FOREWORD

As part of the implementation of the Technology Opportunities Program (TOP) project Getting Rural Virginia Connected: A Vision for the Future, funded by the United States Department of Commerce, we would like to provide you with a detailed report of project-related activities that were undertaken in Craig County.   We hope it will be useful to local government leaders, Virginia Cooperative Extension agents, Technology Leadership Team members, and all county residents with an interest in technology and economic development in Craig County. Many of you were closely involved with the project on a regular basis, and much of the information provided is well known. At the same time we thought it was important to provide background material along with a detailed description of how the project unfolded and how decisions were made for those learning about it for the first time.

We wish to again acknowledge the matching funds of $6,000 provided to us by the Craig Board of Supervisors which helped to make Craig County's participation in this program possible. All of us in Virginia Cooperative Extension and the Blacksburg Electronic Village have enjoyed working with you over the past two years. We hope the Craig Electronic Village http://.www.craigev.net will continue to make a difference in your community and that this report will be helpful as you continue to move ahead in the deployment of information technology to support the vision of your local leadership.

Virginia Cooperative Extension

Blacksburg Electronic Village

INTRODUCTION

Getting Rural Virginia Connected: A Vision for the Future, funded through the Technology Opportunities Program (TOP) of the U.S. Department of Commerce (DOC), had its beginning in Spring 2001. At that time Dr. John Dooley, Associate Director for Family and Consumer Sciences and Community Initiatives in Virginia Cooperative Extension (VCE), and Dr. Andrew Cohill, Director of the Blacksburg Electronic Village (BEV) at Virginia Tech, learned of this funding opportunity. The TOP project was designed to help rural communities in Virginia develop the capacities needed to prosper in the Information Age economy. The underlying purpose of the project was to empower citizens with the knowledge and tools to become active participants in their economic futures. This was accomplished through a participatory process of education on trends in the county, visioning for an improved future, and ways to make that future a reality. Technology was identified as one of the tools to create the kind of future citizens wanted in their counties.

The initial step in each county was the formation of a Technology Leadership Team with a broad representation of citizens from across the county that served as a steering committee to provide on-going direction to the local project. The next step was the implementation of *Take Charge*, an educational program designed to enable leaders, decision-makers, and residents in rural communities to review their strengths and weaknesses and develop a vision for the future. One component of this vision focused on how technology could be used to address issues in their communities. A central piece of the TOP program was the development of a community electronic network and web site that would increase citizen participation in local government, promote community connectedness, and support economic development.

The community networks were modeled after the Blacksburg Electronic Village and provide various features to assist communities in meeting the goals described above. The Community Connections program supports web sites for civic, faith-based, and other community organizations to inform county residents of the services and opportunities for personal development available in their county. A Community Calendar keeps folks informed of government meetings, church or club meetings, or recreational events. Posting the meeting times and agendas of the local Board of Supervisors promotes citizen participation in local government, and the web site Discussion Forum encourages public conversation and dialogue on matters of importance to the county. The Village Mall lists individual businesses, and county residents needing a particular product or service can use this business directory to find a provider in their own community and support the local economy. Tourists planning to visit the locality can find the name of a local bed and breakfast. Finally, the Virtual Business Incubator helps start-up businesses develop their own web site describing their products or services. Technology training for local citizens was also part of the TOP plan so that residents could develop the skills needed to use the web site and volunteers would be prepared to administer the site after the grant funding was completed. (A detailed description of the network services made available to each county by the Blacksburg Electronic Village can be found in Appendix A.)

In addition to their visioning process and community networks, each county received a technology assessment from which a technology master plan was developed. John Nichols, Information Technology Manager for Network Infrastructure and Services, spent time in each county interviewing and researching businesses and network providers to provide a custom

report for each county. This individualized master plan can serve as a blueprint for future plans to acquire high speed Internet access or other technology development.

The TOP program presented an opportunity for two entities within Virginia Tech, VCE and BEV, to develop a working partnership that would benefit rural Virginia communities.   VCE has expertise and experience in helping small communities plan for and take control of their future, and BEV brings expertise and experience in technology assessment and building community networks. With this in mind, Dr. Dooley and Dr. Cohill developed a collaborative proposal that targeted nine rural, economically challenged counties across Virginia. They targeted counties with lower education and income levels and higher outward migration rates as compared to Virginia as a whole, and a need for economic growth. Each participating county pledged a contribution of $6,000 ($2,000 per year over three years) to meet the technical costs associated with maintaining their community networks on the BEV server. At the completion of the project, counties would decide if they wished to continue to host their community network sites with the BEV, or move to another Web hosting service provider.

As the target counties were identified, Dr. Dooley approached the local VCE agent regarding his/her willingness to serve as the local leader of the county project. The local agent carried the project forward to representatives of county government to obtain their approval and financial commitment. The grant proposal was submitted in Spring 2001 with letters of commitment from Carroll, Dickenson, and Grayson Counties in the VCE Southwest District; Craig County in the VCE Northwest District; Cumberland County in the VCE Central District; Louisa County in the VCE Northern District; King and Queen County in the VCE Northeast District; and Accomack and Northampton Counties in the VCE Southeast District. In Fall 2001 Virginia Tech was notified that the proposal was funded, with a start date of October 1, 2001. (The project scope was modified in August 2003 to exclude Grayson and Carroll counties since they had completed many of the project objectives prior to the onset of this project, and there were not sufficient resources to implement a modified project plan for these two counties.)

Unfortunately, personnel turnover at Virginia Tech delayed the start of the project. First, Dr. Dooley, the project leader for VCE, was assigned a new set of responsibilities as Interim Associate Provost for Outreach. About the same time Dr. Cohill resigned his position with the BEV. Also, State budget reductions resulted in the loss of VCE agents in several of the TOP counties and new local leadership had to be identified.

The VCE agents with TOP responsibilities in each of the nine counties were brought together in Blacksburg for a two-day orientation in March 2002. Project policies and procedures were established and a time line was developed for moving the project forward. Shortly thereafter, Dr. Eleanor Schlenker took over Dr. Dooley's responsibilities with the project, and Mathew Mathai was appointed Director of the BEV and Project Director for TOP. Tabitha Combs who was hired as the TOP Project Coordinator resigned her position at the BEV and Jaime Shetrone took her place in May 2002. The new project team met for the first time in June 2002, and work on the project was finally underway – eight months after the funding was awarded.

The geographic separation of the target counties presented a tremendous challenge in communication. To keep everyone informed, the BEV set up a TOP web site on which meeting minutes, publicity materials, PowerPoint programs, pictures of local meetings and activities, and

a calendar of events for each county were posted on a regular basis (http://top.bev.net/). A comprehensive Project Implementation Plan developed by Mathew Mathai provided a step by step outline with benchmarks to measure progress and the completion of required tasks. A handout describing the BEV in a BOX features was made available for local distribution.   These materials were also posted on the TOP site for use by BEV and VCE staff. The Project Implementation Plan is found in Appendix A.

GETTING STARTED

Previous County Efforts in Technology Development

In 1996 Craig County Virginia Cooperative Extension (VCE) worked with other county leaders to set up a Technology Task Force for Craig, with the goal of increasing awareness of the significant role that technology plays in families, schools, communities, and our world. The members were appointed based on their knowledge and expertise in technology.

The members of the Task Force were:

> Dr. Andrew Cohill, Director and Architect of the Blacksburg Electronic Village
> Dr. Dan Malone, Director of the Virginia Center for Innovative Technology
> Dr. Thomas Cecere, Director of Technology for Virginia Western Community College
> Linda DiYorio, Assistant to Congressman Rick Boucher
> Superintendent and Director of Technology for the Craig County Schools
> Managers of the Electric Cooperative, TDS Telephone, and Farmers and Merchants Bank
> Representatives from Roanoke Telecommunications, Inc., and Lewis Gale Medical Center
> Representatives from numerous local businesses
> Local government officials and agency representatives
> Youth, parents, and volunteers

The activities of the Technology Task Force were funded by a three year grant from the Appalachian Regional Commission (ARC) secured by Deborah Snead, VCE Family and Consumer Sciences Agent. With this funding the staff of the Blacksburg Electronic Village (BEV) provided workshops on the use and potential of local web sites and the Internet for members of the Task Force and the community. Six community access sites with computers and Internet access were set up across the County. A County web site, the Craig Rural Electronic Village, also was created and operated for three years under ARC federal guidelines. The Craig Rural Electronic Village was presented as a model project at Congressman Boucher's Technology Conference in November 1999.

In 2000 Craig County initiated a community-wide strategic planning forum to set a plan of action for land use and sustainable economic development in the County. Planners and facilitators from the Canaan Valley Institute partnered with the Craig County Tourism Commission, Craig County Industrial Development Authority, Craig County government, Downtown New Castle Revitalization Management Team, Craig County Rural Partnership, and Craig County VCE in this effort. (The Canaan Valley Institute is a nonprofit organization with the goal of helping rural communities.) Nearly 55 community leaders and citizens took part. Extension Agent Deborah Snead worked with the County Administrator to recruit the participants – many of whom were members of the original Technology Task Force. Through this planning forum, community leaders identified priority needs in six goal areas, including technology. Recommendations from the technology goal area were included in the Craig County 2002 Comprehensive Plan.

Securing County Support for the New Project

Early in 2001, Dr. John Dooley spoke with Extension Agent Deborah Snead about including Craig County in the TOP project. She brought the TOP opportunity to the attention of the Craig County Board of Supervisors who expressed a strong interest in the project and pledged the $6,000 required. (A copy of the commitment letter of the Craig Board of Supervisors can be found in Appendix A.) In Fall 2001 Virginia Tech was notified that the grant was funded with the start date of October 1, 2001. Shortly thereafter, Deborah informed the Board that the project was funded and work would go forward. She also prepared an article for the local newspaper announcing the project and its potential benefit to the county.

Extension Agent Training

The first step in the Project Implementation Plan was orientation and training for the VCE agents who would be leading the county programs. Agriculture and Natural Resources, Family and Community Sciences, Food, Nutrition and Health, and 4-H agents were involved in respective counties. A two-day training held on March 6-7, 2002 at Virginia Tech provided an overview of the timeline and benchmarks for project tasks. Agents representing all nine counties along with their District Directors attended. Dr Andrew Cohill, the BEV Director, demonstrated the various options that would be included on the county sites. VCE Community Initiatives specialists Pamela Gibson and Gary Larrowe described the *Take Charge* process and the preparation required for those sessions.

A second training took place on November 12, 2002 at the Virginia Tech Center in Richmond. Mathew Mathai, TOP Project Director, and Jaime Shetrone, TOP Project Coordinator, reviewed the basic concepts of telecommunications infrastructure and the issues that rural communities face in obtaining Internet access for their homes, schools, and businesses. VCE Community Initiatives specialist Gary Larrowe explained the CSPP model to be used in evaluating current technology access and equipment in each county. (It was decided at a later time that John Nichols, Information Technology Manager with Network Infrastructure and Services at Virginia Tech, would carry out this assessment.) Finally, agents discussed the applications of community networks that could be helpful in their particular communities.

Forming a Technology Leadership Team

The next step in the Project Implementation Plan was recruiting a Technology Leadership Team (TLT). The TLT was the steering committee for the local project, and needed to include representatives from all geographical locations and population groups in the county. TLT members were expected to keep their local groups informed of on-going project activities and encourage their participation. The original proposal indicated that particular communities within each county would have their own TLT. However, as the project began to move forward, it became obvious that all geographic areas of a county had to work together to support technology access and the growth of new business, and all would be better served if there was one TLT providing leadership for the county. Ensuring broad representation from all areas of the county was a priority in recruiting TLT members.

Recruiting a Technology Leadership Team for Craig County

Extension Agent Deborah Snead began to call together community leaders and others with an interest in technology to form a TLT for Craig County. Letters, personal visits, and newspaper announcements were used to make residents aware of this opportunity. Many of those asked to participate had served on the first Technology Task Force and been a part of the strategic planning process held prior to the development of the Craig Comprehensive Plan. Members of the Craig County Board of Supervisors and Extension Leadership Council, School Board members and teachers, and representatives from local civic organizations and churches were invited. This group met on June 5, 2002 at the Craig-Botetourt Electric Cooperative. Three community leaders along with Extension Agents Deborah Snead, Roy Kiser, and Michelle Adcock participated. Mathew Mathai, TOP Project Director, shared the goals for the project including 1) promoting the development of new businesses, 2) helping community organizations become more visible, 3) encouraging citizen participation in their community, and 4) making a positive impact on the local economy. This group laid the foundation for the Craig TLT and made plans for future meetings. (A complete list of county leaders receiving invitations to join the TLT can be found in Appendix B.) At this time another news article was developed, inviting community members to join the TOP project.

On June 30, 2002, Deborah retired from VCE. Extension Agent Roy Kiser represented the project in Craig County from July 1, 2002 until his retirement on February 28, 2003; however, the TLT did not meet during this period. On March 1, 2003 Extension Agent Michelle Adcock took leadership of the Craig project.

Michelle reactivated the TLT originally organized by Deborah Snead in June, 2002. As a 4-H Extension Agent, she recognized how her senior 4-H Club could contribute to the design and construction of the Craig County community network, and invited several youth to join.

Agencies and groups represented on the Craig County TLT included the following:

> Virginia Cooperative Extension
> Craig County Ruritan Club
> Craig County Lions Club
> Craig County Boy Scouts
> Craig County 4-H
> Craig County Child Care Center
> Craig County Board of Supervisors
> Craig County Schools, including the Director of Technology
> Craig County faith-based community
> U. S. Forest Service
> Craig County Businesses
> TDS Telecom

A complete list of Craig County TLT members is located in Appendix B.

IDENTIFYING COUNTY ISSUES AND SETTING GOALS

According to the Project Implementation Plan, the next step after setting up the TLT was the *Take Charge* process. *Take Charge* is an educational program designed to enable leaders, decision-makers, and residents in rural communities to effectively address local problems and develop a vision for the future. In a series of three workshops, participants identify the strengths and weaknesses of their community, set goals for the future, and develop action steps to move forward in reach of those goals. Craig County had recently completed the strategic planning process supported by the Canaan Institute, and the goal areas identified were part of the 2002 County Comprehensive Plan. Since one goal identified was technology, the action steps arising from that process were used to guide the TOP project in place of *Take Charge*.

A summary of the Craig County Comprehensive Plan follows.

The Craig County Comprehensive Plan is a blueprint for the future growth and development of the County over the next 10 to 15 years and is also a statement of the community's shared goals, visions, and values. It provides direction and guidance, for both the public and private sectors, in making decisions about land development, public services, and resource protection. The Comprehensive Plan allows decision-makers to study the long-term consequences of current decisions and recognize that today's actions will impact the County for many years to come. The comprehensive plan contains chapters on the history of Craig County, the natural environment, demographics, housing, economy, education, community facilities, recreation, transportation, existing land use, future land use, and goals and objectives. Craig County goals and sample recommendations follow. A complete copy of the Craig County 2000 Comprehensive Plan is found in Appendix C.

> **Housing**—Craig County desires for its citizens to have opportunities for safe, convenient, and affordable housing, in such a way as to preserve the rural amenities that are the County's hallmark. Sample recommendation: The County should investigate the feasibility of a retirement community built around a golf course.
>
> **Economy**—Craig County wishes to promote a healthy and diverse economic base which balances the need for increased economic opportunities with the need to protect and preserve the County's quality of life and environment. Sample recommendation: The County should encourage forms of economic development which do not rely heavily on public infrastructure. These include, but are not limited to, agriculture, agri-business, tourism, Internet-based business, and biotechnology.
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> **Human Services**—The strength and success of a community begins with the welfare of its children, families and senior adults. It is the goal of the County to empower families to care for their children, as well as the elderly, and to involve faith-based organizations, community groups, and government to help make this happen. Sample recommendation: Craig County is the only county in Virginia with no public library. Craig County should pursue funding of a multi-function facility to serve as a library/meeting/technology facility.

Natural Resources—Preservation and protection of the County's natural resources is vital to the County's high quality of life and efforts toward such preservation and protection are of primary importance. Sample recommendation: The county should utilize its natural resource base to create jobs through low-impact nature-based tourism development.

Agriculture—As an important part of Craig County's heritage and current way of life, in addition to the economic benefits it represents, agriculture in the County should remain an important element in its future. Sample recommendation: The County should study development of an Open Air Market as an economic resource for local farmers.

Recreation/Tourism—To improve the economy of Craig County, provide local job opportunities, and improve the quality of life in Craig County through tourism development and use of our recreational resources. Sample recommendation: Encourage better marketing and servicing of established recreational activities, such as hunting and fishing, to improve the income of local businesses and the County government. One option is to use the Craig County Electronic Village as a resource in marketing the County on the Internet.

Built Resources—To provide a quality and stable infrastructure base upon which to build Craig County. Sample recommendation: The County needs to continue its plan to upgrade the Courthouse, Administration Building, and Sheriff's Office to address space and accessibility needs.

Transportation—The Transportation System in Craig County should provide safe, efficient, and convenient modes of transportation. Improvements to the transportation systems should be sensitive to the County's environmental, social, land use and economic resources and concerns. Sample recommendation: The Virginia Department of Transportation should make substantial improvements to Rt. 311 from the Roanoke County line to New Castle by straightening the severe curves, providing more areas to pass, providing more turn-offs for slow-moving vehicles and school buses and providing more shoulder area where possible.

DEVELOPMENT AND PROMOTION OF THE WEB SITE

The reactivated TLT, under the leadership of Extension Agent Michelle Adcock, began to meet regularly in Spring 2003, and made rapid strides in the development of their web site. The minutes of these meetings summarize the issues discussed, decisions made, and community partnerships put in place.

Technology Leadership Team - April 28, 2003 – Craig County High School, New Castle

Present: 7 TLT members, VCE Agent Michelle Adcock, Retired VCE Agent Deborah Snead, VCE Area Specialist Jon Johnson, Blacksburg Electronic Village Staff member Robert Roberts

Michelle Adcock welcomed members and, following introductions, explained how early retirements had delayed TOP planning, but all were excited about getting started again.

Introduction to the project: VCE Area Specialist Jon Johnson provided an overview of the TOP project and its goals. He stressed the role of the TLT in designing the layout and choosing the content of the site, and demonstrated some of the features including the Community Calendar, Virtual Business Incubator, and directories for churches, civic organizations, and businesses. The Virtual Business Incubator and Community Connections programs will provide support for micro-businesses and nonprofit organizations that want to develop their own web sites. Deborah asked about the definition of micro-business and eligibility for the Virtual Business Incubator. Jon indicated this would include businesses with five or fewer employees. Deborah suggested that with so few businesses in the county, having them all included would contribute to economic growth. The group viewed some of the other TOP county sites hosted by BEV to get some ideas of how they might fashion the Craig site.

Web site management: Jon explained the role of BEV in hosting the site and the services they would provide. TLT member Paul Paradzinski asked who would secure the site from inappropriate content. Robert Roberts explained that BEV provides security. TLT member Chris Fisher asked if a representative would be needed to maintain each individual site (e.g., Lion's Club, Scouts). In addition to a representative to support each organization, there will need to be a volunteer administrator to monitor the content of all information posted to the sites. A concern was expressed as to how the county would maintain the site when BEV stepped out at the end of the grant. TLT member Reese Wood commented that this program was needed in the community and that they would need to find a way to implement it.

Internet access in Craig: The TLT shared issues and concerns about infrastructure to bring Internet access to the County and to provide public computer access. Deborah Snead expressed satisfaction with her tds.net service and speed. TLT member Adele Morris mentioned the after school programming supported by Virginia Western Community College and asked if the computer room at the Craig County Child Care Center was still available for use. There is still a public access computer at the New Castle Commons Senior Citizens Center and at Craig-Botetourt Electric Cooperative. TLT members were asked to sign permission forms to allow their names to be listed on the TOP web site.

Technology Leadership Team - June 2, 2003 – Craig County Administration Building, New Castle – 7:00 pm

Present: 2 TLT members, VCE Agent Michelle Adcock, Retired VCE Agent Deborah Snead, VCE Area Specialist Jon Johnson, TOP Project Director Mathew Mathai, Blacksburg Electronic Village Staff member Robert Roberts, VCE Community Initiatives Specialist Pamela Gibson

Presentation by TOP Project Director: Mathew Mathai described the network programs included in BEV in a Box and the technical support BEV provides. He noted that rural communities are faced with both delays and higher investment in obtaining fiber optics for high speed service, as fewer users will be supporting the service. Despite the cost, fiber infrastructure will strengthen the educational system, assist in work force training and economic development, and make possible new services such as telemedicine.

Questions and discussion: Paul Paradzinsky expressed concerns about hate groups or others who may wish to post inappropriate material. Mathew said that the TLT can set guidelines on the kind of material that can be posted on the site based on the purpose for which the site was being developed, in this case economic and community development. BEV has an informal policy of only allowing family oriented material on its site (http://www.bev.net) and so far has had no legal challenge to that policy.   The group discussed the role of the Web site administrator and the training that person will need to receive. Adele volunteered to take this role and expressed the need for a community readiness workshop. When asked about the use of the money provided to the project by the Craig Board of Supervisors, Mathew indicated that the $2,000 a year match will pay for technical support from the BEV in Year 3 of the project. The TLT was encouraged to look at the Craig County Rural Electronic Village site developed under Congressman Boucher's program as another model web site. It was not known who was currently managing the site.

Technology Leadership Team - July 14, 2003 – Craig County High School, New Castle – 5:30 pm

Present: 3 TLT members, VCE Agent Michelle Adcock, VCE Area Specialist Jon Johnson, TOP Project Coordinator Jaime Shetrone, Blacksburg Electronic Village Staff member Robert Roberts

On-line demonstration of web management: Robert Roberts demonstrated the following web administrative functions:

      Additions to the on-line directory and village mall
      How to log in as the administrator
      Registering new users
      Directory status codes (new, active, blocked, locked, old)
      Moderator types (pre- and post-moderation)
      Demo electronic village

Robert explained that new users can register themselves and then be approved by the site administrator (post moderation), or be registered by the administrator. Jaime Shetrone mentioned it is less up-front work if residents can post listings to the directory or village mall immediately. The web administrator will see when an account is updated.

Development of the test web site: Jaime showed the TLT various web site styles, with possible looks and layouts for the Craig site. The following content topics will be included:

> People
> Home
> Village Mall (local businesses)
> Community Groups
> Government
> Education and Libraries
> Calendar
> About this Site
> Youth
> Seniors
> Communities

Jaime will begin to design a Craig site based on the group's suggestions. She will e-mail the first draft of the page prior to the next meeting.

Technology Leadership Team - August 25, 2003 – Craig County High School, New Castle – 5:30 pm

Present: 5 TLT members, VCE Agent Michelle Adcock, Retired VCE Agent Deborah Snead, Blacksburg Electronic Village Staff member Robert Roberts

Review of the test site: The TLT reviewed the Craig site developed since the last meeting and made the following comments and decisions:

> TLT member Adele Morris asked which tab is the most used in other counties—according to Robert Roberts, this has not been determined.
> Deborah expressed the need for a tab for county churches.
> The group had concerns with the color scheme and the picture on the front page. They will use the picture from the tourism brochure and change the colors to green and rust.
> Deborah and TLT member Paul Paradzinski saw the need to showcase the recreational opportunities in the county
> The overlap between the top tabs and the quick links seemed to be a problem; the tabs should be alphabetized.
> The "Communities" tab will be dropped and "Recreation" and "Churches" will be added; the "Village Mall" will be changed to "Local Businesses."
> The group discussed having links under the government page to county and state government units such as the Department of Motor Vehicles and Department of Taxation.
> TLT member Jeff Boudreaux suggested posting school closings. The "Education" page

could provide links to Craig County Schools, the State Department of Education, Virginia Western Community College, Craig County Child Care Center, Virginia Tech, and others.

The word "libraries" will be removed from the "Education and Libraries" tab. They decided to keep the "Youth" and "Seniors" tabs.

Deborah suggested the need for a tab related to child care. "Child Care" will be included under the quick links, as well as links for public schools, local weather, and local businesses.

Web site content: The following TLT members volunteered to work on content for the site:

> Youth and Government – Michelle Adcock
> Churches and Child Care – Deborah Snead
> Education – Adele Morris and Mary Page Cosby
> Recreation – Jeff Boudreaux
> Utilities – Gerald Groseclose

Technology Leadership Team - September 29, 2003 – Craig County High School, New Castle – 5:30 pm

Present: 6 TLT members, Retired VCE Agent Deborah Snead, Blacksburg Electronic Village Staff member Robert Roberts

Deborah Snead reported that Michelle Adcock accepted a lateral transfer as 4-H Extension Agent in Montgomery County. She will be missed greatly.

