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COUNTY**



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HENDERSON COUNTY STRATEGIC TECHNOLOGY PLAN

TABLE OF CONTENTS

A. Executive Summary 2

B. Why Does This Matter? 7

C. Where Are We and Where Are We Going?13

D. How Do We Get There?37



A. Executive Summary

A. Executive Summary

Purpose

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

Summary

Henderson County’s e-Community Leadership Team is leading the way into a new economy for Henderson 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 Henderson 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
- Community-based organizations

This project has culminated in the development of initiatives to increase the competitiveness of Henderson 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 Henderson 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 Henderson County by 2007.

ConnectKentucky recommends that Henderson 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 Henderson 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 Henderson 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.

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

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 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 coops 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

Henderson County industries employ 21,350 workers. When segmented by industry, manufacturing is the leading employer with 6,950 workers, followed by the service industry with 6,150 workers and trade/transportation/utilities at 3,462. The leading single employer is Tyson Foods Inc., www.tysonfoodsinc.com, with 1,350. Gibbs Die Casting Corp., www.gibbsdc.com, and Alcan Primary Metal Group, www.alcan.com, employ 1,000 and 650 workers, respectively. Henderson County has experienced 28 manufacturing expansions since 2002, one new support/service location expansion, and four support/service expansions. Henderson County's location along the Ohio River makes it an ideal center for transportation with convenient access to highway, river, rail, and air service.

The business and industry sector is served by the Henderson-Henderson County Chamber of Commerce, www.hendersonky.com, offering opportunities for leadership, visibility, and involvement in the community. The Henderson Chamber understands the value of broadband and technology as shown by their integration of teleconferencing into their economic development efforts. The vision of the chamber includes creating a community-profile site. This site could be used to help promote businesses and community-based organizations.

Henderson County Economic Development Council, www.hendersonedc.com, also promotes and recruits business and industry to Henderson County. The work performed by the Henderson County EDC is becoming more and more technology related. Business and industry looking to locate at local industrial parks require more technology, including high-speed Internet. Through the Henderson County EDC website, a potential business can learn about the community, available properties, current businesses and much more.

The Tri-County Business and Industry Training Consortium, www.tricountytraining.com, serves the business and industry sector of Henderson County, as well as Union and McLean Counties. Formed in late 2002 with a Department of Labor grant, the Tri-County Training consortium offers workforce training to its member-companies in areas such as pre-employment skills, high tech and soft skill areas. Topics include computer software packages, electricity, manufacturing technology, welding, and many other advanced technology-related topics. Members include the Henderson Chamber of Commerce, Henderson Community and Technical College, Henderson Economic Development Council and Henderson Municipal Power & Light, among many others.

The Henderson County Riverport Authority, www.hendersonport.com, is a full-port, inter-modal facility serving local, national and international industry. Located on the Ohio River close to the confluence with the Green River, the port

provides a very economical transportation option. Through the Henderson County Riverport Authority website, a person can learn about the Authority, Riverport Industrial Park, services offered, the foreign trade zone, and more.

The Assessment

- **Networked Places** – In the category of networked places, Henderson County's business and industry sector scored a 3 on a 0 to 5 scale, with most office employees having always-on connections to the Internet at their desks. Some mobile workers have laptop computers and can access the office network remotely.
- **Applications and Services** – In the area of technology applications and services, business and industry scored a 3 on a 0 to 5 scale with most businesses having informational websites. Some retail websites can accept credit card transactions. Additionally, some businesses participate in the electronic supply chain.
- **Leadership** – In terms of technology leadership within the business community, Henderson County scored a 2 on a 0 to 5 scale. Some view the Internet as essential to business operations. Employees are trained on basic applications.

The Vision

While the Henderson 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 middle of the scoring system to scores of 4 in the three categories outlined above. The team's vision includes:

- Some businesses 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**;
- Some businesses **outsource** most of their computing services to **local service providers** to allow for concentration on core business functions;
- 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**; and
- Businesses are working with educational partners to **raise workforce skill levels**.

K-12

Henderson County Schools' (www.henderson.k12.ky.us) enrollment totaled 6,638 in the '03-'04 school year. The Henderson County School District is comprised of eight elementary schools, two middle schools, one high school and one alternative center, and it employs 1,060 staff and 290 substitutes. The total

percentage of students eligible for free and reduced meals was 45 percent. Seventeen percent of the district students qualified for programs for exceptional children. Every school in the district is eligible for additional funding through Title I, with the exception of Spottsville Elementary and Henderson County High School. The district attendance and retention rates equal state averages, while the dropout rate exceeds the state average (3.7percent for the district vs. 2.2 percent for the state).

