



POWELL COUNTY STRATEGIC TECHNOLOGY PLAN

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A. Executive Summary

A. Executive Summary

Purpose

This document provides a “road map” for technology-based growth and economic development in Powell County. Detailed assessments and recommendations are provided in Tab 1 of this report. The full report provides an overview of ConnectKentucky’s findings and recommendations related to the assessment of Powell County’s technology needs, particularly related to computers, broadband and Information Technology.

Summary

Powell County’s e-Community Leadership Team is leading the way into a new economy for Powell County, working in partnership with ConnectKentucky. By leveraging the latest in technology and networking, ConnectKentucky is ensuring Kentucky remains the place of choice to work, live and raise a family.

Pursuing the *Five A’s to technology acceleration in Kentucky* (Availability, Affordability, Awareness, Applications and Adoption) ConnectKentucky has established the Commonwealth as a national model for technology development. Over the past two years, Kentucky has achieved growth rates in technology availability and adoption that lead the nation.

Today, the world is smaller because technology makes it easier to work and to live nearly anywhere. In order to compete on a global scale, we must provide our citizens and businesses with the best available technology in the world, wherever they choose to live, learn, work or play. Central to technology-based development is access to and usage of computers and high-speed Internet, commonly referred to as “broadband.”

The need for improved technology in Kentucky is great. In 2003 rankings, Kentucky was 44th in its proportion of high-tech companies, 45th in household computer use, and 43rd in resident Internet use. But that is changing fast, as Kentucky transforms from a technology laggard into a national leader in universal access and innovative technology solutions. Some evidence of the progress Kentucky has made:

- According to the Federal Communications Commission, Kentucky leads the nation in its rate of broadband adoption over the past two years.
- In 2003, about 60 percent of Kentucky households had the ability to subscribe to broadband. Now, an estimated 77 percent of households can access broadband, an addition of 240,000 households over two years. Increased investment from telecommunications companies is expected to bring the broadband coverage rate to 90 percent by the end of 2006.

Though Kentucky’s recent progress has been swift, there remains much to be accomplished. If we do not act on our dreams, we are destined to remain at the bottom of most technology rankings.

With this vision of hope for all Kentuckians, Governor Fletcher introduced his *Prescription for Innovation*, a comprehensive initiative to achieve aggressive goals for broadband deployment and technology adoption in Kentucky. ConnectKentucky is working community by community, provider by provider to ensure that each of these goals is achieved by 2007, including:

1. Broadband availability for all Kentuckians, businesses and local governments;
2. Dramatically improved usage (adoption) of computers and the Internet;
3. Meaningful online applications for local government, businesses, educators, etc.;
4. Establishment of local technology leadership teams in every county promoting technology growth for: local government, business and industry, education, healthcare, agriculture, libraries, tourism and community-based organizations.

Governor Fletcher's *Prescription for Innovation* is being implemented through ConnectKentucky, in partnership with local community leaders. The leadership of Powell County asked ConnectKentucky to facilitate an evaluation of its current uses of technology, identifying and filling broadband coverage gaps and developing a strategic plan to increase the use of technology in each sector of the local community, including:

- Local government
- Business and industry
- K-12 education
- Higher education
- Healthcare
- Libraries
- Agriculture
- Tourism, recreation & parks
- Community-based organizations

This project has culminated in the development of initiatives to increase the competitiveness of Powell County through the expansion of broadband availability and the increased usage of computers and broadband-related applications. In completing this analysis, ConnectKentucky engaged local leaders in all economic sectors, led the group through a visioning exercise and developed a unique strategic plan for the county.

Additionally, ConnectKentucky has engaged its network of telecommunications and Information Technology resources to determine which technology resources are currently available to Powell County and which services are expected in the near future.

ConnectKentucky found that broadband is readily available in larger cities and communities, which contain more than 75% of the county's population, and there are broadband services of some kind available in various locations throughout the county. ConnectKentucky will work with current and potential broadband providers to achieve full broadband availability to all residents of Powell County by 2007.

ConnectKentucky recommends that Powell County focus on these general areas in order to encourage further build-out of broadband throughout the community and to create awareness of the broadband-related services that already exist.

- Creating awareness of the many available digital applications that provide convenience, growth, productivity and empowerment.
- Developing and expanding community applications that will drive the use of broadband access and ultimately encourage residents to become more technologically savvy.

Methodology

Activity 1 – Kickoff meeting and follow-up benchmarking meetings defined existing and future uses of broadband:

- How stakeholders currently use telecommunications and broadband services and applications
- What telecommunications and broadband needs are not currently being met
- What applications would be useful to increase the economic competitiveness of the area
- What telecommunications and broadband services and applications key stakeholders desire for the future

Activity 2 – Interviews with key telecommunications and Information Technology providers in the community determined what services and infrastructure are in place now and what services and infrastructure are planned for the future.

Activity 3 – ConnectKentucky reported the findings, provided analysis of potential alternatives and made recommendations on potential future initiatives:

- Benchmarked current uses of technology
- Researched applications that will enhance the economic vitality of the community in various participating sectors
- Recommended a strategic approach to adopting appropriate applications
- Provided project management to assure successful implementation
- Collected coverage data from existing broadband providers in the Commonwealth. In GIS format, mapped coverage footprints of all providers
- Provided data for areas not served by broadband
- Shared relevant market data with potential providers to encourage additional investment

- Identified possible grant and low-interest loan availability to areas not currently served
- Encouraged investment from all providers, including cable, telecommunications companies, municipals, satellite and wireless, to fill remaining gaps.

How Do We Get There?

ConnectKentucky will continue to assist the e-Community Leadership Team, working together to ensure that Powell County remains a strong place to work, live and raise a family. ConnectKentucky will remain engaged with the leadership and stakeholders from each sector to implement the recommendations provided in this report.



B. WHY DOES THIS MATTER?

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Business and Industry

Today, a number of factors are forcing businesses to change time-honored models of operation, including global competition, a trend toward partnering/outsourcing for all but core functions, and a demand for more personalized services. Each of these trends can save businesses time and money, but they require a sound technological infrastructure. The good news is that while these trends are emerging, the costs of technology are falling.

Businesses cannot be sheltered from competitors. The reality is that Powell County businesses must adapt to the changing world in which they operate. Businesses have to learn the tools of the networked economy and innovate to survive.

Business and industry often experience the most direct benefit of high-speed Internet with increased sales, profit and growth. However, many businesses and industries are utilizing high-speed Internet to simplify processes, increase efficiency and develop new marketing methods. While the employees benefit immediately, the consumer ultimately sees lower prices and better quality.

Gaining benefits from the implementation of high speed Internet is not just for large corporations. For smaller businesses, technology creates an even playing field with companies much bigger than themselves. E-commerce (the buying and selling of goods over the Internet) allows small or even home-based businesses to operate and sell their goods on a national and sometimes international scale. Where small businesses were once limited to whatever local customers they could attract through local advertising and word of mouth, the Internet now allows them to attract customers across the globe.

Utilizing broadband and technology, businesses with multiple locations can save money by implementing Voice over Internet Protocol (VoIP). VoIP allows businesses to call between those locations with little or no costs. It allows users to travel anywhere in the world and still make and receive phone calls. Additionally, VoIP allows for collaboration not available using traditional telephone methods.

Technology has allowed larger businesses to maximize efficiency in order to better serve customers. E-mail, intranets, paperless operations and automated logistics processes are just a few examples of how the Internet is allowing large companies to work with much greater efficiency and at lower costs. This allows those businesses to expand into other markets and grow their companies, or even pass the savings on to their customers.

K-12 Education

For our children to succeed in the New Economy, the tools of the Information Age should be as comfortable to use as a pencil and paper. The future health of the nation's economy depends on how broadly and deeply we reach a new level of literacy – that includes strong academic skills, thinking, reasoning, teamwork skills, and proficiency in the use of technology. Our schools must equip every student, regardless of family income, with the ability to use these tools. Equally important is the use of these tools in the educational

process itself. The interactive nature of the Web provides a richer learning experience that engages and motivates students to explore and learn.

In Kentucky, Internet applications used in elementary and secondary schools continue to develop. Typically, the Internet is a communication tool for teachers and parents to remain up-to-date on the recent happenings of the classroom. Everything from homework assignments to scheduled activities and pictures can be found on classroom websites, keeping everyone connected to educational resources. Elementary and secondary schools provide students with the opportunity to learn more about computer technology and explore the Internet with school computer labs. Committed to protecting students and maintaining a safe, educational environment, schools monitor and restrict Internet access of students to ensure the highest quality resources are being viewed and to ensure the safety of our children.