Review of the test site: Team members reviewed each page of the corrected site and made necessary changes. Additional content for posting should go to Robert Roberts. TLT member Adele Morris will serve as webmaster for the county with support from the team. She will oversee the overall site as well as approve individual, group, and business postings.

The Craig Electronic Village went live on October 1, 2003.

Technology Leadership Team - October 27, 2003 – Craig County High School, New Castle – 5:30 pm

Present: 6 TLT members, Retired VCE Agent Deborah Snead, TOP Project Director Matthew Mathai, Blacksburg Electronic Village Staff member Robert Roberts

Update from TOP Project Director: Mathew Mathai summarized the project's accomplishments so far. Based on the late start, the project will be extended until June 30, 2005 to meet the three-year commitment of financial and technical support. After July 1, 2005 businesses will have to obtain their own host, but may remain as a link on the Craig site. At that time the Craig site and nonprofit groups can choose to remain on the BEV server, who will provide hosting and services

for a fee, or they may move to another host server. A workshop for the Virtual Business Incubator program was set up. TLT member Dot Kincaid will help identify and register participants.

Use of the Discussion Forum: Robert Roberts demonstrated the community forum feature that will allow the posting of comments and discussion on community issues. A forum administrator and moderator are needed to register participants and monitor postings. The forum could go live whenever the TLT decided. Dot indicated that TLT member Deborah Scott in the County Administrator's office might be able to assist with the forum.

Technology Leadership Team - December 1, 2003 – Craig County High School, New Castle – 6:30 pm

Orientation program for community leaders: On this evening the TLT hosted a workshop for county leaders, assisted by staff from the Blacksburg Electronic Village and Virginia Tech. TOP Project Director Mathew Mathai discussed the background of the TOP project and its benefits to the county, along with the tasks still to be completed. The TLT must decide on a domain name for the web site, a registrar for the Community Connections and Virtual Business Incubator accounts, and administrators for the various directories. He offered ideas for publicity with launching the web site. As part of TOP, each county will receive a Technology Assessment and Master Plan, developed by John Nichols from Virginia Tech. He will use GIS tools to assess the county services and resources already available, and determine what is needed. Following the presentation and discussion, the TLT conducted necessary business.

Domain name for Craig: The domain name will be craigev for Craig Electronic Village and three domains will be registered: craigev.net, craigev.com, and craigev.org. TLT members Adele Morris and Dot Kincaid offered to register the information by December 2, 2003, and will use interest from the technology account to pay the fee. TLT member Faye Powers volunteered to assist Adele with web site administration. TLT members Judith Greene and Dot Kincaid will assist with the Community Calendar.

Technology Leadership Team - January 19, 2004 – Craig County High School, New Castle – 5:30 pm

Present: 4 TLT members, Retired VCE Agent Deborah Snead, VCE Community Initiatives Specialist Pamela Gibson, Blacksburg Electronic Village Staff members Robert Roberts and Carol Cornish, Virginia Tech Network Infrastructure and Services Technology Manager John Nichols

Domain name for Craig: The team thanked TLT members Dot Kincaid and Adele Morris for registering the account name and domain of the web site craigev.net. The three year registration cost of $225 was paid with interest on the TOP funds and a donation from Craig County.

Community readiness workshop: Kirstin McKenzie of Virginia Tech will conduct a workshop on technology and health care and the benefits for families. It will be held prior to the next TLT meeting on February 16, 2004 at 4:00 pm. Adele will provide the meeting place.

Web site business: Pamela Gibson and Carol Cornish shared with the team the resources that BEV and Virginia Tech can provide to assist with web site development, posting, and evaluation. Carol pointed out that information should be "family friendly." The team is grateful to TLT members Adele Morris and Faye Powers who have agreed to be the web site administrators, and to TLT members Dot Kincaid and Judith Greene who have agreed to be calendar administrators. The team still needs a directory administrator and registrar. Several names were suggested and folks will be contacted.
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Technology Assessment and Master Plan: John Nichols updated members on his work with the Technology Assessment and Master Plan and asked for names of persons that could help with the information he needs.

Technology Leadership Team - February 16, 2004 – Craig County High School, New Castle – 5:30 pm

Present: 9 TLT members, Retired VCE Agent Deborah Snead, Blacksburg Electronic Village Staff member Robert Roberts

Community readiness workshop: Kirstin McKenzie from the Virginia Via College of Osteopathic Medicine conducted a workshop entitled "Access to Electronic Health Information." Ten members attended and praised the effectiveness of the workshop.

TLT transition training: TLT members Adele Morris and Deborah Scott reported on their transition training from the BEV staff. They learned a great deal and feel very comfortable with their responsibilities as site administrators.

TLT leadership position appointments:

> Directory Administrator – Faye Powers
> Web Site Administrators – Adele Morris and Deborah Scott
> Calendar Administrators – Dot Kincaid and Judith Greene
> Volunteers are still needed for a Registrar and two Forum positions

Web business directory: The team discussed the Business Directory – what might be the most effective way to collect a listing of county businesses and what would be the most efficient way to contact them about registration for the Directory. Deborah will develop a letter and a news article inviting interested business owners to a March 15, 2004 workshop to learn more about the Virtual Business Incubator. An HTML workshop to teach web site development to organizations and businesses was set for March 23, 2004 at the high school computer lab.

Technology Leadership Team - March 15, 2004 – Craig County High School, New Castle – 5:30 pm

Present: 9 TLT members, Retired VCE Agent Deborah Snead, TOP Project Coordinator Jaime Shetrone, Blacksburg Electronic Village Staff member Robert Roberts, VCE Community Initiatives Specialist Pamela Gibson

TLT tasks: The TLT leadership was introduced and each shared their responsibilities. Robert Roberts will work with each leader to help them understand exactly what they are to do. There will be a second round of funding available through the TOP program of the U.S. Department of Commerce. The group decided to continue to focus on the current project but individuals are welcome to contact BEV about new projects.

Community readiness workshops: Robert Roberts and Jaime Shetrone will offer workshops for county businesses and community organizations who wish to register as CraigEV villagers using the Community Connections or Virtual Business Incubator. The first workshop took place immediately following this TLT meeting. TLT members are still looking for ideas on ways to market the web site directory to local businesses.

TOP evaluation: Pamela Gibson described the evaluation that she is conducting of the TOP project from the point of view of the TLTs. Members were asked to share their ideas regarding the strengths and weaknesses of the project, and their thoughts on how things might have been approached differently. The team had the opportunity to give their opinions at the meeting or forward them to Jaime at a later time.

Technology Leadership Team - April 19, 2004 – Craig County High School, New Castle – 5:30 pm

Present: 4 TLT members, Retired VCE Agent Deborah Snead, TOP Project Coordinator Jaime Shetrone, Blacksburg Electronic Village Director Bill Sanders

Project Update: Members discussed the steps necessary to keep the project before the public and market the Virtual Business Incubator program. TLT member Bob Pillow noted that there are very few pages up because small business people needed more technical help. Deborah Snead was pleased that Jaime Shetrone could continue to work for the project and asked for additional workshops. Bill Sanders explained that time was limited on the project, but he recognized that local people needed more training and support from the BEV staff. All agreed that getting more web pages up and being able to sustain them was a critical factor in having a successful project.

Web page development workshops: Bob Pillow and the team felt they should target a few of the participants from the two previous workshops and help them complete their sites. This would set up good sites to serve as examples, and possibly those participants could mentor others and be advocates for the project. The invited participants will need to put their materials such as pictures, brochures, or art work on a disk or CD to bring with them. Jaime and Bill will reserve the BEV computer facilities for a May workshop—they will check for available dates. Working

at the BEV lab will allow for staff help, high speed access, and appropriate equipment. Bob and TLT member Todd Musselwhite will assist with instruction. After reviewing the list of participants in the last workshop, a small group was selected for additional instruction to market not only their businesses but also the project. Bob and Deborah will follow-up with this group. Adele added that one of the most effective ways to teach and reach people is to go into their homes to provide instruction (a familiar setting and equipment).   Hopefully volunteer teens and adults can assume that role.

Former Craig site: The Craig Rural Electronic Village developed as part of Congressman Boucher's project is still up — residing on Citizens Internet in Floyd. It is attractive and simple. Bob suggested that it be transferred to the CraigEV site. Once transferred, it can be removed from Citizens Internet to eliminate confusion.

Technology Leadership Team - May 17, 2004 – Craig County High School, New Castle – 5:30 pm

Present: 5 TLT members, Retired VCE Agent Deborah Snead

Web page development workshops: The group reviewed the recent BEV workshop to help folks with web development. Three people came with TLT members Bob Pillow and Todd Musselwhite and BEV staff providing instruction. Additional workshops are still needed to assist Craig residents in developing their sites. Deborah has spoken with Rob Stahl at Craig-Botetourt Electric Cooperative about using their facility for future workshops. Their community meeting room has FTP and browser capabilities as needed for web development, and Rob and TLT member Gerry Groseclose approved the use of the room. The workshops will be offered on a regular monthly basis (one day/one evening) beginning in July. TLT members Adele Morris, Bob Pillow, and Todd Musselwhite volunteered to serve as instructors and will form a Training Support Team. The workshops, entitled Introduction to Front Page – Web Page Development, will be limited to five participants each and will be free to Craig residents. Equipment is needed and the TLT is asked to help provide computers if available from their worksite.

Technology in the news: Deborah shared two items of interest related to technology development. Congressman Boucher is expecting to announce more technology-based jobs in Southwest Virginia. He is encouraging local governments to prepare for the "next generation" by having high speed Internet connections, which are as important to the community as water and sewer hook-ups. The May edition of *Virginia Business* magazine tells that 40% of employers in the Roanoke area are planning on hiring in 2004. Thus, the technology and job outlook is looking good for businesses and employees interested in technology education.

Web site content: Todd Musselwhite suggested that a tab be added on the CraigEV site for items for sale. The team thought this was a good idea and Adele Morris will work with TOP Project Coordinator Jaime Shetrone on setting it up. Todd agreed to take on the job as Sales Administrator for the Leadership Team.

TOP project evaluation: The final order of business was to complete the TOP evaluation explained by Pamela Gibson, VCE Community Initiatives Specialist, at the previous meeting. Team members compiled their answers as a group response that Deborah will send to Jaime. Members absent from the meeting will be reminded to respond with individual e-mails.

Technology Leadership Team – June 14, 2004 – Craig County High School, New Castle – 5:30 p.m.

Present: 6 TLT members, Retired VCE Agent Deborah Snead, Blacksburg Electronic Village Staff Members Carol Cornish and Kevin Inman

New BEV staff: Carol Cornish and Kevin Inman were introduced and both described their current responsibilities with the BEV. Carol is the new point of contact for TOP and Kevin will provide technical assistance.

Project updates: Adele Morris shared with the group that she included activities and collaboration with the TOP project in her school report to the Virginia Department of Education. Mary Katherine Slack reported that she had several local businesses call about registering on the web site, and she is continuing to contact others.

Web site content: Adele and Kevin have set up the technical process to manage the For Sale site. Todd Musselwhite will serve as moderator and review material for appropriateness. Carol suggested that material be "PG," appeal to families and children, and not be illegal or illicit. The official name will be the Classified Section and it will be open to the public. Anyone placing items for sale must register as a Villager prior to posting. Folks wanting to register should be in touch with Faye Powers, the Site Administrator. Bob Pillow updated the group on the overall site and who had pages up and running. He is continuing to contact folks about assistance with developing their own web pages.

Web site assistance: Kevin shared information about the three different types of web presence that are available to Craig residents.

> Wiki Wizard – a web based program in which a person can just type in information for a site
> Intern Assistance – this can help people get a "billboard" or "business card" presence. This single page site is on a first-come, first-serve basis with interns
> Workshops or Trainings – this provides assistance with developing professional sites for the Community Connections and Virtual Business Incubator. The training must take place at the BEV facilities and interns will assist in developing text and pictures for the site; requests are scheduled through the BEV staff.

The TLT hopes to train additional members to teach web page development workshops in Craig. Deborah will write a news article updating residents on the project and marketing the opportunities for individuals, businesses, churches, and organizations to get help with developing their web sites.

COMMUNITY READINESS WORKSHOPS AND TRAINING

The community readiness workshops described in the Implementation Plan were intended to help county residents develop the computer and technology skills needed to participate in the web site programs such as the Virtual Business Incubator and Community Connections. Another goal for these workshops was to train TLT members or other local volunteers to administer the county site and assume responsibility for its content when the grant was completed.

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Training for the Technology Leadership Team

Training was offered to the TLT members with the expectation that they would share the concepts they learned with others in the organizations and communities they represented. At the first meeting of the reactivated TLT on April 28, 2003 VCE Area Specialist Jon Johnson introduced the group to telecommunications issues relevant to rural communities. BEV Staff Member Robert Roberts worked with the TLT on July 14, 2003 and October 27, 2003, reviewing the BEV in a Box features and the management steps required to manage the content and register the users. Transition training to prepare TLT members Adele Morris and Deborah Snead to administer the CraigEV site was completed on February 10, 2004.

Training for the Community

 The Craig TLT initiated several types of workshops for community members. These included information sessions to make residents aware of the features and best use of the web site and hands-on sessions in web site development.

Orientation for Community Leaders

On December 1, 2003 the Craig TLT sponsored an orientation workshop for county government officials and other community leaders to update them on TOP project activities. The program included a demonstration of the features available on the Craig Electronic Village and the potential contribution of the web site to economic development in Craig County. TOP Project Director Mathew Mathai used PowerPoint to describe the goals for a community network and technology issues facing rural communities.

Workshop: Access to Electronic Health Information

This workshop was presented by Kirsten McKenzie on February 16, 2004 at the Craig County High School in New Castle. It was sponsored by the Blacksburg Electronic Village and the Edward Via Virginia College of Osteopathic Medicine, with funding from the National Libraries of Medicine.   Ten Craig residents participated and gained valuable information and skills on how to access and evaluate reliable health information over the Internet.

Workshop: Using Community Connections and the Virtual Business Incubator

On March 15, 2004 the Craig TLT, along with several staff from the Blacksburg Electronic Village, taught a workshop for Craig County small business owners and nonprofit organization members who were interested in establishing a web page.   The workshop provided an overview of what a web site can do for a business or organization, information on the Community Connections and Virtual Business Incubator programs, and an opportunity to sign up for the programs on the Craig Electronic Village site. Twenty-one individuals attended and at the close of the meeting, 8 registered for Community Connections accounts and 8 registered for Virtual Business Incubator accounts.

Workshop: Advanced Web Site Development

The BEV staff taught an advanced workshop on March 17, 2004 on the Virginia Tech campus for four members of the Craig TLT. The purpose of this training was to prepare them to serve as mentors who could provide individual assistance to folks with limited computer skills who were interested in developing a web presence.

Workshop: Web Site Development

A follow-up to the March 15, 2004 workshop took place on March 23, 2004 at the Craig County High School. This workshop was open to anyone who had signed up for either a Community Connections or Virtual Business Incubator account. Topics for the workshop included how to use an HTML editor to add text, links, and images to a web page. Eight Craig residents participated in this workshop.

Workshop: Web Site Development

On May 12, 2004 three Craig residents traveled to the BEV facilities at Virginia Tech to participate in a one-on-one web page development workshop. The goal was to have at least a partial web site developed for each person by the close of the workshop. Two web sites were completed at the workshop and the third was completed shortly thereafter. All are now linked to the Craig Electronic Village.

Web Site Development Workshop Series

A series of web page development workshops will be offered in Craig County on a monthly basis beginning in July 2004. The workshops, entitled "Introduction to Front Page – Web Page Development," will be limited to five participants each and be free to Craig residents. They will be held in the community meeting room at the Craig-Botetourt Electric Cooperative and alternate

with day and evening times. TLT members Adele Morris, Bob Pillow, and Todd Musselwhite have volunteered to be instructors.

MARKETING AND PUBLICITY EFFORTS

The following articles about the TOP project were published in the newspaper serving Craig County.

Firebaugh, Anita J.: "Technology grant could help county attract industries;" *New Castle Record*; March 14, 2001.

"County will take part in high-tech program;" *New Castle Record*; November 14, 2001.

Snead, Deborah D.: "Local web site will be updated;" *New Castle Record*; June 26, 2002.

Greene, Judith: "Craig County Online Calendar;" *New Castle Record*; February 9, 2004.

Snead, Deborah: "Technology Upgrade;" *New Castle Record*; February 12, 2004.

Snead, Deborah: "Business and Organization Web Workshop Available;" *New Castle Record*; February 27, 2004.

Firebaugh, Anita J.: "Free websites for Craig businesses;" *New Castle Record*; May 19, 2004.

PROGRAM EVALUATION

The TOP Implementation Plan included several expected outcomes that could be used to measure the success of this project. First, we hoped to increase the participation of community residents in local government and decision-making. Second, it was important that community members begin to use the web site by registering as a Villager, registering their organization or business on the appropriate directory, and visiting the Discussion Forum. Finally, we looked to contribute to local economic development and new business start-ups as indicated by listings on the Business Directory and new accounts on the Virtual Business Incubator.

We also wanted to evaluate the methods used in carrying out this project and learn from participants what might have been done differently to improve the project.   As VCE and BEV continue our partnership, it is important for us to recognize how to better help individuals and rural communities take advantage of technology to spur their economic growth.

We were not able to obtain quantitative information on each of these outcomes, but we have presented below the evaluation material that was available to us. Included are comments obtained from the TLT regarding the overall success of the project. We also have given statistics describing the levels of participation in web site features and the number of individuals signing up for Virtual Business Incubator and Community Connections accounts. Additional information is being collected by an external evaluator and will be available to each county.

Thoughts from the TLT

To learn more about the local reaction to the project as well as its accomplishments and limitations, Pamela Gibson, VCE Community Initiatives Specialist, met with the TLT on March 15, 2004. The questions she asked and responses forwarded to Jaime Shetrone, TOP Project Coordinator are given below.

What are your general impressions of the project?

Positive—this project provided opportunities for the county. It has been a blessing.

What are your feelings on the issue identification process you used?

The members present weren't aware of the process used by the county. Craig County did not participate in *Take Charge*.

How do you feel about the technology related to this project?

Positive. They realized their need for technology.

To what extent did the issues identification process influence the development of the technology piece?

Deborah Snead explained how the comprehensive plan was used and the leader sharing forums that took place to create the comprehensive plan.

What were some of the things that went well?

Many generous volunteers have come forward and shared their expertise and facilities. The school technology director (Adele Morris) has been invaluable. The training sessions have gone well.

What were some things that didn't go well?

The many staff changes in the county (two extension agents retired/left) delayed the start and smooth continuity of the project.

If you had to pick one major success as a result of this project, what would that be?

The many volunteers, especially the retired Extension agent (Deborah Snead).

What would you do differently?

There should have been more people involved from the beginning.

What additional or unanticipated things, positive or negative, happened as a result of this project?

People on the team have gotten to know lots of new people, and have discovered businesses they didn't know existed. The technology has made them feel like they are a part of the mainstream society.

What collaboration has resulted from this project?

The school system and the county are working together for a change.

Additional comments

The questions also were delivered by e-mail to all TLT members on the list serve so those who were not able to attend the meeting on March 15, 2004 would have an opportunity to share their comments.

From your perspective, what were the program's greatest strengths, contributions, and successes?

"The greatest strengths were the support from Virginia Tech, and specifically from Robert. He was very professional, always well prepared and did an excellent job. Also, the leadership from Deborah Snead was critical."

"The project pulled together BEV staff and the citizens of Craig County that were interested and had expertise in expanding technology to discuss common goals. The project helped to market technology as a critical need that needed addressing within the County. The BEV staff became involved in our TLT on the local level and helped with ideas and training. BEV staff provided expertise in assisting with local and on site workshops. The project helped us get back in a "technology mode" as a team to continue working on establishing a framework for helping citizens in the community and in establishing or maintaining a business to enhance income for individuals and economic development for the County."

The TLT members and community leaders who have volunteered to be 'e-leaders' have been the best in the world—the cream of the crop in our County!"

In your opinion, what were the program's weak points and how might they be improved?

"Probably the difficulty in getting folks in the county involved."

"The County did not have an appropriate infrastructure (computers with access to Internet—without firewalls, etc.) for setting up web sites on a local basis.

Turnover of Extension staff in the County and TOP leadership at BEV slowed the progress in Craig. Although this could not be helped, communication between the two was lacking for a while and hindered advancement.

Probably due to the turnover, there was not clear direction on what was to be done at the local TLT meetings (monthly agendas) and where the community and business listings would stand at the end of the project (time on the BEV server and fees). This was important in that the local government, TLT and workshop participants all needed to understand these details to determine their involvement and participation."

What do you think are the most important things that need to be done to sustain and build upon the program going forward?

"Maintain contact with VT. If VT can just do quarterly or some kind of regular check-ups that would be a real asset to the county."

"TLT leadership needs to stay involved and informed on the progress of the project. We would very much appreciate the continued support of the BEV staff and facility to secure well trained volunteers who can then conduct workshops on web development for cc and businesses on a local basis. We understand this can only be until June 30, 2005, but any support available would be appreciated.

We also need to find funding for maintaining domain names registration and hosting service after June, 2005."

What are the major points you would like us to make in our report about what has happened in your county as a result of being part of the TOP grant?

"We absolutely would not have a current web page without the program and the support from VT—thanks for everything!"

"We have been most appreciative of being a recipient of the TOP grant and program. It has brought back the enthusiasm for technology that we needed for community members and organizations to become more connected. It has been a real boost to our individuals and small businesses to realize they can not only market to the community, but to the world. The project is beginning to make an impact on a few family businesses and ultimately will enhance the County's economic development and connectivity. We would like to share with the DOC that our County is extremely poor and in debt because of educational and courthouse mandates. It is our greatest desire to have our community be a true 'electronic village' with our people, businesses and government connected, but we have no funding available to set this up or to acquire high speed access. We will do our best to continue to implement this project with our 'cream of the crop' local leaders as best we can. Thank you for selecting us to be part of the TOP."

Major project successes and concerns as expressed by all county TLTs will be addressed in Lessons Learned.

Participation in the Craig Electronic Village

VISITS TO THE CRAIG ELECTRONIC VILLAGE SITE
(Data compiled on August 1, 2004)

Month	Total Visits	Unique Visitors	Calendar Visits	Village Mall Visits	Organization Directory Visits
10/2003	40	21	6	22	20
11/2003	87	73	11	25	14
12/2003	180	96	48	49	47
1/2004	217	117	68	55	56
2/2004	271	130	73	85	73
3/2004	476	170	76	157	130
4/2004	416	159	48	112	144
5/2004	563	248	48	118	137
6/2004	1091	363	103	405	406
7/2004	548	250	64	198	161
Grand Totals	**3889**	**1627**	**545**	**926**	**1188**

LISTINGS ON THE CRAIG ELECTRONIC VILLAGE DIRECTORIES
(Data compiled on August 1, 2004)

Total Villagers	Total Businesses	Total Organizations
38	15	7

VIRTUAL BUSINESS INCUBATOR AND COMMUNITY CONNECTIONS ACCOUNTS
(Data compiled on August 1, 2004)

Virtual Business Incubator	Community Connections
8	8

EVENTS AND MEETINGS POSTED ON THE COMMUNITY CALENDAR

Government Meetings (recurring)
Craig County Planning Commission
New Castle Town Council
Craig County Board of Supervisors
Craig County School Board
Monthly Visit of the Department of Motor Vehicles
USDA Food Distribution

Civic Organizations (recurring)
Craig County Rescue/Emergency Medical Services
Democratic Caucus
Ruritan Club
Friends of the Library
Community Coffee with the Superintendent of Schools
TOP Leadership Team
TOP Web Site Workshops

Youth Events (recurring)
Boys High School Basketball Schedule
Girls High School Basketball Schedule
Boys District Basketball Tournament
Girls District Basketball Tournament

Other
Library Auction
Craig County Redbud Festival

PROGRAM ACCOMPLISHMENTS

The Craig Electronic Village was deployed in October 2003. Since then, it has continued to attract increasing numbers of visitors and listings on the village directories and community calendar. The Technology Leadership Team (TLT) in Craig has established an active mentoring program that will put in place a core of trained citizens for managing the web site and continuing technology and economic development. The unique accomplishments of the Craig program are described below.