Some hardware used by the Henderson County Schools includes: digital cameras, Smart Boards and projectors, scanners, laptops, use of microphones, digital video equipment, video recording equipment and TV-to-computer converters. Some software packages include: Plato Pathways, Curriculum Pathways, Reading Renaissance and Math Renaissance ideas, Tom Snyder Productions and Microsoft Office products. Henderson County Schools has a student/computer ratio of 3.8 students per computer, which is the same as the state average.

The Diocese of Owensboro operates one school in Henderson County. The Holy Name of Jesus Catholic School, www.holynameschool.org, includes preschool through eighth grade and enrolls 644 students.

The Assessment

In its evaluation, the Henderson 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:

- **Network Places** – In the category of network places, Henderson County’s K-12 education sector scored a 3 on a 0 to 5 scale. Most schools provide at least one computer for every five students in grades seven and above. Most classrooms have computers for student use, and some teachers use computer-based presentation tools and projectors for their lessons.
- **Applications and Services** – In the category of technology applications and services, the education sector scored a 3 on a 0 to 5 scale. Some schools have an interactive website that offers access to homework assignments and communication with teachers and administrators. Many experienced teachers know how to incorporate Internet-based lesson plans into the curriculum, and most teachers welcome e-mail from parents and students.
- **Leadership** – In terms of technology leadership within the education sector, Henderson County scored a 3 on a 0 to 5 scale. 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.

The Vision

The Henderson 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 goal set forth by the Henderson County Leadership Team includes reaching a rating of 4 in the categories of Networked Places and Applications and

Services, as well as move to the level of 5 in the Leadership category. The vision includes:

- Some students are given **laptop or portable computers** to use at school and home;
- Some computer labs close because students have more access to computers in their classrooms;
- Many classrooms 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 are **trained to use the Internet** for instruction;
- Parents and family members are encouraged to participate in **student learning via e-mail and online applications**;
- Some seniors are taking **college-level classes** on the Internet;
- Many 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; and
- The school system plays a vital role in **raising the skill level and awareness of community** and family members.

HEALTHCARE

The Methodist Hospital, www.methodisthospital.net, in Henderson County is a broad-based healthcare delivery system. With 185 beds, the Methodist Hospital offers healthcare services in a cost-effective and quality manner. Some of the features of the Hospital's website include a cardiac scoring page to self-screen for heart disease and a web nursery where friends can view the newest arrivals and send the proud parents a message of congratulations.

The Methodist Hospital has recently installed two Wayfinding/Information Display Stations. Found at the Elm Street Lobby and the entrance to the North Tower, these stations help visitors find their way around the hospital. The system includes information on all hospital departments, directional information, physicians, and even includes the ability to print out information and maps in English and Spanish. Taking the lead from President George W. Bush, Methodist Hospital has begun the implementation of electronic health records. To address this issue, Methodist has been in the process of selecting a vendor for the implementation of a new clinical information system (CIS) to improve clinical care.

Henderson County is also served by the Henderson County branch of the Green River Health Department, www.healthdepartment.org. The mission of the GRHD is to improve the quality of life by promoting, protecting, and enhancing the health and well-being of the public. The health department's focus is to develop and maintain healthy habits and lifestyles within Henderson County and surrounding

communities and to ensure the citizenry is protected through environmentally safe surroundings. Some services offered by the health department include Communicable Disease Control, Environmental Services, Public Health Education, Public Health Policy, Families and Children Risk Reduction and Disaster Preparedness.

The Assessment

The Henderson 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.

- **Network Places** – In the category of network places, Henderson County's healthcare sector scored a 2 on a 0 to 5 scale with some doctors regularly using computers to enter and maintain patient records. Digital instruments and imaging equipment are being acquired.
- **Applications and Services** – In the category of technology applications and services, the healthcare sector scored a 2 on a 0 to 5 scale. 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.
- **Leadership** – In terms of technology leadership within the healthcare community, Henderson County scored a 2 on a 0 to 5 scale. Some providers have begun the conversion to electronic medical records. Some providers are investigating how to deploy wireless technologies for mobile workers.

The Vision

The Henderson 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 a rating of 4 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;
- **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** utilizing wireless transmitters and/or broadband Internet;
- Many providers have **informational websites**;
- Most providers **store patient records electronically**;
- Some providers allow **patients to e-mail doctors**;
- 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; and
- Healthcare leaders are talking with the community about **enhancing online services** and using the network to **improve communitywide healthcare**.

LIBRARIES

Henderson County is home to the Henderson County Public Library, www.hcpl.org. Founded in 1904, the Henderson County Library is the oldest public building still standing in the county. Originally built with a \$20,000 donation from the Carnegie Foundation, the building is still used as a library and was expanded in 2002 to offer more services and technologies.

The Henderson County Public Library offers an online catalog and access to many subscription-based research and learning tools. The library's IPAC system allows users with an Internet connection to renew and reserve books, review national best seller lists, browse the library's list of video and DVD resources, read book reviews and excerpts, and search for books related to a given topic.

