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Commonwealth!



CONNECT DAVIESS COUNTY



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DAVISS COUNTY STRATEGIC TECHNOLOGY PLAN

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A. Executive Summary

A. Executive Summary

Purpose

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

Summary

Daviess County’s e-Community Leadership Team is leading the way into a new economy for Daviess 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 Daviess 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 Daviess 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 Daviess 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 Daviess County by 2007.

ConnectKentucky recommends that Daviess 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 Daviess 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 Daviess 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

Daviess County industries employ nearly 41,000 workers. The three leading industries are service (12,076 workers), trade/transportation/utilities (9,147 workers), and manufacturing (6,159 workers). The leading employer is U.S. Bank Home Mortgages, www.usbank.com, with 685 employees. It is followed by Field Packing Co., Inc., www.sfgtrust.com, with 600 employees and Audubon Area Community Services, www.audubon-area.com, with 488.

Since 2002, Daviess County industry has witnessed 17 manufacturing expansions, 7 support/service expansions, and 1 support/service location. Daviess County/Owensboro serves as the industrial, retail, medical, and cultural hub of Western Kentucky. Owensboro is Kentucky's third most populated city. With a labor force 250,000 strong and skilled workers with a good work ethic, local employers enjoy high output and productivity. Owensboro has nationally known workforce development initiative. According to an economy.com annual survey, Owensboro has the second lowest overall business costs in a 15-state region.

Daviess County's Business and Industry sector are served primarily by two different entities: the Greater Owensboro Chamber of commerce, www.owensboro.com/chamber, and Greater Owensboro Economic Development Corporation, www.owensboro.com/economic. These entities understand the value of technology and its impact on businesses and growth.

One example of this forward thinking is in the area of biotech. Owensboro is home to an initiative developing a biotech cluster through the Owensboro Biotechnology Alliance. It is comprised of the Greater Owensboro Economic Development Corporation, University of Kentucky Research and Development, Owensboro Community and Technical College, private industry and local farmers.

The Assessment

- **Networked Places** – In the category of networked places, Daviess 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. The team found that most businesses in Daviess County have a web presence to promote business services or products, and a few of these companies participate in the electronic supply chain. Some retail websites can accept credit card transactions.
- **Leadership** – In terms of technology leadership within the business community, Daviess County scored a 3 on a 0 to 5 scale. Some businesses permit employees to periodically telework, as well as encourage employees to take technology work-related classes offline. Employee training on new technology is a priority among businesses.

The Vision

While the Daviess 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 and 5 in the three categories outlined above. The team's vision includes:

- Some businesses in Daviess County will use high speed connections for **enhanced web services** such as national and international online retail sales, advanced tracking of inventory and equipment, and multiparty video conferencing through computer webcams;
- Where beneficial, employees will be equipped with portable wireless electronic devices such as **laptop computers**, and will have the ability to access the office network remotely, allowing flexibility and cost savings;
- A **telework program** will be implemented within appropriate organizations, allowing employees the opportunity to work from home;
- Where cost-effective, some businesses will use **Voice over Internet Protocol (VoIP)** to streamline and save money on telecommunication services;
- Some businesses will **outsource** all or some of their non-core operations, allowing a focus on core business activities; and
- Daviess County businesses will encourage **technology training**, and all new hires will be required to have experience using new technologies in business applications.

K-12

Daviess County is home to two public school districts. Daviess County Schools, www.dcps.org, enroll nearly 11,000 students (preschool-12) through 12 elementary schools, 3 middle schools, and 2 high schools. There are also alternative programs. Daviess County outperforms state average in rates of attendance, retention, and dropout. Daviess County students are ten times less likely to attend vocational/tech training than the state average (0.4 percent vs. 4.9 percent). Twice as many Daviess County graduates end up in work/part time school when compared to the state averages (14.7 percent vs. 6.7 percent).

Technology is an integral part of the Daviess County Schools' plans. A new initiative has started within the school district where high school students in the pilot program will be given a wireless laptop computer which will allow them to have 24/7 access to technology. This project addresses the "technology divide" that exists between kids who have computers and those who do not. By providing laptops that the kids will have access to 24 hours a day, Daviess County Schools is addressing the questions of "how, when, and where" today's kids learn.