The Craig TLT represents a strong group of volunteers who have taken on important leadership roles. A major accomplishment has been the unique mentoring program they have developed for the people in Craig that can serve as a model for other counties developing technology projects. TLT members with technology backgrounds have visited the BEV facilities on the Virginia Tech campus to hone their skills in web site development and better assist others who are coming to the program with no or limited skills. The goal of the TOP project at the time of its creation was to help folks learn to use technology who may have had little or no technology background at the start. Craig has enthusiastically endorsed this goal in assisting those for whom the development of a web site is a new experience. Providing one-on-one mentoring in the monthly workshops they have scheduled is fulfilling the true purpose of promoting small family businesses and entrepreneurship.

Several new enterprises have been established that will bring new business to the county through the marketing of their products or services on the Craig Electronic Village. Not only will this help the county retain dollars that may currently flow elsewhere, but also can lead to an influx of dollars from other locations in Virginia and elsewhere. Eight businesses have registered for Virtual Business Incubator accounts. Fifteen existing businesses are listed on the Business Directory.

The Craig Electronic Village has continued to attract the attention of local residents and Internet users elsewhere. Both the total number of visits per month and the number of unique visitors have continued to grow with almost 1,100 visits in the month of June alone. This is rather significant for a county having a total population of about 5,100 (based on the 2000 census). Efforts by the TLT to gain publicity for the site with an article in the local newspaper likely contributed to the large number of visits in June. The site location of greatest interest has been the organization directory followed by the business directory and the calendar.

Many different groups in the County have taken advantage of the Community Calendar to attract residents to their activities. The Craig Board of Supervisors and New Castle Town Council as well as other government meetings are now posted regularly along with the agendas. Youth activities have moved to the spotlight with the posting of the high school basketball schedules. As more groups become aware of the site and more county

residents obtain Internet access, it is likely that the numbers of postings and visits will continue to grow.

Several partnerships have been established that have the potential for long term benefit to Craig County. The Craig County Tourism Commission provided the photograph that appears on the home page of the Craig Electronic Village, and visibility for tourism opportunities using the web site can bring visitors and dollars to Craig. The Craig-Botetourt Electric Cooperative is making its community room available for web site workshops for local residents. The contribution of the Craig County School District through the efforts of the Technology Director and the potential for the future involvement of students as mentors for others will be vital to technology growth in Craig.

The Craig Electronic Village has attracted the interest of community and service organizations who hope to increase their visibility among local residents. Eight groups have registered for the Community Connections program which provides them with assistance in developing and hosting a web site.

The Craig web site has brought intangible benefits to the county. TLT members met new people in their community through working on this project, and learned of local businesses that they had heard about previously. The community web site has focused attention on the fact that technology is important to the future growth of Craig County. One meaningful comment addressing the overall impact of the TOP project in Craig was "now we feel like we are a part of the mainstream society."

PLANS FOR THE FUTURE

The TLT will continue to offer monthly hands-on Community Readiness Workshops to encourage the development of web pages by local businesses and organizations. TLT members have pointed to the importance of their continuing relationship with the BEV to further develop their web presence and technology skills. Resources must be acquired to meet the operating costs of the web site beginning in June 2005, including fees for hosting and reserving the domain name. The need for technology infrastructure to serve both homes and businesses remains a challenge for Craig County. The Technology Assessment and Master Plan created by John Nichols is assisting county leaders as they look ahead to long term solutions of Internet access in Craig.

A combined initiative of the Craig County government, the local electric cooperative, and a local business is hoping to bring broadband for high speed Internet access to Craig. If permission is granted by the electric cooperative and its members, the broadband boxes would be installed on the poles carrying electric wires. A funding proposal to support the implementation of this project is now in preparation. Retired Extension Agent Deborah Snead, the leader of the TOP project in Craig, has prepared a letter of support for this project on behalf of the Craig TLT.

LESSONS LEARNED

The TOP Project was developed to bring a new vision of prosperity through technology to seven rural Virginia counties. Although previous experience provided a basis for the TOP project, counties are different just as individuals are different, and methods successful in one situation may not be successful in another. With this in mind, we have looked back across all counties and developed a series of "Lessons Learned"— things that might have been done differently and would have contributed to overall project success. These lessons could be guideposts for future projects, assisting both counties and implementation teams as they develop new approaches to bring technology to rural communities.

Conduct a Situation Analysis

Identifying competing projects

In several TOP counties community networks had already been established under public or private sponsorship. Although the TOP project was intended to complement, not replace these existing networks, on-going questions about duplication of effort hampered progress and prevented the community from seeing alternative benefits.

Recommendation: Implement new technology projects in counties or communities where the concept of a community network is brand new.

Focusing on counties rather than individual communities

The TOP proposal defined the working unit for the project as individual participating communities within a county, rather than the county as a whole. In some rural counties there are no incorporated towns, and units within the county are actually "settlement areas" or voting districts. Also, local government leaders became concerned that working with individual communities would promote the idea that one area of the county was being targeted and not another. The driving force for this project was economic development and the growth and support of new micro and home-based businesses. Funding for small business incubators and overall initiatives for rural economic development are more effective when launched as part of a county-wide rather than an individual community effort.

Recommendation: In rural areas focus on the county rather than on individual communities to provide stronger support for the development of technology infrastructure and overall economic growth.

Ensuring availability of sufficient volunteers

Individual communities with very small populations present a limited number of volunteers to support the project. Agents in all counties were having trouble recruiting Technology Leadership Team members from participating communities with few residents. To illustrate this

point, a table containing the grant-listed participating communities and their populations appears below.

Populations, Based on U.S. Bureau of Census Estimates (2000)

County	Community	Population
Accomack County		38,305
	Onancock	1,525
	Locust Mount (Wachapreague)	236
	Horntown	No data
Craig County		5,091
	New Castle	179
	Sinking Creek Valley	No data
	John's Creek Valley	No data
	Paint Bank	No data
Cumberland County		9,017
	Cartersville	No data
	Cumberland Courthouse	No data
Dickenson County		16,395
	Clintwood	1,549
	Haysi	186
Louisa County		25,627
	Mineral	424
	Bumpass	No data
King & Queen County		6,630
	King & Queen Courthouse	No data
	Newtown	No data
Northampton County		13,093
	Cheapside	No data
	Cape Charles	1,134
	Bayview	No data
	Nassawadox	572
	New Road	No data

Recommendation: Select a unit of organization, either a county or a combination of counties, with a large enough population to provide the necessary number of volunteers to carry out the tasks required.

Seeking an enthusiastic leader

When the project leader is overburdened with too many competing responsibilities or lacks commitment to the project, for whatever reason, progress is slow. An enthusiastic leader keeps people interested and the project moving ahead. Moreover, the leader doesn't necessarily have to understand all the technical details as long as he/she has a good idea of the general breadth of the project and its goals.

Recommendation: Actively seek a volunteer to lead the project, rather than assigning an individual who may not have a true interest in the project or bring the enthusiasm necessary to recruit others. The county leader may be paid staff or a community member who is willing to donate his/her time.

Arranging for training facilities

Several counties did not have a local facility for hands-on computer training. When a computer-equipped facility was not available, both TLT members and the general public did not receive the same quality of training as in those counties with an accessible computer laboratory.

Recommendation: Identify and secure a suitable technology training facility when the project is in the planning stage. If none can be found in the county, arrange for a site nearby, and include fees for facility use and travel in the budget.

Plans for Project Implementation

Conducting *Take Charge*

Several participating counties had completed a community planning forum and developed a county comprehensive plan within two years of the start of the project, and chose to use that plan to guide their vision, rather than carrying out *Take Charge*. In these counties there tended to be less direction as to the potential benefits of technology in support of economic growth, and the project had less momentum to move it forward. *Take Charge* not only provided a means to identify issues in the county and specifically relate them to technology, but also attracted people to the TOP project in general and helped to build a sense of community that supported future activities of the TLT. Even among those counties that carried out the *Take Charge* program, the

connectivity between the community network and economic development and community participation became less clear as the project continued.

Recommendation: Complete *Take Charge* in all counties. Schedule follow-up sessions to *Take Charge*, about every six months, to link the issues and goals identified by the community and the emerging technology.

Recruiting a Technology Leadership Team

In some counties the TLT was recruited primarily through letters of invitation to county leaders holding office in local government or in civic or community organizations. People who already are very active in county-based projects or programs may not feel that they have the time or energy for yet another monthly meeting. A broad mix of people including youth provided a source of energy and enthusiasm for technology that helped to keep a project moving forward.

Recommendation: Develop a broad-based strategy to assemble members for the TLT, using newspaper and radio advertising, letters to the faith-based community, and flyers or posters in public places such as stores, the post office, and theaters.

Attracting volunteers both with and without technical skills

The use of the term Technology Leadership Team to designate the local steering committee may have implied that members were expected to have a high level of technical proficiency. Overall, rather few residents with limited technology background volunteered to serve on their TLT. When this project was first conceived, it was based on the idea that volunteers would not have to be technically proficient in order to participate. We still hold this belief to be true. A variety of skills added strength to the team, especially when participants were willing to learn and move outside of their established comfort zone. Sometimes those who are very technically adept are less experienced at marketing or presenting. There was room for and need in this project for people with a variety of skills, abilities, and interests.

Recommendation: Select a name for the local steering committee that is more inclusive, and will attract not only those with technical expertise, but others who bring skills in communication, group facilitation, and marketing.

Scheduling meeting times

Technology Leadership Teams that met during the work day or at noon had lower attendance. People often find it difficult to attend a voluntary meeting during the work day, especially when they have a long commute as was true for many of the people in these rural communities.

<u>Recommendation:</u> Schedule meetings in the evening, possibly with a supper option, to encourage people to attend.

<u>Estimating time commitment</u>

The time commitment required of local leaders turned out to be more than was expected when the project was conceived. The project became a burden on the team leader, and there was no provision for a back-up person to assume responsibility when the team leader was called away because of personal or work issues.

<u>Recommendation:</u> Provide funding to support a paid, part-time person in each county to assist the local agent or volunteer leader with project tasks.

<u>Setting web site policies and procedures</u>

Web site security was an issue with all of the county projects.

Examples of questions forwarded to the BEV team included:

>   What security measures are/will be in place to protect the county sites?
>   How is content regulated during the life of the grant? For instance, can a local witchcraft shop be prevented from listing its address on the village mall?
>   How can links to porn sites or other sites not supported by the community be prevented?
>   What kinds of policies should be in place after the grant is completed and the county site continues to operate?

<u>Recommendation:</u> 1) Develop security and operating procedures before the project starts, so questions can be answered in a timely manner. 2) Make available a resource on web site policies, because volunteers do not feel qualified or able to create policy. 3) Involve the university attorney or other qualified person in developing web content policy.

Appendix A – Project Implementation Materials

Contents:

Services Provided to TOP Counties by the Blacksburg Electronic Village
TOP Implementation Plan
Letter of Commitment from Craig County Board of Supervisors

SERVICES PROVIDED TO THE TOP COUNTIES BY THE
BLACKSBURG ELECTRONIC VILLAGE

<u>BEV IN A BOX</u>

Community Web Site Hosting

Each community received web space and server administration for a community web site. This is a full service, permanent site with nightly backups, complete statistics reporting, full text search engine, and 125 megabytes of space.

Community Web Site Design

BEV web design staff designed a community web site in collaboration with the Technology Leadership Team. The BEV elicited input from the committee, developed an overall site design, developed pre-coded HTML templates for all content areas on the site, and provided training to the committee on how to update and maintain the pages.

Community Village Mall (Business Directory)

The BEV provided an automated online business directory (identical in functionality to the BEV Village Mall) for each community to help local businesses gain more recognition online, especially from local customers. The BEV Village Mall is the most popular part of the BEV web site, and use continues to rise steadily. Local businesses can create and edit their own entries/links--no manual support is needed. The look of the pages will be fully integrated into the community web site.

Online Community Directory

The BEV provided an automated online directory (identical in function to the BEV Community Directory). The directory allows individuals and organizations in the community to create and maintain their own directory entries, which include their name, e-mail address, and URL/link to a web site (if one exists). Directory entries can also include telephone numbers and addresses if the person/organization wants to share that.

Online Community Calendar

The BEV provided each community with an online, interactive community calendar. The community web site committee will be able to add, delete, and update events as needed. The calendar will be integrated into the main web site.

Online Discussion Forum

The BEV provided a complete online forum system for use by community and civic groups and local government. Online conference systems make it easy to talk about and organize community projects and initiatives, to hold town meetings about important issues, or just to help people meet and learn about their neighbors.

Community Connections (Community Group Web Sites)

The BEV is providing community and civic groups with the same web site hosting services that the BEV provides in Blacksburg. Currently, over 150 organizations use BEV Community Connections services.

The BEV will set up an online registration system so that no local technical or setup support is required, and will provide the community a URL (e.g. civic.ourtown.org, or whatever is requested).

Groups receiving a Community Connections account get:

> A web site (up to 20 megabytes of text and graphics)
> **Sample URL:** *http://civic.yourcountyaddress.net/yourgroup/*
> Two permanent email addresses for group use (with forwarding, if needed), and webmail access.
> **Sample address:** *yourgroup@civic.yourcountyaddress.net*
> A broadcast mailing list that makes it easy to send messages to your members (up to 100 subscribers).
> **Example:** *yourgroup@civic.yourcountyaddress.net*

Please note: This package does not include web site design and development. Community groups are responsible for the development of their own web site.

Virtual Business Incubator

BEV provides a virtual business incubator service to help home-based and microbusiness enterprises (businesses with fewer than 5 employees) get started. This service is similar to the Community Connections service.

Groups receiving a Virtual Business Incubator account get:

> A web site (up to 20 megabytes of text and graphics)
> **Sample URL:** *http://vbi.yourcountyaddress.net/yourgroup/*
> Two permanent email addresses for group use (with forwarding, if needed), and webmail access.
> **Sample address:** *yourgroup@vbi.yourcountyaddress.net*
> A broadcast mailing list that makes it easy to send messages to your members (up to 100 subscribers).
> **Example:** *yourgroup@vbi.yourcountyaddress.net*

Participating businesses also receive marketing and business management assistance to help understand how to successfully integrate the Internet into their business.

Please note: This package does not include web site design and development. Businesses are responsible for the development of their own web site.

Implementation plan for the "Getting Rural Virginia Connected" TOP grant funded project

Goal

To allow counties listed below (also referred to as "participating communities" in this document) to use technology effectively to improve local social and economic conditions while including as many citizens as possible in each community's decision-making process.

Counties

> Accomack
> Craig
> Cumberland
> Dickenson
> King and Queen
> Louisa
> Northampton

Key Outcomes

1. Increased attendance at public meetings on key community issues by 15% per year.
2. A technology plan for each community with measurable milestones that directly address at least four serious social and/or economic issues identified by the community itself.
3. Increased Internet use in each community by 15% per year.
4. A fully functional, community network using local community members to manage content.
5. At least three new home-based and small business startups in each community each year.
6. At least six civic groups and organizations online in each community each year
7. An Information Technology Master Plan for each community
8. Permanent increased capacity in each community to use technology and the
9. Identification of and planning for regional technology corridors linking multiple communities

Implementation Task List

1. **Conduct Extension Agent Training**
   Extension agents will be briefed about the proposed implementation plan for this project. They will also receive training in the following areas:

   a. **Introduction to telecommunications infrastructure**
      Help extension agents become familiar with the telecomm infrastructure issues facing rural communities. Agents will learn how to help communities become more independent in setting local agendas for telecommunications.
   b. **Community assessment**
      Extension agents will learn how to conduct community assessment, with a special focus on telecommunications. An Extension specialist will lead this section, with assistance from Information Systems staff. The CSPP model will be used as a starting point for technology assessment.
   c. **Introduction to community networks**
      Extension agents will learn how community networks make local communities more effective in solving problems, engaging citizens in local issues and creating a stronger sense of community.

   In addition to these training sessions, agents will also be informed about the evaluation component of this project and their role in collecting relevant data for the evaluation process. See Appendix A: Evaluation Plan for Key Outcomes for an overview of the evaluation process.

2. **Obtain support from county administrators and leaders within the county**
   For this project to be a success, administrators and other leaders within each of the nine counties must support this effort in their respective counties. Extension agents will contact county administrators and leaders (preferably with a personal phone call) to explain project goals and outcomes and request their support for the project. The list of people to be contacted includes (but is not limited to) the following:

   - Board of Supervisors
   - County administrator
   - Chamber of Commerce
   - Representatives of Industrial/Economic Development groups
   - Superintendent of Schools
   - School Board
   - Extension Leadership Council

   Agents will also request these leaders to provide names of citizens that they know especially within participating communities who they think might be willing to serve on the technology leadership teams.

3. **Identify Local Technology Leadership Teams**
   Each *participating community* will have a citizen team, referred to in the grant document as the Technology Leadership Team. Using the process described in the section titled Recruiting members for the TLT, agents will recruit ten to twelve citizens from each participating community. These individuals will have a strong interest and commitment to the effort and willingness to contribute time and energy to provide leadership and direction. This group will include representatives from local governments, business and agribusiness, industry, public education, the faith community, civic organizations, youth, and seniors. **Technology Leadership Teams will play a pivotal role in the overall success of this project.**

   These teams will perform the following functions:

   0. Serve as the core group for planning and implementing the Take Charge program that will reach out to the entire community. In their capacity as the planning committee for the Take Charge process, they will undertake the preparatory tasks needed to facilitate this process successfully within their communities. These tasks are listed in Appendix B: Getting Ready for the Take Charge Process
   1. Advise and coordinate local program planning and to communicate and advocate the process to all segments of the community.
   2. Work with project staff and Virginia Tech faculty to perform an assessment of current technology in the community using the CSPP model and other instruments.
   3. Serve as facilitators in community workshops and forums to enhance the understanding of the general public on the potential of technology.
   4. Work with project staff to identify and secure the resources necessary to fulfill and sustain the strategies of the local plan.
   5. Remain in place after the end of the TOP funding with a commitment to continuing to provide technology leadership in the county.

   Recruiting members for the TLT: Extension Agents are fundamental to the process of recruiting these members because they know their communities and the members that represent the power base. They will use the following process to recruit members for the Technology Teams *in each participating community*:

   6. Begin by inviting members of the local government board or council. This is usually best accomplished by a personal phone call explaining the process and intended outcomes. Agents should get a firm commitment from at least one member of the board or council in each of the participating communities.

7. Create a list of other leaders in the communities using Appendix C: Significant Segments of the Community and Decision Makers as a guideline. Every effort should be made to include as many sectors as possible. Inform these individuals about the project and invite them to join this effort.
8. Contact individuals identified by local leaders as most active and likely to champion the process. Request these individuals that if they cannot participate that they recommend likely individuals who could then be invited to serve on the leadership team. In most cases, several follow-ups may be necessary to fill all segments of the community.
9. Publicize the project and the need for participants from within the general population using a combination of the following suggestions:

   1. Plan an informational meeting to collect interested parties
   2. Meet and make informal presentations to local groups to generate interest
   3. Run advertisements for the informational meeting in the local papers
   4. Distribute and flyers place posters within the community
   5. Send out personal invitations to groups such as, but not limited to:
      - Clubs and organizations in the community
      - Fire/Rescue
      - Service organizations
      - NAACP
      - Churches
      - Principals and staff of all schools
      - Historical societies
      - Business heads that have shown support for progress in the county
      - Private residents that have shown interest in economic growt
      - Senior Citizens groups

This process is designed to provide an opportunity for citizens from all walks of life within participating communities to volunteer for this project. Standardizing on a recruitment process ensures that all interested parties have the same opportunities for volunteering for this effort. It also allows the project management team to document and report efforts made within each community to the Department of Commerce (the organization that's funding this effort).

Selecting team members for the TLT: TLT members will be selected based upon the following criteria:

10. They have a personal commitment to using technology to improve the community
11. They are willing to participate actively in both training and ongoing citizen team training
12. They represent a broad cross section of the community
13. They remain in place past the end of the grant period in order to help their communities with their ongoing technology needs

As part of the selection process, **agents will inform each member that unless otherwise requested, their names and the community they are representing will be displayed on the TOP Website and also supplied to the Department of Commerce for record keeping purposes.** *No other personal information will be displayed on the Web site or provided to the Department of Commerce.* Members have the freedom to list other information in the community directory if they choose to do so.

Agents will email the TOP Coordinator (jaime.dunton@vt.edu) the following:

14. A summary of the steps they took to recruit the team
15. A list of its members selected including name, occupation (specific companies are not required)/segment of society they represent, and community they are representing.

Note: Where appropriate, activities of the various community citizen teams will be combined and coordinated at the county level in order to simplify the logistics of providing training and related information to these teams.

4. **Train Technology Leadership Teams**
   TLT members receive training in three areas:

   . **Introduction to telecommunications**
   Team members will become familiar with the telecomm infrastructure issues facing rural communities. Team members would learn how to help their communities become more independent in setting local agendas for telecommunications.

   a. **Take Charge**
   Team members will learn how the Take Charge program works, key aspects and phases of the initiative, and how to participate effectively in Take Charge. During this session, responsibilities for finding suitable locations in three areas of the county, establishing dates for the community meetings, finding sponsors for food, notebooks, copying, workshop materials, and establishing a plan for advertising the Take Charge program will be divided among various team members. See Appendix B: Getting Ready for the Take Charge Process for details.

   b. **Introduction to community networks**
   Team members will learn how community networks make local communities more effective in solving problems, engaging citizens in local issues, and creating a stronger sense of community. Team members would also receive training in how to use email and the Web (if needed), and how to use online tools effectively to support communication within the community.

5. **Conduct Take Charge Workshops**
   Extension agents will facilitate the Take Charge program that includes three, three-hour workshops. These workshops are designed to foster collaboration among the citizens of each community, to move the group toward consensus, and to provide a framework for creating a vision for the county. *All participating communities within a county will come together for these workshops.*

   Workshop #1 - Where Are We Now?
   o Examine historical and current trends and characteristics of the community and consider implications for the future.
   o Self examination of the community's strengths and vulnerabilities in terms of financial, social, human, and natural assets.

   Workshop #2 - Where Do We Want To Be?

   o Develop a collective vision for the future of the community. Findings for each community will be combined to develop a collective vision for the future of the county.
   o Assess the opportunities for and threats to achieving that vision.

   Workshop #3 - How Do We Get There?

   o Identify and frame overarching development issues
   o Identify existing resources to help address these issues
   o Explore alternative ways to organize the community for action

   Issues identified by the Technology Leadership Teams during the Take Charge process will be highlighted on each community's Web site.

6. **Hold Community Readiness Workshops**
   These workshops are open to citizens at large and local community teams. Topics include:

   . Why community networks and technology investments help communities make the transition to the Information Economy
   a. How community networks increase worker job skills and expand the pool of high tech workers
   b. How technology can help rural communities retain traditional "small town" qualities and remain active, vibrant communities
   c. What communities have to do to attract high tech companies
   d. How to set up and run a community network

7. **Perform Community Technology Assessments**
   Extension agents work with TLT members to perform an assessment of current technology in the community, using the CSPP model and other instruments developed by Virginia Tech. These assessments will be used to guide the development of technology master plans for the community.

8. **Deploy Community Network**
   Each community will receive professional support and all systems needed to have a complete local version of the Blacksburg Electronic Village services referred to as ***BEV in a Box*** customized for the community. Design team meetings will be held with each community team to design the community Web site and services. This deployment of BEV in a Box will be done in stages and will include the following activities:

   0. Meeting to discuss and finalize design issues
   1. Training on the use of the various components of BEV in a Box i.e. discussion forum, community calendar, community directory, community village mall
   2. Training on maintaining the Community Network and Community Connection accounts.

9. **Develop Technology Master Plan**
   BEV staff and Extension agents will meet with community leaders over a nine month period to develop Technology Master plans for each community. They will also develop regional Master Plans that will help develop regional technology corridors.

10. **Conduct Citizen Team Meetings**
    Each community team will have ongoing meetings with the project coordinator and the local Extension agent. Community teams will also participate in cluster meetings and quarterly project meetings (all communities) to ensure constant communication and the development of regional technology corridors.

11. **Prepare Report for communities**
    A comprehensive report will be produced in partnership with local teams and disseminated to all project partners within three months following the completion of the 24 months of TOP funding.

12. **Prepare Public Report**
    Write, edit, review, and print the final public report on the effort. This report will document the model used throughout the life of the effort, include all relevant assessment data, will document the impacts of the program, and be oriented specifically to be useful by other communities and regions.

