansburg to Midway portion of that line would be difficult, expensive, and disruptive. An upgrade of the 69 kV line to a 138 kV line would require widening the existing ROW to accommodate the larger voltage line. This would be problematic because the existing urban land use in that area is built up adjacent to the edge of the existing ROW. Furthermore the Cambria, Hans Meadow, and Midway Substations would require significant upgrades and expansions to accommodate the larger line.

The other option considered by the Company was a new 138 kV line or a rebuild of existing transmission lines (from 69 kV to 138 kV) between the North Blacksburg and Merrimac Substations. This alternative was rejected because the new line would not be in proximity to projected load growth. In contrast, a line from the Falling Branch Substation to the Merrimac Substation would traverse the potential load growth area, thereby allowing future distribution substations to be cost effectively integrated into the system.

Finding

I find the Company's preferred route should be utilized for this transmission line. The preferred route would allow the Company to efficiently and effectively acquire ROW, engineer, build, operate, and maintain the proposed project with minimal overall environmental impact. In contrast, the other alternative routes would impact more residences, conflict to a greater degree with

³⁸ Tr. 35, 36.

existing and future land use, and require greater line length and number of structures, all of which result in additional cost and environmental impact.

The preferred route has no residences located within the optimal 100 foot ROW; however, there are approximately 127 dwellings within 500 feet of the centerline. In coordination with building on the preferred route, the Company proposes to relocate 0.6 mile of the existing Merrimac-Midway 69 kV line thereby eliminating nineteen residential and five commercial encroachments.³⁹

The Montgomery County Board of Supervisors⁴⁰ and the Town of Christiansburg Planning Commission passed resolutions in favor of the preferred route.⁴¹ The Town of Christiansburg acknowledged the need for the proposed project and recommended a route that maximizes the use of railroad ROW.⁴² The Town of Blacksburg, by letter dated October 6, 2011, acknowledged the opportunity afforded by the Company to review and participate in the planning for the proposed transmission line.⁴³

Forest Mitigation

I find there is no rationale to require the Company to mitigate the removal of trees at a ratio greater than one to one. Ultimately, the expense of any such mitigation would be borne by the ratepayers. Under the Company's current practice, the landowner is compensated for any trees that are removed. Moreover, the landowner may keep, sell, or otherwise dispose of any felled trees. There, I find the Company should mitigate tree removal with DOF on a ratio not to exceed one to one, and compensate the landowner for any trees that are removed.

I find that the Company's objections to additional requirements proposed by the DEQ, DGIF, and the New River Planning District Commission addressed by Company witness Reese in his rebuttal testimony are reasonable. Therefore, the Company should not be required to:

- Maintain naturally vegetated buffers of at least 100 feet around all wetland sites;
- Prohibit tree removal and ground clearing activities during primary songbird nesting season (March 15 - August 15);
- Use only least toxic herbicides and pesticides; and
- Hire an additional consultant to determine tower locations.

³⁹ Ex. No. 10, at 3.

⁴⁰ *Id.* at Attachment 22.

⁴¹ *Id.* at Attachment 23.

⁴² *Id.* at Attachment 24.

⁴³ *Id.* at Attachment 25.

FINDINGS AND RECOMMENDATIONS

Based on the record in this proceeding, the applicable law, and for the reasons set forth above, **I FIND** that:

1. The proposed project is necessary to meet growing electrical demands and improve reliability for customers in the Christiansburg-Blacksburg area;
2. The proposed project is essential to support ongoing economic development within the Christiansburg-Blacksburg area;
3. The proposed project will maximize the use of existing rights-of-way;
4. The DEQ recommendations are necessary to minimize any adverse environmental impact of the proposed project. However, mitigation of forest loss should not exceed a one-to-one ratio and the Company should not be required to employ extraordinary measures as discussed above;
5. The clarification reached between Company witness Earhart and Wil Orndorff, karst protection coordinator at DCR, regarding vegetation control at karst features is reasonable and should be approved;
6. The proposed project is not suitable to be constructed underground; and
7. The proposed route and tower design reasonably mitigate the overall impact and generally improve the aesthetics of the proposed project as required by HB 1319.

In accordance with the above findings, **I RECOMMEND** the Commission enter an order that:

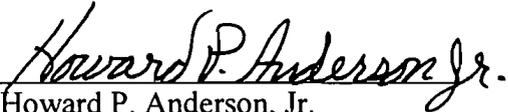
1. **ADOPTS** the findings in this Report;
2. **GRANTS** the Company's Application to construct and operate the 138 kV Falling Branch-Merrimac transmission line in Montgomery County and the Town of Christiansburg; and
3. **DISMISSES** this case from the Commission's docket of active cases.

COMMENTS

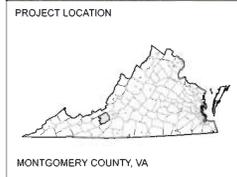
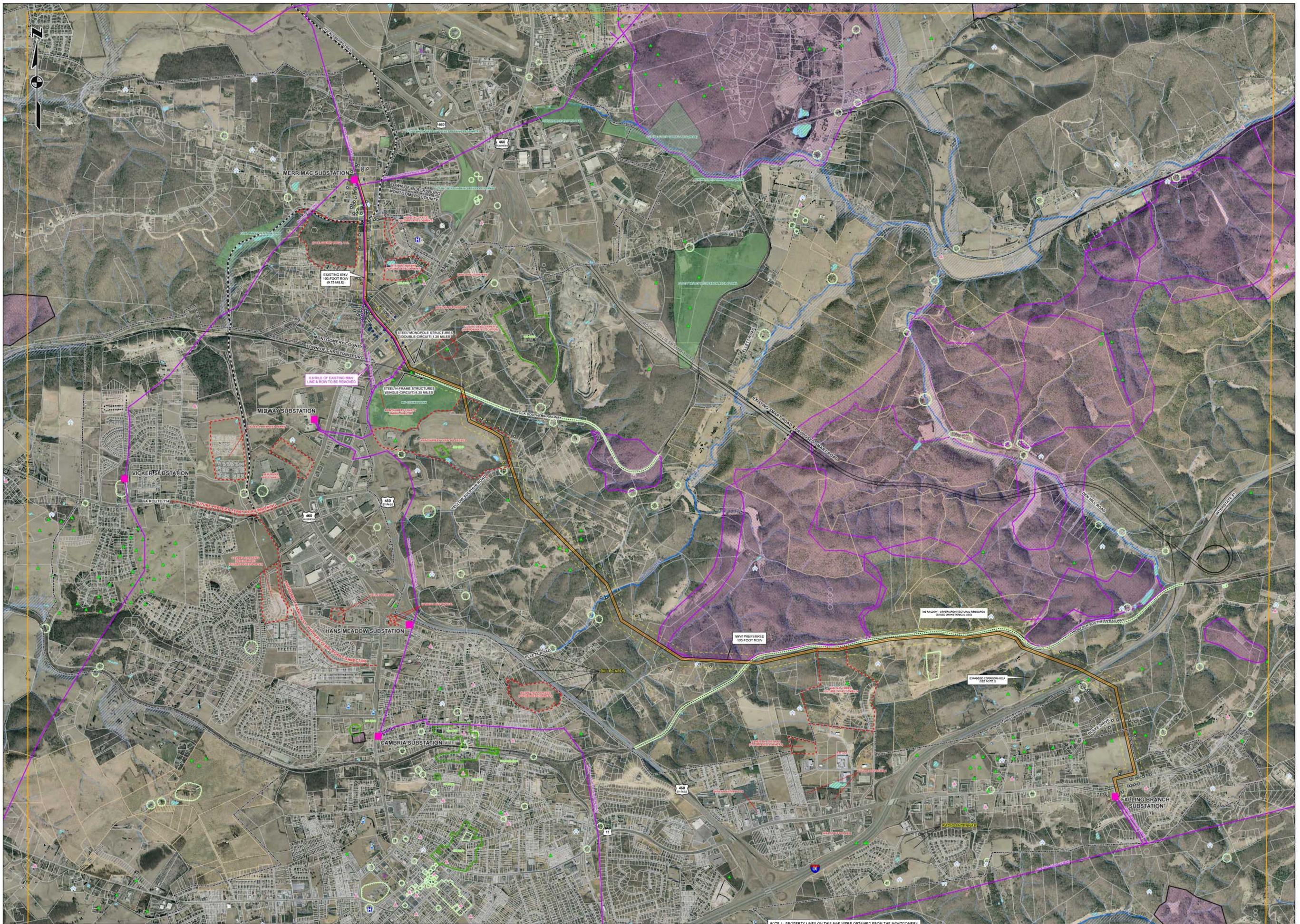
The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and Commission Rule 5 VAC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and ten copies, within twenty-one days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the

foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

Respectfully submitted,


Howard P. Anderson, Jr.
Hearing Examiner

Document Control Center is requested to mail or deliver a copy of this Report to: George J. Clemo, Esquire, Woods Rogers PLC, Wells Fargo Tower, 10 S. Jefferson St., Ste 1400, Roanoke, VA 24038-4125; Hector Garcia, Esquire, American Electric Power, 1 Riverside Plaza, 29 Fl., Columbus, OH 43215-2344; and Dr. Carroll Poovey, Jr., P.O. Box 648, Christiansburg, VA 24068.