With the exception of two schools, all schools within the Daviess County Schools are connected via fiber and transmit at speeds up to 100 Megabits per second (Mbps). In addition, West Louisville and Whitesville Elementary Schools are connected to the district via point-to-point T1s and transmit at 1.5 Mbps.

Owensboro Independent Schools, www.owensboro.k12.ky.us, enroll nearly 4,000 students, P-12. The district includes a program for at-risk preschoolers, six elementary schools, a fifth- to sixth-grade center, a seventh- to eighth-grade middle school and a

high school. All facilities have undergone recent renovation with technology as a priority in the design. Owensboro Independent outperforms state averages in rates of attendance, retention, and dropout.

Owensboro Independent Schools promote technology within their school district as well as the community at large. The school system allows for community members with a demonstrated need to have access to the Internet when available after attending a one-hour training/awareness session provided free of charge by the district. Technology is incorporated into the classrooms through methods such as classroom websites, PowerPoint presentations, and digital pictures. All schools within the school district are connected via 100 Mbps fiber.

Daviess County also has a number of private school systems including:

- Diocese of Owensboro, www.owensborocatholic.org, supports eight schools (two high schools, one middle school, and five elementary schools) with an enrollment of 2,250.
- The Triplett School, www.triplettschool.org, (PK-12) enrolls 79;
- Holy Angels Elementary (K-6) enrolls 151;
- Majesty Christian School (PK-11), www.majestychristianschool.com, enrolls 65; and
- Owensboro Christian Academy (1-12) enrolls 25.

The Assessment

In its evaluation, the Daviess County 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, Daviess 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, Daviess 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 Daviess County 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 vision includes:

- Daviess K-12 institutions will be **networked** to provide staff and students with digital projection and student video production;

- A policy whereby some **students are given their own laptop computers which can be used at school**, allowing for more flexible use of computer labs;
- Use of **wireless sensors to monitor energy consumption**;
- **Interactive school websites** that offer access to homework assignments and e-mail contact with teachers and administrators;
- All teachers will be trained to use the **Internet for instruction**;
- **Parents and family members will be encouraged to participate** in student learning via e-mail and online applications;
- When appropriate, seniors will take **college-level classes on the Internet**;
- **Comprehensive plans** for learning activities will use technology in the classroom;
- New hires will be **required to have experience using new technology** in the classroom;
- **Computer labs are made available to family and community members**; and
- Schools take responsibility for continuing the federal e-rate program and other **funding opportunities**.

HEALTHCARE

Daviess County is home to the Owensboro Medical Health System, OMHS, www.omhs.org. Their vision is to be the healthiest community in Kentucky. Their values include compassionate care, wellness education, integrity-based decisions, fiscal responsibility, and measured improvements in the quality of healthcare offered. With excellence and respect, the OMHS serves Daviess and surrounding counties. The hospital is licensed for 469 beds. To allow access to patient information anytime and anywhere, , OMHS installed a wireless network letting nurses and doctors access patient information including: health-related processes such as doctor's orders, results, pharmacy, and clinical documentation, as well as administrative information, such as scheduling, admitting, charging, and billing.

Owensboro-Medical Health System continues to be a leader in healthcare for the region. At OMHS, most equipment has been converted to digital. Most telephone systems have been converted to VoIP (Voice over Internet Protocol) to save money. Remote monitoring of patients with chronic conditions is standard procedure. Hospital executives are meeting regularly to find ways to collaboratively reduce the cost of healthcare without compromising quality of service. The OMHS leaders are key parts in the community's overall economic strategy.

Healthcare in Daviess County is also served by the Green River Health Department, www.healthdepartment.org. The mission of the GRDHD is to improve the quality of life by promoting, protecting, and enhancing the health and well-being of the public. The department's focus is to develop and maintain healthy habits and lifestyles within Daviess County and its communities and to ensure that the community's citizenry is protected through environmentally safe surroundings. Some services offered by the include Communicable Disease Control, Environmental Services, Public Health Education, Public Health Policy, Families and Children Risk Reduction and Disaster Preparedness.