13. **Perform Assessment Research**
    The assessments conducted for each community will be used as the basis of an ongoing research effort during the two years of the project to document differences and similarities in the communities related to technology needs and impacts. BEV staff and VCE researchers will seek to discover common issues among these communities, try to identify common strategies that worked across multiple communities, and document this work in technical reports and published papers, including peer-reviewed journals.

Appendix A: Evaluation Plan for Key Outcomes

Outcome 1: Increased attendance at public meetings on key community issues by 15% per year.
Evaluation plan: Attendance lists and agendas of all public meetings will be maintained and examined through the project (this will include any public meetings that take place to address issues identified in the Take Charge Program). This tracking should begin with the Take Charge public meetings. Items will include: meeting topic, date, location, agenda items, and total number of participants.

Outcome 2: A technology plan for each community with measurable milestones that directly address at least four serious social and/or economic issues identified by the community itself. An information technology master plan for each community.
Evaluation plan: A format for the technology master plan will be developed by project personnel. A panel of experts will be formed to review the technology master plan for each community. The panel will critique the master plan for appropriateness and practicality using a review sheet that will be developed. Once the measurable milestones have been identified, the evaluation team will work with the community to determine measurement strategies.

Outcome 3: Increased Internet use in each community by 15% per year.
Evaluation plan: Once the community website is developed and online, usage statistics will be monitored on a monthly basis to determine change in Internet use over time.

Outcome 4: A fully functional community network using local members to manage content.
Evaluation plan: Establishment of a functional and operating technology team will serve as evidence that this outcome has been achieved.

Outcome 5: At least three new home-based and small business startups in each community each year.
Evaluation plan: The community web site will be monitored for new business presence (e.g., Virtual Business Incubator, Village Mall). A survey may be developed and administered to the new startups to determine the extent to which the web presence affected their business.

Outcome 6: At least six civic groups and organizations online in each community each year.
Evaluation plan: The community web site will be monitored for civic groups' and organizations' presence (e.g., Community Connections, Organization Directory).

Outcome 7: An Information Technology Plan for each community.
Evaluation plan: The Information Technology Plan for each community will be reviewed to ensure that it contains the outcomes of the Technology Assessments conducted in each community.

Outcome 8: Permanent increased capacity in each community to use technology and the Take Charge planning process to address community needs well beyond the end of the grant period.
Evaluation plan: The Take Charge process will be evaluated at each of the three meetings as well as a follow-up survey/interview with members of the planning committee.

Outcome 9: Identification of and planning for regional technology corridors linking multiple communities.
Evaluation plan: Evidence to document this outcome will be contained in the technology master plan.

Appendix B: Getting Ready for the Take Charge Process (Pam Gibson)

Before the three community-wide meetings can take place, a planning committee made up of a cross-section of the community leadership whose activities will be coordinated by the county extension agent will have to perform the following preparatory tasks to ensure the success of this process:

1. The planning committee should reflect the various interests of the community. Please see the checklist in Appendix C: Significant Segments of the Community and Decision Makers for use as a guideline. Getting commitment from community sectors to work on the Take Charge program will help to guarantee that those sectors of the community will come to the community meetings. For success, there needs to be community wide buy-in by every sector in the community. It is

imperative that members of the county board and town council participate. They control the budget and will have the power to implement the changes the community identifies.

2. The three community wide meetings typically occur one night a week for three consecutive weeks for three (3) hours. Typically the meetings run from 6pm to 9pm or 6:30 pm to 9:30 pm. The meeting dates should be established. Every attempt must be made to publicize these meetings at least two weeks in advance.

3. The meeting locations should vary according to the community. By varying the location, it makes at least one meeting very accessible to one portion of the county. The meeting room should accommodate 50 to 100 people with tables for work areas, room for food set up, accessible restrooms. School lunchrooms have worked well.

4. Once dates and locations are established, it is time to find some sponsors to prepare food for the three evenings. Many people have to come directly from work to attend the meeting and don't have time to eat dinner, so having things like sandwiches available makes it easier for them to attend.

5. There will need to be commitments by the planning committee to purchase or find sponsors for notebooks, create notebooks, photocopy materials, stuff notebooks.

6. Participants will need to be registered for each meeting, given name tags and notebook materials.

7. The meeting locations need to have numerous flipcharts with paper, overhead projector or other audio visual aids.

8. After dates and locations have been established, the planning committee can begin to identify how to ensure that every member of the community knows about the meetings. Pam Gibson has a brochure in MS Word that can be adapted for each county. Putting ads in the newspaper, community newsletters, hanging posters in prominent places, sending notices home with school children are some of the ways to reach members of the community. It is also important that the identified movers and shakers attend the meetings and invite their constituencies.

9. As it closer to the time of the community-wide meetings, facilitators will want to enlist others to help work with the break out groups.

10. Facilitators may also want input from local historians for the first meeting. In the past, it has been popular to have the community history prepared for the notebooks on the first night and have the local historian(s) talk about the founding of the community.

11. Someone has to agree to take notes, collect information and have it ready for the notebooks the following week.

Appendix C: Significant Segments of the Community and Decision Makers

(Reproduced from the Take Charge Manual, Appendix A Page 81)

      Agriculture
      Banks/Financial Institutions
      Chamber of Commerce/ Commercial Clubs
      Churches
      Civic Organizations
      Community Improvement/ Betterment Groups
      Educational Organizations
          o   Schools
          o   Extension Service
          o   Other
      Elderly

Health Care
Industry
Local Development Organizations
Local Government
- o Town Board or City Council
- o Park Board
- o Zoning Board or Planning Commission
- o Economic Development Commission
Professionals (Attorneys, Accountants, Architects, Marketing Specialists)
Real Estate
Retail Businesses
Unions
Utility Companies
- o (Electric, Gas, Railroads)
Youth

LETTER OF COMMITMENT FROM THE CRAIG COUNTY

BOARD OF SUPERVISORS

BOARD OF SUPERVISORS

R S. (STEVE) DEVINNEY, Chairman
New Castle District

JULIE C. WELCH, Vice-Chair
Craig Creek District

LYNDELL M. KEFFER, Member
Simmonsville District

R. BRANDON RATLIFF, Member
Potts Mountain District

BERNIE TRIPP, Member
Craig City District

COUNTY of CRAIG
1851

P.O. Box 308
New Castle, Virginia 24127
540/864-5010 (phone) 540/864-5590 (fax)

MEMO TO: Dr. Andrew Cohill, Director
Blacksburg Electronic Village

FROM: Roy Crawford
Craig County Interim Administrator

DATE: March 13, 2001

RE: *CRAIG COUNTY LETTER OF SUPPORT FOR TOP*

The Craig County Board of Supervisors met on March 5, 2001. Debbie Snead, Extension Agent, Virginia Cooperative Extension – Craig County, presented information on the Technology Opportunities Program. Following a review of the proposal and discussion of the project, the Board members and I were impressed with the opportunity to enhance Craig's technology skills and to contribute to the local economy.

We are in support of the project and feel that it is a good investment; however, funding for the project is subject to the approval of the 2001-2002 Budget at our Board Meeting to be held on March 20.

We look forward to participating in the proposed project.

ecr

Appendix B – Recruitment and Composition of the Technology Leadership Team

Contents:

List of Craig County leaders consulted about the TOP Project

List of Craig County Technology Team Members

Craig County leaders Consulted About the TOP project

Leader	Occupation/Affiliation
Adele Morris	Computer Teacher, Craig County High School

Leader	Occupation/Affiliation
Ashley Fisher	Senior 4-H Club member
Bernie Tripp	Craig County Board of Supervisors, Craig City District
Brandon Ratliff	Craig County Board of Supervisors, Potts Mountain District
Caitlyn Day	Senior 4-H Club member
Chris Fisher	Treasurer, Craig Healing Springs Christian Church
Deborah D. Snead	Retired, Craig County Extension
Don Charlton	Charlton Realtors
Dot Kincaid	Fiscal Officer, Craig County
Ed & Martha Mattox	Owners, Craig County Automotive
Eric Abbott	President, Craig County Ruritans
Frank Beum	District Ranger, U.S. Forest Service
Gerald H. Groseclose	Manager, Craig-Botetourt Electric Cooperative
Heather Rose	Senior 4-H Club member
Helen Looney	Member, Craig County Historical Society
J.W. Bostic, Jr.	Executive Vice President, Farmers & Merchants Bank
Jacki Parson	Treasurer, Craig County
James Paitsel	Owner, Patisel Funeral Home
Jeff Boudreaux	Scout Leader, Boy Scouts
Jerrald M. Harms	Manager, TDS Telecom
Jessie Paxton	Senior 4-H Club member
Julie Welch	Craig County Board of Supervisors, Alleghany District
Ken & Reese Wood	Volunteers, 4-H
Lanier & Thecla Frantz	Farmers and retired business owners
M. Dallas Helems, Jr.	Superintendent, Craig County Schools
Mary Page Cosby	Director of Special Programs, Craig County Schools
Matthew Collins	Craig County Administrator
Michael Carper	Store Manager, Mick-or-Mack IGA
Paul Paradzinski	Retired, U.S. Forest Service
Roy & Dreama Menefee	Retired business owners, Ruritan members
Sara Taylor	Senior 4-H Club member

Leader	Occupation/Affiliation
Tammy Dillon	Co-manager, Helms Pro Hardware & Auto Parts
Teresa B. Oliver	Director, Craig County Child Care Center
Tommy Hodge	Senior 4-H Club member
Travis Charlton	Senior 4-H Club member
Vicki Moore	Co-manager, Helms Pro Hardware & Auto Parts

Members of the Craig County Technology Leadership Team

Member	Town	Occupation/Affiliation
Adele Morris	New Castle	Technology Director, Craig County Schools
Caitlyn Day	New Castle	Student
Chris Fisher	New Castle	Craig County 4-H Volunteer
Danny Kesler	New Castle	Hebron Church Pastor
Deborah Snead	New Castle	VCE Agent, retired
Deborah Scott	New Castle	Craig County Administrator's Office
Don Charlton	New Castle	Charlton Associates
Dot Kincaid	New Castle	Craig County Administrator's Office, Business Owner
Ed & Martha Mattox	New Castle	Craig County Automotive
Elizabeth Huffman	New Castle	Craig County Commissioner of Revenue
Eric Abbott	New Castle	Craig County Ruritans
Faye Powers	New Castle	Craig County School Board
Frank Beum	New Castle	U.S. Forest Service
Gary & Judith Greene	New Castle	
Gerald Groseclose	New Castle	Craig-Botetourt Electric Cooperative
Helen Looney	Catawba	Craig County Board of Supervisors
J.W. Bostic, Jr.	New Castle	Farmers & Merchants
Jackie Parsons	New Castle	Craig County Treasurer
James Paitsel	New Castle	
Jerry Harms	New Castle	TDS Telecom
Ken & Reese Wood	New Castle	
Lanier & Thelca Frantz	New Castle	
Larry Burk	Newport	Craig County Board of Supervisors
Larry Moore	New Castle	Craig County Administrator
Lisa Campbell	New Castle	Craig County Board of Supervisors
Mary Katherine Slack	New Castle	
Mary Page Cosby	New Castle	Craig County Schools
Mike Carper	New Castle	Mick-or-Mack IGA

Member	Town	Occupation/Affiliation
Paul Paradzinski	Catawba	
R. Brandon Ratliff	New Castle	Craig County Board of Supervisors
Rhonda Mason	Catawba	
Rob Stahl	New Castle	Craig-Botetourt Electric Cooperative
Robert Pillow	New Castle	Craig County Friends of the Library
Rosalie Martin	New Castle	Superintendent, Craig County Schools
Roy & Dreama Menefee	New Castle	Craig County Ruritans
Tammy Dillon	New Castle	Helms Hardware
Teresa Oliver	New Castle	Craig County Child Care Center
Todd Musselwhite	New Castle	
Vicki Moore	New Castle	Helms Hardware

Appendix C – Craig County 2002 Comprehensive Plan

Craig County, Virginia Comprehensive Plan

2002

INTRODUCTION

The Craig County Comprehensive Plan is a blueprint for the future growth and development of the County over the next 10-15 years and is also a statement of the community's shared goals, visions, and values. It provides direction and guidance, for both the public and private sectors, in making decisions about land development, public services, and resource protection. The Comprehensive Plan allows decision-makers to study the long – term consequences of current decisions and recognize that today's actions will impact the County for many years to come.

The Comprehensive Plan is general in nature and broad in scope. It does not address every issue or parcel of land individually. It should be interpreted to apply generally to all properties and issues within the County and can be utilized to examine trends in order to meet future needs. The Plan addresses not only issues of the quantity of growth, but also the quality. It is meant to encourage coordinated and harmonious land use in the County and should be used in conjunction with the County's Subdivision and Zoning Ordinances as a guide for future development

Every governing body in the State is required to have a comprehensive plan for the physical development of the territory within its jurisdiction. At least once every five years, the plan must be reviewed by the local Planning Commission to determine whether it is advisable to amend the plan. The Craig County Comprehensive Plan was developed in accordance with Chapter 15.2 of the *Code of Virginia*, Local Planning Legislation, Article 3, which requires that:

> In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.

The process by which the Comprehensive Plan is prepared is as important as the actual plan itself. It should be open to all residents of the County and must be the product of the County as a whole, rather than a reflection of a few individuals or special interest groups. The Craig County Comprehensive Plan based upon demographic information compiled by the Roanoke Valley Alleghany Regional Commission, results of surveys and planning workshops conducted as part of the County's Planning Grant from the Va. Dept. of Housing and Community Development, a community-wide strategic planning forum held in November 1999 and funded with a grant from the Canaan Valley Institute, and feedback received in the public hearings held prior to adoption of this plan. Where practical, tables and charts have been updated to reflect the most currently available data from the US Census. Some tables, however, still reflect 1990 Census data.

In December 1979 the Craig County Board of Supervisors adopted the County's first Comprehensive Plan entitled Land Use Plan, Craig County, Virginia. During the process of

reviewing the 1979 document, the County Planning Commission proposed to expand the scope of the update to include a more detailed look at housing, economic development, recreation and human services. In 1989 the County adopted a revised Comprehensive Plan. In March 1998, Craig County adopted a number of amendments and revisions concerning the goals and objectives for commercial activity, education, facilities improvements economic development, transportation, housing and recreation. During the time period of 2000-2002, the Planning Commission again undertook the task of revising Comprehensive Plan to reflect current and future needs of the County. A public hearing was held at the April 2001 Planning Commission meeting. Pursuant to that meeting, the Planning Commission recommended that where possible, tables be updated to reflect 2000 Census data. Public hearings were again held in April and May of 2002 to allow for public input on the proposed revised Comprehensive Plan.

CHAPTER 1

HISTORY

Craig County is blessed with a beautiful physical environment that has fostered a rich and intriguing history of colorful characters, events, and places. Craig County was formed in 1851 from Botetourt, Roanoke, Giles and Monroe Counties. There were several additional annexations from Alleghany, Giles, Monroe, and Montgomery Counties after Craig County's formation. The County was named for Robert Craig, delegate from Roanoke County to the General Assembly, who was instrumental in the County's formation. Exploration of the area had begun about 1751 and by 1774 there were several permanent settlements. New Castle was established as the County seat when Craig County was formed and is the only incorporated town in the County. Arrival of the C&O Railroad's Craig Valley Branch in the 1890s brought on expansion plans for the County. The 1830s brought the Cumberland Turnpike, which served, as a major transportation corridor for southwestern Virginia.

Laid out in 1818 and formally established in 1819 New Castle was originally within the boundaries of Botetourt County. In 1849, more than 200 citizens in and around New Castle petitioned the Virginia General Assembly to form a new County with New Castle as its seat. New Castle continues to serve as a center for Craig County commerce and small-scale artisan manufacturing. The Craig County court passed special levies to raise troops for the confederacy and to provide support to the soldiers' families. Although Federal troops moved through Craig County in 1863 and 1864, New Castle recovered quickly from the war and was incorporated in 1873.

Historic and Cultural Landmarks

Craig Healing Springs - Craig Healing Springs is significant as a collection of nearly thirty well preserved early Twentieth Centuries resort buildings. Developed as a resort between 1909 and 1920 by the Craig Healing Springs Company, the resort flourished with the advent of automobile travel in the years between the two world wars, but declined with changes in vacation and travel patterns of the 1950s. The Christian Church in Virginia purchased the property in 190_ and has adapted for use as a conference center, carefully maintaining the original grounds and buildings as well as many of the furnishings.

New Castle Historic District - The New Castle Historic District encompasses nearly 70 acres of the downtown commercial center and adjacent residential areas. The historic district formed around the Craig County Courthouse and the tavern, which is now the core of the Central Hotel. From the 1890s through the 1920s the Bank Square subdivision lots along Main Street were sold and developed as commercial property. The typical New Castle building is two-story frame store with false front parapet and large first floor display windows. Building types represented in the district include a courthouse, a sheriffs office/jail, a hotel, boarding houses, single-family dwellings, a church, stores, service stations, domestic and agricultural outbuildings, artisan workshops, offices and a bowling alley. Architectural classifications within the district include

variations of the Greek Revival, Italiante, Beaux-Arts, Eastlake, Queen Anne, and Classical Revival Styles. The period of significance for the district ranges from 1818, the date of the original town plat, to 1940, the construction date for the most recently contributing buildings in the commercial and residential areas.

Churches - Craig County features many historic churches. New Bethel Christian Church, 1912, and Bethel Methodist Church, 1870s, are located on Route 42 along with four other lovely old churches. Hebron Church, located on Route 606, the oldest standing church in Craig County was built in the 1840's. There are 14 churches in Craig County built before 1900.

Local Natural, Scenic and Historical Areas

Craig County is rich in historic buildings and cultural areas, unique scenic areas, and recreational spots – in addition to the historic and cultural landmarks listed in the previous section. These include the following: The Stacks, Pines Campground, Fenwick Mines, Sweet Springs Turnpike, Scott Tavern, Barbours Creek, Bailey Tavern, Virginia Mineral Springs, Paint Bank, Potts Creek, Paint Bank Mill, Shires Cave, Potts Mountain, Circle Gorge, Town Hill, Carper's Cave, Civil War Grave, Craig Healing Springs, Johns Creek, Buttermilk Falls, New River – James River Divide (the Great Eastern Divide), Meadow Creek, Murder Hole, Craig Creek, Arnolds Knob, Route 42, Bellview Farm, Hall Road, Webb's Mills, Appalachian Trail, Miller's Cove, Waitville Road, Blue Healing Springs, Valley Roller Mill, Watershed Dams, Sinking Creek, Mississippi Steamboat House, Rt. 615

CHAPTER 2

NATURAL ENVIRONMENT

Craig County has a vast supply of rural land characterized by its rugged terrain, majestic scenes of rolling fields, and mature forests. Clean water and clear air is of the utmost importance to residents of Craig County. Responsible management of these assets requires preservation, regulation, and controlled development.

The following information on Craig County's natural environment was obtained from numerous sources including: the Virginia Division of Mineral Resources, the Department of Environmental Quality, the USDA Soil Conservation Service, and the Roanoke Valley Alleghany Regional Commission.

Topography

Craig County has a land area of 336 square miles. It lies in the south central portion of the Great Valley of Virginia and borders the State of West Virginia and the Virginia counties of Alleghany, Botetourt, Giles, Montgomery and Roanoke. Several major ridges, running in a northeast-southeast direction reach altitudes of 3,000 to 3,900 feet. The highest peaks are Arnolds Knob at 3,939 feet and Peters Mountain at 3,886 feet. The County claims many fertile valleys, the largest of which is along Sinking Creek. Also within the County are several large streams: Craig Creek, Johns Creek, Sinking Creek and Potts Creek.

Geology

Craig County is located in the Valley and Ridge physiographic province and is underlain by sedimentary rocks which primarily consist of shale, limestone, dolomite, sandstone and some conglomerate. Except for the conglomerate, the other minerals listed have relatively high rates of permeability. Limestone and shale form the valley floors while sandstone forms the ridges in the County.

In the past, Oriskany iron ore was produced by underground and surface mining in northeastern Craig County. The iron ore was used primarily in local iron ore furnaces. Mining operations for iron ore ceased about 1925. Manganese deposits occur at several locations and have been mined and prospected in the vicinity of Simmonsville, New Castle, Paint Bank and on Sinking Creek Mountain southwest of New Castle. Limestone and dolomite have been quarried near New Castle, Simmonsville, and Huffman for roadstone and other use. Samples of clay and shale from selected localities in the County have been tested and found potentially suitable for use in the manufacture of brick, tile, drain tile, pottery, and lightweight aggregate. Sandstone in the County offers potential sources of construction and industrial stone.

Large gas and oil companies have obtained mineral exploration rights to thousands of acres of land, however, to-date no actual drilling for such resources has been initiated. It is likely that if the

exploration for these minerals proves that major deposits exist in the County, this will have a significant economic and environmental impact on the County.

Soils

Information concerning soils is important in the decision making process for future land use and community facilities. The lack of central sewage collection system throughout most of the County forces residents to utilize on-site septic fields for sewage treatment. According to 1990 Census data, only 22 percent of the County's housing units are served by a public sewer system, 1,565 are served by a septic tank or cesspool and other means. A soil's ability to accommodate these facilities is based on several factors such as permeability and drainage characteristics. Limitations of soils to support drainfields also limits the possibilities for developing these areas. An area that has a poor drainage field rating will require central sewage collection or an off-site system before it can be developed for residential, commercial or industrial use.

Craig County as the following soil associations: Frederick/Elliber/Hayter (good rating for septic drainage fields), Litz/Hayter/Jefferson (fair rating for septic drainage fields), Monongahela/Sciotoville/Purdy/Chavies/Pope/Atkins (poor rating for septic drainage fields), and Jefferson/Weikert (fair rating for septic drainage fields). This information is contained within the Craig County Agricultural Inventory, USDA Soil Conservation Service, 1971.

The Natural Resources Conservation Service will be conducting comprehensive County-wide soil mapping over the next five years, which will assist in determining areas most suitable for various types of development based upon soil classifications.

Climate

The temperate climate of the Craig County region brings relatively cool summers and mild winters to the area. The winds through the region generally blow from the west/northwest at an average of 8-10 miles per hour. Average precipitation for Craig County is approximately 40-45 inches a year with the drier months occurring during the winter. However, many summers can be extremely hot and dry, causing drought to occur. When the rain returns in the fall (often as a result of a tropical depression or storm in the vicinity) flooding may occur in low-lying areas of the County because of poor soil permeability. Temperatures in Craig County remain fairly mild year-round, with an average maximum temperature ranging in the low to mid 60s and the average minimum temperature ranging in the low to mid 40s.

Groundwater

Care should be taken when planning for development in the County in order to protect groundwater supplies. According to 1990 Census data, only 21 % of the County's housing units are served by a public or private central water system. The remainder of residents relies upon

groundwater or some other source of drinking water. Most wells in Craig County's mountainous areas are less than 300 feet deep and generally yield five to twenty gallons per minute. In the Potts Mountain area dry holes have been drilled as deep as 250 feet. Wells in the valleys are generally less than 200 feet deep and yield less than 40 gallons per minute.

One of the deepest and most productive wells in the County penetrates shale and limestone at the Paint Bank Fish Hatchery. This well is 400 feet deep and was test pumped for 24 hours at 323 gallons per minute with only 89 feet of drawdown. All but five gallons per minute were obtained from calcareous shale at depths of between 300 and 400 feet. Artesian wells located near Route 311 have also been located and found to produce 1200-1300 gallons per minute.

Alluvium in broad valleys may reach sufficient thickness to yield moderate supplies of water. A few perennial streams are present in the County and yield varying amounts of water. Several springs occur south of New Castle on the southeastern side of Sinking Creek Mountain. The limestone and dolomite formations offer the best possibilities for future groundwater development in Craig County. However, the erratic nature of occurrence in this type of rock and the lack of well data makes reliable estimates of potential per unit area difficult. Adequate water supplies may be obtained from sandstone and shale's if these types are sufficiently fractured to provide storage and movement of groundwater.

Wells in limestone may yield hard water and iron is frequently excessive. Sulfur occurs in some wells, particularly east and northeast of New Castle. Alum has been reported in water from the Craig Healing Spring's area.

Surface Water

Craig County lies within the James River Basin and the New River Basin. There are no major rivers within the County, but several tributary streams are present. Those draining into the James River Basin include Craig Creek and its major tributary Johns Creek, Potts Creek and Barbour's Creek. The major New River tributary in the County is Sinking Creek.