LEGEND	
	EXISTING SUBSTATION
	KARST FEATURE
	CHURCH
	HOSPITAL
	SCHOOL
	CEMETERY
	LIBRARY
	HELIPORT
	PREFERRED ALTERNATIVE ROUTE CENTERLINE (SEE NOTE 2)
	PREFERRED 100-FOOT RIGHT OF WAY (SEE NOTE 2)
	PREFERRED 500-FOOT CORRIDOR (SEE NOTE 2 & 3)
	RELOCATED 69 KV SUB-TRANSMISSION LINE
	REMOVED EXISTING 69 KV SUB-TRANSMISSION LINE
	EXISTING TRANSMISSION SUB-TRANSMISSION LINE
	PROPERTY PARCEL BOUNDARY (SEE NOTE 1)
	POTENTIAL FUTURE DEVELOPMENT
	TOWN / MUNICIPALITY LIMIT
	STUDY AREA
	NRHP ARCHITECTURAL RESOURCE
	OTHER ARCHITECTURAL RESOURCE
	NW1 WETLANDS
	CONSERVATION INTEREST
	CONSERVATION EASEMENT
	PARKS/RECREATION
	AGRICULTURAL/FORESTAL DISTRICT
	FEMA FLOODPLAIN
	WATERBODY
	HUCKLEBERRY TRAIL
	RAILROAD
	SMART ROAD FUTURE EXTENSION
	STREAM
	RIVER
	STRUCTURES WITHIN 500 FEET OF PREFERRED ROUTE CENTERLINE
	APARTMENT
	RESIDENCE
	BUSINESS
	BARN
	OTHER

MAP 1
GIS CONSTRAINTS MAP
PREFERRED ALTERNATIVE CORRIDOR

APPALACHIAN POWER COMPANY
 FALLING BRANCH MERRIMAC 138KV
 TRANSMISSION LINE PROJECT

AP
 AEP

DRAWN AND CHECKED: MDD APPROVED: CTR DATE: 01/11/2012

PROJECT NO: DASH NO: 126X NO: 15
 041211

SCALE: 1"=10,000' SHEET NO: 1 OF 1

GIS CONSULTANTS
 PITTSBURGH, OHIO 385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005

NOTE 1: PROPERTY LINES ON THIS MAP WERE OBTAINED FROM THE MONTGOMERY COUNTY GIS DATABASE. PROPERTY LINES SHOWN ON THIS MAP ARE APPROXIMATE AND ARE NOT BASED ON ACCURATE GROUND SURVEY AND ARE THEREFORE NOT TO BE CONSIDERED OR USED AS EXACT DEPICTIONS OF LEGAL BOUNDARIES.

NOTE 2: A FINAL 100-FOOT WIDE ROW WILL BE SITED WITHIN THE PREFERRED 500-FOOT CORRIDOR. THE PREFERRED CORRIDOR CENTERLINE AND 100-FOOT ROW SHOWN IS NOT THE FINAL ALIGNMENT OR THE ACTUAL LOCATION OF ANY STRUCTURES OR ANGLE POINTS. THE PREFERRED CORRIDOR CENTERLINE REPRESENTS AN OPTIMAL LOCATION BASED UPON THE DATA PRESENTLY AVAILABLE. THE FINAL 100-FOOT ROW WILL BE LOCATED IN THE PREFERRED 500-FOOT CORRIDOR TO ALLOW FOR THE REFINEMENT OF THE LOCATION BASED ON DESIGN NEEDS, VISUALIZATION OF RESOURCE IMPACTS, DETAILED GROUND SURVEY AND LANDOWNER PREFERENCES.

NOTE 3: IN ONE AREA, THE 500-FOOT CORRIDOR EXPANDS AN ADDITIONAL 1,500 FEET TO ADDRESS LANDOWNER CONCERN WHICH IS CURRENTLY BEING ANALYZED. THE REMAINDER OF THE PREFERRED CORRIDOR IS 500 FEET WIDE EXCEPT WITHIN THIS EXPANDED CORRIDOR AREA. THE LOCATION OF THE CENTERLINE FOR THE 500-FOOT CORRIDOR AND FOR THE OPTIMAL 100-FOOT ROW ARE THE SAME.

REFERENCE:
 NATIONAL AGRICULTURAL
 IMAGERY PROGRAM (NAIP),
 AERIAL PHOTOGRAPHY, USDA/
 FSA, 2009.

P:\P112005\2005-154 AEP TUG\041211 - Falling Branch - Merrimac\GIS\PROJECT_FILES\GIS_CONSTRAINTS_AERIAL_ATTACHMENT2_2012_01_11.mxd



MONTGOMERY COUNTY DEPARTMENT OF
PLANNING & GIS SERVICES

PLANNING
GIS & MAPPING

755 ROANOKE STREET, SUITE 2A, CHRISTIANSBURG, VIRGINIA 24073-3177

MEMORANDUM

November 8, 2012

TO: Planning Commission members

FROM: Steven M. Sandy, Planning Director *Steve*

RE: Proposed 2013 Work Program

Attached please find an updated draft work program for 2013. The work program outlines specific projects to be completed by the Planning Commission and Planning & GIS Services Department in 2013. It also outlines many of the ongoing or "day to day" activities that the department performs.

Staff will review these items with you at our meeting on November 7th under Work Session Items. A final work program will be brought before the Commission at your December meeting for approval.

Please contact me if you should have any questions or need any additional information regarding this matter.

Enclosures

MONTGOMERY COUNTY, VIRGINIA
PLANNING COMMISSION and PLANNING & GIS SERVICES
DEPARTMENT
2013 WORK PROGRAM

(Major projects in priority order)

1. LAND DEVELOPMENT OFFICE (LDO) IMPLEMENTATION

PLANNING & GIS SERVICES DEPARTMENTS

- Work with LDO vendor consultants in enhancing and modifying the software to better serve the needs of Planning, Zoning, E & S, and Permitting and Inspections for sign permits, site plans, field use and GIS integration.
- Work with General Services and IT to extend LDO to the Web to create a citizen access portal.
- Further extend benefits and training of LDO end users for county departments, constitutional offices and where possible to the general public.
- Utilize grant funding from PHMSA Technical Assistance Grant (TAG) to develop a process and client side LDO interface with Virginia Utility Protection Service (VUPS) to identify future development impact on underground utilities and/or an encroachment on a utilities ROW using LDO parcel, building permit, and subdivision information.

2. COMPREHENSIVE PLAN IMPLEMENTATION

PLANNING COMMISSION

- Conduct semi-annual review (Feb & Aug) of any requests to amend the Planning Policy Areas map.
- Conduct joint Planning Commission Meeting with Towns of Blacksburg & Christiansburg
- Review and discuss ordinance amendments (zoning, subdivision) being developed to implement specific Comprehensive Plan strategies.
- Participate in the ongoing plan implementation process along with other boards and commissions.

PLANNING DEPARTMENT

- Prepare SRTS grant application for Belview Elementary and Auburn School Complex in conjunction with Montgomery County Public Schools and NRV Planning District Commission
- Revise and update transportation chapter of Comprehensive Plan to comply with new state law requirements of 15.2-2223
- Review and revise Village Plans for Prices Fork and Plum Creek, as necessary

GIS AND MAPPING SERVICES

- Provide mapping support for Planning staff and Commission

PLANNING CONSULTANT

- Hire consultants as necessary for special projects

3. GENERAL COUNTY REASSESSMENT

PLANNING DEPARTMENT

- Work with County General Reassessment Team and provide support where possible.

GIS AND MAPPING SERVICES

- Provide mapping support for reassessment process

4. GEOGRAPHIC INFORMATION SERVICES (GIS)

GIS AND MAPPING SERVICES

- Provide GIS support to NRV 911 Consolidation and Public Safety/Fire Rescue Radio system project for countywide radio propagation study and tower placement including PSAP grant administration.
- Assist Planning and Zoning staff in reviewing, organizing, and scanning legacy rezoning and special permits for entry or correction in LDO. Work with county departments and constitutional offices to deploy, enhance, train and use the updated Pictometry aerial imagery in office as well as field situations including public safety and fire/rescue vehicles.
- Review, organize, and scan all legacy rezoning and special permits for entry or correction in LDO.
- Work with county departments and constitutional offices to deploy, enhance, train and use of Pictometry aerial imagery in office as well as field situations including public safety and fire/rescue vehicles.
- Continue E911 addressing of mobile home parks.
- Work with libraries to create and publicize a specialty road atlas for cemeteries.
- Investigate migration of iGIS to new ArcGIS Server platform.
- Continue to assist Commissioner of the Revenue with mapping for Use Value Assessment Program

5. SUBDIVISION AND ZONING ORDINANCE AMENDMENTS

PLANNING DEPARTMENT

- Prepare subdivision and zoning ordinance amendments to address state code changes
- Consider and prepare zoning amendments for small wind energy systems, chickens in residential areas and landscaping sections

PLANNING COMMISSION

- Conduct public hearings and gather public input regarding proposed ordinance amendments

Ongoing Project: ZONING ORDINANCE ADMINISTRATION

PLANNING COMMISSION

- Review and recommend rezoning requests and special use permit requests.
- Review and recommend amendments to the Zoning Ordinance.

BOARD OF ZONING APPEALS (BZA)

- Review and decide variance requests and appeals of Zoning Administrator decisions
- Review and decide special use permits (as applicable).

PLANNING DEPARTMENT

- Provide staff support to the Planning Commission and the Board of Zoning Appeals.
- Prepare draft Zoning Ordinance amendments for Commission consideration
- Provide information and answer questions concerning the Zoning Ordinance for developers and the general public.
- Enforce the Zoning Ordinance including review of building permit applications, review of site plans, complaint investigation and follow-up, legal enforcement actions, etc.
- Assist CPEAV & VAZO with regional training sessions for Planning Commission and BZA members/alternates.

Ongoing Project: SUBDIVISION ORDINANCE ADMINISTRATION

PLANNING COMMISSION

- Review and recommend plats for major subdivisions.
- Review and recommend amendments to the Subdivision Ordinance.

PLANNING DEPARTMENT

- Provide staff support to the Planning Commission in the review of major subdivisions
- Review and approve plats for family subdivisions and minor subdivisions.
- Prepare draft Subdivision Ordinance amendments for Commission consideration.
- Provide information and answer questions concerning the Subdivision Ordinance for developers and the general public.

Ongoing Project: COMPREHENSIVE PLAN IMPLEMENTATION

PLANNING COMMISSION

- Review implementation priorities and projects.