The Assessment

The Daviess County 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 farming community.

- **Network Places** – In the category of network places, Daviess County's healthcare sector scored a 3 on a 0 to 5 scale. Some doctors and nurses are using laptop and palm-held devices connected to wireless networks to enter patient information and access databases. Digital instruments and imaging equipment are being acquired. Some doctors regularly use computers to enter and maintain patient records.
- **Applications and Services** – In the category of technology applications and services, the healthcare sector scored a 3 on a 0 to 5 scale. Many providers have websites. Many providers store patient records electronically. Some offices are electronically transmitting records to insurers for reimbursement.
- **Leadership** – In terms of technology leadership within the healthcare community, Daviess County scored a 3 on a 0 to 5 scale. Many providers have begun the conversion to medical records. Many providers are investigating how to deploy wireless technologies for mobile workers.

The Vision

The Daviess County 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 5 on a 0 to 5 scale. The team's vision includes:

- Most equipment being converted to **digital**.
- **Desktop video conferencing** is routine at all hospitals and major clinics.
- Telephone systems have been converted to **Voice over Internet Protocol (VoIP)** to save money where appropriate.
- 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** is used to access specialists.
- **Wireless feeds in ambulances** provide real-time patient assessments 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 hospitals, clinics, insurers, employers and other healthcare providers are meeting regularly to find ways to collaboratively reduce the cost of healthcare without compromising quality of service.

LIBRARIES

Daviess County Public Library, www.dcpplibrary.org, was established in 1913. In 1997, the library made Internet access available for the public. Its 46,500 square-foot building serves 92,000 people in Owensboro and Daviess County with 170,000 books, 10,000 movies and audiotapes, 45 newspapers, and a large number of other resources. Through the reference page at the Daviess County Library, a patron can access many online resources such as the library catalog, LawCheck for Libraries, Facts on File,

Heritage Quest, Magill On Literature, and Today's Science among others. Additionally, a patron can gain access to the Internet for free at the library with a valid library card.

Daviess County Public Library has begun construction on a new facility. In two years, the library plans to have the new building completed with self-check installed. At the same time the Library will upgrade their online system to include the capability of paying fines and applying for library cards via the library online system. Part of the upgrade will include a shift from barcode to RFID technology and an establishment of a wireless network within the library. To keep up with the latest technology, Daviess County Public Library is looking into downloadable audio because of the high demand and difficulty in keeping audio books in its various formats.

Other libraries within Daviess County include libraries at Kentucky Wesleyan College and Brescia University. Kentucky Wesleyan College Library houses more than 150,000 books, periodicals, audiovisual materials, and other resources. Brescia University houses the F. R. Leonard Alvey Library, where laptops are available for use at the circulation desk.

The Assessment

The Daviess County Leadership team found that the library rated higher overall than most other sectors in its current use of technology.

- **Network Places** – In the category of network places, libraries scored a 3 on a 0 to 5 scale. There seems to be an adequate number of computers for those currently needing access; there is rarely more than a 10-minute wait for computer resources.
- **Applications and Services** – In the category of technology applications and services, libraries again scored a 3 on a 0 to 5 scale. The Daviess County library's catalogs are available 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. And the library hosts live video feeds of public interest events.
- **Leadership** – In terms of technology leadership within the library system, the sector again scores a 5 on a 0 to 5 scale. 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.

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 an aggressive goal for the categories of network places and applications and services, with plans to move from a score of 3 to 4 in two years. In the leadership category, it is the team's goal to continue to advance and stay at the 5 level. The vision includes:

- A publicly accessible wireless network with a **minimum speed of 100 mbps**, allowing for more productive time on computers;
- Patrons may **review their accounts online** and **pay fines by credit cards**;
- Requirement that new hires have **experience using new technology**;
- Libraries continue to **upgrade their facility** to offer the community the next generation in technology, services, and training;
- Libraries actively promote technology literacy to drive positive impacts on economic performance, skills, and innovation in the community;

- Taking responsibility for **continuing grant and subsidy programs** such as the federal e-rate program; and
- The network technologies and management policy is designed to **prevent patrons from sending spam**.