The Henderson County Library houses more than 100,000 materials, including books, videos, CDs, audio books, and DVDs. In 2000, the library was renovated and a new children's library was added. The library has a T1 data line for Internet access; online research library and web services; fee-based content free to remote and in-house patrons; and wireless Internet access. As reported to the Kentucky Department of Libraries and Archives in 2004, Henderson County Library has 59 computer terminals, ranking 13th among the 120 counties in the state. Thirty-six of those terminals are Internet terminals used by the public.

Henderson County is also home to the Joseph M. Hartfield Library on the campus of Henderson Community and Technical College. The Joseph M. Hartfield Library and Learning Resource Center's main purpose is to provide quality library services to all citizens served by Henderson Community and Technical College, including reference, circulation, library skills instruction, technical services, media services, and off-campus services. The library is also committed to investigate, acquire, utilize and maintain traditional and emerging technologies.

The Assessment

The Henderson 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.

- **Network Places** – In the category of network places, libraries scored a 4 on a 0 to 5 scale. Public libraries have added network ports or wireless networks and electrical outlets to carrels.
- **Applications and Services** – In the category of technology applications and services, libraries again scored a 4 on a 0 to 5 scale. 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.
- **Leadership** – In terms of technology leadership within the library system, the sector again scored a 4 on a 0 to 5 scale. 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.

The Vision

The 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 network places and leadership. The team set a goal in all three categories of moving to a rating of 5 on a 0 to 5 scale. The vision includes:

- Most public libraries offer patrons a **10 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 video conferencing** 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

Henderson Community and Technical College (HCC), www.henderson.kctcs.edu, founded in 1964, was originally the Northwest Extension of the University of Kentucky, which opened in 1960. HCC, a charter member of the University of Kentucky Community and Technical College System, currently enrolls students in academic, technical and transfer programs and provides training for more than 4,000 citizens through its continuing education program. Henderson Community and Technical College became a member of the Kentucky Community and Technical College System in 1998.

Henderson Community and Technical College prepares students for the new global economy by offering programs in information technology. The Information Technology Program at HCC offers an Associate in Applied Science Degree and certificates in IT Fundamentals, Computer Programming, Network Administration, Database Administration, and Electronic Commerce. In addition to its academic program in information technology, Henderson Community and Technical College has integrated technology into all aspects of the college. All computer labs have been recently upgraded. Professional development courses are offered to all faculty and staff to increase knowledge of technology. A variety of courses are offered online and a new technology center for the college is in the works.

Murray State University, www.murraystate.edu, offers a full-service office in Henderson, KY for students enrolled in courses and programs at the Henderson Regional Campus. There are a variety of courses and programs available for students who do not have access to the main campus. Broadband and technology allows for students to take interactive television courses in Henderson from Murray State and other organizations. Wireless Internet, available throughout the campus, allows students to study in all areas and use the building in creative ways. Degree programs offered in Henderson County include: business administration, elementary education, special education and nursing.

In addition, Henderson Community and Technical College, along with other KCTCS entities and Murray State University, have joined efforts to promote technology in the area. HCC and MSU established a transfer agreement between the Associate in Applied Science in Information Technology offered by KCTCS and the Bachelor of Science Degree in Telecommunications Systems Management offered by Murray State University. Students completing IT programs at HCC can enter the MSU program without losing any credits. In addition, students can complete this 4-year technology degree from a Kentucky university without leaving Henderson County.

The Assessment

The Henderson County eCommunity Leadership Team found that the higher education sector is currently taking advantage of technology more than most others in the community; however, there is also a large opportunity to expand current services with technology applications.

- **Network Places** – In the category of network places, Henderson County's higher education sector scored a 3 on a 0 to 5 scale with most on-campus facilities having 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.
- **Applications and Services** – In the category of technology applications and services, the higher education sector scored a 3 on a 0 to 5 scale. 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.
- **Leadership** – In terms of technology leadership within the higher education community, Henderson County scored a 3 on a 0 to 5 scale. 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.

The Vision

The Henderson County eCommunity Leadership Team sees great potential for the use of technology in the higher education sector but understands that colleges and universities are limited in their resources and ability to implement changes within a brief period. The team has set goals of achieving a rating of 4 out of 5 in all three categories over the next two years. The team's vision includes:

- 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/or **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 and technical colleges are expanding their capacity by using **distance learning** technologies to reduce the need for classroom time; and
- Some colleges and universities are **developing online classes** to market to students in other parts of the country and the world.