PLANNING DEPARTMENT

- Prepare legislative priorities for land use matters.
- Prepare Indicators Report

GIS AND MAPPING SERVICES

- Prepare supporting maps and modify GIS layers

Ongoing Project: METROPOLITAN PLANNING ORGANIZATION (MPO)

PLANNING DEPARTMENT

- Provide County representative to the MPO Technical Advisory Committee.

GIS AND MAPPING SERVICES

- Review and support services.

Ongoing Project: GEOGRAPHIC INFORMATION SERVICES (GIS)

GIS AND MAPPING SERVICES

- Provide staff support to County Administration and Economic Development with property acquisitions and other projects.
- Provide GIS data, maps, and E911 site addresses to citizens, realtors, other interested parties.
- Continue to market/leverage the County's investment in LIDAR, orthophoto and GIS data in order to maximize cost recovery, effectiveness and efficiency to the benefit of the taxpayers.
- Continue to assign E911 addresses
- Continue support for Voter Registrar – Precinct boundary and polling places Continue cemetery inventory for land development and subdivision requirements
- Continue to inventory billboards and signs for inclusion into LDO and GIS.
- Continue cellular tower, review, mapping and updates.
- Continue GIS and mapping support for the Sheriff's Office for monthly crime incidents, special events, task force, and PSAP dispatch GIS data updates.
- Continue to provide GIS, mapping, and training support to the MC Public Schools. Continue to provide local GIS support for Virginia Game and Inland Fisheries Officers & US Marshals Office
- Continue to work with IT to migrate data to new ArcGIS Server application
- Continue to determine Landuse Soils Capability Classification for designated agriculture parcels and provide mapping and data sheets to Commissioner of Revenue's Office
- Continue to review and enter elevation certificates, LOMR's, LOMA's into GIS database and mapping layers

Ongoing Project: AGRICULTURAL & FORESTAL DISTRICT DISTRICTS

AGRICULTURAL AND FORESTAL DISTRICT ADVISORY COMMITTEE

- Review requests and recommend additions, deletions and withdrawals to agricultural and forestal districts within the County including district renewals for districts #7, 9 and 10.

PLANNING DEPARTMENT

- Provide staff support to the Agricultural and Forestal District Advisory Committee.

GIS AND MAPPING SERVICES

- Prepare supporting maps and modify GIS layers.

Ongoing Project: 15.2-2232 REVIEW REQUIREMENT

PLANNING COMMISSION

- Review streets, parks or other public areas, public buildings or public structures, public utility facilities, etc. for compliance with the Comprehensive Plan. Hold public hearings per Board of Supervisors policy.

Ongoing Project: REVENUE SHARING/RURAL ADDITION PROGRAM

PLANNING DEPARTMENT

- Determine if any rural additions will be added to the state secondary road system.
- Work with developers and VDOT on completing revenue sharing projects in Route 177 Corridor area (FY12 and FY13 Projects)
- Prepare and submit revenue sharing applications for FY14

GIS AND MAPPING SERVICES

- Prepare supporting maps and modify GIS layers

Ongoing Project: PUBLIC INFORMATION

PLANNING DEPARTMENT

- Prepare and distribute Annual Report.
- Support Public Information Office with Citizen's Academy

GIS AND MAPPING SERVICES

- Maintain iGIS website for external (general public) and internal inquiries

Ongoing Project: NEW RIVER VALLEY PLANNING DISTRICT COMMISSION (NRVPDC)

PLANNING DEPARTMENT

- Provide County representative to the Rural Transportation Advisory Committee (TAC).
- Provide County representative to the Bikeway/Walkway Committee.
- Provide County representative to the regional Transit Coordinating Council.
- Support NRVPDC efforts on Livability Initiative Grant.
- Support NRVPDC with Safe Routes Grant application materials.

Ongoing Project: NRV HOME CONSORTIUM

PLANNING DEPARTMENT

- Provide County representative to the New River Valley HOME Consortium

Ongoing Project: CAPITAL IMPROVEMENTS PROGRAM (CIP) (if applicable)

PLANNING COMMISSION

- Review and recommend draft CIP with respect to Comprehensive Plan. Hold public hearing if deemed necessary.

Adopted by PC on _____



THE NEW RIVER LIVABILITY INITIATIVE

NRV Tomorrow

What is the New River Valley Livability Initiative?

The Livability Initiative is an opportunity for New River Valley residents to develop a vision for our future and develop strategies that businesses, community organizations, local governments, and individuals can use to make this future vision a reality. This regional initiative is taking place over three years and provides many opportunities for residents to share their ideas about what they would like to stay the same and what they would like to be different. The feedback will help identify ways to increase regional self-reliance and prosperity, save tax dollars, increase support for local businesses, create communities that offer more choices in housing and transportation, and protect the region's rural character.

Why a regional plan?

People in the New River Valley may live in one town, work in a different town, and see a doctor in another. They may travel from one side of the New River Valley to the other in order to shop, spend time outdoors, or to visit family members. We are connected in many ways, through our rich cultural heritage, the natural beauty of our mountains and rural landscape, and the New River, the namesake that connects and defines our region. We are also connected as a community that "cares for its own"- and pull together when a disaster or misfortune hits one part of the New River Valley.

Regional plans focus on identifying innovative ways to address issues that cross town or county boundaries. The New River Valley Livability Initiative is looking at how to extend limited resources, encourage collaboration and information sharing and increase genuine and meaningful citizen involvement to make the entire region more self-reliant.

What is going to come out of this Initiative?

- A better understanding of where we are now, where we are headed, and where we want to be as individuals, communities, and a region- as it relates to economic development, housing, transportation, energy, natural resources, agriculture and food systems, arts and culture, internet broadband, and community health.
- More meaningful civic engagement.
- Goals and strategies for improving our quality of life, which include:
 - Making the NRV a more productive and better place to do business;
 - Creating better choices in where and how NRV residents live and work;
 - Enabling more residents at all skill and education levels to prosper;
 - Preserving our rural heritage and building on our history of self-reliance;
 - Building partnerships so we can achieve more of our priority goals; and
 - Reducing poverty-community resources are strained with so many of our neighbors in need.

All outcomes of this project will be optional for adoption or implementation by local governments and other partners.

Why is there a Regional Planning District Commission?

The New River Valley Planning District is one of twenty one planning districts in Virginia whose commissions are chartered under Virginia law. Also known as PDC 4, the organization includes the counties of Floyd, Giles, Montgomery, and Pulaski, and the City of Radford. The purpose of our regional planning district commission is to promote regional cooperation, to coordinate the activities and policies of member local governments, and to provide planning assistance to local governments. The commission is financed by a combination of local, state, and federal funds but has no regulatory, governing or taxing authority.

How is the Livability Initiative funded? Are my tax dollars paying for this?

The New River Valley Planning District Commission (NRVPDC) was one of 45 in the United States selected through a competitive grant process to receive a Sustainable Communities Regional Planning Grant funded by the Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA). The New River Valley was one of a few primarily rural areas to receive this federal funding. The NRVPDC and other partner organizations are contributing matching funds from existing federal, state, and local programs but have not received any additional funding from local governments within the New River Valley to conduct this regional planning process.

These funds will allow NRVPDC staff to work with partners throughout the New River Valley to create a locally-driven strategic plan for the New River Valley region. Our partners include professional and business organizations, non-profits, local governments, state agencies, and educational institutions. This planning effort will also provide additional information to support existing efforts of these partners.

Why should I participate?

Local choice and control is important, and planning is a way our community can choose its future. When it comes to making investments in a community, planning can create more options and choices and lead to a return on public investments many times over.

The New River Valley Planning District Commission and its partners know that for any plan to lead to action and to stand the test of time, it must reflect the needs and wishes of those who will be impacted by it. Everyone who lives and works in the New River Valley has their own story, their own special knowledge of the area, and their own hopes for the future. This is your chance to help shape the future of your community and the region, to define what Livability means in the New River Valley, and to build the partnerships that will make your goals for the region's future a reality.

How can I participate?

Over the next three years, we will be discussing issues and asking for your input in many ways—regional meetings held in various locations, smaller group meetings, surveys, an interactive website, tables at local and regional events, and more. If you have a particular area of interest or expertise, you can also join one of our eight working groups (housing, energy, transportation, economic development, agriculture and food systems, natural and water resources, arts and culture, and community health). These working groups will help guide the planning process around that topic and combine public input with regional information to create a plan for each of these topic areas.

For more details on the Livability Initiative or how to get involved, please contact:

Kim Thurlow, Project Coordinator, (540) 639-9313 ext. 202, kthurlow@nrvpdc.org

Website: <http://www.nrvlivability.org>



2012 Interim Report

LIVABILITY in the NEW RIVER VALLEY

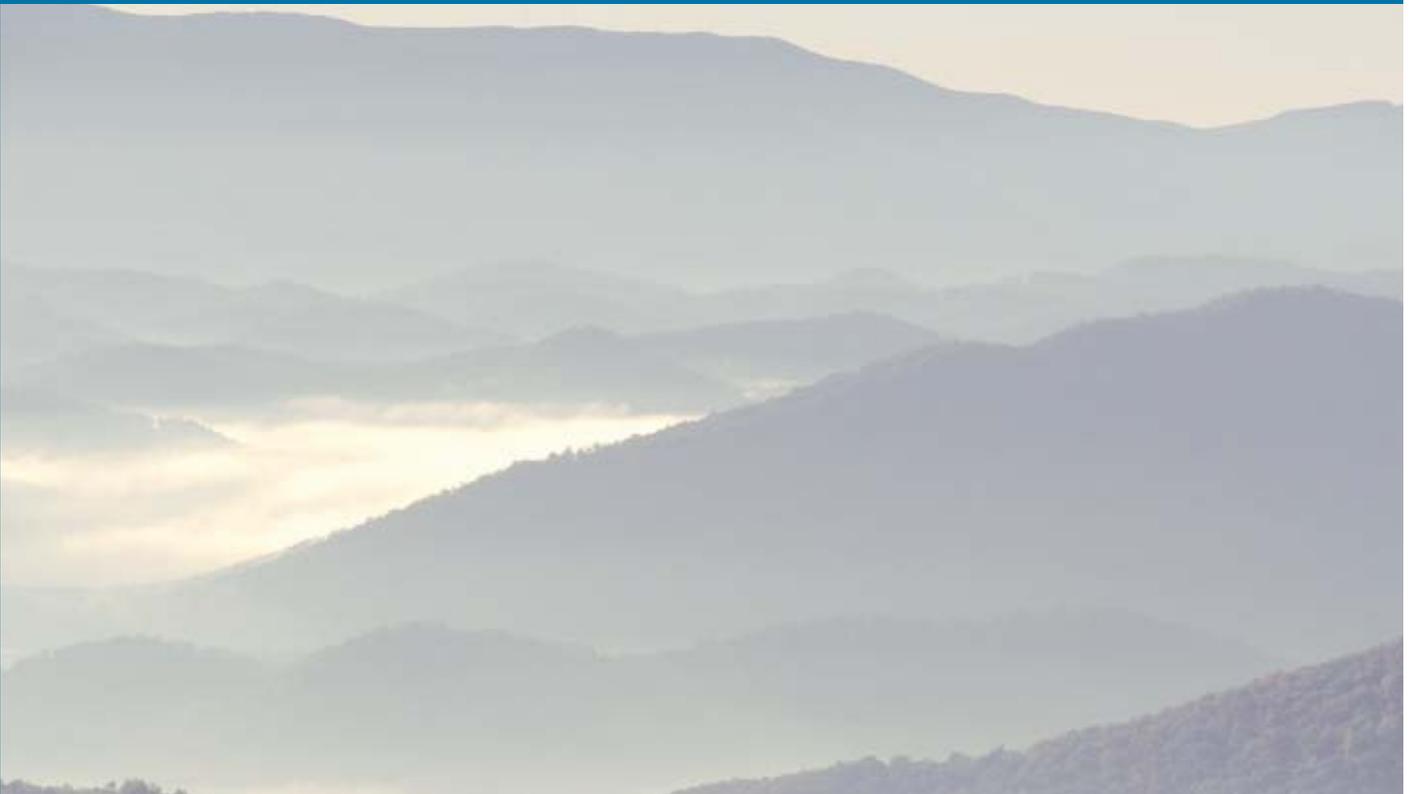






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WHAT IS THE LIVABILITY INITIATIVE?

The Livability Initiative is an opportunity for New River Valley 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 regional initiative is taking place over three years, providing many opportunities for residents to share their ideas about what they would like to stay the same and what they would like to be different.

The Initiative is focused on the New River Valley region, but with recognition that what works for one community may not work for another. The character and priorities expressed by each community and county will influence the development of goals and action items. By the end of 2013, the Initiative will develop a plan of action; communities can select from this menu of action items to best address their most pressing challenges, while at the same time accomplishing regional goals.

The planning process will help identify ways to increase regional self-reliance and prosperity, save tax dollars, increase support for local businesses, create communities that offer more choices in housing and transportation, and protect the region's rural character and scenic beauty.



Why is this Initiative 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 us to see the big picture, by generating new information and ways to talk openly about the future. In this way, planning can inspire people to be proactive about ensuring the New River Valley is a great place to live, work, and play today and tomorrow.

About this Report

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 events during August 2011-2012 in which more than 1,500 residents participated. This report provides a summary of major issues and trends in the New River Valley region. The following six trends are major drivers behind the region's biggest challenges: *An Aging Population, Agricultural Shifts, Commuting Patterns, Housing Costs, Jobs & Education, & Community Health*. Focusing on how we address these trends will enable us to more effectively improve the quality of life for residents in the New River Valley.

AN AGING POPULATION

The New River Valley's population is aging. The number of seniors will nearly double in the NRV in the next 20 years. In Giles and Pulaski, the under-25 year-old population is also declining, as many young people seek opportunities outside the region. These two population trends are likely to create an increased demand for services to support older citizens and a smaller tax base to support those services.

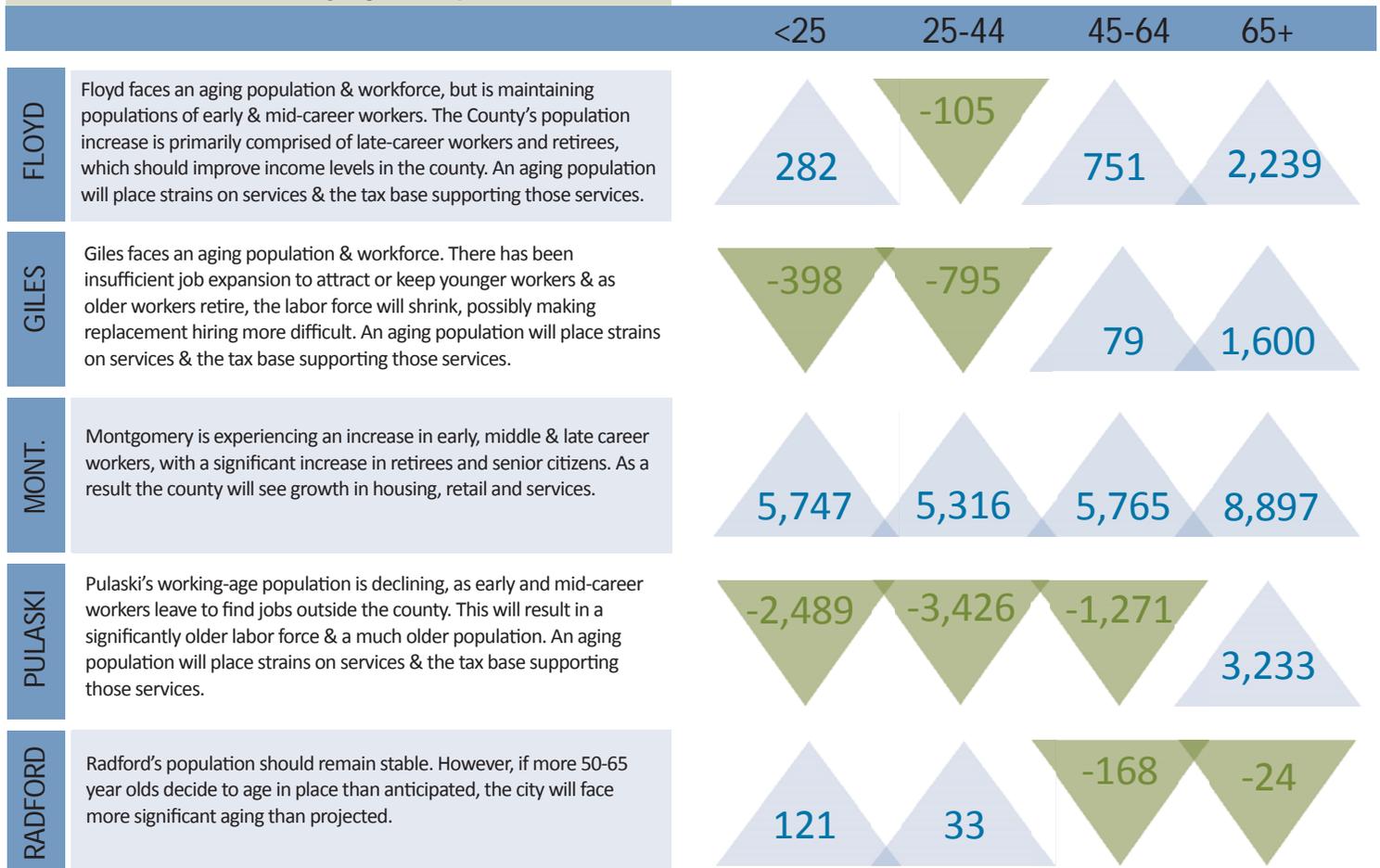
An aging population brings specific challenges to the community. Declining mobility makes it harder for older adults to navigate stairs and bathrooms and many find their existing homes no longer meet their needs. When older adults are no longer able or comfortable driving, few options exist to get to and from the grocery store, the doctor's, 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.



2x By 2030, the number of seniors will nearly double in the NRV & about 1-in-5 people will be over age 65



2000-2030 Change in Number of Residents by Age Group



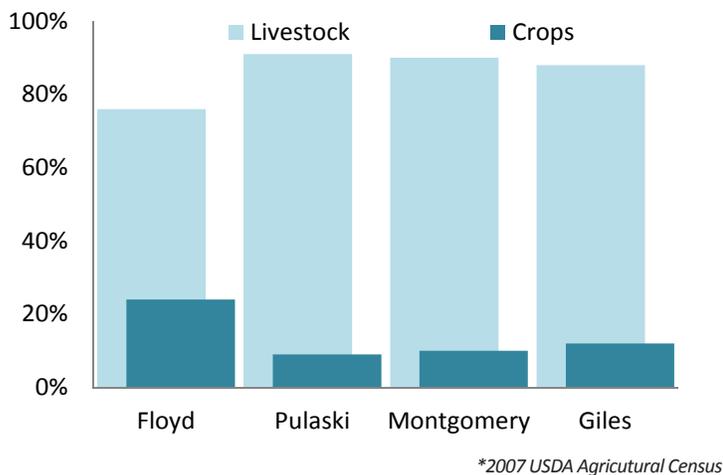
*2000-2010 data from decennial Census Counts; 2020 and 2030 projections from the Virginia Center for Housing Research. Note: These should be considered 'Interim' projections until the new VEC projections are available.

AGRICULTURAL SHIFTS

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 this 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.