HIGHER EDUCATION

Kentucky Wesleyan College (KWC), www.kwc.edu, is rated one of the top ten best educational values in the South by *U.S. News and World Report*. Kentucky Wesleyan College, in partnership with the United Methodist Church, fosters a liberal arts education that nourishes, stimulates and prepares future leaders intellectually, spiritually and physically to achieve success in life.

Kentucky Wesleyan College is committed to providing students state-of-the-art technology systems and services. Across the curriculum, students are given the tools, knowledge and practical applications required to attain a level of computer proficiency consistent with the demands of any eventual career choice. Additionally, KWC's Library Learning Center (LLC) provides information and library services to meet the educational needs of the KWC community and to prepare students for the process of life-long learning.

Brescia University, www.brescia.edu, was founded in 1950 by the Ursuline Sisters of Mount Saint Joseph. The university offers certificates, associate's, baccalaureate and master's degrees through semester and time-shortened programs of higher education in the Ursuline tradition. Brescia emphasizes the liberal arts and prepares its traditional and non-traditional students for successful careers and for service to others.

Brescia University provides all students Internet access with 10/100 Ethernet. Many of the labs are equipped with computers and Internet. Additionally, Brescia University's Library and Student Support Services are now able to offer wireless Internet to its patrons. Future plans include expanding wireless Internet access to a larger part of the campus, including some outside areas.

The Owensboro Community and Technical College (OCTCS), www.octc.kctcs.edu, has set a mission to educate, lead, and serve all citizens who choose to enhance their lives and community as lifelong learners. The college offers a comprehensive curriculum fulfilling the first two years of a baccalaureate program; a certificate, diploma, and/or associate degree; customized business and industry training; and educational opportunities through Adult Basic Education, community service, continuing education, and professional development.

OCTCS offers postsecondary and workforce training on four campuses and off-site locations in Daviess, Ohio, Hancock, and McLean counties. Owensboro Community and Technical College offers three different IT degree programs and several certificate programs. These degrees include: computer programming, information system support, and network administration. Certificates include A+ Certification, Information Technology Fundamentals, and Computer Programming. Weekend, evening, and on-line courses are available, giving flexibility to students who work and attend school.

The Assessment

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

- **Network Places** – In the category of network places, Daviess County's higher education sector scored a 3 on a 0 to 5 scale. Most campus residences have connections to the network in every room of at least 10 Mb. 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 2 on a 0 to 5 scale. Some faculty members are trained to use the Internet for instruction. Some classes use digital content and/or web-based content for instruction.
- **Leadership** – In terms of technology leadership within the higher education community, Daviess County scored a 4 on a 0 to 5 scale. 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.

The Vision

The Daviess County 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 the categories of networked places and applications and services over the next two years, as well as a rating of 5 out of 5 in leadership. The team's vision includes:

- Most 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;
- 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; and
- The colleges/universities **actively promote technology literacy** to drive positive impacts on economic performance, skills, and innovation in the classroom.

COMMUNITY-BASED ORGANIZATIONS

Daviess County is home to approximately 400 non-profit community-based organizations. Many community-based organizations meet together through the community connections organization. These community-based organizations include religious, educational, charitable, scientific or literary organizations. Some of these community-based organizations include:

- American Cancer Society, www.cancer.org
- American Heart Association, www.americanheart.org
- American Red Cross, www.bigriversredcross.org
- Audubon Area Community Services, Inc, www.audubon-area.com
- Boulware Mission, Inc, www.boulwaremission.org
- Shawnee Trails Council, Boy Scouts of America, www.shawneetrails.org
- Cliff Hagan Girls and Boys Club, www.positivekidsplace.org
- Community Solutions for Substance Abuse, www.substanceabusesolutions.org
- The Foundation for Health, www.foundationforhealth.org
- Gideon Productions, www.gideonproductions.com
- Owensboro Goodwill Industries, www.evgoodwill.org
- H.L. Neblett Community Center, hlineblettcenter.org
- Owensboro Junior Achievement, owensboro.ja.org
- Owensboro Lions Club, www.owensborolions.org
- Public Life Organization of Owensboro, www.plfo.org
- The Volunteer Center of Owensboro-Daviess County, www.volunteerowensboro.com
- Wendell Foster's Campus for Developmental Disorders, www.wendellfostercenter.org

The Assessment

The Daviess County 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, Daviess 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 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. Some organizations have informational websites.
- **Leadership** – In terms of technology leadership within the community-based organization community, Daviess County scored a 2 on a 0 to 5 scale. Organizations are minimally involved in 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 Daviess County 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 have e-mail**.
- Most organizations have an **informational website**.
- Many local chapters are able to **share data electronically** with the national parent organization.
- Some organizations **accept online donations**.
- Some organizations are involved in specific **economic development** initiatives, but most do not participate.