COMMUNITY-BASED ORGANIZATIONS

Henderson County is home to approximately 180 non-profit community-based organizations. These community-based organizations include religious, educational, charitable, scientific or literary organizations. Some of these community-based organizations include:

- Downtown Henderson, www.downtownhenderson.org
- EVV Goodwill, www.evvgoodwill.org
- Tri County Recycling, www.tricountyrecycling.com
- Green Valley Baptist Association, www.greenvalleybaptists.com
- Friends of Audubon, www.friendsof Audubon.org
- Henderson Punishers Football, www.hendersonpunishers.org
- St. Anthony's Hospice, www.stanthonyshospice.org
- United Way of Henderson County, www.unitedwayhendersoncounty.org
- Volunteer & Information Center, Inc, www.volunteer-informationcenter.com
- Christian Care Communities, www.christiancarecommunities.org

The Assessment

The Henderson County eCommunity Leadership Team found that the community-based organization sector is just beginning to use technology to its advantage and identified a large opportunity for technology applications within the community-based organizations.

- **Network Places** – In the category of network places, Henderson County's community-based organization sector scored a 2 on a 0 to 5 scale. 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.
- **Applications and Services** – In the category of technology applications and services, the community-based organization sector scored a 2 on a 0 to 5 scale with some organizations have an informational website.
- **Leadership** – In terms of technology leadership within the community-based organization community, Henderson County scored a 1 on a 0 to 5 scale. Organizations are minimally involved in community economic development issues. Little or no plans exist for better utilizing telecommunications services and technologies. Some organizations provide technology training to their staff at least once a year.

The Vision

The Henderson County eCommunity Leadership Team sees great potential for the use of technology in the community-based organization sector but understands the sector 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 a rating of 3 on a 0 to 5 scale. The team's vision includes:

- Most community-based 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; and
- Some organizations provide **technology training to their staff** at least once a year.

GOVERNMENT

Henderson County government entities include Henderson County, Henderson (county seat), Corydon, and Robards. Henderson's official city website (<http://www.cityofhendersonky.org>) ranked 45th out of 116 official city websites across the state, while Henderson County, Corydon, and Robards have no official websites.

The City of Henderson, www.cityofhendersonky.org, provides information and services related to city government, city services and the community. Some of the city services information found on the website include: finance and collections, taxes, personnel and general services, code of ordinances and commission meeting agenda and minutes. City services included on the website include: public works, police, fire and code, parks and recreation and rapid transit.

The Property Valuation Administrator in Henderson County has created a website to better serve Henderson County. The PVA website, www.hendersoncopva.com, provides a great deal of information to help the public better understand the workings of the PVA office. The website will answer questions about Kentucky's Property Tax System. As new policies and procedures are developed, they will be posted along with current statutes to keep taxpayers informed. From the website, residents can find a tax calculator and forms and perform property searches.

The Assessment

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

- **Network Places** – In the category of network places, the government sector scored a 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 scored a 2 on a 0 to 5 scale. Most public agency websites offer informational features such as community calendar, staff directory, and downloadable forms. Customers rely mostly on postal mail and telephone to conduct business.
- **Leadership** – In terms of technology leadership within the government community, Henderson County and its associated governments scored a 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. Elected officials are not involved in telecommunications issues.

The Vision

The Henderson County eCommunity Leadership Team has developed goals to provide a framework for robust e-government functions in the next two years, bringing the rating in the category of network places to a 4; the rating for applications and services to a 4; and the rating for leadership to a 4. The team's vision includes:

- Some field workers use **wireless networks** to upload and download data in the field;
- Some employees are using **desktop videoconferencing**;
- Sensors and **webcams monitor locations**, such as rivers, that are critical to public safety;
- Customers can make **routine payments**, such as parking fines, **online** using credit cards or EFT;
- **Parks and recreation classes** can be registered for online;
- Building **inspections and violations** can be entered from the field;
- Some agencies have a formal policy that allows some employees to **work at home** at least one day a week;
- **Rights-of-way and tower siting** policies are in place; and
- Elected officials understand the **importance of the network for economic development and quality of life**.

TOURISM, RECREATION AND PARKS

Henderson County is home to several annual events: Tri-Fest in April, W.C. Handy Blues and Barbecue Festival in June, Bluegrass in the Park and the Flea Market in August, Big Rivers Arts and Crafts Halloween Festival in October, and December's Christmas in the Park.

In addition to outstanding duck and goose hunting, Henderson County includes the Audubon State Park, named in honor of renowned wildlife artist John James Audubon. The park includes the James Audubon Museum, which houses an extensive collection of his works. Lodging and camping are also offered at the park.

Henderson municipal parks provide areas for picnicking, golfing, tennis, soccer, swimming, softball, and baseball. For the fisherman, several area lakes are available, and other water sports may be enjoyed on the Ohio River. The 1,000-seat Henderson Fine Arts Center on the HCC campus offers quality

entertainment to Hendersonians, boasting a 4,000-square-foot stage with state-of-the-art light and sound systems.