The quality of surface waters in the County is good but relatively hard. Large volumes are available during periods of normal flow however; storage is necessary to provide continuous supplies during drought periods. Stream flow gauging stations have been maintained on Johns Creek at New Castle since 1926 and at Parr in Botetourt County since 1925. Records of temperature, water quality data, flow during duration and high- and low-flow sequence data are available for these gauging stations.

The County administers Erosion and Sediment Control Ordinance designed to minimize the effects of erosion on creeks and streams from construction, timber harvesting operations, and other projects.

Forests

The forestland of Craig County has always played an important part in the lives of the County's residents. The oak-hickory forests provide recreation, clean water, wildlife habitat, and raw

materials for forest industry. The scenic valley of Sinking Creek grows some of the finest hardwoods in Virginia. The first State Forest in Southwest Virginia is situated in Craig County, the Niday Place State Forest near Simmonsville on Johns Creek Mountain. Craig County contains approximately 160,000 acres of commercial forestland. About 38 % of the commercial forestland are in private ownership while the remaining 62% is in the National Forest. Total acres of U.S. Forest Service land in Craig County are 55% of the total land area of the County. Although the potential of increased forest production in the future is good, there has been strong opposition in the past to extensive timbering in the National Forest. The Virginia Department of Forestry provides forest management advice and technical services to private landowners with forestland

CHAPTER 3

DEMOGRAPHICS

Population Trends

Craig County's population has fluctuated over the past century with the greatest change occurring during the period of 1910-30 and 1940-60. From 1910 to 1930 there was a 24% decrease in population while during the decades of 1940-60 there was an 11% decrease. The County population has continued to increase since 1960, growing from 3,356 to 4,372 in a thirty-year period. The period from 1970-2000 has seen a 44.5% increase in population. The table below presents the numerical and percentage changes in population for the last 100 years.

Table 1
Population Change, 1900 - 2000

Year	Population	Change %
1900	4,293	-
1910	4,711	13.0
1920	4,100	-9.7
1930	3,562	-13.1
1940	3,769	5.8
1950	3,452	-8.4
1960	3,356	-2.8
1970	3,524	5.0
1980	3,948	12.0
1990	4,372	10.7
2000	5,091	16.4

Source: U.S. Bureau of the Census, 1950 -2000.

Population Projections

Population projections through the year 2030 indicate that the County will continue to grow in population. The following table presents population projections from 2000 to 2030.

Table 3
Population Projections

Year	Population	% Change
2000	5,091	--
2010	5,810	14.1
2020	6,529	12.4
2030	7,248	11.0

Source: Staff projection based on US Decennial Census (1990-2000 (Linear Regression). The growth period of 1990-2000 was used for the basis because of the County's lack of growth control measures and increased water and sewer capacity.

Migration and Natural Increase

According to information provided by the U. S. Census Bureau, 678 persons age 5 and over moved to Craig County between 1985 and 1990. In addition, 657 residents age 5 and over of Craig County moved from one home to another within the county between 1985 and 1990.

Table 4
Residence In 1985, Persons Age 5 and Over

Location	Persons
Same house in 1985	2,755
Different house in United States in 1985:	
Same County	657
Different County, Same State	520
Different County, Different State	158
Lived Abroad in 1985	0

Source: U.S. Bureau of the Census, Census of Population, 1990.

Natural increase is a measure of the population change based on the number of births and deaths that have occurred in a locality over a period of time. Natural increase from 1987 to 1996 was 76 persons.

Table 5
Natural Increase, 1987-1999

Year	Births	Deaths	Natural Increase
1987	47	41	6
1988	50	41	9
1989	45	48	-3
1990	62	40	22
1991	50	40	10
1992	42	42	0
1993	55	38	17
1994	58	51	7
1995	54	47	7
1996	54	53	1
1997	43	41	2
1998	45	46	-1
1999	54	38	16

Source: *Virginia Vital Statistics Annual Report, Virginia Department of Health, 1987-1999.*

Age Distribution

The age composition of the County has changed in both the young and elderly populations from 1990 to 2000. The percentage of population between the ages of 0 and 19 decreased by 11.3 % from 1129-1001. The number of older citizens, age 65 and over, increased during that same period by 10.7 %. The workforce population between the ages of 20 and 64 increased by 18.3 % with the largest increase, almost 37 %, in the 35 to 59 age groups. It should be noted that the median age in Craig County has been increasing over the last few decades, with a decreasing youth population.

Table 6
Population Distribution by Age

Age Group	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Under 5	240	6.1	282	6.5	292	5.7
5 - 9	288	7.3	263	6.0	328	6.4
10 - 14	303	7.7	297	6.8	375	7.4
15 - 19	338	8.6	287	6.6	306	6.0
20 - 24	290	7.3	259	5.9	229	4.5
25 - 34	633	16.0	700	16	633	12.4
35 - 44	479	12.1	660	15.1	877	17.2
45 - 54	440	11.1	547	12.5	777	15.3
55 - 59	218	5.5	233	5.3	322	6.3
60 - 64	210	5.3	220	5.0	261	5.1
65 - 74	311	7.9	378	8.4	392	7.7
75 & over	198	5.0	246	5.6	299	5.9
Total	3,948	100.0	4372	100	5091	100

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990, 2000.

Household Characteristics

While the County's population increased by 28.9 % from 1980 to 2000, the number of households increased by 41.9%. Although there are more households, the average household size has decreased by 9.9 %. This decline has taken place over the last few decades with a 25 % decrease in the average household size from 3.5 persons in 1960 to 2.6 persons in 1990. This decrease in average household size may be attributed to a growing number of elderly residents and younger single persons who have postponed marriage. In 2000, 23.9 % of all households in Craig County were one person households.

Table 7
Household Characteristics

Category	1980	1990	2000	% Change 80-00
Total Households	1,452	1,682	2060	41.9
Average Household Size	2.72	2.6	2.45	-9.9

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990, 2000.

Income

Although the median household income in Craig County increased by more than 85 % from 1980 to 1990, this amount was still equal to only 75 percent of the state median family income in 1990. Family median income was also only 75 percent of the state median family income. Per capita income in the County was approximately 71 percent of the state median per capita income. The Craig County median family income was projected to increase to $36,017 by 1996 and the median household income was projected to increase to $36,874 by 1998.

Table 8
Median Income, Craig County

Category	1980	1990	1998 (Est)	Change
Household	$13,562	$25,106	$36,874	172 %
Family	$16,073	$28,530	n/a	77.5 %
Per Capita	$5,841	$11,168	$19,649	236 %

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990; Bureau of Economic Analysis (1998 Est)

Table 9
Median Income, 1990

Category	Craig County	Virginia
Household	$25,106	$33,328
Family	$28,530	$38,213
Per Capita	$11,168	$15,713

Source: U.S. Bureau of the Census, Census of Population, 1990.

Table 10
Projected Median Family Income

Year	Craig County	Virginia
1991	$31,983	$40,556
1992	$33,446	$42,258
1993	$34,908	$43,919
1994	$33,545	$44,643
1995	$34,796	$46,096
1996	$36,017	$47,547

Source: 1994-96 Income Projections, Families and Households, Virginia Localities, Center for Public Service, University of Virginia, 1994.

Table 11
Projected Median Household Income

Year	Craig County	Virginia
1991	$26,295	$34,459
1992	$27,447	$35,839
1993	$28,587	$37,202
1994	$29,519	$38,936
1995	$30,620	$40,203
1996	$31,695	$41,470
1997	$34,900	$40,209
1998	$36,874	$42,622

Source: Income Projections, Families and Households, Virginia Localities, Center for Public Service, University of Virginia.

Table 12
Mean Household Income by Type, 1990

Category	Craig County	Virginia
Wage and Salary Income	$27,732	$39,615
Nonfarm Self-employment Income	$9,695	$18,896
Farm Self-employment Income	$8,536	$6,694
Social Security Income	$6,923	$7,223
Public Assistance Income	$1,881	$3,394
Retirement Income	$7,928	$12,652

Source: U.S. Bureau of the Census, Census of Population, 1990.

Wage and salary income reflects income disparity with the statewide figures. Wage and salary mean income level in Craig County was 70 % of the state figure. While nonfarm self-employment income was 51 % of state figure, farm self-employment income for Craig County is 128 % of state figure. Mean social security income was 96 % of the state figure, retirement income is 63 % of the state figure and mean public assistance income was only 55 % of the state figure.

While 80 % of Craig County households had wage and salary income in 1990, only 5 % had public assistance income. 30 % of households received social security income and 17 % received retirement income. 11 % of households had nonfarm self-employment income and 6 % had farm self-employment income.

In 1999, Craig County had a per capita personal income (PCPI) of $20,454. This was 69 % of the state average, $29,794. In 1986, the PCPI of Craig County was $10,930. The annual growth rate of PCPI over the past 10 years was 5.1 %. The average annual growth rate for the state was 4.8 %.

Table 13
Per Capita Personal Income

Year	Craig County	Virginia
1990	$13,457	$20,054
1991	$13,369	$20,571
1992	$14,489	$21,370
1993	$14,974	$22,296
1994	$15,857	$23,174
1995	$17,086	$24,284
1996	$17,685	$25,255
1997	$18,602	$26,763
1998	$19,649	$28,369
1999	$20,454	$29,794

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, 2000.

Poverty Statistics

Craig County experienced a decrease in the percentage of persons below the poverty level between 1980 and 1990 as well as a decrease in the percentage of persons age 65 and over below the poverty level. The percentage of families below the poverty level remained the same at 8.0 %. The number of female householder families below the poverty level increased from 20.4 % to 22.4 %. 1999 estimates indicate a decrease in the percentage of persons in poverty as well as families in poverty.

Table 14
Poverty Statistics, Craig County

Category	1980	1990	1999 (est)
Persons	10.2%	9.8%	8.3%
Persons Age 65 and Over	24.4%	16.9%	n/a
Families	8.0%	8.0%	7%
Female Householder Families	20.0%	22.4%	n/a

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990. Weldon Cooper Center for Public Statistics 1999

CHAPTER 4

HOUSING

Shelter is a basic human need. Section 15.2 of the *Code of Virginia* lists affordable housing as an issue, which may be addressed by local governments in the comprehensive plan. Housing affordability should be monitored to ensure that all citizens are capable of meeting this basic need.

Year-Round Housing Units

For the period 1980 - 1990 there was a moderate decrease in the number of year-round housing units in Craig County. However, from 1990 to 2000 there was a 33% increase in the number of year-round housing units. The number of vacant housing units increased by almost 55 % during the same period (1990-2000). Vacant housing units also include cottages and cabins used on a seasonal basis.

Table 15
Year-Round Housing Units

Category	1980	1990	2000	Change (90-00)
Year-round units	1,717	1,676	2225	32.8%
Vacant Units	265	317	494	55.6%

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990, 2000..

Occupied Units

The percentage of owner-occupied housing remained steady 1980 - 2000. The number of owner-occupied units increased by 482 units (40%) from 1980 to 2000. The number of renter occupied units increased by 48 % during the same 20 year period. In 1980, 82 % of all units were owner-occupied, while in 2000 the figure was 81 %.

Table 16
Occupied Units by Type

Category	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Owner-Occupied	1,190	82	1393	83	1672	81.2
Renter-Occupied	262	18	283	17	388	18.8

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990, 2000.

Housing Type

From 1980-1990, single-family units have remained the dominant types of housing in Craig County. However the number of mobile homes has increased by 65 %.

Table 16
Housing Type

Type	1980		1990	
	Number	Percent	Number	Percent
Single-Family	1,346	78	1,487	75.2
Multi-Family	108	6	55	2.8
Mobile homes	263	16	435	22.0

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990.

General Housing Characteristics

The median house value increased by almost 60 % from 1980 to 1990. The median rent increase of 292 % can be attributed to the low number of rental units available in the County in 1980. The amount of housing stock 30 or more years old decreased by 17 %.

The census data which best reflect the condition of housing units in the County are percent of occupied units with more than 1.01 persons per room and percent of occupied units lacking complete plumbing for exclusive use. The percent of overcrowded units decreased by almost 23 percent and the percent of units lacking complete plumbing decreased by more than 55 % from 1980 to 1990. Substandard units, those units either lacking complete plumbing or that have more than 1.01 persons per room, decreased by 36 %.

Table 18
Housing Characteristics

Characteristic	1980	1990	Change
Median Value	$32,000	$50,800	58.6
Median Contract Rent	$71	$278	292.0
Percent of Housing 30 Years or Older	49.8	41.3	-17.1
Percent of Occupied Units with More than 1.01 Persons / Room	2.2	1.7	-22.7
Percent of Occupied Units Lacking Complete Plumbing for Exclusive Use	14.5	6.5	-55.2
Substandard Units as a Percentage of Occupied Units	0.75	0.42	4.2

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990.

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Table 19
Housing Units by Year Structure Built, 1990

Period	Number
1939 or Earlier	414
1940 to 1949	112
1950 to 1959	298
1960 to 1969	265
1970 to 1979	429
1980 to 1984	211
1985 to 1988	219
1989 to March 1990	45
1991-2000 (estimated)	420

Source: U.S. Bureau of the Census, Census of Housing, 1999-2000.

Based on data provided by the Center for Public Service and Craig County, the number of new housing units authorized has averaged approximately 40 units per year since 1985. The only major fluctuations were the construction of 16 multi-units in 1992 and 40 multi-units in 1993.

Table 20
Housing Units Authorized, 1985 - 2000

Year	Units
1987	20
1988	25
1989	37
1990	35
1991	34
1992	40
1993	88
1994	40
1995	48
1996	34
1997	45
1998	32
1999	40
2000	42

Source: Cooper Center for Public Service, 2000
and Craig County Building Official.

Summary of Affordable Housing Needs

An indicator that can be used to measure affordability is comparison of the increase in median income versus increase in median house value. Median household income in Craig County

increased by 85.1 % from 1980 to 1990 and the median house value increased by 58.6 %. The median contract rent increased by 292.0 %. These figures indicate that ownership became more affordable and renting became less affordable from 1980 to 1990.

The Census Bureau's Comprehensive Housing Affordability Strategy database definition of housing problems includes the following criteria "any occupied units lacking a complete kitchen, lacking complete plumbing, having more than 1.01 persons per room, or costing more than 30 percent of the occupant households (monthly) income."

Table 21
Craig County Housing Problems

Criteria	1980	1990
Units Lacking Complete Kitchen	15.8	5.0%
Units Lacking Complete Plumbing	14.5	6.5%
Units With More Than 1.01 Persons Per Room	2.2	1.7%
Renters Paying More Than 30% of the Occupant Households Income	NA	24.6%
Owners Paying More Than 30% of the Occupant Households Income	NA	11.7%

Source: Virginia Housing Atlas: Housing Trends and Patterns to 1990, Virginia Center for Housing Research, 1993.

In 1990 the Craig County median rent was only 56 % of the statewide median rent. Approximately one-quarter of renters in Craig County was paying less than $250 per month. Fewer than 1 % of renters were paying above $600 per month compared to almost one-third of renters statewide.

Table 22
Gross Rent, 1990

Category	Craig County	Virginia
Median	$278.00	$495.00
Below $250	25.1%	11.7%
$600 or More	0.9%	32.6%
No Cash Rent	23.8%	5.4%

Source: Virginia Housing Atlas: Housing Trends and Patterns to 1900, Virginia Center for Housing Research, 1993.

Craig County median owner costs with a mortgage were only 57 % of the statewide median while median owner costs without a mortgage were 77% of the state median. The lower monthly mortgages may be attributed to Lower House values, yet similar costs for utilities, maintenance and taxes. The percentage of owners with a mortgage in Craig County was lower than the percentage for the state. This is possibly due to lower median house value and long-term ownership trend in the County creating an opportunity for owners to payoff a mortgage.

Table 23
Owner Costs, 1990

	Craig County	Virginia
Median Costs with a Mortgage	$474.00	$831.00
Median Costs without a Mortgage	$148.00	$192.00
Owners with a Mortgage	48.6%	71.5%

Source: Virginia Housing Atlas: Housing Trends and Patterns to 1990, Virginia Center for Housing Research, 1993.

A standard measure of affordability for both owner and renter is the percentage of income being applied toward housing costs. This cost includes rent or mortgage, utilities, maintenance and taxes. An acceptable rate is 30 % of the household's income. In 1990, 11.7 % of home owners in Craig County were applying more than thirty percent or more of their income toward housing costs and almost 25 % of renters were applying 30 % or more of their income toward housing costs. These figures are lower than those of the state are as a whole are.

Additional consideration can be given to household income levels relating to the 30 % guideline to demonstrate the need for affordable housing for low-income households. In Craig County, 29.4% of owners with incomes of less than $20,000 were above the 30 % guideline while 44.3 % of renters with incomes less than $20,000 were above the 30 % guideline. Again, these figures are lower than statewide numbers, even after taking income level into consideration. The Craig County housing cost burden is not high when compared to the statewide figures. However, local officials must look at the Craig County figures and realize that almost half of the renters with an income of less than $20,000 are using more than 30 % of their income for rent and almost one-third of owners with an income of less than $20,000 are paying more than 30 % of their income for rent. This indicates a need for more affordable housing in the County, which should be addressed.

Table 24
Housing Cost Burden, 1990

	Craig County	Virginia
Owners Paying 30% or More of Income	11.7%	20.5%
Owners Paying 30% or More of Income with Income Less than $20,000	29.4%	42.6%
Renters Paying 30% or More of Income	24.6%	38.3%
Renters Paying 30% or More of Income with Income Less than $20,000	44.3%	71.5%

Source: Virginia Housing Atlas: Housing Trends and Patterns to 1990, Virginia Center for Housing Research, 1993.

Homeownership rates in Craig County are higher than the statewide figures for all age groups, possibly due to lower housing values and the lower mobility rate in rural areas.

Table 25
Homeownership Rates, 1990

	Craig County	Virginia
Overall Homeownership Rate	83.1%	66.3%
Homeownership Rate for 25-34 Year Olds	74.6%	47.3%
Homeownership Rate for 35-44 Year Olds	87.6%	69.4%
Homeownership Rate for 65 and Older	81.2%	78.1%

Source: Virginia Housing Atlas: Housing Trends and Patterns to 1900, Virginia Center for Housing Research, 1993.

Resources

The percentage of Craig County households eligible for federal housing assistance is in the range of 30.1 - 40.0 %. The percentage of eligible households actually receiving assistance is less than 15.0 % according to the 1991 Virginia Center for Housing Research report Rural Housing Trends in Virginia: A Profile of the Eighties. This indicates a need for additional housing outreach activities in the County to inform eligible households of assistance that is available for housing preservation, development, and ownership opportunities. Additional research is also needed to update past housing studies in order to provide citizens and officials with an up to date assessment of current housing needs.

Local housing programs can help residents access safe affordable housing by addressing the needs of specific clients, improving existing housing and assisting in financing. In addition, programs for the elderly and handicapped, energy efficiency and weatherization, water and sewer system programs and local regulations such as the building code and zoning, all play a role in providing affordable housing.

Additional resources are available from the following agencies for financial and technical assistance: Virginia Department of Housing and Community Development's (DHCD) Division of Community Development; Virginia Housing Development Authority (VHDA); USDA Rural Development Office; and Southeastern Rural Community Assistance Project (formerly known as Virginia Water Project).

CHAPTER 5

ECONOMY

Rural communities need compatible economic development and growth guided in ways that will protect and enhance the community's special resources. Craig County has experienced difficulties over the past decade with economic development but is beginning to see an upswing. The County's largest employer, Halmode Apparel, discontinued their operations in Craig County in 1998. Some positive economic developments have happened since then, to include the relocation and expansion of Mick or Mack Grocery, opening of Dollar World in New Castle, development of a number of cottage industries throughout the County, and restoration of the downtown New Castle business district through the Community Development Block Grant received from the Va. Department of Housing and Community Development. Tourism and recreation-based businesses, such as trout ponds, guided horseback trail rides, overnight accommodations, and other similar businesses are also increasing in the County.

Employment

Table 26 shows the unemployment rates for Craig County from 1990 to 2000. Craig County's unemployment rate has been consistently higher than the rate for the State, however annual figures for 2000 indicate that the County's unemployment rates mirror the State and region.

Table 26
Annual Average Monthly Unemployment Rate

Year	Craig County	Virginia
1990	6.0%	4.3%
1991	7.7%	5.9%
1992	5.1%	6.4%
1993	6.1%	5.1%
1994	5.8%	4.9%
1995	4.6%	4.5%
1996	4.4%	4.4%
1997	4.3%	4.0%
1998	6.5%	2.9%
1999	4.2%	2.8%
2000	2.5%	2.2%

Source: Virginia Employment Commission, 2000.

Labor force Characteristics

The number of persons in the Craig County labor force has been increasing since 1998, while actual numbers of unemployed have been decreasing. By 2000, the County's unemployment rates

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mirrored that of the region and State. Unemployment rates for 2001 have continued to mirror the rates of the Roanoke region.

Table 27
Labor Force Characteristics, 1994 - 2000

Year	Labor Force	Employed	Unemployed	Unemp. Rate
2000	2,250	2,194	56	2.5
1999	2,073	1,985	88	4.2
1998	2,181	2,029	152	7.0
1997	2,447	2,339	108	4.4
1996	2,353	2,249	104	4.4
1995	2,459	2,345	114	4.6
1994	2,395	2,257	138	5.8

Source: Virginia Employment Commission, Virginia Electronic Labor Market Access.

Table 28
Labor Force Characteristics, 2000

Month	Labor Force	Employed	Unemployed	Unemp. Rate
Jan.	2,403	1,955	88	4.3
Feb.	1,989	1,921	68	3.4
Mar.	2,115	2,064	51	2.4
Apr.	2,149	2,101	48	2.2
May	2,197	2,144	53	2.4
June	2,388	2,337	51	2.1
July	2,517	2,452	65	2.6
Aug.	2,528	2,469	59	2.3
Sept.	2,261	2,213	48	2.1
Oct.	2,282	2,246	36	1.6
Nov.	2,290	2,234	56	2.4
Dec.	2,251	1,995	54	2.4
2000 Avg.	2,250	2,194	56	2.5

Source: Virginia Employment Commission

Industry of Employed Persons

The largest numeric increase in employment was in "services" with 215 new jobs between 1980 and 1990 followed by "retail sales" with 106 new jobs. The largest percentage increase in employment was in "retail trade" at 75.2 % followed by "construction" and "services." There were decreases in employment for the following industries: agriculture, mining, wholesale trade and public administration. As a percentage of total employment, "retail trade" and "services" increased while "manufacturing", "agriculture" and "public administration" declined.

Table 28
Industry of Employed Persons

Industry	1980		1990	
	Number	Percent	Number	Percent
Agriculture, Forestry, and Fisheries	122	7.5	114	5.4
Mining	17	1.0	11	0.5
Construction	141	8.6	218	10.3
Manufacturing	484	29.6	565	26.7
Transportation, Communication, and Util.	118	7.2	140	6.6
Wholesale Trade	64	3.9	53	2.5
Retail Trade	141	8.6	247	11.7
Finance, Insurance, Real Estate	76	4.6	99	4.7
Services	362	22.1	577	27.3
Public Administration	112	6.8	87	4.1
Total	1,637	100.0	2,111	100.0

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990.

Occupation of Employed Persons

The largest increase in number of jobs based on occupation was for the "service" sector at 55.1% and "precision production, craft and repair" at 53.3 % from 1980 to 1990. The only occupational sector that experienced a loss of positions was "farming, forestry and fishing" which declined 16%

Table 29
Occupation of Employed Persons

Occupation	1980		1990	
	Number	Percent	Number	Percent
Managerial and Professional Specialties	219	13.4	296	14.0
Technical, Sales, Admin. Support	381	23.3	479	22.6
Service	167	10.2	259	12.2
Farming, Forestry and Fishing	125	7.6	105	4.9
Precision Production, Craft and Repair	244	14.9	374	17.7
Operators, Fabricators, Laborers	501	30.6	598	28.3
Total	1,637	100.0	2,111	100.0

Source: U.S. Bureau of the Census, Census of Population, 1980, 1990.

Trade Sectors

Analysis of trade by sector provides information about the composition of the local economy. The U.S. Census Bureau Economic Census information shown below includes data for the retail trade, wholesale trade and service industry sectors. The retail trade sector includes establishments primarily engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods. The wholesale trade sector includes establishments primarily engaged in selling merchandise to retailers; other wholesalers; or industrial commercial, institutional, farm, or professional users. The services industries include establishments engaged in providing professional, repair, and recreational services.