- Some organizations plan to use **telecommunications services and technologies** within the next year.
- Some organizations provide **technology training to their staff** at least once per year.

GOVERNMENT

Daviess County governmental entities include Daviess County, Owensboro (county seat), and Whitesville. Owensboro's official city website, www.owensboro.org, was ranked the 7th best official city website in the state. From the Owensboro City web page, a person can learn basic information regarding the city, its elected officials, and various departments; download agendas from every City Commission meetings since 1997; and view web-casts of current and archived meetings. A person could also obtain maps of the area, view the city budget and review various ordinances from the city.

Daviess County's website, www.daviessky.org, was the 3rd ranking official county website in the state. From the Fiscal Court's website, a person can view information about the Court, its members, and various ordinances. Minutes and agendas from the Daviess County Fiscal Court are available dating back to 1997. Information from various departments is also available including information about the Parks, County Clerk, PVA Office, Road Department and much more.

The cities of Owensboro and Whitesville, along with Daviess County, created a comprehensive plan. This plan identified two guiding themes regarding information technology. These themes are the desire for "universal access" to the various information technologies; and the linking of information technology and infrastructure to the four essential elements that were outlined in the comprehensive plan: transportation, community facilities, utilities and land use.

The Assessment

Although the government entities in Daviess County have a limited online presence, the Daviess County 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 3 on a 3 to 5 scale. Many employees have e-mail accounts. Some field workers are collecting data on laptop computers or palm-held devices. Webcams are starting to be deployed.
- **Applications and Services** – In the category of technology applications and services, the government sector scored a 3 on a 0 to 5 scale. Some e-government applications are available, such as simple building permit applications, e-mail listservs and some downloadable forms. E-mail from residents is manually routed to the appropriate departments. Some agencies routinely use the network to share data.
- **Leadership** – In terms of technology leadership within the government community, Daviess County and its associated governments scored a 3 on a 0 to 5 scale. 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.

The Vision

The Daviess County 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

Owensboro is known as a festival city. It hosts more than 20 annual community celebrations, attracting visitors from around the state and around the world. Festivals include bluegrass, barbecue, and the fine arts. The Tourist Commission in Owensboro, visitowensboro.com, promotes tourism within Owensboro and Daviess County. Some entertainment & attractions include:

- Executive Inn Rivermont Showroom Lounge, www.executiveinnrivermont.com
- Goldie's Best Little Opryhouse in Kentucky, www.goldiesopryhouse.com
- International Bluegrass Hall of Fame, www.bluegrass-museum.org
- Mount St. Joseph Conference & Retreat Center, www.msjcenter.org
- Owensboro Area Museum of Science & History, www.owensboromuseum.com
- Owensboro Museum of Fine Art, www.omfa.museum
- Owensboro Symphony Orchestra, www.owensborosymphony.org
- Theatre Workshop of Owensboro, www.theatreworkshop.org
- RiverPark Center, www.riverparkcenter.org

Daviess County Parks and Recreation, www.daviesscountyparks.com, maintains two parks, Yellow Creek and Panther Creek. The Mission of Daviess County Parks & Recreation is to provide an environment conducive to leisure activities, family recreational opportunities and unique experiences for nature enthusiasts in facilities that are clean, safe, and well maintained. From its webpage, a person can learn about its parks, rules, calendar, fees, and its newsletter.

Owensboro Department of Parks and Recreation, www.owensboroparks.org, maintains several parks, a golf course, ice skating arena, a softball complex, and the Owensboro Sports Center which is used by Kentucky Wesleyan as well as local high schools. From this webpage, you can learn about the various parks & facilities, upcoming events, sports, rental fees, portable staging and much more.