Henderson is served by the Henderson County Tourist Commission, www.hendersonky.org. The Tourist Commission promotes Henderson and the surrounding community through a variety of ways including its very interactive website. From the website, a visitor to Henderson can find out about local events, accommodations, points of interest, shopping, food and a great deal more. Some of the Henderson County destinations within the tourism, recreation, and parks sector include:

- John James Audubon State Park, parks.ky.gov/stateparks/au
- Ellis Park Race Course, www.ellisparkracing.com
- Henderson Fine Arts Center, www.henderson.kctcs.edu/arts
- Sloughs Wildlife Management Area
- Historic Walking Tour, www.downtownhenderson.org
- Kentucky's Audubon Bird Sculptures, www.hendersonky.org/citybirds
- Image One Gallery, www.imageonegallery.com

Serving downtown Henderson is the Downtown Henderson Project, www.downtownhenderson.org. The mission is to promote, improve and preserve the unique character and economic vitality of downtown Henderson. Understanding the value of technology, Downtown Henderson uses the website to promote the downtown businesses. One example is the new website linkage program. All members get a link on the Downtown Henderson website as well as the Henderson Tourist Commission's site. Some members taking advantage of this program include:

- Ohio Valley Bank, www.ovbank.com
- L & N Bed and Breakfast, www.lnbbky.com
- Bugg and Associates Realty, www.buggandassociates.com
- The Dance Factory, www.deannasdancefactory.com
- Memories Past and Present, www.goantiques.com/members/memoriespastandpresent
- Earth Magic, www.herbsfromearthmagic.info
- Collier & Collier – Century 21, www.century21collier.com

The Assessment

The Henderson 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.

- **Network Places** – In the category of network places, Henderson County's tourism, recreation, and parks sector scored a 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 scored a 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, Henderson County scored a 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 Henderson 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 a rating of 4 on a 0 to 5 scale. The team's vision includes:

- Some facilities use **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**;
- Some facilities outsource most of their **computing services to local service providers**;
- Some facilities **market out of state** or internationally;
- Some employees **work remotely**;
- Some facilities **permit some employees to telework** one or two days a week;
- Some facilities encourage employees to take **work-related classes online**; and
- Facilities are working with educational partners to **raise workforce** skill levels.

AGRICULTURE

Henderson County's base of farms fell 13 percent from 1997 to 2002, going from 600 farms to 525 farms. The amount of land in farms fell as well, down 7 percent in the same time frame, going from 207,453 acres to 192,264 acres. The average size of Henderson County farms was 366 acres in 2002, a 7 percent increase over 1997 data.

The market value of production remained virtually the same in 1997 and 2002 (approximately \$52 million annually). Crop sales accounted for \$29 million while livestock accounted for \$23 million. The average Henderson County farm generated nearly \$99,000 in 2002. Government payments totaled \$2.85 million in 2002 (up 57 percent from 1997).

The leading agricultural products for Henderson County are grains (\$27 million), poultry/eggs (\$20 million), and cattle/calves (\$2.3 million). Henderson County is the sixth leading producer of grains and ninth leading producer of poultry/eggs in the state. Total burley grower payments for 2002 was \$4.2 million. Dark payments totaled \$5.3 million.

In Henderson County, the agricultural community is served by the Henderson County Office of the University of Kentucky Cooperative Extension Service, ces.ca.uky.edu/Henderson. From their website, a farmer can learn the latest

information about grain, tobacco, livestock, agriculture policies, and hot topics such as soybean rust, soybean aphid and West Nile virus. From the Agriculture page, a farmer can view newsletters on grain marketing, corn and soybeans, and the latest news from the University of Kentucky, as well as the Henderson Cooperative Extension Service.

The Assessment

The Henderson 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.

- **Network Places** – In the category of network places, Henderson County's agricultural sector scored a 2 on a 0 to 5 scale. Some growers, suppliers, and processors have always-on connections to the Internet at their desks.
- **Applications and Services** – In the category of technology applications and services, the agriculture sector scored a 2 on a 0 to 5 scale with some growers, suppliers, and processors have an informational website. Some growers, suppliers, and processors transmit or receive some orders electronically.
- **Leadership** – In terms of technology leadership within the agricultural community, Henderson County scored a 2 on a 0 to 5 scale. The Internet is seen as essential to business operations. Employees are trained on basic applications.

The Vision

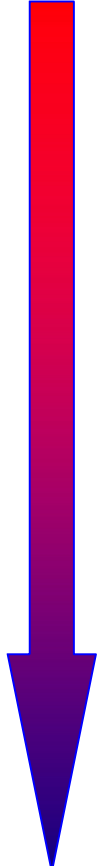
The Henderson County eCommunity Leadership Team sees great potential for the use of technology in the agricultural sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move its rating to a 4 on a 0 to 5 scale in Networked Places and to a rating of 3 on a 0 to 5 scale in the applications & services and leadership categories. The team's vision includes:

- Some growers, suppliers, and processors use **VoIP to save money**;
- Some workers have converted from desktop computers to **portable devices** with wireless connections;
- Some office computers have **webcams for video conferencing**;
- 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**; and
- Some growers, suppliers, and processors encourage employees to take **work-related classes online**.