Increase of 80 % in the number of retail trade establishments over a five-year period from 1987 to 1992. The retail trade sector had an increase in annual sales and in the number of retail employees and annual payroll. These increases indicate that the retail trade sector in Craig County has expanded. The number of wholesale trade establishments and employees has remained stable from 1987 to 1992 although annual sales and annual payroll increased. Service industries also remained stable during the period. Due to disclosure requirements by the Census Bureau (to insure confidentiality of the data reported by local businesses) it cannot be determined if changes occurred in annual sales and annual payroll for the service industries. The number of service industry employees decreased by at least 41 percent during the five-year period based on information provided by the Census Bureau.

Data from the 1997 Economic Census are not directly comparable to previous data released for 1992 and 1987. 1997 data are shown for reference purposes only.

Table 30
Retail Trade

	1987	1992	1997	Change (87-92)
Number of Establishments	10	18	8	80%
Annual Sales	$3,354,000	$5,341,000	$3,673,000	59%
Annual Payroll	$223,000	$523,000	$297,000	135%
Number of Paid Employees	42	61	25	45%

Source: Census of Retail Trade, U.S. Bureau of the Census, 1987, 1992, 1997.

Table 31
Wholesale Trade

	1987	1992	1997	Change (87-92)
Number of Establishments	3	3	3	0%
Annual Sales	$1,325,000	$2,351,000	$484,000	77%
Annual Payroll	$190,000	$335,000	$145,000	76%
Number of Paid Employees	22	20	5	-9%

Source: Census of Wholesale Trade, U.S. Bureau of the Census, 1987, 199,1997..

Table 32
Service Industries (does not include Real Estate)

	1987	1992	1997	Change
Number of Establishments	10	10	12	80%
Annual Sales	$945,000	D	D	NA
Annual Payroll	$328,000	D	D	NA
Number of Paid Employees	32	0-19[1]	(20-99)[1]	-41%[2]

D: Data suppressed due to disclosure requirements by the Census Bureau.
[1] Range provided due to disclosure requirements by the Census Bureau.
[2] Estimate calculated based on number of employees in 1987 minus the maximum of the
range provided for 1992 of 0-19.
Source: Census of Service Industries, U.S. Bureau of the Census, 1987, 1992.

Major Employers

The following table shows major employers for Craig County in 1997 based on data provided by
the Virginia Employment Commission. Most business establishments in Craig County have a small
number of employees. Based on 1997 data from the Virginia Employment Commission, 69 % of
the establishments in Craig County have fewer than 5 employees. Craig County Public Schools
and Craig County are two of the largest employers in the County. Youth camps, the Easter Seal
Society and Wilderness Adventures at Eagle Landing, have a large number of seasonal employees.
Utilities, TDS Telecom and the Craig-Botetourt Electric Coop, are also major employers.

Table 33
Major Employers, 1997

Employer	Range
Halmode Apparel, Inc.	A
Craig County Public Schools	B
County of Craig	C
Craig Botetourt Electric Coop, Inc.	D
Wilderness Adventures at Eagle Landing	D
Farmers & Merchants Bank	D
Wilderness Leadership Academy	D
Johnston Masonry	E
Castle Sands Company	E
Mick or Mack	E
The Bread Basket	E
Necessary Organic, Inc.	E
New Castle Telephone Company, Inc.	E
First National Bank of Rocky Mount	E

Employment Ranges: A= 125 and above; B= 100 to 124; C= 50 to 99;
D= 20 to 49; E= 5 to 19.

Source: Virginia Employment Commission, 1997.

The closure of the Halmode Apparel plant in June 1998 resulted in the loss of 116 jobs in Craig County. In addition, Necessary Organic closed its New Castle Office in early 2000, which resulted in the loss of 5 jobs. In 1990s production levels continued to rise and employment declined. Less restrictive trade agreements have lead to an increase in imports and movement of factories to overseas in search of cheaper labor markets. The textile and apparel industries in Virginia have been in decline for the past two decades based on Virginia Employment Commission data and currently make up only 1.7 % of statewide employment. VEC estimates that employment in the apparel sector will decline by 22 % by the year 2006 according to a VEC *Virginia Economic Indicators* series of articles published in 1998. The former Halmode Apparel building is now occupied by Shrewsbury Machine Shop. During 1999 Mick or Mack moved to its new facility and expanded significantly. Also in 1999 Dollar World and Fitness First opened on Main Street. New businesses in 2000 include a Laundromat, Doctor's Office, Chiropractor and Massage Therapist.

Taxable Sales

Craig County experienced a 13.6 % increase in taxable sales from 1994 to 1998 and a 41% increase from 1998-2000. Total taxable sales for the state increased 20.9 % during same period. The number of establishments in Craig County decreased slightly from 89 in 1994 to 86 in 1998.

Table 34
Annual Taxable Sales

Year	Establishments	Taxable Sales
1994	89	$5,864,465
1995	87	$5,799,437
1996	96	$6,670,015
1997	89	$6,617,596
1998	86	$6,664,549
1999	N/A	$7,366,319
2000	84	$9,398,808

Taxable Sales in Virginia Counties and Cities, Annual Report, 1993-97, Virginia Department of Taxation, 1994 - 2000.

Tourism

Residents of Craig County are beginning to realize the impact tourism can have on the local economy. As mentioned earlier in this chapter, a number of tourism-related businesses have opened recently in Craig County and the Craig County Tourism Commission in working with Botetourt County, the Roanoke Valley Alleghany Regional Commission, VDOT, and the Va. Dept. of Conservation and Recreation in studying the feasibility of converting the old C & O Railbed into a rails-to-trails facility for walkers, bicyclists, and horseback riders.

The latest data available from the Virginia Division of Tourism is for 1999. The drastic reduction in Travel Impact expenditures is actually due to the model being used. One of the base variables in the model is for gasoline sales. Craig has a very high rate of gas expenditures due to the high numbers of residents who commute to Roanoke. The model was revised in 98-99 to reflect this.

Table 35
Craig County Travel Impact 1991-1999

Year	Employment	Expenditures
1991	70	$5,440,000
1992	50	$7,230,000
1993	80	$7,960,000
1994	100	$8,840,000
1995	90	$7,660,000
1996	150	$14,160,000
1997	170	$15,550,000
1998	55	$2,348,555
1999	57	$2,465,504

Source: Travel Impact Model, Virginia Division of Tourism,

Agriculture

Much of the scenic beauty of Craig County comes from its agricultural and forestland uses. Many of the farms in Craig County are beef cattle operations with grazing lands extending up the lower slopes of the mountains throughout the County. The rural and aesthetic character of the County's agricultural land is a very important resource that should be conserved and maintained for future generations. Agriculture is an important industry in Craig County. In addition to contributing to a balanced local economy through the production of food, agricultural land aids in the protection of groundwater by filtering precipitation, provides wildlife habitat and open space, and maintains the rural character of the County.

Past Comprehensive Plans stressed the importance of preserving agricultural land and goals / objectives were formulated in a manner that would help preserve farmland. Unfortunately, previous efforts have not been succeeding – the mass residential exodus from the urban areas to rural communities like Craig County has consumed much productive acreage and residents are beginning to awaken to the loss of prime farmland. It will be important for the County to find ways of assisting farmers retain their farmland and resist development pressures.

The total number of farms in Craig County declined from 1982 to 1997, as did the amount of land in farms although total cropland and harvested cropland remained relatively constant. From 1992-1997 the number of farms posted an increase, as did the total number of acres in farms. The average value per farm and average value per acre increased 57% during the same time period according to the U.S. Census of Agriculture. Value of Craig County agricultural products in general increased from 1992 to 1997 and average market value per farm increased by 57%. The total market value of crops posted a 14% increase from 1992-1997. The total market value of livestock and poultry remained relatively flat from 1992-1997.

While the number of full time owners of farms decreased from 1992 to 1997, the number of part-time owners increased by 30%. The number of tenant farmers – those who lease land from others – decreased by 50%. Operators whose principal occupation is farming increased by 6.8 % during the same 5-year period. The average age of farm operators has remained stable, with a 25% increase occurring in the 35 to 44 year old age bracket.

Table 36
Farm Characteristics

	1982	1987	1992	1997	Change 1992 - 1997
Number of Farms	196	177	170	176	3.5%
Land in Farms (acres)	56,252	50,308	45,451	45684	0%
Avg. Farm Size (acres)	287	284	267	260	-2.6%
Avg. Value[1] Per Farm	200,689	195,802	232,144	364,567	57%
Avg. Value[1] Per Acre	706	699	841	1251	48.8%
Total Cropland (acres)	17,573	20,386	17,580	19,590	11.4%
Harvested Cropland (acres)	7,281	7,355	7,533	7,401	-1.7%

[1] Includes land and buildings.

Source: Census of Agriculture, U.S. Bureau of the Census, 1982, 1987, 1992, 1997.:

Table 37
Value of Agricultural Products

	1982	1987	1992	1997	Change 1992 - 1997
Market Value of all Agricultural Products Sold [1]	$2,167	$2,415	$2,581	$2,635	2.1%
Avg. Per Farm	$11,058	$13,642	$15,182	$14,970	-1.4%
Market Value of Crops [1]	$401	$97	$232	$265	14.2%
Market Value of Livestock, and Poultry [1]	$1,759	$2,317	$2,349	$2,370	.8%

[1] Value in thousands of dollars.

Source: Census of Agriculture, U.S. Bureau of the Census, 1982, 1987, 1992,1997.

Table 38
Farm Operators by Tenure

Tenure of Operator:	1982	1987	1992	1997	Change 1992-1997
Full Owners	141	120	121	112	-7.4%
Part Owners	48	49	42	60	30%
Tenants	7	7	8	4	-50%
Principal Occupation, Farming	76	80	73	78	6.8%
Principal Occupation, Other	120	97	97	98	0%

Source: Census of Agriculture, U.S. Bureau of the Census, 1982, 1987,1992,1997.

Table 39

Farm Operators by Age Group

Age Group	1982	1987	1992	1997	Change 1992-1997
Under 25 years	2	4	0	2	
25 to 34 years	17	12	19	14	-26.3%
35 to 44 years	30	24	27	22	-18.5%
45 to 54 years	50	32	36	45	25%
55 to 64 years	53	45	39	38	0%
65 years and over	44	60	49	55	12.2%
Average Age	54	56	55	56	0%

Source: Census of Agriculture, U.S. Bureau of the Census, 1982, 1987, 1992, 1997.

EDUCATION

Craig County Public Schools

The Craig County School Division consists of McCleary Elementary, Craig County Middle School, and Craig County High School. The Elementary School, KG to 5th Grade, serves about 350 students, while the high School, Grades 6 to 12, serves another 375. The schools are located on one campus and share a school nurse, cafeteria, gymnasium, and auditorium facilities

McCleary Elementary School was constructed in 1969. The pupil-teacher ratio at McCleary Elementary School is 20 students per classroom teacher. Craig County High School is essentially two schools in one. It has the normal high school grades and a middle school section, which has its own staff and buildings. The Middle School has 4 mobile-units that are used for classes. Craig County participates in the Governor's school in Roanoke for those students who qualify academically. Craig County High School Vocational Program has classes in carpentry, cabinetmaking, nursing, horticulture, food occupations, and mechanics, art, business and computer science. In addition, the school has several excellent ballfields.

The School Board is currently working with an architectural and engineering firm in the design of renovations to the Elementary and High Schools in order to accommodate the increasing number of students and to house the Middle School, which would result in the phasing-out of the mobile classrooms now in use.

Public School Statistics

Total school membership increased by 1.6% during the five-year period of 95/96-99/00. End of year membership in grades K-7 increased while end of year membership in grades 8-12 decreased by almost 30 %. Pupil/Teacher ratios increased to 15 in grades K-7 and decreased to 8.7 in grades 8-12. Statewide, the pupil teacher ratio for grades K-7 was 13.6 and the grade 7-12 ratio was 11.8.

Total number of dropouts in Craig County decreased by 90 percent from 1995-96 to 1999-00. The dropout percentage for Craig County was .32% compared to a statewide percentage of 2.55%. The total number of graduates in Craig County continues to decrease, however the percentage of students graduating in 1999-00 was 99.6%, which is significantly higher than the statewide rate. The graduation rate is calculated as a percent of ninth grade membership four years earlier and does not take into account the mobility of the population.

Table 40
Public School Statistics

Category	1990-91	1995-96	1999-00	Change (95-00)
End of Year Membership	665	700	711	1.6%
End of Year Membership, K-7	412	342	458	33.9%
End of Year Membership, 8-12	253	358	253	-29%
Pupil/Teacher Ratio, K-7	15.3	13.7	15	.9%
Pupil/Teacher Ratio, 8-12	12.0	11.1	8.7	-21%
Dropouts	14	10	1	-90%
Total Graduates	57	46	35	-24%

Source: Superintendent's Annual Report for Virginia, Virginia Department of Education, 1990-91, 1995-96, & 1999-00.

The percent of students attending 2-year and 4-year institutions increased as well as the percentage of students attending technical schools. Statewide percent continuing at 2-year was 23.8; 4-year was 47.7 and other was 8.5%. Statewide, 80.0 % of students continued their education in 1995-96.

Table 41
Students Continuing Education

Type of Institution	1990-91	1995-96	1999-00
2 Year College	28.1%	30.4%	40%
4 Year College	35.2%	32.6%	45%
Other	7.0%	0%	6%
Total	70.2	63.0	

Source: Superintendent's Annual Report for Virginia, Virginia Department of Education, 1990-91 and 1995-96, 1999-00.

Table 42
Public School Expenditures

Category	1990-91	1995-96	1999-00	Change (95-00)
Total Per Pupil Expenditure	$3,961	$5,265	$6,669	26.7%
Average Annual Teacher Salary	$26,854	$29,139	NA	NA

Source: Superintendent's Annual Report for Virginia, Virginia Department of Education, 1990-91 and 1995-96, 1999-00.

Public school expenditures for Craig County increased by almost 33% during the five-year period from 1990-1995 and average annual teacher salaries increased by 8.5%. From 1995-2000 per pupil expenditures increased an additional 27%. Total per pupil expenditure for Craig County was $5,265 compared to the statewide average of $5,440 in 1995-96. The average teacher salary in Craig County was $29,139 compared to $34,792 for the state in 1995.

Table 43
Fall Membership Projections

Year	Total Enrollment	Percent Change
1999-00	746	NA
2000-01	771	3.4%
2001-02	783	1.6%
2002-03	789	0.8%
2003-04	784	-0.6%

Source: Public School Divisions Fall Membership Projections, 1999-2003
Center for Public Service, 1999.

Head Start

A federally funded program for children ages three, four, and five and their families is managed by Total Action Against Poverty. The program provides comprehensive services to children and families. Seek to enroll children with disabilities. Admission to the program is based on income. Eligibility is 100% of poverty level based on guidelines from the Department of Health and Human Services.

Tap

TAP seeks to enroll children with disabilities. Admission is based on income and / or the Child's disability.

CHAPTER 7

COMMUNITY FACILITIES

Water Systems

The 1990 Census of Population and Housing reported 417 housing units (20.9 %) as being served by public system or private company in Craig County, a 17 % increase from 1980 to 1990. According to the 1990 Census, 1,149 housing units (57.6 %) obtain water from individual drilled wells, 91 (4.6 %) from individual dug wells; and 336 (16.8 %) from some other source.

Table 44
Source of Water (housing units)

Source	1980	1990	Change
Public system or private company	355	417	17.5%
Individual drilled well	824	1,149	39.4%
Individual dug well	103	91	-11.7%
Other	405	336	-17.0%

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990.

Sewerage Systems

The 1990 Census of Population and Housing reported 428 housing units in Craig County being served by public sewer, this is an increase of more than 21 % during the ten-year period from 1980 to 1990. Still, there were 1,425 (71.5 %) housing units using a septic tank or cesspool and 140 (7 %) using other means of sewage treatment and disposal.

Table 45
Method of Sewage Disposal (housing units)

Method	1980	1990	Change
Public Sewer	164	428	21.5%
Septic tank or cesspool	1,194	1,425	71.5%
Other	329	140	7.0%

Source: U.S. Bureau of the Census, Census of Housing, 1980, 1990.

Current and proposed water and sewer service area maps are shown in Attachment A.

Solid Waste Management and Recycling

Craig County adopted the "Solid Waste Management Plan for Craig County and the Town of New Castle" in 1991. The document was revised in 1992. The solid waste management plan is formulated to achieve two main objectives: 1) effectively manage solid waste through the 6-step waste management hierarchy of source reduction, reuse, recycling, resource recovery, incineration and landfilling; and 2) implement a recycling program to reduce the solid waste stream by 10 % by 1991, 15 % by 1993 and 25 % by 1995. The County landfill was closed in the mid-1900s, with all solid waste being collected at the transfer station and hauled by a private contractor to their landfill in Amelia County. A convenience center, located on Route 42 also provides a trash services for residents of Sinking Creek and John's Creek.

Table 46
Average Volume (cubic yards) of Solid Waste Generated, 1990

Category	Daily	Weekly	Monthly
Household	58.7	410.4	1,764.7
Construction	7.2	50.6	217.6
Cardboard	3.5	24.6	105.8
Furniture	2.8	19.5	83.8
Scrap Metal	0.9	6.6	28.4
White Goods	0.4	3.0	12.9
Other	0.1	0.9	3.9
Brush	0.1	0.4	1.7
Total	73.7	516.0	2,218.8

Source: Draper Aden Associates, 1990.

Projected Solid Waste Generation

The projected waste figures were calculated using population projections from the Virginia Employment Commission, a 0.6 percent projected increase in waste generation per capita per year (based on national trends in waste generation) and 1990 waste generation figures for Craig County. This information was originally published in the Solid Waste Management Plan for Craig County and the Town of New Castle, 1992. Craig County was projected to a per capita waste generation rate of 4.99 by 2010, generating a total of 12 tons per day. This is a 25 % increase over that generated in 1990.

Table 47
Projected Solid Waste Generation in Craig County

Year	Projected Population[1]	Projected Waste Rate[2]	Projected Tons Per Day	Projected tons Per Year
1997	4,411	4.60	10.1	3,703.0
1998	4,440	4.63	10.3	3,751.7
1999	4,472	4.66	10.4	3,803.2
2000	4,500	4.69	10.6	3,851.7
2005	4,650	4.84	11.2	4,107.3
2010	4,800	4.99	12.0	4,371.2

Source: Solid Waste Management Plan for Craig County and the Town of New Castle, 1992.
[1] Source: Virginia Employment Commission.
[2] Pounds/person/day

Law Enforcement / Emergency Services

Craig County Sheriff's Department provides law enforcement services for the County. Additional law enforcement is provided by Virginia State Troopers, US Forest Service Wardens and Game and Inland Fisheries Wardens assigned to the area. Craig County has two Rescue Squads – Paint Bank Rescue Squad and Craig County Rescue – EMS. There are five volunteer fire departments that serve Craig County: Craig – New Castle VFD, Upper Craig Creek VFD, Paint Bank VFD, Simmonsville VFD, John's Creek VFD.

Health Care Facilities

The Craig County Health Department provides health care services to County residents. The department's staff consists of an office manager, environmental specialist, clerical support and a public health nurse. Programs offered by the health department include CHIP, WIC (Food Program for Women, Infants and Children), Maternity Clinic (delivery at Carilion Community Hospital), Maternal and Infant Care Coordination, Family Planning Clinic, STD Clinic (Sexually Transmitted Disease), HIV Counseling and Testing, Immunization Clinic, Children's Specialty Services, School Health Programs, Preschool Physicals, Pharmacy Services, Communicable Disease, Vital Statistics. Environmental Health, and Food Safety.

The New Castle Medical Center operates as a satellite office of Lewis-Gale Clinic in Roanoke. A physician, with the assistance of a nurse practitioner and staff, provides health care services to Craig County residents. The facility is equipped to provide x-ray and laboratory services. The office is open five days a week and has a physician from Lewis-Gale Clinic on call 24 hours a day. Lewis-Gale Clinic closed the New Castle Medical Center in October 1999 when its physician left to take another position out of state. Since that time, a part-time doctor's office has been opened on Court Street and Radford University obtained a grant to operate a mobile health clinic in Craig County as a pilot project.

Craig County Comprehensive Plan – DRAFT

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Electric Utilities

Craig-Botetourt Electric Cooperative distributes electricity to portions of the county and is headquartered in New Castle, Virginia. The cooperative serves portions of seven counties in southwest Virginia and West Virginia.

American Electric Power serves portions of Craig County and other areas in southwestern Virginia.

Communication Services

TDS Telecommunications provides local phone and Internet service to Craig County. Citizens InterNET (Citizens Telephone Cooperative) provides a point-to-point (PPP) accounts through a dial-up local access number. US Cellular will be constructing a cellular tower on APS knob in 2002 and currently has a temporary antenna in New Castle. The Craig Rural Electronic Village provides local community and government information on the Internet and has access sites for use by the general public in various locations throughout the County.

CHAPTER 8

RECREATION

Inventory of Existing Recreation Resources

Craig County is served by the New Castle Ranger District of the Jefferson and George Washington National Forest. The United States Forest Service (USFS) manages approximately 108,000 acres of land in Craig County as well as 4 recreation areas and 200 miles of roads and trails. The USFS works in cooperation with the Virginia Division of Game and Inland Fisheries to manage the wildlife habitat in the County. The lands of the USFS provide residents and tourists with many opportunities for fishing, camping, hiking, hunting and nature study.

The Appalachian Trail, the best known hiking trail in the United States, passes through Craig County from VA. Route 601 on John's Creek Mountain near Captain to Cove Mountain near Dragon's Tooth. The Appalachian Trail is a footpath of more than 2,150 miles and is the first National Scenic Trail in the U.S. Pack animals, bicycles, and motorized vehicles are not allowed on the Appalachian Trail. Approximately 30 miles of the Appalachian Trail pass through Craig County.

The Virginia Department of Forestry operates the first State Forest in Southwest Virginia – Niday Place State Forest near Simmonsville on Johns Creek Mountain. The State Forests in Craig County provide numerous recreational opportunities for nature lovers.

Outdoor Recreation Facilities – Jefferson and George Washington National Forest

Craig Creek Recreational Area, one of the few range lands on the Jefferson National Forest, is also the New Castle Ranger District's premier group facility and has been designated as a National Forest Landscape for the Future. Views of Craig Bluffs, warm water fishing, canoeing, picnicking, highly diverse wildlife, hiking, swimming, and group facilities for organizations are just a few of the offerings at Craig Creek. Located near the village of Oriskany, Virginia, an historic iron town, Craig Creek is accessible from a rail grade that has been converted to vehicular use. The rail grade originally connected the early iron industry of Craig and Botetourt Counties to the James River and the Atlantic.

Fenwick Mines Recreational Area is a day use facility offering recreation opportunities for the naturalist, historian, and angler. The facility is managed and maintained by the U.S. Forest Service. The created wetlands, boasting an accessible boardwalk interpretive trail, are the remnants of a late nineteenth century iron mining and manufacturing center that once was the location of a community of over 200 individuals. The Fenwick Mining Complex, consisting of 3,000 acres, was operated primarily between 1899 and 1924. Eight mines in the proximity of the wetlands produced high-grade ore, which was shipped by the C&O Railroad to furnace locations for smelting. The reclaimed area now boasts waterfowl habitat, native wetland flora habitat, warm water fishing area, casual sports openings, a picnic shelter, and group and family picnic sites.

Adjacent trails offer waterfalls, hunting, upland hardwood and mixed pine forests, and a glimpse into the history of the iron industry.

There are two wilderness areas within the National Forest in Craig County. These are Barbours Creek Wilderness area, a 5,700 acre wilderness, and Shawvers Run Wilderness area, a 3,467 acre wilderness area. Both of these wilderness areas contain rugged and remote mountains (including Potts Mountain) and a variety and abundance of wildlife. Both wilderness areas also contain branches with native brook trout. These wilderness areas are available to all who seek refuge from the hustle and bustle of modern life. There are no facilities in the wilderness areas and motorized vehicles and mountain bikes are prohibited.

Dragon's Tooth Trail, located on Cove Mountain at the Craig/Roanoke County line, is a popular hiking trail for residents and tourists. The interesting rock formations of Dragon's Tooth provides the hiker with excellent views of many nearby and distant mountain peaks. The trail is 2.6 miles long. Ferrier Trail/Lick Branch Loop, located on Forest Service Road. 182 off Va. Route 690, is a 7 mile loop providing good views of Craig Creek Valley and Potts Mountain.

The Pines Campground is a U.S. Forest Service managed recreation area with 2 picnic sites, 17 campsites, a horse corral and trails, water and bathroom facilities. Steel Bridge Campground has 20 campsites, water and restroom facilities, and is located off Va. Route 18.