Healthcare

The healthcare industry has unique challenges. It inherently generates mountains of information yet at the same time is duty bound to keep these mountains hidden for the sake of individual privacy. For companies charged with managing and working with this information, high-speed Internet access and technology innovations are crucial. On a daily basis, doctors must keep up with the latest research; patient records have to be easily accessible and accurate; and images, test results and prescriptions have to be delivered promptly, without errors, to practitioners, pharmacies and insurance providers. In healthcare, errors and delays are not only costly, but also dangerous. Many providers are converting to electronic medical records which can be easily updated and shared on secure, internal networks. Network-based technologies like video-conferencing and digital stethoscopes allow specialists to consult with rural patients, reducing travel time and hazards. This ability to reach rural patients through technology has allowed many people to seek treatment that otherwise might not. Bringing the best of healthcare to every Kentucky citizen is a worthy goal.

Because of the nature of their activities, the healthcare industry has found the perfect partner in high-speed Internet technology. The convenience of the Internet has simplified information transfers and improved medical equipment while maintaining the integrity of confidential patient information.

Libraries

Today, libraries are more than just books on the shelves. Everything from the card catalog to check out can be simplified with the help of high-speed Internet. Public libraries often play a vital role in the community by providing every resident with the opportunity to receive instruction and use the Internet free of charge. Though they are not available 24 hours a day as a home computer is, libraries are still a central point of access to the Internet that is available to each and every citizen in the community. Many businesses have been launched as a result of research done on a computer in a Kentucky library. Many children are able to do their homework online or research reports because of the Internet access provided by the local library. Because the library plays such an important role in the community, it is essential that local libraries are on the cutting edge of technology and

continue to develop new methods of keeping their patrons up to date. High speed Internet can help libraries continue their tradition as a trusted and indispensable resource.

Higher Education

Colleges, universities and community and technical colleges in Kentucky continue to find new ways to use the Internet to improve everyday activities. Websites are an important source of information about the institution, from providing news and information concerning campus activities to online registration of classes. Colleges and universities often implement the use of the school websites to attract prospective students, remain connected to alumni and allow for online donations.

The most common application of high-speed Internet on college and university campuses, however, is typically not actually used on-campus. Most colleges and universities offer online classes and academic programs to better equip students with the opportunity to learn. In 2004, 35,000 students participated in higher education classes through Kentucky Virtual University, www.kyvu.org. By bringing the classroom to the students, participants from every walk of life and region of the state were able to participate in higher education classes. However, it is necessary to have high-speed Internet to participate successfully in online classes. High-speed Internet is crucial to supporting the capabilities and the possibilities of higher education in Kentucky.

Community-Based Organizations

Non-profit agencies provide a wide variety of services to citizens, including health services, religious services, community sports and athletic facilities and public entertainment. Like any organization, community-based organizations need technology to manage operations, apply for grants, reduce costs, improve client services and better serve the community. Unfortunately, their budgets are typically limited, and they often depend on outdated technologies and donated services. As a result, community-based organizations must be creative in order to serve their constituents in the best manner possible. Fortunately, there is no shortage of creativity among community-based organizations, and many are using innovative solutions to offer important local services. As with other sectors, the Internet is an enabling factor for these creative solutions.

Government

Government serves citizens in numerous ways, from providing services such as vehicle registration to providing information such as election results. While it is common for people to feel disengaged from the everyday actions of state and local government, technology has allowed governments to begin closing that gap. On the state level, Kentucky has developed Kentucky.gov, a comprehensive website that provides government services and information to all citizens. On this site, residents can purchase and update hunting licenses; car dealers can access title searches on cars; and citizens can monitor the progress of legislation when the General Assembly is in session. By bringing the services of the state government to the convenience of residents' homes, the Kentucky.gov site provides participants a greater sense of relevance in the actions of state government.

Local governments have also seen the importance of an online presence. Local governments provide communities with many services, offer a great deal of local information and encourage public involvement and awareness. With a web presence, local governments can distribute information to more citizens, provide more opportunities for interaction with the agencies that affect them and make more convenient transactions that previously required a drive to the courthouse.

Tourism, Recreation, and Parks

As citizens become more comfortable with the Internet, they typically continue to find more uses for it. One of the industries benefiting from this trend is the tourism industry. Increasingly, people are using the Internet to research, book and pay for airline tickets, hotels, rental cars, and to make other logistical arrangements for their vacations and business travel. In light of this fact, hotels, travel agents, restaurants, attractions and other support businesses in the tourism industry are taking advantage of this trend and making their information and services available on the Internet.

Additionally, with the help of high-speed Internet and computer technology, the leisure time planned and purchased over the Internet can also be used more efficiently, allowing for a more enjoyable experience. Whether it is vacation, recreation or a visit to a local park, high-speed Internet is making the travel experience more enjoyable and more convenient. Already, a number of innovative tourism attractions are using high-speed Internet to improve services and meet the changing demands of their guests.

Agriculture

Too often, the agricultural community sees little need for broadband technology in the day-to-day activities of maintaining farms and livestock. However, broadband technology allows for growing innovation in agriculture, simplifying and mainstreaming important daily tasks, and developing marketing and sales. With high-speed Internet, farmers can remain up-to-date with everything from the weather to the conditions of the chicken facilities equipped with temperature-sensitive monitors. Livestock farmers can access market prices and gain access to the latest in livestock management techniques. Farmers can advertise and even sell goods on the Internet, generating customers from all over the world. The Internet can also help Kentucky farmers diversify their operations and develop cutting edge revenue streams thus alleviating some of the loss of revenue from the Tobacco Quota Buyout Program. Internet resources can give Kentucky farmers an edge on production and results. The possibilities are virtually endless. The marriage of agriculture and high-speed Internet can produce abundant success for farmers across Kentucky by creating opportunities.



C. WHERE ARE WE AND WHERE ARE WE GOING?

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BUSINESS AND INDUSTRY

Powell County industries employ 2,662 workers. The leading industries in terms of number employed are:

1. Manufacturing with 542;
2. Trade, Transportation, and Utilities with 538;
3. Service industry with 324; and
4. Public Administration with 191 employees.

The Powell County eCommunity Leadership Team recognizes the importance of having up-to-date communications in the county, and knows that obtaining it will be the key to success for current and future businesses in the community. Making people aware of the existing and potential technology must be a priority. The team members also realize there is a local need for people who can design, develop and implement websites for businesses.

The Assessment

- **Networked Places** – In the category of networked places, Powell County’s business and industry sector is currently at stage 2 on a 0 to 5 scale, where some office employees have always-on connections to the Internet at their desks.
- **Applications and Services** – In the area of technology applications and services, the business and industry sector is currently at stage 2 on a 0 to 5 scale where some businesses have an informational website. Some businesses transmit or receive some orders electronically.
- **Leadership** – In terms of technology leadership within the business community, Powell County is currently at stage 2 on a 0 to 5 scale with some viewing the Internet as essential to business operations, and employees are being trained on basic applications.

The Vision

While the Powell County eCommunity Leadership Team found that business and industry’s current use of technology is somewhat limited, the team has an aggressive vision for how the county’s business and industry sector will be using technology in two years. The team set goals that would move the business and industry sector from the stage 2 to stage 3 in the three categories outlined above. The team’s vision includes:

- Most office employees have **always-on connections to the Internet at their desks**
- Some **mobile workers have laptop computers and can access the office network remotely**
- **Affordable videoconferencing** facilities are available in the community
- Most businesses have an **informational website**
- Some retail websites can **accept credit card purchases**
- Some businesses **participate in the electronic supply chain**
- Some businesses permit some **employees periodically to telework**
- Some businesses encourage employees to **take work-related classes offline**
- **Employee training** on new technology **is a priority**

K-12 EDUCATION

Powell County School District enrolled 2,463 students in the 2004-2005 school year. The mission of the Powell County School system is to prepare students as life-long learners who are self sufficient, responsible and productive members of the community. Powell County School District believes that:

- students and staff thrive in a supportive and inviting environment;
- all individuals are of worth and importance;
- higher expectations will yield higher results;
- parents, schools, students and the community are all responsible for doing their part in providing a quality education;
- that all children can learn;
- students deserve a safe school;
- all district employees are important for learning; and
- a quality education impacts the entire community.