Business and Industry

Henderson County

- Henderson County's Benchmark Assessment Results are presented in red.
- Henderson County's Vision for this Sector is presented in blue.

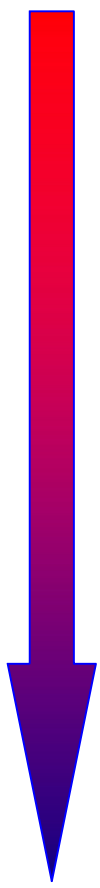
	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Not using the Internet.	No computer use or Website. Customers use phone and postal mail.	No technology or telecom plan.
	1	Some employees have limited access to the Internet through a dial-up connection.	Utilize basic e-mail services through their connection.	Internet is considered a possible business enhancement.
	2	Some office employees have always-on connections to the Internet at their desks.	Some businesses have 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 informational Website. Some retail Websites can accept credit card transactions. Some businesses participate in 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 VoIP (Voice over IP) 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 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.

● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
 <p>Least Connected</p>	0	Not using the Internet.	Use phone and postal mail. No Website.	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. Internet is not used as a resource for instruction or homework assignments.	Few experienced teachers are trained in 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 utilizing telecommunications services and technologies in their classrooms. Some teachers can incorporate Internet material into their curriculum.
	3	● Schools provide at least one computer for every five students in grades 7-12. 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/administrators. Many teachers can incorporate Internet material into the curriculum Teachers welcome e-mail from parents/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 students bring their own laptop computers to school. Some computer labs close. Many classrooms 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 are trained to use the Internet for instruction. Parents and family members are encouraged to participate in student learning via e-mail and online applications. Some seniors are taking college-level classes on the Internet.	Some schools have comprehensive plans for learning activities utilizing 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.
<p>Most Connected</p>	5	Most students bring their own laptop computers to school. Most computer labs have been closed. Many classrooms have large, flat-panel displays or projectors for video-based instruction. Most schools have converted their phone system to VoIP to save money.	Schools use the network to connect students, teachers and parents, improve learning via online resources, and manage administrative responsibilities. Schools have ICT literacy requirements in place. Technology training is offered in the community. Many high school students use online resources to explore subjects and develop learning plans.	■ Many schools have comprehensive plans for learning activities utilizing technology in the classroom. School districts actively promote ICT 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	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson 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.	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 are utilizing a dial-up connection in order to access health-related sites.	Considering what advantage may come from implementation of Internet in 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 videoconferencing 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 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.
<p style="text-align: center;">Most Connected</p>				

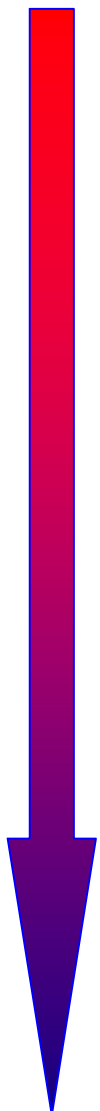
Libraries	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
	Least Connected	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 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 a more than 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 100 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 ICT literacy to drive positive impacts on economic performance, skills, and innovation in the community.	
Most Connected				

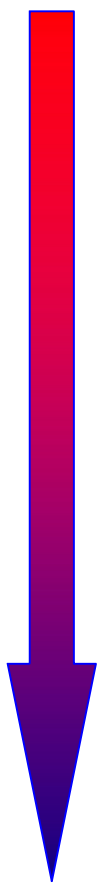
Higher Education	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
 <p style="text-align: center;">Least Connected</p>	0	Not using the Internet.	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 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/or 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.	The college/university sees itself as a vital partner in the community's economic development strategy and has formed partnerships with local businesses to provide skilled technology workers and innovative solutions. The colleges/universities actively promotes ICT literacy to drive positive impacts on economic performance, skills, and innovation in the classroom.
Most Connected				