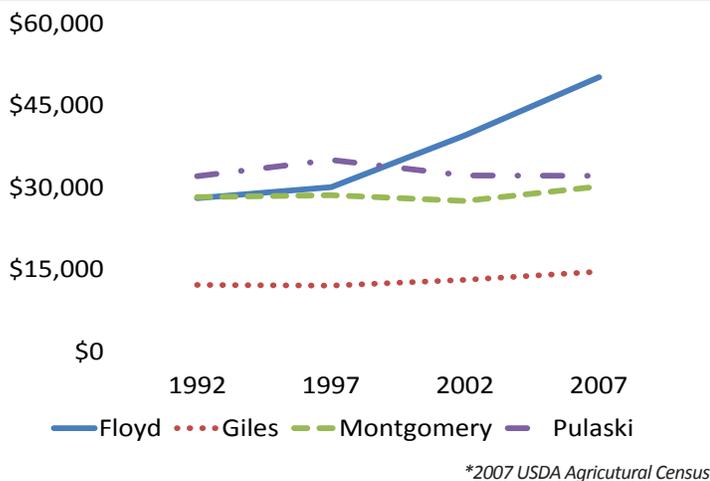


% of Total Market Sales by Livestock and Crop Production



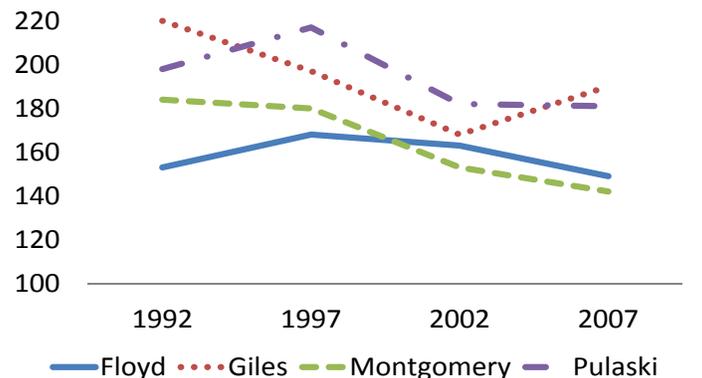
The NRV is home to the 7th largest cattle population in Virginia. Livestock makes up the majority of market sales in every county. Primary crops include hay, Christmas trees, nursery stock, fruits, and vegetables.

1992-2007 Change in Average Market Value of Agricultural Products



The average farm size and amount of acreage in agricultural production is on the decline.

1992-2007 Change in Average Farm Size (acres)



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.

of Acres & % of Farmland Taken Out of Agricultural Production

Floyd	6,439	-5%
Pulaski	5,465	-7%
Montgomery	10,259	-10%
Giles	2,842	-4%

*2007 USDA Agricultural Census

COMMUTING PATTERNS

Over the past 30 years, the patterns of development in the New River Valley have typically concentrated commercial areas along major roadways while housing is spread sparsely throughout the region. Housing and transportation costs typically account for over 40% of the region's household median income. 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. Those who live in town or more urban centers tend to spend more on housing, but live closer to common destinations – reducing household transportation costs.

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. This is especially the case for lower-income families and seniors. 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.



Each year, NRV residents travel an average of 11,874 miles and spend an average of \$7,588 on transportation costs (fuel, maintenance, insurance, etc.)

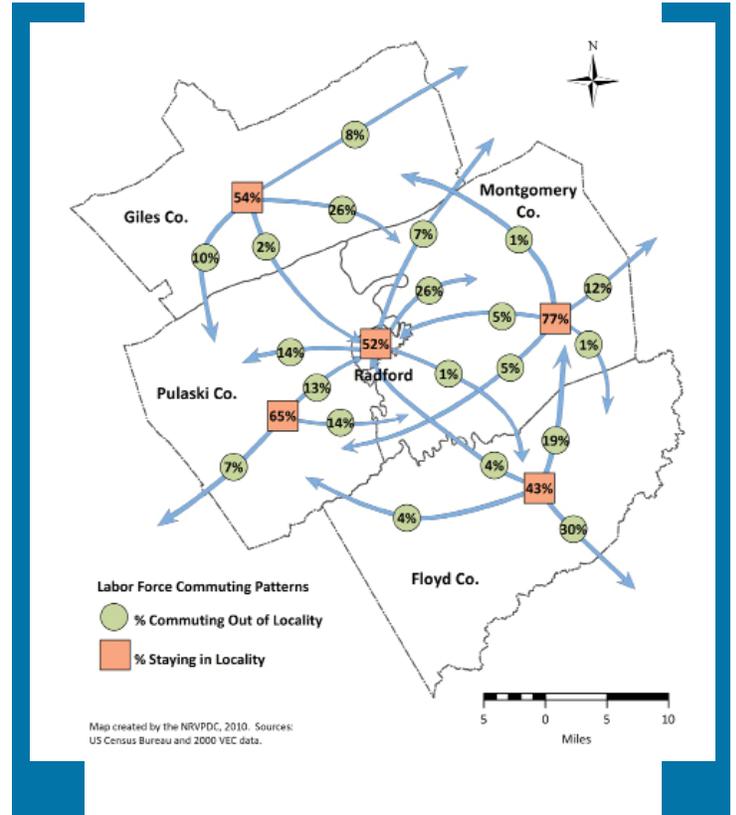
% of Workers Commuting Out of Their County for Work

	2005		2010
Floyd	61.1%	decreased	55.9%
Giles	61.0%	increased	63.3%
Montgomery	32.4%	decreased	31.7%
Pulaski	39.5%	increased	53.6%
Radford	60.6%	decreased	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 uniformed military, self-employed workers, and informally employed workers.*



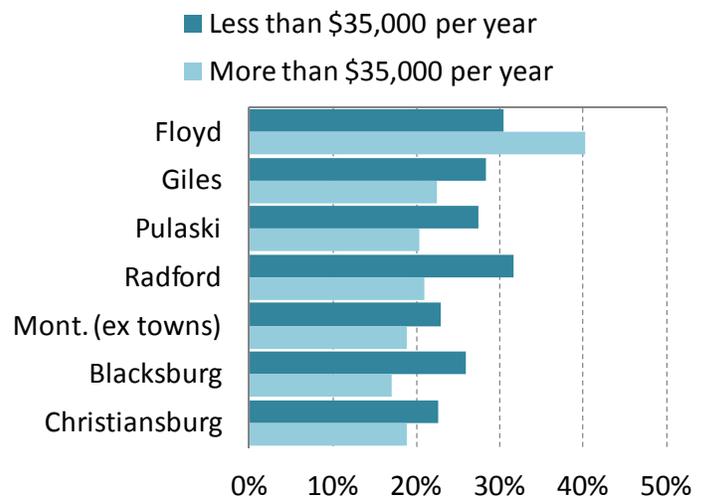
Workers earning less than \$15,000 a year commute an average of 26 miles more per day than workers who earn \$40,000 or more per year.



** 2000 U.S. Census Bureau, and 2000 Virginia Employment Commission Data; *Based on survey data capturing formal and informal as well as full and part-time employment.*

Many of the region's lower income families are unable to afford housing in close proximity to employment and commercial areas. As a result, these families must often choose lower-cost housing farther away and incur higher transportation costs.

% of Workers Driving more than 25 miles to Work by Income



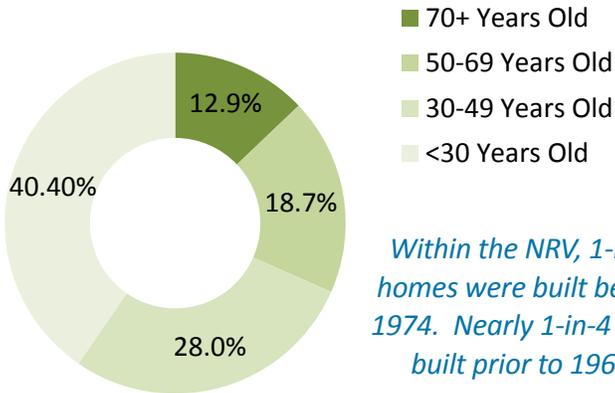
**U.S. Census Bureau, ACS 2005-2009*

HOUSING COSTS

As energy use and prices continue to rise, households in the NRV are spending more and more of their income on their electric and home heating bills. The cost increases have been even more dramatic for those who live in older and less energy efficient homes. As a result, many residents are finding they have less money each month to spend on housing, food, childcare, medicine, and medical care. These changes affect not just household budgets, but our local and regional economy as families limit their spending on recreation and retail items when the funds required to meet basic needs are stretched too thin.



% of Total Housing Stock by Year Built



Within the NRV, 1-in-2 homes were built before 1974. Nearly 1-in-4 were built prior to 1960.

*U.S. Census Bureau, ACS 2005-2009

The loss of jobs in Pulaski and Giles could impact the quality of the housing stock in these counties. Reduced household income and increased vacancies often lead to under-maintenance, poor energy efficiency, and increased physical deterioration.



1-in-3 households in the NRV spend more than 30% of their household income on housing costs and are therefore, considered "cost burdened".

Number & % of Cost-Burdened Households in the NRV

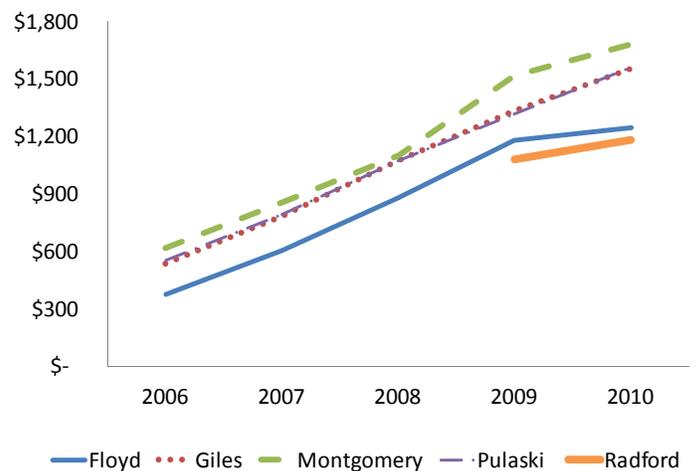
Floyd	1,290	21.5%
Giles	1,598	23.7%
Montgomery	12,227	36.8%
Pulaski	3,944	32.3%
Radford	2,597	36.2%

*U.S. Census Bureau, ACS 2005-2009



Household electricity costs in the NRV have increased 30% per year for the last five years based on an increase in price and use.