	Attendance Rate	Retention Rate	Dropout Rate	Graduation Rate	College	Military	Work	Voc/Tech Training	Work & Part-Time School	Not Successful
District	93.8%	3.4%	4.3%	67%	45%	2.3%	37.2%	3.9%	0%	11.6%
State	94.3%	3.3%	2.2%	81.5%	54.7%	2.6%	27.5%	4.8%	6.4%	4%

Across the district, technological opportunities for instruction and teacher/student use continue to improve. All schools have access to hardware and software for instruction and classroom management. This access includes SMART Boards and multiple presentation projectors for whole class participation, multiple digital cameras, additional laptops, assistive technology, school pads, teacher workstations, digital camcorders and scanners. All schools have multimedia lab(s) with Internet access. Two schools have a terminal service lab. The District continues to provide professional development opportunities for numerous software programs with a focus on the integration of technology for instructional purposes. Schools are implementing various instructional programs such as Compass Learning, Kidspiration, Inspiration, CISCO, Webquests, Bridges, United Streaming, MarcoPolo and Success in Keyboarding. Schools are using software such as Skills Connection, S.T.A.R., Accelerated Reader, Accelerated Math and STI to assess student progress and manage student data. All grades 4-12 now have active student e-mail accounts for communication. The middle school and the high school provide STI access for all parents who wish to check their child's grades, attendance and assignments.

	Spending per Student	Student Teacher Ratio	Student/Computer Ratio	% of Classrooms with at Least One KETS Workstation With Internet Access
District	8612	15:1	1.9:1	100
State	8663	16:1	3.7:1	100

District website: <http://www.powell.k12.ky.us>.

The Assessment

In its evaluation, the Powell County eCommunity Leadership Team determined that the K-12 education sector has made significant progress in making technology a priority, and the team set goals for enhanced access and use of technology and its applications. The current assessment includes:

- **Networked Places** – In the category of networked places, Powell County's K-12 education sector is currently at stage 3 on a 0 to 5 scale. Schools provide at least one

computer for every four students in grades K-12. Most classrooms have computers for student use.

- **Applications and Services** – In the category of technology applications and services, the education sector is currently at stage 4 on a 0 to 5 scale. Many schools have an interactive website that offers access to homework assignments and e-mail contact with teachers and administrators. All teachers meet National Educational Technology Standards.
- **Leadership** – In terms of technology leadership within the education sector, Powell County is currently at stage 5 on a 0 to 5 scale. All schools have comprehensive plans for learning activities utilizing technology in the classroom.

The Vision

The Powell County eCommunity Leadership Team recognizes that the school systems have made technology a priority, and the team has outlined a clear vision for enhanced technology usage and application in the classroom. The goals set forth by the Powell County eCommunity Leadership Team include reaching stage 4 in the networked places category and reaching and/or maintaining a stage 5 in the categories of applications and services and leadership. The team's vision includes:

- Some high school students are provided their own **laptop computers at school**
- Many classroom teachers have access to **digital projection capabilities**
- Most middle and high schools have **video programs** that allow students to produce and share shows on a public network
- Some schools use **wireless sensors** to monitor energy consumption
- Schools use the network to connect students, teachers and parents, improve learning via **online resources**, and manage administrative responsibilities more efficiently
- All students **meet grade level requirements** in the **National Educational Technology Standards**
- **Technology training** is offered in the community
- Many high school students use **online teachers and experts** to explore subjects and execute individual learning plans
- All schools have **comprehensive plans** for learning activities **utilizing technology in the classroom**
- School districts actively **promote information technology literacy** to drive positive impacts on economic performance, skills and innovation in the classroom
- The school system plays a vital role in **raising the skill level and awareness** of community and family members

HEALTHCARE

The nearest hospital is Marcum & Wallace Memorial Hospital, www.u-s-hospitals.com/hospitals/76454.htm, located in Irvine and situated in Estill County, which is approximately 12 miles from Powell County. Marcum & Wallace Memorial Hospital has been designated as a critical access hospital with 25 licensed beds. Their services have continued to expand through the purchase of new equipment and recruitment of emergency department physicians, as well as specialty physicians.

The Powell County Health Department located at 376 North Main Street in Stanton Kentucky serves the people of Powell County through a variety of programs and services

including Well Child and EPSDT Exams, school physicals, Immunizations, diabetes and cancer programs. as well as the Federal WIC program in addition to other important community services. The Health Department also sponsors a preventative program aimed at deterring youth in the community from using tobacco.

Other healthcare providers in the area include:

- Clark County Clinic;
- Clark Regional Medical Center; a 25-bed medical facility operating in Winchester, Kentucky;
- Rural Healthcare Van;
- Kentucky Rural Healthcare Medical Access; and
- University Dental Mobile Unit.

The Assessment

The Powell County eCommunity Leadership Team found that the healthcare sector is beginning to use technology to its advantage and identified a large opportunity for technology applications within the healthcare community.

- **Networked Places** – In the category of networked places, Powell County’s healthcare sector is currently at stage 1 on a 0 to 5 scale. Some physicians and/or staff have access to the Internet through a dial-up connection.
- **Applications and Services** – In the category of technology applications and services, the healthcare sector is currently at stage 1 on a 0 to 5 scale. Physicians and/or staff use a dial-up connection in order to access health-related sites.
- **Leadership** – In terms of technology leadership within the healthcare community, Powell County is currently at stage 1 on a 0 to 5 scale. Healthcare providers are considering what advantage may come from using the Internet in the office.

The Vision

The Powell County eCommunity Leadership Team sees great potential for the use of technology in the healthcare sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move each of the three categories to stage 3 on a 0 to 5 scale. The team’s vision includes:

- Some doctors and nurses are using **laptop and palmtop devices** connected to wireless networks to enter patient information and access databases
- Many providers have **informational websites**
- Many providers **store patient records electronically**
- **Telemedicine** is being evaluated
- Some offices are **electronically transmitting records** to insurers for reimbursement
- Many providers have begun the conversion to **electronic medical records**
- Many providers are investigating how to deploy **wireless technologies** for mobile workers

LIBRARIES

Powell County Public Library’s website (www.powelllib.org) has information about the staff, location, hours of operation and schedules. The website also offers a link to an online card catalog.

The Assessment

The Powell County eCommunity Leadership Team found that the library sector had a great deal of potential with technology and could benefit a great deal from the implementation for more.

- **Networked Places** – In the category of networked places, the library sector is currently at stage 3 on a 0 to 5 scale. There is rarely more than a 10-minute wait to use the Internet-enabled computers.
- **Applications and Services** – In the category of technology applications and services, the library sector is currently at stage 2 on a 0 to 5 scale. Most libraries have a website with basic information about hours of operation and location.
- **Leadership** – In terms of technology leadership within the library system, the sector is currently at stage 3 on a 0 to 5 scale. The library research desk is an online community resource. Staff training on new technologies is a priority at most libraries.

The Vision

The Powell County eCommunity Leadership Team has set forth a two-year vision for enhancing the library so that it serves the community more effectively and efficiently, concentrating on networked places and leadership. The team set a goal of moving to stage 4 on a 0 to 5 scale in the networked places and applications and services categories. The goal is to move the leadership category to stage 5. The vision includes:

- Public libraries have added network ports or **wireless networks** and electrical outlets to carrels
- Patrons may review their **accounts online** and pay fines by credit card
- Patrons can **access the library online** as a portal for other online information services
- Libraries continue to **upgrade their facilities** to offer the community the next generation in technology, services and training
- Libraries actively promote information **technology literacy** to drive positive impacts on economic performance, skills, and innovation in the community

HIGHER EDUCATION

Although higher education facilities are not currently located in Powell County, there are three higher education and training facilities within a 25-mile drive:

- Bluegrass Community and Technical College, Winchester-Clark County Campus, www.bluegrass.kctcs.edu/LCC/ExtendedCampus/Winchester
- Morehead State University at Mt. Sterling, <http://www.moreheadstate.edu/mtsterling>
- Eastern Kentucky University, Richmond, www.eku.edu
- College level and dual credit classes are offered at the high school, including a new "Introduction to Education" course through Morehead State University.

The Powell County eCommunity Leadership Team recognizes the need for high-speed Internet access in the county to provide for a Technology Center in the county, which would allow students to take college courses without the extended travel.

COMMUNITY-BASED ORGANIZATIONS

There are approximately 30 community-based organizations in Powell County including the Lions Club, Kiwanis Club, High School Alumni, Ministerial association, PRIDE, Stanton, Clay City and Middle Fork VFDs, Red River Chamber of Commerce, Clay City and Stanton 4-H and Homemakers and most recently the Red River Historical Society.