State Trout Fish Hatchery is located on Va. Route 311 in Paint Bank.

Outdoor Recreation Facilities - Other

Camp Mitchell, a recreational/community center owned by the County and leased to the Craig County Ruritan Club, is currently utilized for a variety of recreational needs such as T-Ball and Coaches' Pitch leagues, dances, and basketball. The Ruritan Club has been working diligently since 1998 to upgrade the facility, which had fallen into disrepair over the years. Plans are currently being developed by the Ruritan Club to restore the cabins at Camp Mitchell, repair the swimming pool, and develop nature trails. Camp Mitchell is located of Va. Route 689 just outside of New Castle.

The Craig County Historical Society has developed an Historic Log Cabin Park on a County-owned lot adjacent to the Mick or Mack Grocery and a second log cabin is being constructed beside the old Hotel.

Greenways

The 1996 Virginia Outdoors Plan recommends that consideration be given to the development of the abandoned C&O Railroad right-of-way as a recreational trail (Craig Creek Trail). Located between New Castle and Eagle Rock in Craig and Botetourt Counties, this right-of-way is owned by the Virginia Department of Transportation and could connect Camp Mitchell, Craig County schools, the George Washington and Jefferson National Forests, and several other local recreation

areas. Potential funding sources for this trail include Virginia Department of Transportation Enhancement Program, Scenic Byways Fund, and the Virginia Recreational Trails program.

The proposed Alleghany Trail traverses the Craig County and West Virginia line, crossing the west corner of Alleghany County before entering West Virginia. Portions of the trail have been constructed and the West Virginia section is nearly complete.

Introduction

The predominant mode of transportation in Craig County is the automobile. The County maintains a close working relationship with the Virginia Department of Transportation (VDOT) on all road and vehicular traffic related issues. The State of Virginia owns, constructs and maintains all public roads, both primary and secondary routes, in the County. The County of Craig does not own or maintain any public roads.

Route 311

Route 311 is the main transportation facility connecting Craig County to the urban core of the Roanoke Valley and the rest of the East Coast via Interstate 81. Resident and government concerns have been heightened in recent years due to increased congestion and unsafe conditions on Route 311. A study of the Route 311 corridor prepared in 1995 by the Roanoke Valley Alleghany Regional Commission (formerly known as the Fifth Planning District Commission) found that the presence of sharp curves, narrow lanes, and almost no shoulder on Route 311 from Hanging Rock to New Castle created safety issues and transportation problems. The study found that the likelihood of accidents is heightened by these conditions, as well as by the fact that many vehicles are travelling at high speeds at close spacing along this route and motorists become frustrated with the inability to pass and are more likely to risk passing at an unsafe time. There is also a concern for the safety of school children riding buses. There have been close calls in which vehicles have stopped short or been entirely unable to stop for loading or unloading school buses due to inadequate sight distances on Route 311. In addition, there are few safe locations where school buses can pull off the road to allow a build-up of vehicles behind them to pass.

One of the largest stumbling blocks to economic development in Craig County is its isolation from neighboring communities, the nearby urban areas, and Interstate 81. Route 311, as a two-lane highway winding through mountainous and rolling terrain, is a hindrance to economic development efforts. Many companies looking for a location for their operations desire a site which provides easy access to their market areas via interstate highways, a commercial airport, and/or rail service. Without improvements to Route 311 to accommodate commercial traffic safely and without congestion, efforts to increase economic development in Craig County will be severely hindered.

Scenic Highways and Virginia Byways

In 1966 the Virginia General Assembly passed the Scenic Highway and Virginia Byways Act authorizing the Commonwealth Transportation Board and Department of Conservation and Recreation to recognize certain roads for outstanding features. Virginia Byways are existing roads with significant aesthetic and cultural values, leading to or lying within an area of historical, natural, or recreational significance. A Scenic Highway is a road within a protected scenic

corridor located, designed and constructed so as to preserve and enhance the natural beauty and cultural value of the countryside. The Virginia Byways Act was intended to be used for recognition of roads with aesthetic value and does not place any land use restrictions or controls on a designated corridor. Local land use controls have been relied upon to conserve the scenic qualities of the corridor.

Approximately 1,100 miles of roadway within the state of Virginia have been designated as either scenic highways or Virginia byways. Craig County has three designated Virginia Byways: Route 311, Route 42, and Route 615. The 1996 Virginia Outdoors Plan has recommended Route 606 from Fincastle to its intersection with Route 615 be considered for Virginia Byway status.

C & O Railbed

Since the 1960s, VDOT has owned the 26.4-mile abandoned CSX (C & O) Railroad right of way that traverses east to west between New Castle in Craig County and Eagle Rock in Botetourt County. Conversion of this abandoned railbed to a multi-use trail facility (i.e. walking, biking, horseback) has been discussed for more than 30 years at the local and state level with varying degrees of commitment and enthusiasm. The Roanoke Valley Alleghany Regional Commission conducted a feasibility study in 1999-2000 to determine the value of converting this right of way to rails to trails project. The findings of the feasibility study were that the right of way is a valuable public asset, which could support recreation, alternate modes of transportation, and resource protection in a variety of ways. It can also provide a much needed economic boost for both New Castle and Eagle Rock, with users of the trail visiting local stores and shops with the development of trail – related businesses.

Following presentation of the feasibility study to the Boards of Supervisors of Craig and Botetourt Counties, both counties voted to pursue further development of this project through preparation of a Trail Plan and conducting public workshops to provide information to residents and property owners of both counties.

CHAPTER 10

EXISTING LAND USE

General Land Use

During the 1980's and early 1990's, land use patterns in the County changed very little. Forested and agricultural land remains the dominant land use, with small areas in the County devoted to residential commercial and industrial activities. A field survey conducted in July 1985 provided the following statistics on County land use.

Table 48
Change in Land Use 1985-2002
Craig County, Virginia (excludes the Town of New Castle)

Land Use	Acres 1985	% of Total Land 1985	Acres 2002	% of Total Land 2002
Agricultural/Rural Residential	50, 124	23.3%	50,097	23.3%
Residential	2,273	1.1%	2,279	1.06%
Commercial	124	0.1	126	.1%
Industrial	43	*	62	*
Public	104	22.1%	104	22.1%
Private Forest	47,376	22.1%	45,842	21.3%
National Forest	114,817	53.3%	116,351	54.2%
Total	214,861	100.0%	214,861	100%

* Less than 0.1% of total.
Source: Fifth Planning District Commission estimates are based on a land use field survey conducted in July, 1985. The National Forest land acreage was provided by the Jefferson National Forest, New Castle District (as of October, 1985). 2002 Acreage derived from 1985 land use, county re-zoning records 1985-2002, and National Forest receipts information.

However, beginning in the mid-1990s Craig County began seeing an increase in the amount of agricultural and rural land subdivisions for residential housing. The rural and aesthetic character of the County's agricultural land is a very important resource that should be conserved and maintained for future generations. Past Comprehensive Plans stressed the importance of preserving agricultural land and goals/objectives were formulated in a manner that would help preserve farmland. Unfortunately, previous efforts have not been succeeding — the mass residential exodus from the urban areas to rural communities like Craig County has consumed much productive acreage and residents are beginning to awaken to the loss of prime farmland. It will be important for the County to find ways of assisting farmers to retain their farmland and resist development pressures.

Table 49
Farm Characteristics

	1982	1987	1992	1997	Change 1992 - 1997
Number of Farms	196	177	170	176	3.5%
Land in Farms (acres)	56,252	50,308	45,451	45684	0%
Avg. Farm Size (acres)	287	284	267	260	-2.6%
Avg. Value¹ Per Farm	200,689	195,802	232,144	364,567	57%
Avg. Value¹ Per Acre	706	699	841	1251	48.8%
Total Cropland (acres)	17,573	20,386	17,580	19,590	11.4%
Harvested Cropland (acres)	7,281	7,355	7,533	7,401	-1.7%

Source: Census of Agriculture, U.S. Bureau of the Census, 1982, 1987, 1992, 1997

Recent information on land development within the County indicates that residential construction accounts for the largest percentage of new construction. The County has averaged 40 new single family building permits per year for the period of 1990-2000. In addition, the County has begun to see an increase in large subdivisions. In 2001, at least 58 new lots were recorded as a result of major plats (greater than 3 lots being created on one plat).

New Castle continues to be the commercial center of the County with most commercial activities concentrated along Route 311 and Main Street. The Route 311 corridor from the Roanoke County line to New Castle has seen a great deal of development in recent years. Not only have a number of large residential subdivisions been developed, but low-impact business is also beginning to develop along the corridor. Existing businesses located on the Route 311 corridor include a printing company, natural gas filling station, an excavation company, ceramic shop, variety store, and auto repair station, and a number of gas station/convenience stores which have been in operation for years.

Although the lack of public water and sewer along Route 311, as well as existing traffic concerns, do not support the development of the Rt. 311 corridor for intensive industrial uses, the corridor does offer the potential for commercial and light industrial development. However, it is important that caution be taken to guarantee protection of the Rt. 311 corridor from intensive uses which could contaminate the creeks and floodplain areas along the corridor.

CHAPTER 11

FUTURE LAND USE

The future land use plan is intended to serve as a guide for future development to promote orderly growth within the County. The plan is to be used in conjunction with local zoning and subdivision ordinances in channeling future growth to desired areas. The land use plan is composed of a map and written elements. The map shows proposed future land uses for Craig County, but it does not supercede the existing zoning ordinance. It is intended as a general guide for future changes to the Zoning Ordinance and other related land use ordinances. The future land use map can be found appended (Attachment B) to this document. The essential features of the plan are discussed below.

Forest and Recreation Conservation

These are areas, which are either currently under National Forest ownership, mountain slopes, or privately owned timberland. The goal for this area is to maximize local benefits from National forest ownership, while preserving this natural resource for future generations.

~~The County should review current procedures where the National Forest Services obtain additional acreage in Craig County. The County's tax-base diminishes as the National Forest Service increases its acreage.~~

We recognize that the National Forest offers a wide range of recreational and economic opportunities. Our goal is to encourage the National Forest Service to maximize the use of their natural resources to their fullest potential by enhancing both recreational and economic opportunities, without encroaching on the county's landowners or acquiring additional private land within the county. The history of National Forest growth in the county is shown below.

History of National Forest Service System Acreage, Craig County, VA 1980-2001

YEAR	ACREAGE	YEAR	ACREAGE
1980	114,932	1991	114,664
1981	114,934	1992	114,852
1982	114,911	1993	115,310
1983	114,779	1994	115,337
1984	114,814	1995	115,724
1985	Unknown	1996	115,806
1986	114,818	1997	116,102
1987	Unknown	1998	116,479
1988	114,484	1999	116,509
1989	114,484	2000	116,351
1990	114,666	2001	116,351

Agricultural and Rural Conservation

Encouraging good stewardship of these areas will serve various purposes. First, conservation of agricultural areas will ensure that agriculture remains a viable element in the County's economic structure. Agriculture is an important part of the County's heritage and current way of life. Second, conservation of the county's rural areas will help preserve important watersheds. Third, conservation will help maintain low density of settlement of these areas. Fourth, conservation will help to hold the land in an open condition to accommodate future county needs. Strip development along highways in areas designated, as agricultural and rural conservation areas on the Land Use Map should be discouraged.

The County should also encourage the development of low-impact agri-business operations as a means of preserving farmland and open space, while at the same time expanding the local tax base and offering job opportunities.

Multi-Purpose Growth Area

The New Castle area and the Route 311 corridor from the Roanoke County line to New Castle are the prime site for future residential, commercial and light industrial activities in the County. It has the greatest potential to accommodate future growth. The timing and location of water and sewer lines, and other public services, will effect the orderly development of this area. Development in and around New Castle will provide for an efficient, high density community that will help to reduce local government expenditures for public services and utilities, and generate the necessary market and labor force for future commercial and light industrial development. Since growth will be channeled to this area, protection will be provided to agricultural and rural conservation areas. By encouraging the clustering of housing and commercial activities in the multi-purpose growth area, the potential for strip development along rural highways can be better controlled.

There are several good sites within the New Castle growth area that have potential for commercial and light industrial development. However, this development must not infringe upon the quality of waterways and floodplain areas, or the historic site potential of the Town of New Castle. Instead, commercial and light industrial development should be designed and located in such a way as to compliment the historic character of the area.

Industrial Areas

There are several specific areas near New Castle, which would be appropriate sites for future industry. These areas, because of the existing uses at the sites, make them candidates for future industrial prospects. These sites include, but are not limited to, the area around the Castle Sands plant, the former Fairground site, and the area around the old sawmill/sand plant site on Route 311 south of New Castle. Current industrial zoned areas within Craig County include the Castle

Sands plant, the old sawmill sand plant site (5 acres) on Route 311 south of New Castle, 108 acres owned by Craig Botetourt Electric Cooperative in the Scratch Ankle area of the County, an approximately 17 acre site owned by William J. Oliver in the Scratch Ankle area, the former Abbott Lumber site on Route 615, the former Crown Building, the former Halmode Building, and the former Craig Printing site on Route 311.

FUTURE LAND USE GOALS

Rural Residential Zoning Classification

For the past several years there has been an increase in the number of subdivisions being created from Agriculture zoned land, specifically land located in one-acre districts(A-2 zoning). Because of the agriculture designation predominantly residential subdivisions are experiencing conflict with adjoining and nearby lands that remain in agricultural use. Additional, unless private deed restrictions are placed on the subdivided lots, one acre tracts of land may still be utilized for any agricultural use as well as the placement of individual mobile homes (this right is protected by Virginia State Code). The County should evaluate the current A-2 zoning district and consider amending the zoning to that of a "rural residential" designation to eliminate conflicts within and adjoining new subdivisions.

Zoning District Classification

The County should evaluate the current zoning districts and consider alternatives.

Subdivision Standards for Road Construction

As stated above, new subdivisions are being created throughout the County at an increasing rate. Currently, the subdivision ordinance has no stated standards for road construction. The county should consider amending the subdivision ordinance to include minimum road standards for future subdivisions.

Currently, the subdivision ordinance has no stated standards for road construction. The County should consider amending the subdivision ordinance to include minimum road standards for future subdivisions.

GOALS AND OBJECTIVES

Craig County values its unique and irreplaceable status as a rural community with clean air and water, an uncluttered environment, attractive views, clean and safe industry and economic assets, and an excellent quality of life. Our overall goal is to be a county that is environmentally responsible and economically sustainable with a size, density, and diversity that encourages interaction, involvement and vitality among our people. **It is also of the utmost importance that we obtain and develop a balanced harmony between the economic needs and fiscal capabilities of the County.**

Housing

Goal: Craig County desires for its citizens to have opportunities for safe, convenient, and affordable housing, in such a way as to preserve the rural amenities that are the County's hallmark.

Objectives and Recommendations:

1. Housing for the County's large and growing elderly population is a priority. The County should pursue funding for the development of additional facilities for housing the elderly, to include working with private/non-profit organizations in the development of a combination assisted living/nursing home facility. *The County should consider the cost impact of such a facility. These facilities often require additional services and unanticipated costs. Therefore, the option to grant possible tax breaks to such potential facilities should be weighed carefully.*

2. The County should pursue the option of working with developers in creating affordable housing projects.

3. The County should investigate the feasibility of a retirement community built around a golf course.

4. Additional handicapped-accessible rental housing should be developed — possibly through the Blue Ridge Community Housing Agency. *The County should consider the cost impact of such a facility. These facilities often require additional services and unanticipated costs. Therefore, the option to grant possible tax breaks to such potential facilities should be weighed carefully.*

5. The County should encourage residential development along the Route 311 corridor between the Roanoke County line and New Castle, around New Castle and any areas served by public water and sewer.

6. The County should consider allowing private communities well systems in subdivisions that are large enough for the system to be economically feasible and that have soils suitable for individual septic systems. Private community well systems could allow for enhanced aquifer protection by reducing the number of aquifer punctures.

7. The County should encourage high quality mobile home parks in the area near New Castle to discourage the random placement of mobile homes throughout the County.

Economy

Goal: Craig County wishes to promote a healthy and diverse economic base which balances the need for increased economic opportunities with the need to protect and preserve the County's quality of life and environment.

Objectives and Recommendations:
1. The County, working with the Craig County Industrial Development Authority and an economic development consultant, should identify lands appropriate for industrial development and study the feasibility of developing an industrial park.
2. Recreation and Tourism represents a significant economic development potential for the County. Facilities to accommodate dispersed recreation and tourism activities should be encouraged to locate at appropriate sites within the county.
3. The County, working with the Craig County Tourism Commission, state and federal agencies should explore development of the old C&O railbed from New Castle to Eagle Rock into a multi-use trail facility.
4. The County should continue its participation in the Commonwealth of Virginia's Scenic Byway Program, in order to attract tourism traffic and spending to the County.
5. Development of overnight or weekly accommodations should be encouraged throughout the County in the form of bed & breakfasts, inns, hotels/motels, lodges, and cabins/cottages. Without more overnight accommodations it will be difficult to effectively tap the tourism market.
6. The County should encourage forms of economic development (which do not rely heavily on public infrastructure.) These include but are not limited to agriculture, agri-business, tourism, internet based business, and *biotechnology*.
7. The County should ~~support~~ *explore* the *services that the* Roanoke Valley Economic Development Partnership *may provide* as a ~~major~~ marketing force for economic development within the County.
8. The County should explore an Agricultural & Forestal District Ordinance or a Land Use Assessment Ordinance as a means of assisting farmers to afford to stay in business.

Human Services

Goal: The strength and success of a community begins with the welfare of its children, families and senior adults. It is the goal of the County to empower families to care for their children, as well as the elderly and to involve faith-based organizations, community groups and government to help make this happen.

Objectives and Recommendations:
1. In light of the county's increasing population (especially in the 25-34 category) the County should be alert to long range school needs. The necessity for more classroom space should be anticipated and County officials should remain aware that capital funding for expansion of the schools would be needed.

2. The County should work with developers and non-profit organizations toward the development of a combination assisted living/nursing home facility.
3. County Fire and EMS organizations should provide basic first aid and fire protection/prevention training at the schools and for community groups to help increase interest in volunteering and for the general welfare of County residents.
4. Craig County is the only county in Virginia with no public library. Craig County should pursue funding of a multi-function facility to serve as a library/meeting/technology facility.
5. The County should continue working with Blue Ridge Housing Agency toward development of handicapped-accessible rental housing.
6. The County should continue to provide facilities for the Craig County Child Care Center, the New Castle Commons, and the Women's Resource Center.
7. The County should work with health care providers toward the re-opening of a medical clinic in New Castle.
8. The County should encourage the development of programs for youth and seniors.

Natural Resources

Goal: Preservation and protection of the County's natural resources is vital to the County's high quality of life and efforts toward such preservation and protection are of primary importance.

Objectives and Recommendations:
1. Groundwater and surface water quality and quantity in Craig County are currently very good. The County should consider allowing communities well systems in subdivisions that are large enough for the system to be economically feasible and that have soils suitable for individual septic systems. Community well systems could allow for enhanced aquifer protection by reducing the number of aquifer punctures.
2. The County should discourage development in the 100-year flood hazard area, with the exception of seasonal dwellings.
3. The County should continue working with the Natural Resources Conservation Agency to conduct countywide soil mapping.
4. The County should consider commissioning a water quality study to determine the actual quality of our water supplies (not publicly provided water supplies).
5. The County should utilize its natural resource base to create jobs through low-impact nature-based tourism development.
6. The County should investigate the need for adopting an ordinance regulating intensive large-scale livestock operations in order to protect water quality
7. The County should encourage the U.S. Forest Service to study the feasibility of developing a ski resort in Craig County.
8. *The County should review the U. S. Forest Services slow but steady increase in ownership of the County's total acreage. In 1985 the Forest Service owned 53.3% of the acreage. Today that figure is approximately 55%. Therefore, the County has less land in its tax base.*

Agriculture

Goal: As an important part of Craig County's heritage and current way of life, in addition to the economic benefits it represents, agriculture in the County should remain an important element in its future.

Objectives and Recommendations:
1. In order to maintain the rural character of the County, the current five-acre minimum lot size for selected agricultural areas should be maintained.
2. Preservation of agricultural lands is an important objective. Alternative methods of ensuring this preservation *may* be investigated, such as new agricultural techniques for smaller farms, development of Agri-business *and special method farming, which may include biotechnology-* ~~partnerships with biotechnology companies needing farm sites and development of specialty~~ ~~crops.~~
3. The County should study development of an Open Air Market as an economic resource for local farmers.
4. The County should study an Agricultural and Forestal District Ordinance or a Land Use Assessment Ordinance as a means of assisting farmers to afford to stay in business.
5. In conjunction with the school system, and other interested parties, students should be given the opportunity to explore opportunities for agriculture as a vocation.
6. In order to promote agriculture related uses of the land, the County should pursue soils mapping for the entire county and ensure the prime farm land remains in the agricultural land use designation.

Recreation/Tourism

Goal: To improve the economy of Craig County, provide local job opportunities, and improve the quality of life in Craig County through tourism development and use of our recreational resources.

Objectives and Recommendations:
1. Encourage better marketing and servicing of established recreational activities, such as hunting and fishing to improve the income of local businesses and the County government. One option is to use the Craig Rural Electronic Village as a resource in marketing the County on the Internet.
2. The County should *explore the possibility of having someone to* ~~consider hiring an~~ ~~administrative assistant to~~ coordinate recreation, tourism, and event-development activities and solicit grant funding for tourism/recreation projects.
3. The County needs more annual or semi-annual events to draw visitors, increase community spirit, and boost retail sales.
4. The County, working with the Craig County Tourism Commission and state agencies, should study development of the old C&O railbed from New Castle to Eagle Rock into a multi-use trail facility.
5. The County should continue its participation in the Commonwealth of Virginia's Scenic Byway Program, in order to attract tourism traffic and spending to the County.

7. Promote recreation related businesses such as pick your own crops and fishing ponds; provide liaison with companies and agencies to obtain financing and encourage the operation of schools and activities with Craig such as the Orvis Company Fishing and Hunting Schools and the Virginia Game Commission's hunting safety schools, bicycling tours, mountain bike races, and corporate sponsored bikes and retreats.
8. The County should study development of an Open Air Market as an economic resource for local farmers.
9. The County should continue to maintain and improve Camp Mitchell through civic group, government and business cooperation.
10. The County should work with other organizations in locating or developing age appropriate leisure activities for our youth, such as roller-skating, bowling, and skateboarding facilities.
11. Development of visitors' center with restroom facilities and community bulletin board should be pursued by local organization(s) to include the County.

Built Resources

Goal: To provide a quality and stable infrastructure base upon which to build Craig County.

Objectives and Recommendations:

1. The Craig-New Castle Public Service Authority should continue implementing its plan to upgrade existing sewer infrastructure to decrease the inflow and infiltration problems and increase the amount of usable capacity at the wastewater plant.
2. Power and telephone lines on Main Street in New Castle should be placed underground or relocated to the rear alleys.
3. The County needs to continue its plan to upgrade the Courthouse, Administration Building, and Sheriff's Office to address space and accessibility needs.
4. The County schools need to be expanded to meet current and anticipated growth, as well as provide permanent facilities for the Middle School (now housed in mobile trailers).
5. The County should work with other organizations to study development of a public library, conversion of the C&O railbed to multi-use trail, and construction of a combination assisted living/nursing home facility.
6. Route 311 should be upgraded to allow for more passing areas and wider shoulders.

Transportation

Goal: The Transportation System in Craig County should provide safe, efficient and convenient modes of transportation. Improvements to the transportation systems should be sensitive to the County's environmental, social, land use and economic resources and concerns.

Objectives and Recommendations:

1. The Virginia Department of Transportation (VDOT) should make substantial improvements to Rt. 311 from the Roanoke County line to New Castle by straightening the severe curves,

providing more areas to pass, providing more turn-offs for slow-moving vehicles and school buses, and providing more shoulder area where possible.

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Appendix D – Marketing and Publicity Materials

Firebaugh, Anita J.: "Technology grant could help county attract industries;" *New Castle Record*; March 14, 2001.

"County will take part in high-tech program;" *New Castle Record*; November 14, 2001.

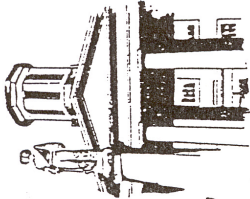Snead, Deborah D.: "Local web site will be updated;" *New Castle Record*; June 26, 2002.