2006-2010 Annual Change in Electricity Costs per Household



*Appalachian Power Company, 2006-2010



Nearly 1/2 of lower income homeowners and nearly 3/4 of lower income renters spend more than 30% of their income on housing costs.

JOBS & EDUCATION

For middle-skill and higher-skill workers, there are many opportunities for job training and career advancement in the NRV. However, this is not the case for the region's lower-skill workers. Unemployment is high for those who did not graduate high school or only possess a high school diploma. New demands of the 21st century are bringing shifts to the job market and require workers with more advanced skills. Without skill advancement, residents are poorly positioned to take advantage of job opportunities and build income. These citizens and their families are among the most vulnerable to changes in the cost of housing, transportation, food, and rising energy and health care costs.

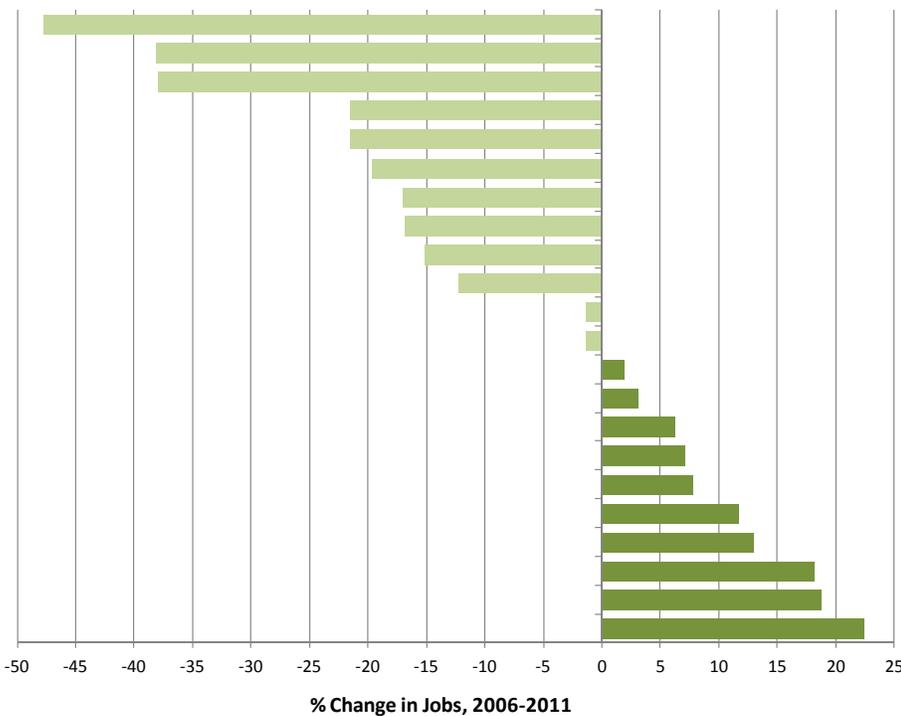


NRV lags behind in state averages in educational attainment, especially in post-high school education.

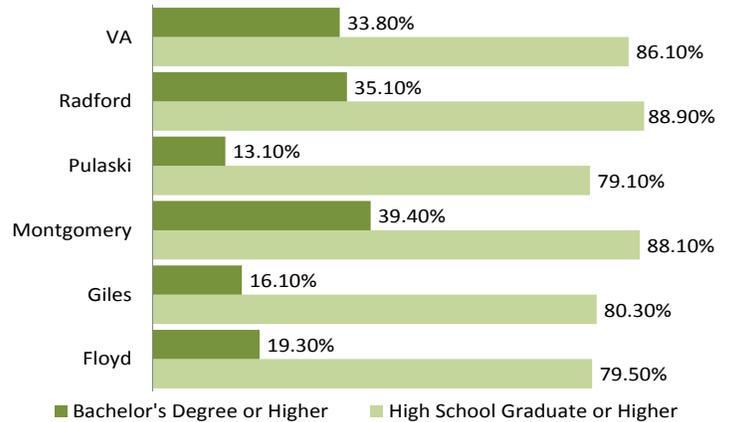


Jobs in manufacturing have been decreasing while jobs in professional, scientific, and technical services have been increasing.

2006-2011 Job Loss and Creation by Industry Sector



Percentage of Residents with Specified Educational Levels



*U.S. Census Bureau, ACS 2005-2009

*Southern Rural Development Center using Economic Modeling Specialists Int. Data

COMMUNITY HEALTH

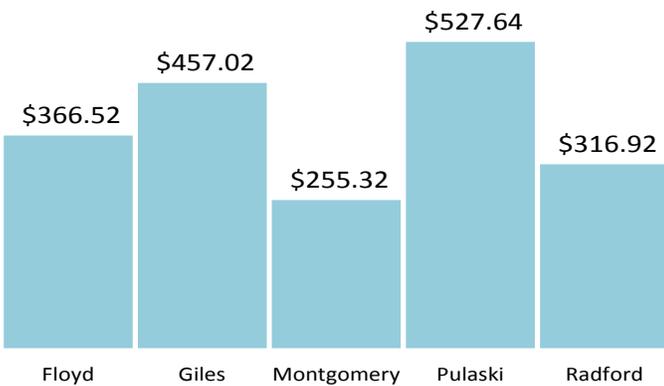
The New River Valley ranks poorly on several health-related measures, when compared to both Virginia overall and national benchmarks. A few issues stand out as particularly troubling—these include smoking, physical inactivity, obesity, substance abuse, poverty, and teen pregnancy rates.



In the NRV, death rates from prescription drug abuse are 3x higher than the state average. Rates in Giles & Pulaski are 4x and 6x higher respectively.



Annual Public Costs of Diabetes per NRV Resident



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

* County Health Calculator; Based on: Education and income statistics from U.S. Census; county death rates and diabetes prevalence estimates from the U.S. Dept. 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.

Does Not Meet VA State Average

Health Indicators of the New River Valley

	Floyd	Giles	Montg.	Pulaski	Radford	Virginia
Teen Pregnancies per 1000 births	28	46	16	49	8	35
% of Children in Poverty	20	19	17	23	19	15
Limited Access to Healthy Foods	9	22	13	17	8	7
% of Adult Obesity	28	29	29	27	28	28
% of Adult Smokers	22	22	16	35	13	19

*2012 VA County Health Rankings & Roadmaps

HOW CAN WE ADDRESS TRENDS & CHALLENGES?

Many of the challenges, issues, and trends that the New River Valley faces are inter-related, which means that progress in one area can lead to improvements in others. This next section identifies some of the ways these challenges intersect and overlap, which may create new opportunities to more effectively address our challenges through an integrated approach. By integrating efforts on multiple fronts, our businesses, community organizations, local governments, and residents can become more focused and effective with the investments we make in our communities- investments that build upon one another- to help make our future vision a reality.

Enhancing Living & Working Environments

- 1** *Ensure there are affordable housing options for all stages of life and income groups.*
- 2** *Increase housing choice near jobs, services, and other key destinations.*
- 3** *Reduce energy costs to households, businesses, institutions, and municipalities through energy efficiency improvements, reduced energy waste, local energy generation, affordable energy prices and rates, and expanded consumer choice.*
- 4** *Enhance transportation and internet options to create better access to employment centers, town centers, and key destinations throughout the region.*
- 5** *Seek ways for residents to successfully age in place and in their communities.*

Making the Business Environment more Productive & Efficient

- 1** *Support and develop a diverse economic base, from emerging high technology industries to small businesses to provide high quality jobs and foster regional investment.*
- 2** *Improve the region's telecommunications infrastructure network to attract new businesses and assist existing businesses.*
- 3** *Invest in transportation projects that enhance the business environment.*
- 4** *Ensure that residents have the skills, resources, and education necessary to reach their full potential.*
- 5** *Strengthen the economic viability of agriculture to diversify the local economy and enhance quality of life.*

Preserving Rural Heritage & Community Character

- 1** *Protect beautiful vistas, which characterize the New River Valley, to preserve quality of life and rural character.*
- 2** *Protect and enhance parkland, open space, and waterways of the New River Valley to provide for outdoor recreation opportunities.*
- 3** *Recognize and celebrate the importance of the arts, culture, and history as being central to defining and building community character and pride.*
- 4** *Strengthen the economic and cultural position of downtown commercial districts.*
- 5** *Integrate existing community character into the design of community core improvements.*

Building Healthy Communities

- 1** *Monitor and improve the environmental quality of the New River Valley's air, water, and land to promote the health of its residents.*
- 2** *Promote proactive choices about food, fitness, family, work, and play.*
- 3** *Improve access to healthy transportation, housing, and recreation options.*
- 4** *Foster collaboration across healthcare providers and networks to decrease health disparities and to increase access, availability, and affordability of healthcare services.*
- 5** *Promote local strategies that prevent and reduce the burden of chronic conditions, disease, and substance abuse.*

Enhancing Living & Working Environments



1 Ensure there are affordable housing options for all stages of life and income groups.

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.

To accommodate projected population growth over the next 20 years, the region will need 10,000 new homes, and 14,000 existing homes will need either replacement or substantial rehabilitation, due to their age. Looking at population growth and other changes in demographics, 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 in how they live.

2000-2010 Change in Number of Housing Units by Structure Type

	Single Family	Multi Family	Mobile Home
Floyd	709	104	94
Giles	370	-22	207
Mont.	3,122	2,046	-283
Pulaski	428	-28	485
Radford	704	-403	-14

* U.S. Census Bureau, ACS 2005-2009; Virginia Center for Housing Research.