The Assessment

The Powell County eCommunity Leadership Team found that the community-based organizations sector had a great deal of potential with technology and could benefit a great deal from the implementation for more.

- **Networked Places** – In the category of networked places, the community-based organizations sector is currently at stage 3 on a 0 to 5 scale. Many organizations have e-mail.
- **Applications and Services** – In the category of technology applications and services, the community-based organization sector is currently at stage 2 on a 0 to 5 scale. Some organizations have informational websites.
- **Leadership** – In terms of technology, leadership within the community-based organization sector is currently at stage 3 on a 0 to 5 scale. Some organizations plan to use telecommunications services and technologies within the next year.

The Vision

The Powell County eCommunity Leadership Team has set forth a two-year vision for enhancing the community-based organization sector. The team set a goal of moving to stage 4 on a 0 to 5 scale in the networked places. The team set a goal of moving to stage 3 on a 0 to 5 scale in the applications and services categories, while the goal is to move the leadership category to stage 4. The vision includes:

- Many organizations with at least five employees have **direct connections** to the Internet
- All paid staff have **e-mail accounts**
- Some organizations use **Voice over Internet Protocol (VoIP)** to save money
- Some office workers have converted from desktop computers to **portable wireless devices**
- Some office computers have **video cameras**
- Many organizations have an **informational website**
- Many local chapters are able to **share data electronically** with the national parent organization
- Some organizations **accept online donations**
- Some organization leaders are actively involved in **community economic development** issues and there are visible leaders taking a significant role in economic development
- Many organizations plan to use **telecommunications services** and technologies within the next year
- Most organizations provide **technology training** to their staff at least once a year

GOVERNMENT

Government entities in Powell County are:

- Powell County;
- Clay City; and
- Stanton.

The government entities of Powell County do not have official websites. However, there is an informational website at www.kyhometown.com/stanton.

The Assessment

Although the government entities in Powell County have a limited online presence, the Powell County eCommunity Leadership Team found that the local government is currently using technology to improve processes in other areas.

- **Networked Places** – In the category of networked places, the government sector is currently at stage 2 on a 0 to 5 scale with some employees having e-mail accounts.
- **Applications and Services** – In the category of technology applications and services, the government sector is currently at stage 1 on a 0 to 5 scale. Some employees use the Internet for e-mail purposes.
- **Leadership** – In terms of technology leadership within the government community, Powell County and its associated governments are currently at stage 2 on a 0 to 5 scale. Public agencies do not have a strategy for how best to use e-government.
- Minimal telecommunications planning has occurred.

The Vision

The Powell County eCommunity Leadership Team has developed goals to provide a framework for robust e-government functions in the next two years, which will bring the sector to stage 3 in all three categories. The team's vision includes:

- Many employees have **e-mail accounts**
- Some field workers are collecting **data on laptop computers** or palmtops
- Webcams are starting to be deployed
- Some **e-government applications** are available, such as simple building permit applications, e-mail listservs and some downloadable forms
- E-mail from residents is manually routed to the appropriate departments
- Some agencies routinely use the network to **share data**
- Government staff is actively involved in framing technology and **telecommunications issues**
- Processes are underway for **enhancing connectivity**, rights-of-way management, and information technology innovation
- Employees are **trained and knowledgeable** about basic applications

TOURISM, RECREATION AND PARK

There are many tourism and recreational points of interests in Powell County. The Powell County Tourism website is www.powellcountytourism.com. Located at the foothills of Eastern Kentucky, Natural Bridge, Red River Gorge, Stanton and Clay City are delights for lovers of the great outdoors. The area boasts over one hundred arches and rock shelters, the largest concentration east of the Colorado Rockies. The areas many attractions include:

- Natural Bridge State Resort Park is home to the great natural sandstone arch which stands 65 feet high and 78 feet long. This 2,200 park sits in the Daniel Boone National Forest, and offers lodging, dining, a gift shop, meeting rooms, a nature center, swimming pool, fishing, camping and hiking
- Kentucky Old Mill Association (KOMA) This Kentucky Chapter is part of the International SPOOM, an acronym for The Society for the Preservation of Old Mills. Both KOMA and the parent organization, SPOOM, are dedicated to promoting interest in old mills and other Americana now quickly passing from the present scene. It reports to its members through a quarterly magazine, keeps files and maintains a library on mills and acts as a clearing house on milling information.
- Near Clay City is the renowned Pilot Knob State Nature Preserve, the promontory from which Daniel Boone is believed to have first viewed the “level of Kentucky” in 1769. One of the tallest knobs in the Cumberland Plateau, Pilot Knob rises 730 feet above the surrounding. The preserve is under the management and supervision of the Kentucky State Nature Preserves Commission.
- Red River Gorge Geological Area is a national natural landmark. The Gorge is part of the Daniel Boone National Forest. It is a magnificent natural wonderland with more than 80 natural sandstone arches, sculpted by wind and water for over 70 million years. The gorge has the largest concentration of rock shelters (over 100) and arches east of the Rockies.
- Meadowgreen Park Music Hall is located on KY 82, near Clay City, and was built exclusively for the preservation and performance of Bluegrass Music. Top Bluegrass performers are complimented by appearances of local groups. Performances are live on Saturday nights, starting in October and extending through May.
www.powellcountytourism.com/entertainment/index.htm
- Racing and Off-Road, www.powellcountytourism.com/attractions/racing.htm - Life in the fast lane takes on new meaning in Clay City, Kentucky. Since 1963 the area has been recognized for its drag racing track. Visitors can add excitement to their trip by attending one of the tracks' year-round sanctioned races. Recent years have resulted in the development of an ATV and dirt-bike riding and racing park in Clay City. The ATV Park offers over 40 miles of trails through every possible terrain. The Natural Bridge area offers an adult go-kart track, mini Nascart track and slick track go-karts for added excitement.
- Washington Court Street Shops, www.danielboonecountry.com/explore/shops.htm, is a large concentration of work crafted by Kentucky artists. The shops showcase first quality creations of art, wood, jewelry and shaker furniture, as well as Virginia Metal Crafters, and selections of international crafts.
- The Stanton Corn Festival is an annual event held each year during the first full weekend in August. The festival features hand-crafted items exclusively, on-site craft demonstrations, car show, games for kids, food, live entertainment, local/guest talent and pageants. It is held at the Stanton City Park.
- Patriot Days in Clay City is an annual event held at the Clay City Park. The celebration is designed to promote patriotism and pride in community and country, and features a parade as well as a variety of vendors.

The Powell County eCommunity Leadership Team recognizes the immediate need for high-speed access to the Slade Rest Area, which is a tourism hotspot.

The Assessment

The Powell County eCommunity Leadership Team found that the tourism, recreation, and parks sector is beginning to use technology to its advantage and identified a large opportunity for technology applications within the tourism, recreation, and parks sector.

- **Networked Places** – In the category of networked places, Powell County’s tourism, recreation, and parks sector is currently at stage 2 on a 0 to 5 scale. Some office employees have always-on connections to the Internet at their desks.
- **Applications and Services** – In the category of technology applications and services, the tourism, recreation, and parks sector is currently at stage 2 on a 0 to 5 scale. Some facilities have an informational website. Some facilities transmit or receive some reservations electronically.
- **Leadership** – In terms of technology leadership within the tourism, recreation, and parks sector, Powell County is currently at stage 2 on a 0 to 5 scale. The Internet is seen as essential to business operations. Employees are trained on basic applications.

The Vision

The Powell County eCommunity Leadership Team sees great potential for the use of technology in the tourism, recreation and parks sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move each of the three categories above to stage 3 on a 0 to 5 scale. The team’s vision includes:

- Most office employees have **always-on connections to the Internet at their desks**
- Some **mobile workers have laptop computers and can access the office network remotely**
- **Affordable videoconferencing** facilities are available
- Most facilities have an **informational website**
- Some websites can **accept credit card purchases**
- Some facilities **participate in an electronic supply chain**
- Some facilities permit **some employees periodically to telework**
- Some facilities **encourage employees to take work-related classes online**
- **Employee training on new technology is a priority**

AGRICULTURE

In 2002, Powell County was home to 239 farms. The total combined acreage was 37,516 acres or an average of 157 acres per farm. The market value of production was roughly \$2.5 million. Crop sales accounted for \$1.5 million, and livestock sales accounted for \$1 million. The average market value of production per farm was \$10,394. Government payments in 2002 totaled \$75,000. Powell County is ranked 103rd in the value of agricultural products sold in the state. The leading agricultural products in sales in Powell County are:

- Tobacco with \$866,000;
- Horses, ponies, mules, burros, and donkeys with \$533,000;
- Grains, oilseeds, dry beans, and dry peas with \$488,000; and
- Cattle and calves with \$474,000.