Greene, Judith: "Craig County Online Calendar;" *New Castle Record*; February 9, 2004.

Snead, Deborah: "Technology Upgrade;" *New Castle Record*; February 12, 2004.

Snead, Deborah: "Business and Organization Web Workshop Available;" *New Castle Record*; February 27, 2004.

Firebaugh, Anita J.: "Free websites for Craig businesses;" *New Castle Record*; May 19, 2

Technology grant could help county attract industries

By ANITA J. FIREBAUGH
Contributing Writer

A unique opportunity for county participation in a technology program was presented to the Craig County Board of Supervisors at the Board's March 5 meeting.

The County is one of 10 Virginia localities invited to participate in the National Telecommunications & Information Administration's Technology Opportunities Program.

Debbie Snead, an extension agent with the Virginia Cooperative Extension, told the Supervisors the program has been established to assist "under served communities with a demonstrated need for technology."

Technology "has become the growth engine for our economy," Snead said.

She told the Supervisors that a presence in technology is vital if the county hopes to attract clean industry.

"I can't sit here and say it will attract an industry, but if people don't see a community having a presence in technology, there certainly is less of a chance of it happening," Snead said. "Technology is an investment in our future."

The county received a technology grant in the late 1990's. A task force of local business and civic leaders studied Craig County's technology needs and established six community Internet access sites. Two of those sites are still operative and available to the general public. That particular grant funding ran out two years ago.

This new opportunity should, in the least, allow the county to establish professional web pages to market the area, Snead said. It will aim to establish a community network for communication purposes and to allow public access to the information available through computers.

The program requires a $2000 match from Craig County and a three-year commitment, beginning July 1.

The match may be made with in-kind contributions, such as volunteers serving on a local advisory group. County dollars likely will be required after the initial development phase.

The Supervisors tabled further discussion until the March 20 meeting.

In other matters, the Supervisors:

• discussed road work to the trash transfer station off Route 609.

• agreed to purchase 125 additional shares in the New River Valley Commerce Park through the Virginia's First Regional Industrial Facility Authority. The new shares will add approximately $350 to the county's $5,500 yearly commitment. Craig City Supervisor Bernie Tripp opposed the purchase.

• discussed the purchase of guns and patrol cars with Sheriff B. B. McPherson.

• informed Superintendent Dr. Dallas Helems, Jr., that the Supervisors approved $6 million for the school construction, and any money made through interest earnings on loans or bond revenues will go into the county's general fund, not into the school budget.

• approved a slate of real estate and personal property tax refunds.

• discussed selling the county's interest in the Fairview Homes, Inc.

• received a resignation from the Craig County Tourism Commission from Jenny Givens. Givens was the representative from the Town of New Castle. No replacement was named.

The Supervisors next meet on Tuesday, March 20, at 7:30 p.m.

County will take part in high-tech program

Craig County will be taking part in a new program to bring community technology networks into nine rural counties across Virginia.

The Blacksburg Electronic Village (BEV) and Virginia Cooperative Extension have received a $748,000 federal grant to create and support these networks in 29 communities within the 9 counties.

"We look forward to working with citizens of our county and with BEV to bring expanded technology capabilities into our communities," said Debbie Snead, Extension Agent in Craig County. "By using it with our planning process, we hope to make a significant impact on our future."

Andrew Cohill, director of the BEV, said, "The project will help rural communities in Virginia develop the capacities needed to prosper in the Information Age economy. It will permanently increase the capacity of these communities to take control of and use technology effectively to improve local economic conditions, while including many more citizens in the decision making process."

The BEV, a part of Virginia Tech's Information Systems, and Virginia Cooperative Extension will jointly administer the project.

It is named "Getting Rural Virginia Connected," and is funded by a grant from the U.S. Department of Commerce's Technology Opportunities Program in an innovative partnership. Extension's planning process is being allied with the Blacksburg Electronic Village's "BEV in a Box" program.

BEV's staff will work closely with local and regional Extension agents to bring the participating counties a broad combina-

tion of technical expertise from Virginia Tech.

J. David Barrett, Director of Cooperative Extension, said, "We are excited to be able to extend technology and new community planning programs to rural communities from the Eastern Shore to far southwest Virginia. We are taking the time-tested Extension model into the 21st century."

BEV, originated in 1993, is one of the oldest continuously operated community networks in the country.

The 29 communities selected for the program are located in nine counties including Accomack, Carroll, Craig, Cumberland, Dickenson, Grayson, Louisa, King and Queen, and Northampton Counties.

The differences in the technology capabilities between rural and suburban/urban areas are not unique to these Virginia counties. Most rural communities across the U.S. lag significantly behind their urban counterparts.

A primary reason these nine counties were selected was that they are similar to other rural counties in Virginia and the nation. Additionally, local government in the counties selected has shown strong support for partnering with Virginia Cooperative Extension and the Blacksburg Electronic Village.

The project uses four key programs to help communities better control and direct their own destiny:

• Leadership and technology training for local and area Extension agents who work directly in each community. This direct linkage to Virginia Tech will facilitate access to cutting edge information technology developments as well as community development resources.

• Citizen teams comprised of a broad cross-section of people who agree to commit significant time and energy to the effort.

• The Extension program process will help communities reach consensus on major tenets of their development agenda and will provide ongoing support and resources for the citizen-based planning process.

• A tested, turn-key community network system (BEV in a Box), including: e-mail, Web hosting and design assistance, mailing lists, resident, business, civic and arts directories, online conference system, and professional technical support throughout the life of the project and beyond — coupled with extensive technical training for Extension agents and citizen teams.

New Castle Record, June 26, 2002

Local web site will be updated

By DEBORAH D. SNEAD
Extension Agent, Family &
Consumer Sciences, Craig County

Thanks to a national initiative that focuses on enhancing technology in rural communities, Craig County will be receiving guidance from Virginia Tech's Information Systems in technology infrastructure and a new and expanded web site for our community. The National Telecommunications & Information Administration's Technology Opportunities Program is an annual telecommunications initiative for under-served communities who can demonstrate a need for assistance with implementing technology while preserving the best aspects of the rural area.

Craig was selected for the project due to the ruralness of the communities, small population, and limited tax base. In addition, Craig has demonstrated an interest in technology enhancement and maintains a base in Extension's previously implemented Craig Rural Electronic Village project.

There is a digital divide between the people who have the best technology available and those who do not. For those who do not have access, the divide means that there is less opportunity to take part in our new information-based economy in which many more jobs will be related to computers. It means that there is less opportunity to take part in the education, training, and communication opportunities that are available on line.

Unfortunately, it also means that rural, low-income areas will be further left behind without these provisions. Information technol-ogy introduces the following world of new possibilities to rural areas:

• Offers the rural community potential for improvement and growth while maintaining the area's rural qualities.

• Establishes a community network allowing citizens to communicate and exchange information.

• Allows access to unlimited information for increasing knowledge.

• Increased employment opportunities for the workforce and allows residents to remain in the locality.

• Promotes new markets for the private sector, especially locally-owned businesses.

• Makes the community more attractive to high tech businesses and thus contributes to economic development.

A community task force is being established to implement the project. If you are interested in being a part of the group, please contact the Craig County Extension Office (864-5812). Web pages for both public and private businesses as well as county information and activities will be developed this summer and task force meetings will begin in September 2002.

Rural communities have the potential for change and growth in a variety of ways – technology is one of the most important keys to growth. The Rural Telecommunications Economic Initiative will assist Craig County in providing the community with a vision and with strategies to establish an appropriate and credible plan to enhance organizational and economic viability for the future.

It is celebration time! The new Craig County Online Calendar is up and running. We are accepting information from the community on events that take place in Craig County. The calendar is on the new Craig County site -

This is really easy to use! The calendar will display all events that have been listed with us by identifying the event and time. By pointing to the event, you can see some details. By clicking on the event, you will have a screen with full details that can be printed if you like.

If you have events that should be added to the calendar, you click on the bar that says add your event to the Craig County Calendar on the menu. This will take you to a screen that asks for information on the event. Fill in the simple blanks and hit enter to send it on its way.

We want to list school and sports events, club meetings, fund raising events, and church events. We want the most accurate information on each event so we suggest that each organization select a person to be a Calendar Coordinator. That person will collect all the information and enter it on the calendar periodically. We want our community calendar to be as complete as possible.

If your organization has an event that is open to members only, you can still list it on the calendar to facilitate community planning of other events. Merely note that it is for members only, or leave out the site information and supply a phone number or email address where interested persons may obtain this information. This is a great way to build membership since the phone call or email letter will give your organization a chance to contact these interested persons.

ecr

TECHNOLOGY UPGRADE

Craig and six other counties in Virginia that had a large rural population were selected by Virginia Cooperative Extension and Virginia Tech's Blacksburg Electronic Village (BEV) to develop a project to enhance technology education and resources. This project is funded by a Department of Commerce Technology Opportunities Program (TOP) grant. The goal is to have rural communities understand and utilize technology for employment, business development, open new markets for the private sector, and economic development for the County. More details about this project can be found at the project Web site - http://top.bev.net.

The Craig County Board of Supervisors has endorsed and provided support for the three-year project. A Technology Leadership Team (TLT) has been appointed to work with BEV on the project implementation. The initiative is providing a professional County web site with design work by BEV staff and content from Craig citizens, organizations, and businesses.

The site is now live, but is just in the development stages. The County's citizens will have an on-going opportunity to contribute to the site. Features of the site will include people, local business, and community organization directories, an online discussion forum, a Web calendar that has events of interest for Craig County residents and links to other appropriate sites. Two special programs are also provided by the TOP grant, the "Community Connections" program for non-profit organizations, schools, and churches to post information, and a "Virtual Business Incubator" program for home and micro businesses in the area. The programs are intended to help organizations and small businesses establish a Web presence. Both programs provide web hosting, two email addresses, and a mailing list that allows up to 100 subscribers.

During the project period which extends through June 30, 2005, there will be no charge to organizations or small businesses for the Community Connections or Virtual Business Incubator programs. At the end of the project period, businesses using the free incubator services will need to find a Web hosting service to host their sites. Incubator businesses as well as established businesses can continue to list themselves at no charge in the local business directory even after the project ends.

In addition to server administration, Web site design, Web calendar, online discussion forum, and free listings for businesses, churches, schools, and civic groups, BEV services also

include a technology assessment and master plan for Craig County and a series of educational workshops for the community. The first workshop will focus on how to use the Internet to help you explore your health needs. The workshop is open to the public and will be conducted by a staff member of the Virginia College of Osteopathic Medicine. The workshop will be held in the new school system's Technology Lab on February 16, 2004, from 4:00 to 6:00 pm. There is no charge, but you must register by calling the Craig Extension Office by February 13. Additional workshops will be held to assist community organizations, businesses, and community technology leaders in administration of the project. We are fortunate to have several of our Technology Team members volunteering their expertise:

- Director/Administrator – Faye Powers

- Web Site Administrators – Adele Morris and Deborah Scott

- Calendar Administrators – Dot Kincaid and Judith Greene

Volunteers are needed for three additional positions:

- Registrar (responsible for the business incubator services and verification of community connections and virtual business incubator accounts)

- Discussion Forum Administrator (responsible for on-line discussions and creating moderator)

- Discussion Forum Moderator (responsible for monitoring discussion forums for appropriateness)

Please contact the Craig County Extension Office or me if you are interested in one of the positions or would like to serve on the Technology Leadership Team.

The Craig web site has been registered under three domain names – craigev.net, craigev.org, and craigev.com (the craig "ev" represents electronic village). You may use any of the three (helps access and security) to get to the site on the BEV server.

THE NEW CASTLE RECORD   February 27, 2004

Submitted by Debbie Snead (540/864-5047)

> ***This project is exciting, valuable, and innovative for Craig citizens. Since your paper is about the only way to share information, we would really appreciate having you put this in a visible place for our folks to see it.***
>
> ***We would love to run it both weeks before the workshop if possible.***
>
> ***Thanks so much, Debbie***

Business and Organization Web Workshop Available

A couple of weeks ago I shared with you that Craig County has received a grant to enhance our technology. Funded by the Dept. of Commerce Technology Opportunity Program (TOP), the goal is to help rural communities utilize technology for employment, business and organizational development, and economic growth for the County.

Craig citizens will have an on-going opportunity to contribute to the new web site. The site has been registered under three domain names – craigev.net, craigev.org and craigev.net. The craig "ev" represents electronic village. The site is still under construction, but you can get to it using any of the three names.

Features of the site will include people in the news, schools, churches, and non-profit organizations and a discussion forum. Two very special programs funded by the grant will be the "Community Connections" for non-profit organizations to post events of interest and the "Virtual Business Incubator" for new and established businesses to establish a presence on the web. Both programs will provide web hosting, two emails addresses and a mailing list that allows up to 100 subscribers.

On ***Monday, March 15,*** our Craig Technology Leadership Team, in cooperation with several staff from the Blacksburg Electronic Village, will sponsor a workshop for Craig small business owners and non-profit organizations to establish their presence on the Web. The workshop will include:

New Castle Record, May 19, 2004

Free websites for Criag businesses

By Anita J. Firebaugh
Contributing writer

Businesses take note: for the next year, you can have a website hosted for free on the Internet, courtesy of a grant from Virginia Tech.

The grant, awarded to Craig County in 2002, is slated to end June 30, 2005. Until then, though, businesses can get a website up and running and see how the site could enhance business opportunities.

Other information on the website, such as church information, a community calendar, community group information, and school information, will remain online and available to computer users.

The site, located on the Internet at www.craigev.net, is under development, but some information about the county, its businesses, and the community, is already online.

The grant administrators are now focusing on workshops to help businesses and community groups implement website, Debbie Snead, the technology team leader, said.

It is easy to add a business. First, register on the website as a villager. When an administrator approves your application, you can add things to the community calendar and access other areas of the website.

Even if an area business already has its own website, it can use the craigev.net site. Businesses can be listed in the local business directory for free, with a link to the existing website.

Community groups and churches are also encouraged to list their organizations on the site. Several have already taken advantage of the offer and have sites under construction.

Craig is one of six counties that received this grant. One of the goals of the project is to help the county utilize technology for employment, business development, and economic development with the hope of opening new markets for the private sector.

The Craig County Board of Supervisors endorsed the project.

Craig County citizens are invited to visit the site and offer comments and suggestions. The site, when complete, will feature people, local businesses, community organization directories, an online discussion forum, and a calendar.

Some of those items are still in the construction phase.

The technology team, in conjunction with the Blacksburg Electronic Village staff, is working on a technology assessment and master plan for Craig County. They are also offering an ongoing series of educational workshops for the community.

The craigev.net site joins other county websites, which are not affiliated with this grant project:

the Craig County page
http://co.craig.va.us
or
http://198.82.190.21/craigcounty/countyadministrator/aboutCraig.cfm

The Craig County Sheriff's Department
http://www.craigcounty.fws1.com/

Craig County Public Schools
http://www.pen.k12.va.us/Div/Craig/

Craig County Rescue Squad - EMS
http://www.craigcountyems.org
For more information, contact Debbie Snead at dsnead@vt.edu or Faye Powers, 864-6482. Churches interested in establishing a page can contact Danny Kesler, 864-6139.

Appendix E – Benchmark Report

BENCHMARK REPORT

Prepared by

Pamela Gibson
Community Initiatives Specialist
Virginia Cooperative Extension

Early in the process, specific benchmarks were identified as necessary for successful completion of this project. The following table lists the fourteen benchmarks identified in the project. While each of the counties included in the study satisfied completion of these benchmarks, there were differences among the localities. This report includes some of the notable differences.

		TOP Benchmarks						
		Accomack	Craig	Cumberland	Dickenson	King & Queen	Louisa	Northampton
1	Extension agent training	11/7/02	11/7/02	11/7/02	11/7/02	11/7/02	11/7/02	11/7/02
2	Obtain support from county leaders	3/9/01	3/13/01	3/16/01	3/3/01	3/19/01	3/12/01	3/7/01
3	Technology Team recruitment	11/17/02	6/5/02	1/21/03	7/16/03	7/22/02	12/20/02	11/26/02
4	Technology Teams formed	9/26/02	4/28/03	11/14/02	7/18/03	8/1/02	1/15/03	11/21/02
5	Technology Team training	11/20/02	4/28/03	4/28/03	7/18/03	11/19/02	1/15/03	11/21/02
6	Take Charge Mtg 1	2/5/03	N/A	3/20/03	N/A	1/9/03	N/A	1/15/03
7	Take Charge Mtg 2	2/25/03	N/A	3/27/03	N/A	1/16/03	N/A	1/22/03
8	Take Charge Mtg 3	3/4/03	N/A	4/3/03	N/A	1/23/03	N/A	1/29/03
9	Community Readiness Workshops	5/20/04	3/15/04	10/15/03	10/1/03	5/9/03	10/29/03	10/6/03
10	Technology Assessments	9/03-04/04	9/03-04/04	9/03-04/04	9/03-04/04	9/03-04/04	9/03-04/04	9/03-04/04
11	Initial web site development mtg	3/12/03	7/14/03	5/15/03	7/18/03	3/11/03	2/11/03	3/13/03
12	Transition training	N/A	2/10/04	3/8/03	3/10/03	3/24/04	3/17/04	N/A
13	Web site deployment	N/A	10/1/03	10/1/03	10/1/03	6/10/03	5/27/03	N/A
14	Technology Master Plans	6/30/04	6/30/04	6/30/04	6/30/04	6/30/04	6/30/04	6/30/04

Extension personnel from each of the participating counties attended a day-long training program in Richmond, VA on November 7, 2002. The program provided introduction to the TOP team from Extension and BEV who would

be in each county, the process involved to complete the project, and the commitment needed from agents in each county. This program was taped so that others working on the project could review information.

For the second benchmark, support from county leaders was identified. The date in the table represents the initial letter of intent from each of the participating counties. This information was important to assure that the $6,000 required from each county would be committed. It was hoped that the support would include participation by local leaders in the project. Participation by local leaders in the Technology Leadership Teams and the *Take Charge* meetings was not consistent across the seven participating counties.   Extension agents were given guidelines for recruitment that included securing participation of key local leaders.   In some counties, participation was active in the beginning of the project but waned months later. Several counties have had consistent participation from a variety of local leadership throughout the project. Cumberland county maintained consistent participation from local leaders, and Van Petty won a seat on the Board of Supervisors.

Technology Team recruitment was the third benchmark. The dates in the table reflect the beginning dates for this process. In some cases, the recruitment process went much slower than expected, suffered lapses because of personnel turnover, and often did not meet the expectations of the recruitment process. The process for recruitment stressed the need to attract members of all segments of the community, but there was a perception that one needed to be technologically savvy to participate. For a few counties such as Craig and Dickenson, this perception created a significant roadblock in recruiting the number of members needed for the longevity of the project. All of the counties found the necessity to have members of all sectors of the community to do things such as information gathering, speaking to clubs and organizations, and general brainstorming. Northampton and Accomack counties had unique problems. First, they had a competing website for the eastern shore and didn't see the need for a duplicate site and being next door to one another had difficulty determining whether it was best to work on the county level or as a shore (regional) basis. Initial efforts were on a county level with each county recruiting members but later folded membership into the Networked Futures Task Force that served the shore technology efforts. Many of the members of the TLTs were already active in this task force and found it useful to put energy into one organizational effort.

Formation of Technology Leadership Teams was the fourth benchmark. This process involved getting commitments from those members of the Technology teams who would be responsible for the updating and maintenance of the websites. In the counties of Accomack and Cumberland, this phase took place before general recruitment took place. They organized teams of leaders in the community to begin the initial process. Those leaders were instrumental in recruiting other members for the team.

For all of the counties, team recruitment has continued to be part of the process to keep the project alive. Counties having the most difficulty with this step were those who didn't advertise broad base recruitment. By limiting team membership to only those known to have technical skills, participation by the community became significantly restricted and left all of the work to a few.

The Technology Team training was an ongoing process during the course of the project. The date in the table reflects the first major training opportunity for technology team members. The BEV team gave each county as set of job titles and descriptions for TLT members who will be needed to maintain the website:

1) Web Site Administrator-responsible for managing the content on the Community Web site
2) Directory Administrator-responsible for People, Business, and Organization Directories:
    a) Approves or blocks requests of individuals who register using the "Become a Villager" link on the County Web site.
    b) Add, modify, delete or reassign business entries as needed if individuals who created them can't do so (for some reason e.g. forgot their password.)
    c) Reset passwords for individuals, community connections and virtual business incubator accounts.
3) Calendar Administrator-responsible for Online Calendar:
    a) Approve calendar entries sent in by individuals in the community.
    b) Add, modify and delete entries from the Online Calendar
4) Discussion Forum Administrator-responsible for Online Discussion forum:
    a) Appoint and train moderator
    b) Stop discussion forum

5) Discussion Forum Moderator-monitor Discussion Forum
   a) Ensure appropriateness of posts
   b) Hide or delete threads
6) Registrar-responsible for BEV Incubator Services
   a) Verify credentials for community connections accounts
   b) Verify credentials for virtual business incubator accounts

For a small county such as Craig, identifying willing volunteers to take these positions became a challenge and took some time. Because Accomack and Northampton chose not to develop their unique websites, they needed fewer volunteers to maintain the elements that would be incorporated into the Eastern Shore Virginia Portal website.

The three *Take Charge* meetings comprise benchmarks 6-8. This program provided a bone of contention from the very beginning. Extension Agents said that they were not aware that they had to go through this program in order to be part of the TOP project. In order to compromise on the considerable time this program would require of agents, the TOP leadership agreed to use comprehensive plans if they were up-to-date or a comparable community visioning process. Craig and Louisa used their comprehensive plan to identify community issues for their TOP site. Dickenson county was part of another study in which community focus groups were organized to identify issues and used the data from this project for the TOP program. The four remaining counties used the *Take Charge* process to involve citizens in issue identification and action plans. Of those four counties, Cumberland and King and Queen counties embraced the project enthusiastically and followed the guidelines for success. Agents in Northampton and Accomack had little time to devote to the project and did not make its success a priority. They did not publicize and invite attendees and had fewer participants than anticipated and fewer attendees participating in all three meetings. Evaluations from the *Take Charge* meetings indicate that the programs were well received by participants and led to further involvement in the TOP project and community activities. Even the two less successful counties, found that this community empowerment program resulted in new involvement for citizens and their communities. In addition, this process provided improved membership in the TLTs.

The next benchmark is Community readiness Workshops. These workshops provided a great opportunity for communities to share with citizens all of the things technology and networks could do for them. Members of BEV traveled to communities and provided demonstrations. Several counties readily took advantage of this opportunity to use experts to share the technology and held several of these workshops, with the initial workshop date appearing in the Benchmark table. A few counties such as Accomack and Dickenson devoted little attention to this process and held only one meeting for citizens. The workshops not only informed citizens of opportunities but gave county extension agents and TLT members models for future demonstrations throughout their counties after the BEV support ended.

Technology assessments were performed by John Nichols toward the end of the funding period. The TOP team was fortunate to have this expert join the project and perform this process. John began meeting with counties and doing assessments in the Fall of 2003 and completed the process in April 2004.

The initial web site development meeting was enthusiastically attended by TLT members in most of the participating counties. Because of the existing website in Accomack and Northampton counties, some issues had to be settled. It was ultimately decided that the unique Bev-in-a-box tools could be added onto their existing site, thus eliminating two competing websites.   This website development meeting helped TLT members select those elements that would make the site personal for their particular county. This is where counties could plug in the issues identified in their issue identification meetings, determine methods for naming their site, and particular pictures they wanted to showcase. For many of the TLTs, this meeting sparked renewed enthusiasm for the project.

The twelfth benchmark was the transition training meeting.   This meeting served the purpose of training the responsible TLT members to take over particular duties for website maintenance. Volunteers for the specific positions were either trained at Virginia Tech or in their communities and were given reference materials to keep for the continuation of their site. Because Accomack and Northampton opted to use the Portal Website, this step and the deployment were not needed in these counties. Appropriate county members were trained to do the selected components of BEV to the existing Portal website.

Web site deployment is probably the most significant benchmark as identified by a number of counties in their focus group evaluations. The fact that they actually got a site up and running was seen as a big step. Several counties had celebrations to mark the unveiling of the county website. Cumberland and King and Queen counties had articles in the local newspapers and community meetings to demonstrate their new sites.

John Nichols used the information he gathered doing the Technology Assessments in each of the counties to develop a Technology Master Plan. The Technology Master Plans are the 14th and final benchmark for this project. These plans will be completed at the end of the funding cycle and will be shared with the counties.