2 Increase housing choice near jobs, services and other key destinations.

Increasing housing choices near job centers and implementing multi-modal transit infrastructure such as sidewalks, multi-purpose paths and public transportation to better link these residential communities 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.

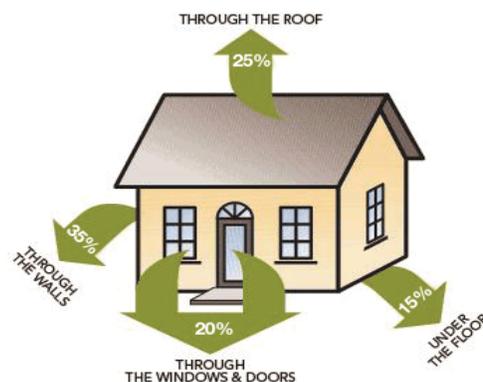
Median Income by County and % Required for Housing & Transportation Costs

Floyd	Giles	Mont.	Pulaski	Radford
\$42,044	\$41,186	\$48,598	\$41,163	\$37,294
44%	37%	45%	34%	46%

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

3 Reduce energy costs to households, businesses, institutions, and municipalities through energy efficiency improvements, reduced energy waste, local energy generation, affordable energy prices and rates, and expanded consumer choice.

Housing involves more than square footage, number of bedrooms, mortgage or rent. It also includes the more 'invisible' items that factor into overall housing costs, one of the largest being the cost of energy. Improving the energy-efficiency of existing homes can substantially increase the affordability of housing, while improving comfort, safety and health of residents.





4 Enhance transportation and internet options to create better access to employment centers, town centers, and key destinations throughout the region.

In addition to expanding housing options near job and commercial centers, enhancing transportation choices, such as public transit, vanpools, or park and ride locations can help reduce costs for families who prefer to live a rural lifestyle. This can also benefit older adults, the disabled, and those who do not own a car.

Connecting more homes with high-speed internet can also help residents' access work and services from home, making telecommuting a viable option and further reducing commuting costs for families. Improved internet access can also help residents remain better connected with family and friends, participate in online education programs, and receive health-related services and information over the internet.

Benefits of Expanding Access to Broadband

1. Accelerates business development and job growth.
2. Provides direct access to education for rural residents.
3. Increases digital literacy to improve academic performance and prepare for future jobs.
4. Makes telecommuting (working from home) a viable option.
5. Expands access and quality of healthcare, while reducing the cost of care.
6. Strengthens ties with family and friends.
7. Improves the speed at which emergency personnel can react to a crisis.

5 Seek ways for residents to successfully age in place and in their communities.

Overwhelmingly, older adults say they prefer to age in their homes, near family and the community they love. Assisted living and nursing homes are expensive and often outstrip the resources of many older adults and their families. To enable more people to age successfully in their homes and communities, modifying existing housing can help meet the changing physical and cognitive needs of older adults. 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.

Each year, 1-in-3 adults aged 65+ accidentally falls. Main risks in the home include lack of grab bars, poor lighting, & tripping hazards. 1-in-4 older adults have a lower body limitation. Their homes could be made more safe with home modifications.

Average Costs of Elderly Care Per Month in Virginia

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

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 stair lift.

Bathroom Retrofit for Independent Living



Making the Business Environment more Productive & Efficient



1 Support and develop a diverse economic base, from emerging high technology industries to small businesses, to provide high quality jobs and foster regional investment.

Employment trends within the New River Valley will impact the location of jobs, commuting patterns, and where our workforce lives. Several factors have shaped the employment landscape of the region. Blacksburg and Radford continue to be important centers for higher education and provide a substantial and growing employment base. The Virginia Tech Corporate Research Center provides business innovation in the region and is facilitating the creation of new jobs. Pulaski and Giles Counties have traditionally been reliant on manufacturing for jobs, but the region's employment in the manufacturing sector has been shrinking over a long period. The number of self-employed businesses has been growing and now outnumbers jobs in the manufacturing sector.

2 Improve the region's telecommunications infrastructure network to attract new businesses and assist existing businesses.

Access to the latest technology, infrastructure, and a highly-skilled workforce is critical to retaining existing businesses as well as increasing the diversity and number of jobs in the region. Quality of life also impacts economic development by attracting new businesses and supporting the existing economy. The business sector, in turn, contributes further to community quality of life through investments in the built environment, culture, and philanthropy.

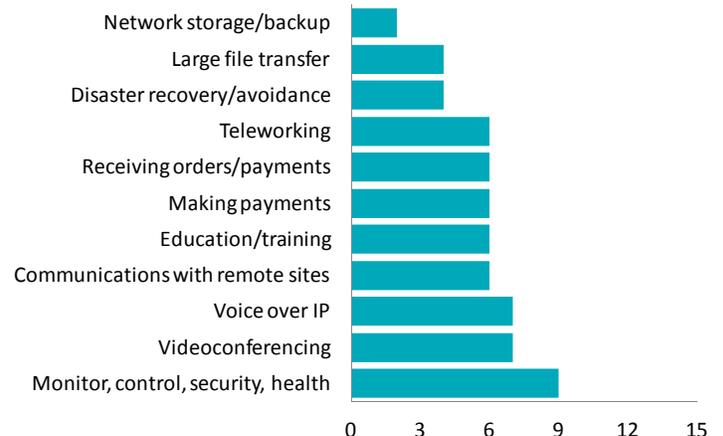
Improving the region's telecommunication network can assist existing businesses, attract new businesses, and allow residents to access education opportunities. Affordable broadband linkages throughout the NRV can help meet the rising technology usage of both residents and businesses.

Number of New Business Startups in the New River Valley



*Virginia Employment Commission, Quarterly Census of Employment & Wages

Number of Top 15 NRV Employers Reporting Needs of Broadband Usage



*2004 NRVPCD New River Valley Telecommunications Plan

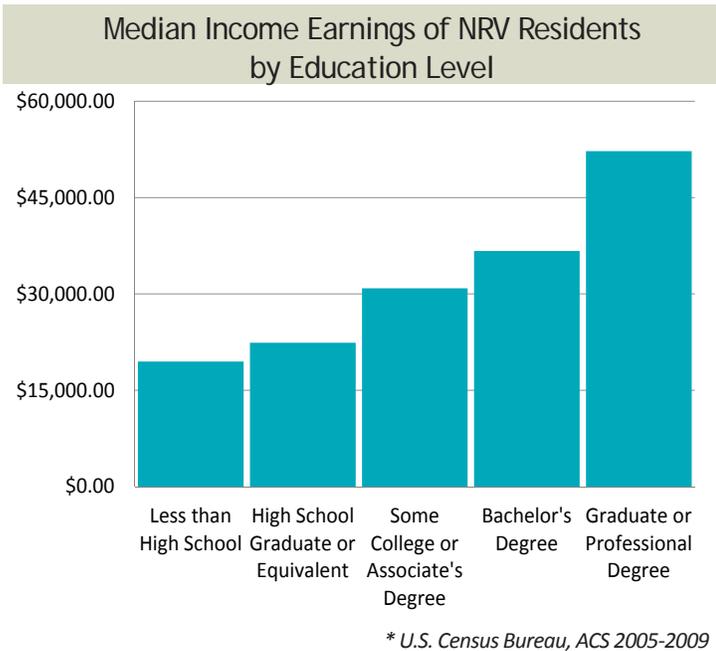


3 Invest in transportation projects that enhance the business environment.

Targeted transportation investments can improve access to jobs, education, shopping, and commercial transport for movement of goods, while providing construction and operations jobs. By investing in transit, communities can better position themselves to attract new businesses as well as customers to their downtowns and other major employment centers.

4 Ensure that residents have the skills, resources, and education necessary to reach their full potential.

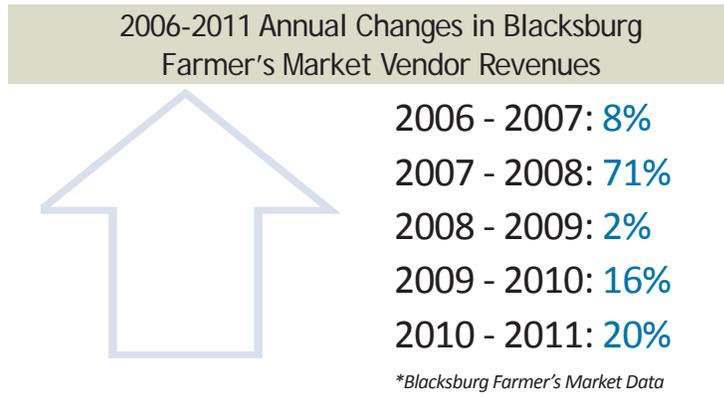
In order for this region to be prosperous, residents need the tools, resources, and education necessary to reach their full potential as citizens, workers, and leaders. As jobs in manufacturing continue to decline and the 21st century economy brings demands for different skills, training programs can connect workers with more secure job options. 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 from moving away to find good jobs.



5 Strengthen the economic viability of agriculture to diversify the local economy and enhance quality of life.

Local farms remain key economic assets and symbols of the New River Valley’s cultural identity. Increasing interest and demand for more locally grown foods, presents a great opportunity for farmers to increase the economic viability of farming. However, there is currently an inadequate supply to meet the demand and it is unknown whether there is interest from current farmers to expand or diversify their operations. Expanding the agriculture infrastructure available in this region (e.g. processing or distribution center, slaughter house or dairy) could also help expand options and profit for local farmers and increase the region’s agricultural viability. By increasing availability of direct sales to the community, farmers can increase both their economic strength and community presence.

The Blacksburg Farmers Market has seen a 160% increase in vendor revenues over the past 5 years (2006 - 2011).