Powell County tobacco farmers received \$5,194,966 in burley payments from the Tobacco Buyout Program. There were no dark tobacco payments.

The Powell County Cooperative Extension Service (PCCES), <http://ces.ca.uky.edu/powell/> is part of the University of Kentucky's and Kentucky State University's off-campus information network. It connects to UK, KSU and the world. The PCCES delivers information, education and solutions. The PCCES grows ideas into better communities, stronger local economies and healthier lives.

A Pilot Satellite Broadband Cost-Share Program has been established by the Governor's Office of Agricultural Policy for counties to adopt, using County Agricultural Development Funds. High-speed Internet (broadband) will allow Kentucky farmers to simplify important daily tasks, while developing marketing and sales opportunities. Internet resources will allow farmers to remain competitive and profitable in today's changing agricultural economy.

Van Bert Farms (www.vanbertfarms.com) has been owned and operated by the Derickson family for five generations. It consists of over 400 acres near the quaint little town of Stanton, Kentucky. Van Bert Farms has been operating as a Kentucky horse farm and equine training facility since 1965 with training and sales of rocky mountain horses, Kentucky mountain horses, mountain pleasure horses and pleasure walking horses. The gaited horses, in general, are their specialty and the farm has long been a Rocky Breeder and pleasure horse breeder, with great trail horses. The farm is encircled by the red river and the picturesque Appalachian Foothills, becoming a part of the beautiful Red River Valley. Because of the beauty of this area, many visitors from all over the world are attracted to the natural sites.

The Assessment

The Powell County eCommunity Leadership Team found that the agricultural sector is just beginning to use technology to its advantage and identified a large opportunity for technology applications within the farming community.

- **Networked Places** – In the category of networked places, Powell County's agricultural sector is currently at stage 1 on a 0 to 5 scale. Some growers, suppliers and processors have limited access through a dial-up connection.
- **Applications and Services** – In the category of technology applications and services, the agriculture sector is currently at stage 1 on a 0 to 5 scale. Some growers, suppliers and processors use e-mail and Internet.
- **Leadership** – In terms of technology leadership within the agricultural community, Powell County is currently at stage 1 on a 0 to 5 scale. The Internet is seen as a possible enhancement to the way daily business is conducted.

The Vision

The Powell County eCommunity Leadership Team sees great potential for the use of technology in the agricultural sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move to stage 3 on a 0 to 5 scale in networked places and also to stage 3 on a 0 to 5 scale in the applications and services and leadership categories. The team's vision includes:


- Most growers, suppliers and processors have **always-on connections to the Internet**
- Some **mobile workers have laptop computers and can access the network remotely**

- Affordable **videoconferencing facilities are available** in the community
- Most growers, suppliers and processors have **informational websites**
- Some websites can **accept credit card purchases**
- Some growers, suppliers and processors **participate in an electronic supply chain**
- Some suppliers and processors **permit employees periodically to telework**
- Some growers, suppliers and processors **encourage employees to take work-related classes online**

Business and Industry	Powell County
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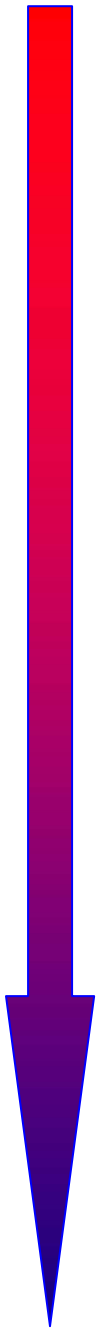
● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">Least Connected</div>  <div style="margin-top: 10px;">Most Connected</div> </div>	0	Not using the Internet.	No computer use or website. Customers use phone and postal mail.	No technology or telecom plan.
	1	Some employees have limited access to the Internet through a dial-up connection.	Some employees use basic e-mail services through their connection.	The Internet is considered a possible business enhancement.
	2	● Some office employees have always-on connections to the Internet at their desks.	● Some businesses have an informational website. Some businesses transmit or receive some orders electronically.	● Some view the Internet as essential to business operations. Employees are trained on basic applications.
	3	■ Most office employees have always-on connections to the Internet at their desks. Some mobile workers have laptop computers and can access the office network remotely. Affordable videoconferencing facilities are available in the community.	■ Most businesses have an informational website. Some retail websites can accept credit card transactions. Some businesses participate in the electronic supply chain.	■ Some businesses permit some employees periodically to telework. Some businesses encourage employees to take work-related classes offline. Employee training on new technology is a priority.
	4	Some businesses use Voice over Internet Protocol (VoIP) to save money. Some office workers have converted from desktop computers to portable device. Some office computers have webcams for videoconferencing.	Some businesses outsource most of their computer services. Some retailers and manufacturers sell goods out of state or internationally. Some employees work remotely, some out of state.	Some businesses permit some employees to telework one or two days a week. Some businesses encourage employees to take work-related courses online. Businesses are working with educational partners to raise workforce skill levels.
	5	Most businesses use Voice over Internet Protocol (VoIP) to save money. Most computers have video cameras. Some retailers and manufacturers use RFID (radio frequency identification) to track inventory and equipment.	Some businesses send and receive video mail. Some businesses outsource most of their computing services. Some businesses routinely use multiparty videoconferencing to coordinate operations.	Some businesses have restructured to focus on their core contribution and outsource nonessential functions. New hires are required to have experience using new technology in business applications.

● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue. (Blue is used when Assessment and Vision are the same.)


	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Not using the Internet.	Schools use phone and postal mail. Schools have no website.	There is no technology or telecom plan.
	1	Few middle and high schools have computer labs for students. Few classrooms/teachers have access to computer projectors.	Few schools have an informational website. The Internet is not used as a resource for instruction or homework assignments.	Few experienced teachers are trained on how to incorporate material from the Internet into their curriculum.
	2	Many middle and high schools have computer labs for students. Some classrooms and teachers have access to computer projectors.	Many schools have an informational website. The Internet is rarely used as a resource for instruction or homework assignments.	Few schools have plans for better using telecommunications services and technologies in their classrooms. Some experienced teachers are trained on how to incorporate material from the Internet into their curriculum.
	3	● Schools provide at least one computer for every four students in grades K-12. Most classrooms have computers for student use. Some teachers use computer-based presentation tools and projectors for their lessons.	Some schools have an interactive website that offers access to homework assignments and communication with teachers and administrators. Many teachers can incorporate Internet material into the curriculum. Teachers welcome e-mail from parents and students.	The school board sees opportunities to use the network to raise test scores and operate the school more efficiently. Teacher training on new technologies is a priority at most school districts. Schools are using consultants to take advantage of e-rate and other school discounts.
	4	■ Some high school students are provided their own laptop computers at school. Many classroom teachers have access to digital projection capabilities. Most middle and high schools have video programs that allow students to produce and share shows on a public network. Some schools use wireless sensors to monitor energy consumption.	● Many schools have an interactive website that offers access to homework assignments and e-mail contact with teachers and administrators. All teachers meet National Educational Technology Standards. Most students meet National Educational Technology Standards. Parents and family members are encouraged to participate in student learning via e-mail and online applications. Online classes are available to high school students via Internet-based instruction, including college online classes and Kentucky Virtual High School.	Some schools have comprehensive plans for learning activities using technology in the classroom. New hires are required to have experience using new technology in the classroom. Computer labs are made available to family and community members. Schools take responsibility for continuing e-rate and other discounts.
	5	Many classrooms have large, flat-panel displays or projectors for video-based instruction. Most schools have converted their phone system to Voice over Internet Protocol (VoIP) to save money. Most high schools have one-to-one computing for their students. Some school computer labs have been made available to the public.	■ Schools use the network to connect students, teachers and parents, improve learning via online resources, and manage administrative responsibilities more efficiently. All students meet grade level requirements in the National Educational Technology Standards. Technology training is offered in the community. Many high school students use online teachers and experts to explore subjects and execute individual learning plans.	● ■ All schools have comprehensive plans for learning activities utilizing technology in the classroom. School districts actively promote information technology literacy to drive positive impacts on economic performance, skills and innovation in the classroom. The school system plays a vital role in raising the skill level and awareness of community and family members.