The Assessment

The Daviess County 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, Daviess County's tourism, recreation, and parks sector scored a 3 on a 0 to 5 scale. 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.
- **Applications and Services** – In the category of technology applications and services, the tourism, recreation, and parks sector scored a 3 on a 0 to 5 scale. Most facilities have an informational website. Some websites can accept credit card purchases. Some facilities participate in an electronic supply chain.
- **Leadership** – In terms of technology leadership within the tourism, recreation, and parks sector, Daviess County scored a 3 on a 0 to 5 scale. 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.

The Vision

The Daviess County 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 5 on a 0 to 5 scale. The team's vision includes:

- Some office workers have converted from desktop computers to **portable devices with wireless connections**;
- Most facilities use **Voice over Internet Protocol (VoIP)** to save money;
- Most computers have **video cameras**;
- Some facilities **send and receive video mail**;
- Some facilities outsource to local companies 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**; and
- New hires are required to have experience using new **technology in business applications**.

AGRICULTURE

Daviess County's number of farms decreased 9 percent from 1997 to 2002 (1,161 farms to 1,062 farms). There are 255,000 Daviess County acres in farm land. The market value of production in 2002 was \$62.7 million, down from \$73.2 million in 1997. Crop sales accounted for \$46 million of the total in 2002, while livestock accounted for \$16.7 million. Production market value per farm is down 6 percent from 1997 to 2002 (\$63,000 to \$59,000).

Daviess County is the number one leading producer in the state of vegetables, melons, potatoes, fruits, tree nuts, berries, cut Christmas trees, and short rotation woody crops. Daviess County is the Commonwealth's 3rd leading producer of grains, oilseeds, dry

beans, and dry peas. Daviess County is the Commonwealth's 7th leading producer of hogs and pigs. Total burley tobacco payments in 2002 topped \$36.5 million.

In Daviess County, the agricultural community is served by the Daviess County office of the University of Kentucky Cooperative Extension Service, ces.ca.uky.edu/daviess. From their website, a farmer can learn the latest information grain, tobacco, and livestock, latest agriculture policies, and hot topics such as soybean rust, soybean aphid, and West Nile virus.

The Assessment

The Daviess County 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, Daviess 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. Some growers, suppliers, and processors have an informational website, and some transmit or receive some orders electronically.
- **Leadership** – In terms of technology leadership within the agricultural community, Daviess 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

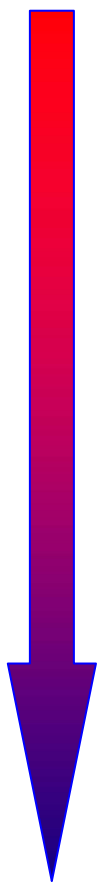
The Daviess County Leadership Team sees great potential for the use of technology in the agricultural sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move its rating in the networked places category to a 4 rating and to a rating of 3 on a 0 to 5 scale for the other categories of applications and services and leadership. 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 videoconferencing**;
- 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**.

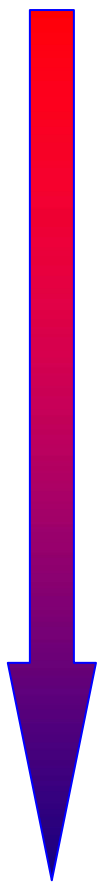
Business and Industry

Daviess County

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

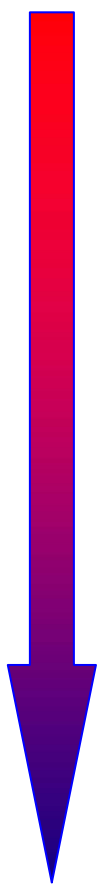
	Stage	Networked Places	Applications & Services	Leadership
<p style="text-align: center;">Least Connected</p>  <p style="text-align: center;">Most Connected</p>	0	Not using the Internet.	No computer use or Website. Customers use phone and postal mail.	No technology or telecom plan.
	1	Some employees have 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.

● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess 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.
	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.
Most Connected				

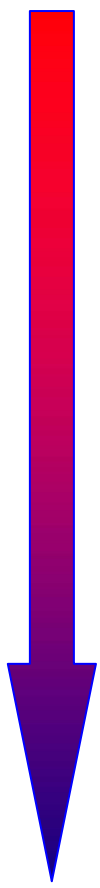
Healthcare	Daviess County
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● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">Least Connected</div>  <div style="margin-top: 20px;">Most Connected</div> </div>	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.

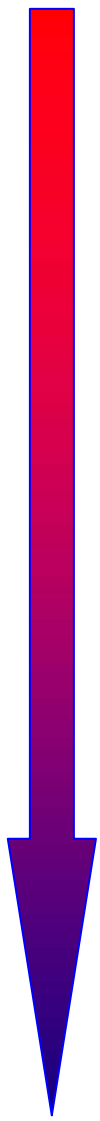
Libraries	Daviess County
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● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess County's Vision for this Sector is presented in blue. (Blue is used when Assessment and Vision are the same.)

	Stage	Networked Places	Applications & Services	Leadership
	Least Connected	Libraries do not provide Internet access.	Customers use postal mail or phone. No Website.	There is no technology or telecom plan.
	0	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.
	1	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.
	2	● 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.
	3	■ 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.
	4	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	5			

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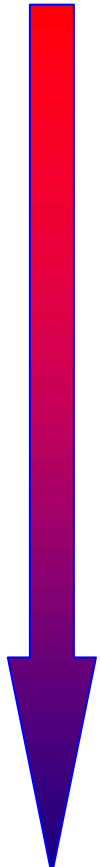
● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
 <p style="text-align: center; margin-top: 10px;">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	Daviess County
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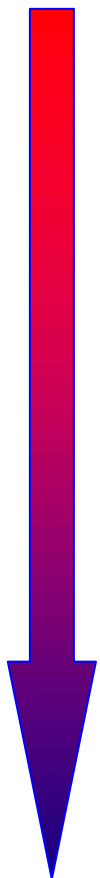
● Daviess County's Benchmark Assessment Results are presented in red.

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

	Stage	Networked Places	Applications & Services	Leadership
	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.
	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.
Least Connected				
Most Connected				

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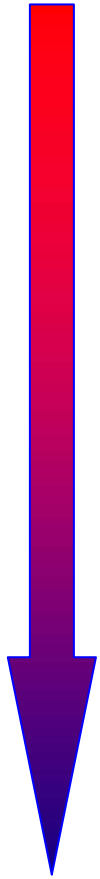
● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
	Least Connected			
	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 siting policies are in place. Elected officials understand the importance of the network for economic development and quality of life.
Most Connected	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.

Tourism, Recreation, and Parks

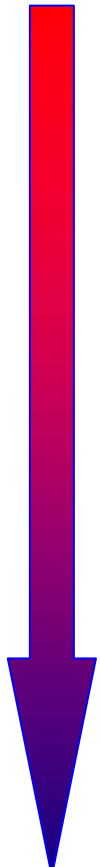
Daviess County

● Daviess County's Benchmark Assessment Results are presented in red.
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Least Connected  Most Connected	Stage	Networked Places	Applications & Services	Leadership
	0	Not using the Internet.	No computer use. No Website. Customers use phone and postal mail.	There is no technology or telecom plan.
	1	Some employees can access the Internet through a dial-up connection.	Some employees currently 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	Daviess County
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● Daviess County's Benchmark Assessment Results are presented in red.
 ■ Daviess County's Vision for this Sector is presented in blue.

	Stage	Networked Places	Applications & Services	Leadership
 <p style="text-align: center;">Least Connected</p>	0	Not using the Internet.	No computer use. No Website. 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.
<p style="text-align: center;">Most Connected</p>				



D. HOW DO WE GET THERE?

D. HOW DO WE GET THERE?

Priority Action Items

PROJECT CONCEPT: Education, Training, and Awareness for Daviess County

LONG TERM GOAL:

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

WHY IT'S IMPORTANT:

An educated community is essential in today's global economy. There are opportunities to leverage existing resources in Daviess County to expand and enhance workforce training programs, encourage more post-secondary education, and create additional awareness within the community in regards to broadband and technology. One of the key elements in our ability to expand technology within each sector of the community is education, training, and awareness. These 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, not process-oriented; and achievable within one year)

1. Inventory of all education/training/awareness resources in Daviess 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 Daviess County.