Preserving Rural Heritage & Community Character



1 *Protect beautiful vistas, which characterize the New River Valley, to preserve quality of life and rural character.*

Scenic beauty is highly valued by 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 and cultural resources. They support local communities by providing outdoor recreation and tourism opportunities such as hunting, fishing, paddling, hiking, and camping. Forest resources protect ground and surface waters to help ensure a clean and healthy water supply for NRV residents. Improving land use planning and practices can help protect these resources as well as the rural character, scenic views, and opportunities for active recreation they provide.



2 *Protect and enhance parkland, open space, and waterways of the New River Valley to provide for outdoor recreation opportunities.*

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*

More than 20,000,000 visitors enjoy outdoor recreational opportunities in the New River Valley each year.

**2006 Virginia Outdoor Survey*





3 *Recognize and celebrate the importance of the arts, culture, and history as being central to defining and building community character and pride.*

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 often provide much-needed gathering places, where local traditions are 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.

"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 & Chief Executive Officer, Norfolk Southern Corporation



4 *Strengthen the economic and cultural position of downtown commercial districts.*

Strengthening small town centers provides an opportunity to revitalize local economies without sacrificing the beauty of the surrounding landscape or the unique character and identity of communities. 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 include the arts 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 visitor expectations, and supporting local businesses.

5 *Integrate existing community character into the design of community core improvements.*

Channeling investments into these existing main streets can preserve existing infrastructure, historic character, and spur new economic opportunities, while making wiser use of public resources. It can also help to increase the accessibility and convenience to essential services for our more rural communities— making them true "town centers" once again, where people work, shop, and come together for community events.

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*

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

Building Healthy Communities



1 Monitor and improve the environmental quality of the New River Valley's air, water, and land to promote the health of its residents.

Clean air and water, scenic landscapes, fresh food, outdoor recreational opportunities and diverse fish and wildlife each enhance the health and quality of life of New River Valley residents. Although both ground and surface water are abundant in much of the NRV, many of these water resources are under threat or already impaired from agricultural runoff, leaky septic systems, and development patterns that threaten long-term water supply. Strategies that address or mitigate threats to water quality and supply will help protect this critical resource for generations to come.

2 Promote proactive choices about food, fitness, family, work, and play.

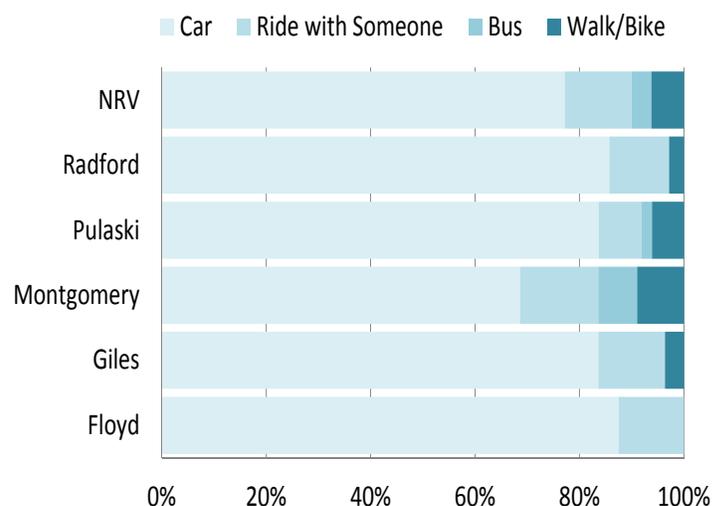
Communities that make it more convenient to make healthy choices have better health outcomes for their citizens. Communities can also foster a built environment that makes healthy lifestyle choices (like walking, biking, and eating fresh food) more convenient and fun. Transportation systems and options can be designed to link up important destinations, including places to access affordable, healthy food options. When communities plan with healthy food access, pedestrian safety, and access to recreation opportunities in mind, they are likely to see substantial health benefits for their citizens.

Water Quality Impairments in the New River Valley

Impairment Type & Primary Causes	# of River Miles Impaired
E. COLI. <i>Animal waste associated with pets and farm animals and human waste from straight pipes, leaky sewage collection and treatment systems.</i>	285.39
PCBs IN FISH TISSUE <i>Legacy contaminants.</i>	76.60
TEMPERATURE <i>Destruction of riparian vegetation.</i>	60.80
LOSS OF AQUATIC ORGANISMS <i>Sedimentation and nutrients from agriculture, municipal and industrial source and toxicity associated with legacy contaminants.</i>	60.25
METALS <i>Legacy contaminants.</i>	3.55

*2012 VA Department of Environmental Quality

% of Lower-Income Residents Walking, Biking, Riding, & Driving to the Grocery Store



*2012 Livability Initiative Lower Literacy Survey



3 *Improve access to healthy transportation, housing, and recreation options.*

Development decisions can affect community health outcomes. Sidewalks, bike lanes, street designs that slow traffic and make it safe to cross, parks, trails, gyms, shops and other destinations within walking distance—all of these community features can help communities reduce overall obesity rates and related health problems such as diabetes and heart disease.



4 *Foster collaboration across healthcare providers and networks to decrease health disparities and to increase access, availability, and affordability of healthcare services.*

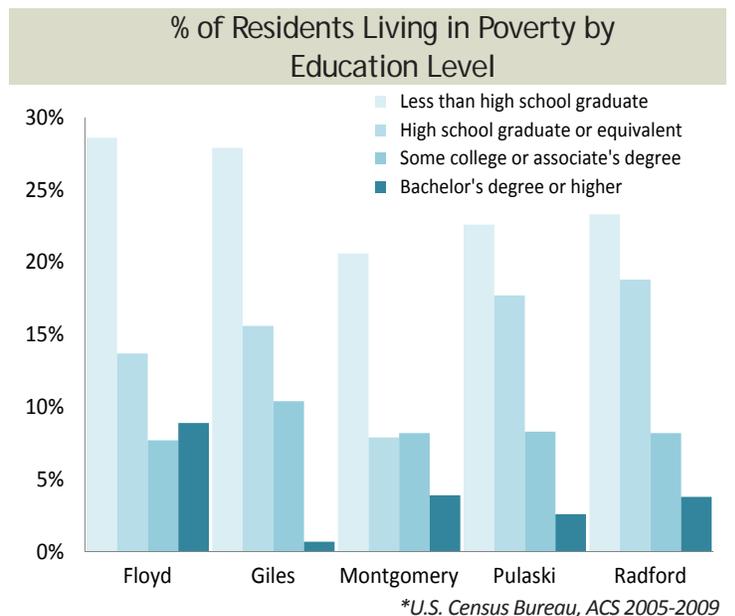
Communities can improve health outcomes by increasing access to preventative care. People who don't receive appropriate preventative medical and behavioral care are more likely to use the emergency room for primary care, raising the costs for all citizens. Health insurance by itself does not ensure access. It is also necessary to have providers that accept the individual's health insurance and a sufficient number of healthcare providers located at close proximity to patients. Communities can reduce the gap between providers and patients by increasing knowledge about the importance of preventative care, providing transportation services for medical related visits, promoting electronic collaboration among healthcare providers, and adding evening and weekend clinic hours for patients who cannot seek care during the work day.



5 *Promote local strategies that prevent and reduce the burden of chronic conditions, disease, and substance abuse.*

Social support networks comprised of family and friends, and involvement in community life, have also been identified as a powerful predictor of health, suggesting that individuals without a strong social network are less likely to participate in healthy lifestyle choices. People living in remote areas, especially the elderly, those who live alone, and those without secure transportation are more likely to become isolated, be less physically active, and have reduced access to health services. Communities can improve citizen health by taking active steps to reduce isolation for these vulnerable populations.

Higher levels of education improve individual economic opportunities, access to medical care, and reduce social/psychological stressors that can contribute to substance abuse and family violence. By focusing on education in order to improve high-school graduation rates, strategic workforce re-training to respond to a changing economic landscape, and economic development initiatives to improve job security, improvements in citizen health outcomes are more likely and more lasting.



WHAT'S

NEXT?

This interim report for the Livability Initiative is an important milestone in our planning process. In it, key challenges have been identified including some data and trends that provide a clearer picture of the region today, and where things are heading. The key strengths and assets of this region have also been identified based on citizen feedback— those things citizens want to preserve, strengthen, and draw from as critical issues in this region are addressed. Some overarching goals have also been presented, goals that could substantially improve quality of life for citizens and the overall livability of this region; as well as some potential strategies that communities could employ to achieve those goals.

The next steps in the process involve looking at the region today and where communities in this region want to be 20 years from now. This will involve examining the goals and strategies developed by working groups so far and developing a better understanding of how they might interrelate. That is, which strategy options might help address multiple challenges, and which might require asking some hard questions on tradeoffs, costs, and different preferences among citizens and localities. In many cases, this will require deciding between multiple approaches depending on the preferred end goal and strategies that our citizens want to put their energy into.

This report was built by:

1, 200 New River Valley Citizen Voices and
160 Participants at Monthly Working Groups



Outreach activities included:

- A day long regional kick-off meeting
- An on-line survey
- Spanish language survey
- Lower literacy paper survey
- Small focus group and community meetings
- Interactive performance theatre
- Digital storytelling
- BUILT planning game

Working group participants included:

- 8 State agencies
- 11 Regional organizations
- 26 Non-profit and community based organizations
- 15 Private sector partners
- 15 citizens (no particular affiliation)
- All member localities

How can I participate?

As with the first phase of the planning process, citizen participation is both welcome and needed! The New River Valley has tremendous resources to draw upon as citizens work to address some of the key challenges identified in this report. Making positive progress on these challenges and achieving the goals that residents have identified means weighing different potential solutions and seeing which are the best fit for this region, and which might be more effective in some localities than others. Citizens can help make sure the priorities and action strategies that are most important to them, their neighbors, and their community are heard in the next phase of the planning process by participating in face-to-face meetings, workshops, online surveys, and focused topic discussions.

To find out more ways to get involved, visit
www.nrvlivability.org
or call Carol Davis, Community Outreach Facilitator for
the Livability Initiative at 540-639-9313, ext. 222.