Healthcare

Powell County

● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue.


	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Not using the Internet.	Customers use phone and postal mail. No website.	No technology or telecom plan.
	1	● Some physicians and/or staff have access to the Internet through a dial-up connection.	● Physicians and/or staff use a dial-up connection in order to access health-related sites.	● Healthcare providers are considering what advantage may come from using the Internet in the office.
	2	Some doctors regularly use computers to enter and maintain patient records. Digital instruments and imaging equipment are being acquired.	Some providers have informational websites. Some providers store patient records electronically. Telemedicine is being evaluated. Some offices are electronically transmitting records to insurers for reimbursement.	Some providers have begun the conversion to electronic medical records. Some providers are investigating how to deploy wireless technologies for mobile workers.
	3	■ Some doctors and nurses are using laptop and palmtop devices connected to wireless networks to enter patient information and access databases.	■ Many providers have informational websites. Many providers store patient records electronically. Telemedicine is being evaluated. Some offices are electronically transmitting records to insurers for reimbursement.	■ Many providers have begun the conversion to electronic medical records. Many providers are investigating how to deploy wireless technologies for mobile workers.
	4	Internet-based video conferencing is used to consult experts and for training programs. Some patients are being monitored at home and at work via portable devices with wireless transmitters.	Some providers allow patients to e-mail doctors. Most providers store patient records electronically. Some lab results and images are received electronically.	Work is underway by some providers to begin online exchanging of test results and other medical records with appropriate parties. Healthcare leaders are talking with the community about enhancing online services and using the network to improve communitywide healthcare.
	5	Most equipment has been converted to digital. Desktop videoconferencing is routine at all hospitals and major clinics. Telephone systems have converted to Voice over Internet Protocol (VoIP) to save money. Remote monitoring of patients with chronic conditions is standard procedure.	All providers allow patients to schedule appointments, view records and get advice online. All patient records are stored electronically and routinely sent electronically to distant providers to aid diagnosis and treatment for emergency patients. Telemedicine routinely is used to access specialists. Wireless feeds in ambulances provide real-time patient assessment to ER staff.	Healthcare leaders see themselves as a key part of the community's overall economic strategy. Leaders are visible and active in strategy development and implementation. Executives of the region's hospitals, clinics, insurers, employers and other healthcare providers are meeting regularly to find ways to collaboratively reduce the cost of healthcare without compromising quality of service.


Libraries

Powell County

● Powell County's Benchmark Assessment Results are presented in red.


■ Powell County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Libraries do not provide Internet access.	Customers use postal mail or phone. No website.	There is no technology or telecom plan.
	1	Some employees have access to a dial-up connection.	Some employees are accessing e-mail and library-related websites.	Employees are accessing the Internet in order to help the patrons of the facility.
	2	Public libraries provide several computers with free access to the Internet.	● Most libraries have a website with basic information about hours of operation and location.	Libraries are the first to offer free access and instruction in the use of the Internet.
	3	● There is rarely more than a 10-minute wait to use the Internet-enabled computers.	Most libraries have catalogs online. Patrons may use the Internet to place books on hold and request books from other libraries in the library system. Patrons can search online databases from home, school, or work. Libraries host live video feeds of public interest events.	● The library research desk is an online community resource. Staff training on new technologies is a priority at most libraries. Libraries are using consultants to take advantage of e-rate and other discounts. Library policies reflect appropriate filtering requirements.
	4	■ Public libraries have added network ports or wireless networks and electrical outlets to carrels.	■ Patrons may review their accounts online and pay fines by credit card. Patrons can access the library online as a portal for other online information services.	Libraries help the community understand copyright issues and how to protect privacy on the Internet. New hires are required to have experience using new technology. Libraries take internal responsibility for continuing e-rate and other discounts. Libraries have developed network management policies and technologies to prevent patrons from sending spam.
	5	Most public libraries offer patrons a 54 mbps or faster wireless network.	Public libraries offer live video consultations. Public libraries allow patrons to borrow e-books over the Internet. They help patrons conduct research and assist with legal access to copyrighted databases and publications, including music and movies. Two-way videoconferencing is available to the general public.	■ Libraries continue to upgrade their facilities to offer the community the next generation in technology, services and training. Libraries actively promote information technology literacy to drive positive impacts on economic performance, skills, and innovation in the community.

Higher Education		Powell County		
 <p>Least Connected</p>	Stage	Networked Places	Applications & Services	Leadership
	0	Not using the Internet.	Use phone and postal mail.	There is no technology or telecom plan.
	1	Some on-campus residents have broadband connections through non-university providers.	Few faculty members are trained to use the Internet for instruction. Few classes use digital content and/or web-based content for instruction.	Few departments have plans for better utilizing telecommunications services and technologies in their operations.
	2	Most on-campus residences have a 10 mbps connection to the network. Some classrooms are wired to the college/university network and are equipped with digital projection capabilities.	Some faculty members are trained to use the Internet for instruction. Some classes use digital content and/or web-based content for instruction.	Few departments have plans for better utilizing telecommunications services and technologies in their operations.
	3	Most on-campus residences have connections to the network in every room at least 10 mbps. Some classrooms have projection equipment that allows the instructor to display videos from the Internet into the classroom.	Many of the faculty are trained to use the Internet for instruction. Many classes use digital content and/or web-based content for instruction. Students use chat rooms to discuss lessons and ask questions of instructors outside of class hours. Online registration, catalogs and payment are available.	Specialized courses have been developed to cater to area businesses seeking to improve the skills of workers. Some colleges and universities have or are developing online classes to provide greater convenience for students and to increase student enrollment. Faculty training on new technology is a priority.
	4	Some classrooms have been remodeled to include network connections and power outlets at every seat. Many students bring laptop computers or other network-enabled devices to class. Some classrooms have video equipment for recording lectures.	Most of the faculty are trained to use the Internet for instruction. Most classes use digital content and web-based content for instruction. Some undergraduate students take distance learning classes for specialized subjects and graduate-level research.	Higher education and local businesses are working together to raise the skill level of the current workforce. Community colleges are expanding their capacity by using distance learning technologies to reduce the need for classroom time. Some colleges and universities are developing online classes to market to students in other parts of the country and the world.
5	Many classrooms have been remodeled to include network connections and power outlets at every seat. Most students bring laptop computers or other network-enabled devices to class. Many classrooms have video equipment for recording lectures.	Many undergraduate students take distance learning classes for specialized subjects and graduate-level research. All aspects of higher education are available through the network including instruction and administration.	Colleges and universities see themselves as a vital partner in the community's economic development strategy and have formed partnerships with local businesses to provide skilled technology workers and innovative solutions. Colleges and universities actively promote information technology literacy to drive positive impacts on economic performance, skills, and innovation in the classroom.	
Most Connected				

Community-Based Organizations	Powell County
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● Powell County's Benchmark Assessment Results are presented in red.
 ■ Powell County's Vision for this Sector is presented in blue.


	Stage	Networked Places	Applications & Services	Leadership
 <p style="text-align: center;">Least Connected</p>	0	Not using the Internet.	No computer use. No website. Use phone and postal mail.	No technology or telecom plan.
	1	Accessing the Internet through a limited dial-up connection.	Currently using e-mail and possibly other basic Internet functions.	The Internet is seen as a possible enhancement and marketing tool.
	2	Some organizations have computers that are no older than three years old. Many organizations have e-mail. Some office employees have always-on connections to the Internet at their desks.	● Some organizations have informational websites.	Organizations are minimally involved in community economic development issues. Little or no plans exist for better using telecommunications services and technologies. Some organizations provide technology training to their staff at least once a year.
	3	● Most organizations with at least five paid staff have at least one computer for every three employees. Many organizations have e-mail.	■ Many organizations have an informational website. Many local chapters are able to share data electronically with the national parent organization. Some organizations accept online donations.	● Some organizations are involved in specific economic development initiatives, but most do not participate. Some organizations plan to use telecommunications services and technologies within the next year. Some organizations provide technology training to their staff at least once a year.
	4	■ Many organizations with at least five employees have direct connections to the Internet. All paid staff have e-mail accounts. Some organizations use Voice over Internet Protocol (VoIP) to save money. Some office workers have converted from desktop computers to portable wireless devices. Some office computers have video cameras.	Most organizations have an informational website. A unified portal provides access to a broad range of community information and services. Most local chapters are able to share data with the parent organization.	■ Some organization leaders are actively involved in community economic development issues and there are visible leaders taking a significant role in economic development. Many organizations plan to use telecommunications services and technologies within the next year. Most organizations provide technology training to their staff at least once a year.
	5	Many organizations use Voice over Internet Protocol (VoIP). Every organization is connected to the Internet. Every computer can access the Internet via a local area network. Many computers have video cameras. Most organizations use affordable videoconferencing facilities.	Most organizations accept online donations. Some organizations use an interactive service to further engage the community and make their services more broadly available. Electronic data sharing is a common practice between organizations locally and with national parent organizations.	Organizations collaborate with one another regularly to share resources and provide up-to-date training to their employees and volunteers. Organizations have a defined role in supporting local economic development initiatives. Most organizations plan to use telecommunications services and technologies within the next year.
Most Connected				

Government

Powell County

● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue.