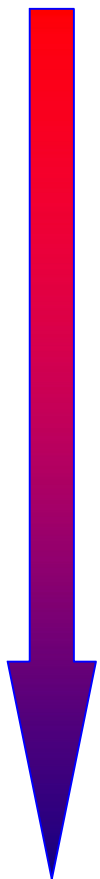
Community-Based Organizations	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
	Least Connected			
	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 utilizing e-mail and possibly other basic Internet functions.	Internet is seen as a possible enhancement and marketing tool.
	2	● Some CBOs have computers that are no older than three years old. Many CBOs have e-mail. Some office employees have always-on connections to the Internet at their desks.	● Some CBOs have informational Websites.	● CBOs are minimally involved in community economic development issues. Little or no plans exist for better utilizing telecommunications services and technologies. Some CBOs provide technology training to their staff at least once a year.
	3	■ Most CBOs with at least five paid staff have at least one computer for every three employees. Many CBOs have e-mail.	■ Many CBOs have an informational Website. Many local chapters are able to share data electronically with the national parent organization. Some CBOs accept online donations.	■ Some CBOs are involved in specific economic development initiatives, but most do not participate. Some CBOs plan to use telecommunications services and technologies within the next year. Some CBOs provide technology training to their staff at least once a year.
	4	Many CBOs with at least five employees have direct connections to the Internet. All paid staff have e-mail accounts. Some CBOs use VoIP to save money. Some office workers have converted from desktop computers to portable wireless devices. Some office computers have video cameras.	Most CBOs have an informational Website. A unified CBO 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 CBO leaders are actively involved in community economic development issues and there are visible leaders taking a significant role in economic development. Many CBOs plan to use telecommunications services and technologies within the next year. Most CBOs provide technology training to their staff at least once a year.
Most Connected	5	Many CBOs use VoIP. Every CBO is connected to the Internet. Every computer can access the Internet via a local area network. Many computers have video cameras Most CBOs use affordable videoconferencing facilities.	Most CBOs accept online donations. Some CBOs utilize an interactive service to further engage the community and make their services more broadly available. Electronic data sharing is a common practice between CBOs locally and with national parent organizations.	CBOs collaborate with one another regularly to share resources and provide up-to-date training to their employees and volunteers. CBOs have a defined role in supporting local economic development initiatives. Most CBOs plan to use telecommunications services and technologies within the next year.

Government	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
	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 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 listserv 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 IT innovation. Employees are trained and knowledgeable on basic applications.
	4	■ Some field workers use wireless networks to upload and download data in the field. Some employees are using desktop videoconferencing. Sensors and webcams monitor locations, such as rivers, that may be a threat to public safety.	■ Customers can make routine payments, such as parking fines, online using credit cards or EFT. Parks and recreation classes can be registered for online. Building inspections and violations can be entered from the field.	Some agencies have a formal policy that allows some employees to work at home at least one day a week. Rights-of-way and tower sitting 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 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 IT master plans in place to guide its efforts. Innovative processes are used to collaborate with the private sector.
Least Connected				
Most Connected				

Tourism, Recreation, and Parks

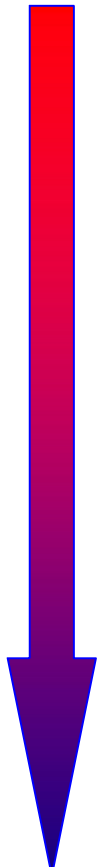
Henderson County

● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson 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. 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 utilize the Internet for the purpose of e-mail.	The Internet is seen as a possible way to enhance operations.
	2	● Some office employees have always-on connections to the Internet at their desks.	● Some facilities have an informational Website. Some facilities transmit or receive some reservations electronically.	● The Internet is seen 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.	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.
	4	■ Some facilities use 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.	■ Some facilities outsource most of their computing services. Some facilities market out of state or internationally. Some employees work remotely.	■ Some facilities permit some employees to telework one or two days a week. Some facilities encourage employees to take work-related classes online. Facilities are working with educational partners to raise workforce skill levels.
	5	Most facilities use VoIP to save money. Most computers have video cameras.	Some facilities send and receive video mail. Some facilities outsource most of their computing services. Some facilities routinely use multiparty videoconferencing to coordinate operations.	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.

Agriculture	Henderson County
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● Henderson County's Benchmark Assessment Results are presented in red.
 ■ Henderson County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
 <p style="margin: 0;">Least Connected</p> <p style="margin: 0;">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 utilize 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 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 VoIP to save money. Most computers have video cameras. Some use 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: Education, Training, and Awareness for Henderson County

LONG-TERM GOAL

Organization, promotion and delivery of technology education, training and awareness to the entire community of Henderson County.

WHY IT'S IMPORTANT

An educated community is essential in today's global economy. There are opportunities to leverage existing resources in Henderson 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 education/training/awareness resources in Henderson County.
2. Development of additional education, training and awareness materials to further the use of technology and broadband applications.
3. Increase the citizen usage rates of computers and broadband in Henderson County.

STEPS TO ACHIEVE OUTCOME

1. Identify all organizations within Henderson 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.
5. Determine gaps in education/training/awareness and ways to fill those gaps.

NAMES OF IMPLEMENTATION CHAMPIONS

Educational Team **K-12 Education**

Henderson County Schools, www.hendersonschools.net

Higher Education

Henderson Community and Technical College, www.henderson.kctcs.edu
Murray State University, www.murraystate.edu

Community Education

Green River Area Development District, www.gradd.org
Henderson County Adult Learning Center,
www.hencc.kctcs.edu/services/adult.asp
Henderson County Community Education, www.hendersonschools.net
Henderson County Cooperative Extension Service, ces.ca.uky.edu/henderson
Henderson County Public Library, www.hcpl.org
Tri-County Training Consortium, www.tricountytraining.com

PROJECT CONCEPT: Conceptual Plan for E-Government Services in Henderson County

LONG TERM GOAL

Using technology, improve internal and external efficiencies within city and county government, allowing for better communication between the different government entities and the citizens of Henderson County.