	Stage	Networked Places	Applications & Services	Leadership
<p>Least Connected</p>  <p>Most Connected</p>	0	Not using the Internet.	No website.	There is no technology or telecom plan.
	1	Select employees have access to the Internet through a dial-up connection.	● Some employees use the Internet for e-mail purposes.	The Internet is seen as a possible way to enhance the basic daily operations.
	2	● Some employees have e-mail accounts.	Most public agency websites offer informational features such as a community calendar, staff directory and downloadable forms. Customers rely mostly on postal mail and telephone to conduct business.	● Public agencies do not have a strategy for how best to use e-government. Minimal telecommunications planning has occurred. Elected officials are not involved in telecommunications issues.
	3	■ Many employees have e-mail accounts. Some field workers are collecting data on laptop computers or palmtops. Webcams are starting to be deployed.	■ Some e-government applications are available, such as simple building permit applications, e-mail listservs and some downloadable forms. E-mail from residents is manually routed to the appropriate departments. Some agencies routinely use the network to share data.	■ Government staff is actively involved in framing technology and telecommunications issues. Processes are underway for enhancing connectivity, rights-of-way management, and information technology innovation. Employees are trained and knowledgeable about basic applications.
	4	Some field workers use wireless networks to upload and download data in the field. Some employees use desktop videoconferencing. Sensors and webcams monitor locations, such as rivers, that are important to public safety.	Customers can make routine payments, such as parking fines, online using credit cards or electronic fund transfer. Parks and recreation classes have online registration. Employees can enter building inspections and violations from the field.	Some agencies have a formal policy that allows some employees to work from home at least one day a week. Rights-of-way and tower siting policies are in place. Elected officials understand the importance of the network for economic development and quality of life.
	5	The telephone system is being converted to Voice over Internet Protocol (VoIP) to save money. Many field workers use wireless networks to upload and download data in the field. Critical traffic signals are connected. Desktop videoconferencing is widely available.	Interactive applications, such as customer relationship management, online GIS and video streaming are in regular use. Employees manage benefits programs on an intranet. Emergency response teams can reliably communicate across jurisdictions. Council meetings are indexed and available for searching and retrieval online.	The government has telecommunications, e-government and information technology master plans in place to guide its efforts. Innovative processes are used to collaborate with the private sector.

Tourism, Recreation and Parks

Powell County

● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue.


<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	Stage	Networked Places	Applications & Services	Leadership
	0	Not using the Internet.	No computer use. No website. Customers use phone and postal mail.	There is no technology or telecom plan.
	1	Some employees can access the Internet through a dial-up connection.	Some employees currently use the Internet for e-mail.	The Internet is seen as a possible way to enhance operations.
	2	<p>● Some office employees have always-on connections to the Internet at their desks.</p>	<p>● Some facilities have an informational website. Some facilities transmit or receive some reservations electronically.</p>	<p>● The Internet is seen as essential to business operations. Employees are trained on basic applications.</p>
	3	<p>■ Most office employees have always-on connections to the Internet at their desks. Some mobile workers have laptop computers and can access the office network remotely. Affordable videoconferencing facilities are available.</p>	<p>■ Most facilities have an informational website. Some websites can accept credit card purchases. Some facilities participate in an electronic supply chain.</p>	<p>■ Some facilities permit some employees periodically to telework. Some facilities encourage employees to take work-related classes online. Employee training on new technology is a priority.</p>
	4	<p>Some facilities use Voice over Internet Protocol (VoIP) to save money. Some office workers have converted from desktop computers to portable devices with wireless connections. Some office computers have webcams for videoconferencing.</p>	<p>Some facilities outsource most of their computing services. Some facilities market themselves out of state or internationally. Some employees work remotely.</p>	<p>Some facilities permit some employees to telework one or two days a week. Some facilities encourage employees to take work-related classes online. Facilities work with educational partners to raise workforce skill levels.</p>
5	<p>Most facilities use Voice over Internet Protocol (VoIP) to save money. Most computers have video cameras.</p>	<p>Some facilities send and receive video mail. Some facilities outsource most of their computing services. Some facilities routinely use multiparty videoconferencing to coordinate operations.</p>	<p>Some facilities have restructured to focus on their core contribution and outsource nonessential functions. New hires are required to have experience using new technology in business applications.</p>	

Agriculture

Powell County

● Powell County's Benchmark Assessment Results are presented in red.

■ Powell County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Not using the Internet.	No computer use. No website. All contacts via phone and postal mail.	There is no technology or telecom plan.
	1	● Some growers, suppliers and processors have limited access through a dial-up connection.	● Some growers, suppliers and processors use e-mail and Internet.	● The Internet is seen as a possible enhancement to the way daily business is conducted.
	2	Some growers, suppliers and processors have always-on connections to the Internet at their desks.	Some growers, suppliers and processors have an informational website. Some growers, suppliers, and processors transmit or receive some orders electronically.	The Internet is seen as essential to business operations. Employees are trained on basic applications.
	3	■ Most growers, suppliers and processors have always-on connections to the Internet. Some mobile workers have laptop computers and can access the network remotely. Affordable videoconferencing facilities are available in the community.	■ Most growers, suppliers and processors have informational websites. Some websites can accept credit card purchases. Some growers, suppliers and processors participate in an electronic supply chain.	■ Some suppliers and processors permit employees periodically to telework. Some growers, suppliers and processors encourage employees to take work-related classes online.
	4	Some growers, suppliers and processors use Voice over Internet Protocol (VoIP) to save money. Some workers have converted from desktop computers to portable devices with wireless connections. Some office computers have webcams for videoconferencing.	Some suppliers and processors outsource most of their computing services. Some growers, suppliers and processors sell goods out of state or internationally.	Training on new technology is a priority. Some processors and suppliers permit employees to telework one or two days a week.
	5	Most growers, suppliers and processors use Voice over Internet Protocol (VoIP) to save money. Most computers have video cameras. Some use Radio Frequency Identification (RFID) to track inventory and equipment.	Some growers, suppliers and processors send and receive video mail. Some outsource most of their computing services. Some routinely use multiparty videoconferencing to coordinate operations.	Some suppliers and producers have restructured to focus on their core contribution and outsource nonessential functions. New hires are required to have experience using new technology.



D. HOW DO WE GET THERE?

D. HOW DO WE GET THERE?

PROJECT CONCEPT: Create Government Websites for Powell County, City of Stanton and Clay City

LONG-TERM GOAL

The goal of this project is to create a website for the government entities of Powell County, Stanton, and Clay City that will serve the local county and community as a clearinghouse of government and civic information by providing access to all pertinent applications, links and websites for the citizens of Powell County.

WHY IT'S IMPORTANT

A county/city government website would provide a new and vital way of delivering government-related services to citizens living in Powell County. By harnessing the power of the internet, an electronic governmental "one-stop shop" could eventually be realized. A growing range of services could be accessed by residents of Powell from either their own homes or from community facilities within the county. This would bridge the problem of rural isolation by making needed governmental services available at a touch.

SPECIFIC MEASURABLE OUTCOMES

1. Increase community access to pertinent government information and services
2. Creation and implementation of an established clearinghouse of government information for Powell County residents
3. Increase in community comfort level of Powell County citizens through use of the Website.
4. Promote technology usage through website communication device

STEPS TO ACHIEVE MEASURABLE OUTCOMES

1. Engage services of Kentucky.gov to assist with technical hosting, design and implementation of a website for each of the named government entities.
2. Identify and decide on all pertinent links and applications, such as paying taxes.
3. Create webpage design
4. Launch webpage
5. Market webpage to increase usage by the community

NAMES OF IMPLEMENTATION CHAMPIONS

Powell County Judge Executive
Stanton Mayor's Office
Clay City Mayor's Office

PROJECT CONCEPT: Education, Training and Awareness for Powell County

LONG-TERM GOAL

This project will work toward the organization, promotion and delivery of technology education, training and awareness to the entire community of Powell County.

WHY IT'S IMPORTANT

An educated community is essential in today's global economy. There are opportunities to leverage existing resources in Powell County to expand and enhance workforce training programs, encourage more post-secondary education, and create additional awareness within the community in regard to technology. Education, training and awareness are essential in our ability to expand technology within each sector of the community. These community sectors include: agriculture, business and industry, community-based organizations, government, healthcare, higher education, K-12 education, libraries, and tourism, parks and recreation.

SPECIFIC MEASURABLE OUTCOMES

(Criteria: clear, compelling, outcome-oriented, achievable within one year)

1. Inventory of all technology education/training/awareness resources in Powell County and development of resource tool to help facilitate collaboration between these various entities.
2. Development of additional education, training and awareness materials to focus on the use of technology and broadband applications.
3. Increase the citizen usage rates of computers and broadband in Powell County.

STEPS TO ACHIEVE OUTCOME

1. Identify all organizations within Powell County performing community education, training and awareness.
2. Divide current resources offered by organizations into three categories: education, training and awareness.
3. Determine which sectors could benefit from education/training/awareness opportunities.
4. Create new ways to market and promote opportunities to appropriate groups within the community and divide up market sectors between community entities.
5. Determine gaps in education/training/awareness and ways to fill those gaps.

NAMES OF IMPLEMENTATION CHAMPIONS

Educational Team

K-12 Education

Powell County Schools

Higher Ed/Community Education

Powell County Cooperative Extension Service

Powell County Public Library

POTENTIAL ACTION ITEMS

Business and Industry

- Educate small businesses about telecommunications services and the benefits of using technology in business.
- Create a technologically capable workforce through training and skills development.
- Develop a local directory of information technology services.
- Identify ways to reduce the cost of connecting to the Internet and find potential funding sources for small businesses.
- Get businesses together to aggregate demand for high-speed services, create a more attractive market for infrastructure providers and ensure that the services meet local needs.
- Teach businesses how to use e-commerce to sell to public agencies.
- Offer training programs and workshops at night and on weekends to make them more accessible to community-based organizations.
- Encourage Internet access from home for education, business, shopping and banking.
- Offer basic training classes on how to use e-mail, search the Internet and perform research.
- Encourage more hotspots in locations such as bookstores, businesses and libraries.
- Develop a services directory for local IT-related services in the county.
- List local providers for technical support, including individuals, businesses and schools.

Education

- Provide training in information technology resources, especially for support staff and classified personnel.
- Build relationships between schools and broadband providers.
- Develop strategies for bridging the digital divide, such as after-school programs and community centers.
- Expand wide-area resources and increase bandwidth.
- Create web-based instructional materials.
- Identify options for opening school computer labs to the community after hours.

- Expand student, parent and teacher access to student information, such as homework assignments and attendance records.
- Develop school websites with interactive features.
- Make it easier for low-income families to access computers and the Internet as a way to facilitate communications with teachers and schools.
- Ask businesses to donate surplus computers to low-income parents.
- Create training, internships or career ladders for technical support staff.
- Promote technology integration in classrooms and on teacher websites.
- Encourage parent involvement through technology
 - Provide iSafe training for students and parents
 - Encourage parents to access and use STI and i-High sites
 - Provide laptops for students to check out for home use
- Train students to provide technical support.
- Add links to teachers' web pages for homework assignments, tests and other relevant material.
- Create an interactive online calendar for school events
 - Look at using calendar for entire community
 - Run ads in local papers and radio stations to advertise availability
- Ask businesses to donate surplus computers to low-income parents.

Healthcare

- Develop a providers' survey to gather baseline information on usage of technology in healthcare. Topics should include: e-mail access, Internet access, websites, electronic records, billing and telemedicine initiatives.
- Identify funding methods for enhancing educational infrastructure.
- Educate providers on available technologies and the benefits of technology in medicine.
- Provide safe, vendor-neutral, information technology training for healthcare providers, using the state and community and technical colleges, adult education programs and libraries.
- Using public and private partnerships, ensure that small providers and rural areas have access to affordable, high-speed networks so they can participate in telemedicine and teleconferencing services.

- Seek grants to upgrade technology and train medical staff.
- Create a focus group to identify the barriers to using technology in private practice.
- Show doctors how to use technology in their offices.
- Provide basic technology education for healthcare providers, using state and community and technical colleges, adult education, distance learning and the library.
- Provide online appointment scheduling and verification.

Library

- Investigate cost-efficient ways to increase bandwidth to rural libraries.
- Increase the number of public-access computers.
- Provide ports or wireless access points where patrons with laptop computers can connect to high-speed lines.
- Develop expanded Internet training programs for the public, targeting specific needs and groups.
- Increase the use of mobile computer stations in bookmobiles or outfitted vans, especially in rural areas.
- Market the current capabilities and services of the library system.
- Improve the current website and expand the library's ability to interact with patrons.
- Make library services more user-friendly.
- Support county applications for technology grants that will also benefit the library system.
- Explore options to increase customer-initiated transactions online, such as paying fines and accessing subscription databases.
- Identify and catalog technology training programs already in place.
- Make more e-books available.
- Advertise the training classes that are currently available.
- Create an online calendar.
- Increase the number of public access computers and provide wireless access.

Community-Based Organizations

- Identify the community-based organizations in the county and list their websites.
- Develop a list of potential funding sources for technology acquisition.
- Develop collaborative partnerships with educational institutions and corporate partners to provide web services and equipment.
- Develop a networking event to share information, ideas and innovations in technology deployment.
- Recruit high school students to develop websites.
- Encourage community-based organizations to use e-mail and the web to reduce the use of paper mail.
- Introduce a community portal that expands use of a variety of applications.
- Help community-based organizations find locations to access the Internet.
- Facilitate collaboration to share the costs of technology and expertise.
- Develop “train-the-trainer” workshops to help agencies take advantage of technology resources and explain the benefits to clients.
- Provide training on webpage development, including the use of free webpages.
- Identify and list the community-based organizations in the county, as well as their websites.

Government

- Improve the ability to conduct business with government over the Internet, such as permitting, purchasing and payments.
- Increase the number of public access terminals in the county.
- Encourage inter-governmental sharing of software, information and e-commerce concepts.
- Develop more e-government applications that provide value to the consumer.
- Allow the donation of appropriate surplus computers to non-governmental organizations and individuals.
- Set goals to be completed in one year.
- Develop more thorough employee technology training programs.

- Seek grant funding to improve infrastructure and support functions.
- Develop partnerships with businesses and grassroots organizations to improve technology usage countywide.
- Create a strategic plan to improve all automated systems, re-engineer manual procedures and restructure how departments collaborate.
- Increase city-county collaboration.
- Use streaming video to broadcast council or court meetings on the Internet.
- Create a partnership of public and private entities to develop a regional portal.
- Enable online government services, such as permitting, purchasing, payments, downloading tax forms, paying ambulance bills and applying for dog tags.
- Enable online license renewals, voter registration, and court record searches and voting.
- Digitize Property Valuation Administration records, maps and utilities for online access.
- Issue emergency notifications, such as road closures, via e-mail and the website.

Tourism, Parks and Recreation

- Make high-speed broadband access in the Powell Tourism area a priority.
- Improve and correct local links and identification.
- Continue to expand the countywide web portal to share information, market the community, list attractions and hotels and provide a calendar of events.
- Encourage more local companies to sell their goods and services online to promote local businesses and increase sales.
- Develop affordable, high-speed services for rural parts of the county.
- Offer videoconferencing capability to all sectors from a central location.
- Use hand-held devices for inventories, tickets and reservations.
- Create websites that are both informative and interactive to market local attractions to potential in-state and out-of-state tourists.
- Make electronic brochures and information available for downloading.

Agriculture

- Increase broadband awareness among the agricultural community.
- Develop educational materials to help the agricultural community understand the importance of broadband.
- Create a list of providers to help the agricultural sector understand what service is available and from whom.
- Provide high-speed Internet access at the UK Cooperative Extension office.
- Consider creating a local agricultural portal for sharing news and market information.
- Create and promote materials for the new eXtension service, a national web-based information and education network providing 24/7/365 access to objective, science-based information from universities and partners nationwide.
- Provide high-speed wireless Internet access at the UK Cooperative Extension Office.
- Create a national animal identification database.
- Promote online sales and auctions.