WHY IT'S IMPORTANT

Technology will allow local governments to deliver more applications and improved services to constituents while saving money. E-government will assist in achieving this objective, as well make the services more accessible to the constituents. With growing public acceptance of online transactions and e-commerce growing dramatically, a well-planned e-government strategy will provide for the request for and delivery of local government services over the Internet.

SPECIFIC MEASURABLE OUTCOMES

1. Determine the public need for electronic access to government.
2. Develop a strategy for significantly reducing visits by the public to government offices for routine transactions.
3. Identify applications specifically designed to help businesses interface with governments more efficiently.

STEPS TO ACHIEVE MEASURABLE OUTCOMES

1. Review current e-government applications to identify areas containing gaps.
2. Develop a survey instrument to identify applications of public interest. Use the survey to examine potential e-government applications.
3. Identify high-volume services to target for automation/online service.

4. Identify partners and entities to assist in implementation.
5. Develop and launch applications.

E-GOVERNMENT TEAM

City of Henderson, www.cityofhendersonky.org

Green River Area Development District, www.gradd.com

Henderson County

City of Corydon

City of Robards

Potential Action Items

Business and Industry

- Develop a services directory for IT-related services in the County, including business-to-business opportunities.
- Educate small businesses on what telecommunications services are available and the benefits of using technology in business.
- 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.
- Identify ways to reduce the costs of connecting to the Internet and find potential funding sources for small businesses.

Education: K-12

- Run fiber to all buildings in the district.
- Develop curriculum that integrates web-based instructional materials.
- Consolidate and centralize servers.
- Implement online or computer-based testing.
- Develop informational websites for all schools with interactive features, including expanding student, parent and teacher access to student information such as homework assignments and attendance records.
- Build relationships between education and broadband providers.
- Establish a countywide educational consortium (made up of public, private, adult education) to develop a process for consolidating the various groups working on technology planning in the education sector.

- Provide training in information technology resources for districts, especially for support staff and classified personnel.

Healthcare

- Increase access to clinical information among providers and increase access to individual patient information by that patient.
- Increase use of video- and web-conferencing tools to educate healthcare professionals through distance learning and inform the public of current healthcare activities.
- Educate healthcare professionals on available technologies and benefits of technology in medicine.
- Use public and private partnerships to expand access to affordable, high-speed networks for smaller providers and rural areas, while increasing their ability to provide tele-medicine and teleconferencing services.
- Seek grants for implementing technological upgrades and training for medical staff.

Libraries

- Equip bookmobile with Internet access. Librarian can answer reference questions, maintain live contact with library's automation system and instruct people how to use library's website. Resources needed: Internet connection, laptop, accessories to connect to automation system.
- Provide assistive technology for Internet and computer use for disabled patrons. Resources needed: applicable software and specialized hardware (keyboard, monitor, microphone, etc.).
- Work with organizations that benefit the disabled to find out what type of technology is needed to help people use computers and the Internet.
- Seek out all viable Internet connections for the bookmobile by networking with other libraries and library organizations and other related businesses such as trucking companies, delivery vehicles, etc.

Higher Education

- Increase methods of instruction delivery over the Internet in terms of video and/or audio, and 3D visualization technology.
- Provide continuous training to all educators and staff on technology usage and applications.

- Allow for tele-learning courses to be delivered to students' homes in both real-time and archived formats.
- Develop wireless networks to allow students and faculty seamless access to the campus network.
- Improve countywide access to distance learning classes.

Community-Based Organizations

- Enhance education for organizations to better utilize broadband.
- Develop a networking event to share information, ideas and innovations in technology deployment.
- Encourage organizations to use e-mail and the web by eliminating the use of paper mail.
- Facilitate collaboration and cooperation among organizations to help them share the costs of technology and expertise.

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.
- Better public awareness through presentations and literature for personal applications.
- Develop more e-government applications that provide value to the consumer.
- Speed up Internet response from dial-up.

Tourism, Parks and Recreation

- Educate the public about what is trying to be accomplished in Henderson.
- Use creative advertising showing the positive results technology would have on business and the quality of life.
- Develop programs to set up public access points in malls, public buildings and farm worker communities.
- Encourage more local companies to sell their goods and services online to promote local businesses and increase sales.
- Use technology to market county attractions to potential in-state and out-of-state tourists.

Agriculture

- Develop educational materials to help the agricultural community understand the importance of broadband.
- Implement video conferencing system at the Cooperative Extension Office for the community to use.
- Increase broadband awareness among the agricultural community.
- Create and/or 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.