STEPS TO ACHIEVE OUTCOME:

1. Identify all organizations within Daviess 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 opportunity.
4. Create new ways market and promote opportunities to appropriate groups within the community.
5. Determine gaps in education/training/awareness and ways to fill those gaps.

EDUCATIONAL TEAM:

K-12 Education:

Daviess County Public Schools, www.daviess.k12.ky.us
Owensboro Public Schools, www.owensboro.k12.ky.us

Higher Education:

Brescia University, www.brescia.edu
Daymar College, <http://www.daymarcollege.com>
Kentucky Wesleyan College, www.kwc.edu

Murray State University, www.murraystate.edu
Owensboro Community and Technical College, <http://www.octc.kctcs.edu>
Western Kentucky University, www.wku.edu

Community Education:

Center for Community & Economic Development, www.cced.net

- Adult Education
- Business & Industry Training
- Community Education

Daviess County Cooperative Extension Service, ces.ca.uky.edu/daviess

Daviess County Public Library, www.dcplibrary.org

Greater Owensboro Chamber of Commerce, www.owensboro.com/chamber

Green River Area Development District, www.gradd.org

PROJECT CONCEPT: Conceptual Plan for e-Government Services in Daviess County

LONG TERM GOAL:

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

WHY IT'S IMPORTANT:

Technology and broadband will allow local governments to deliver more applications and improved services to constituents while saving money and reducing costs. E-government will achieve this objective, as well as move these services closer and make the services more accessible to the constituents. With growing public acceptance of online transactions and ecommerce 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 gaps areas.
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.

eGOVERNMENT TEAM:

Daviess County Fiscal Court, www.daviessky.org

City of Owensboro, www.owensboro.org

City of Whitesville

Green River Area Development District, www.gradd.com

PROJECT CONCEPT: Health Technology Focus Group**LONG TERM GOAL:**

Using broadband and technology, improve internal efficiencies in storing and retrieving information and improve customer service to Daviess County residents within the healthcare sector.

WHY IT'S IMPORTANT:

The healthcare industry is highly information-intensive. Doctors must keep up with the latest research; patient records must be easily accessible and accurate; and images, test results and prescriptions must be delivered promptly, without errors, to practitioners, pharmacies and insurance providers. Errors and delays can be costly and dangerous, so many providers are converting to electronic medical records which can be easily updated and shared on secure, internal networks. Network-based technologies such as videoconferencing and digital stethoscopes allow specialists to consult with rural patients, reducing travel time and hazards.

OVERALL GOALS OF FOCUS GROUP:

1. Serve as a forum for the exchange of ideas and consensus building regarding the advancement of health information infrastructure and healthcare applications.
2. Improve storage and transmission of patient information
3. Ensure data exchange between providers is secure and compliant with the Health Insurance Portability and Accountability Act (HIPAA), a federal law.
4. Develop secure e-mail capabilities to promote doctor-client electronic exchanges community-wide.
5. Improve secure remote access for caregivers to corporate networks.
6. Examine possible applications and/or pilot projects which could be implemented community-wide such as:
 - a. Creating online scheduling program for clients
 - b. Creating a central electronic record keeping system for all providers within Daviess County
 - c. Computerized Physician Order Entry (e-prescribing)
7. Assist providers to implement electronic filing to save money and time.
8. Develop educational opportunities to education healthcare givers to the opportunities brought on by technology.

IMPLEMENTATION CHAMPION:

Gordon Rohwder – Owensboro Medical Health System

eHEALTH TEAM:

Green River Area Development District, www.gradd.com

Green River District Health Department, www.healthdepartment.org

Owensboro Community and Technical College, www.owensboro.kctcs.edu

Owensboro-Medical Health System, www.omhs.org

Daviess County Medical Society Alliance

Potential Action Items

Business and Industry

- Develop a services directory for IT-related services in Daviess County, including business-to-business opportunities.
- Educate small businesses on what telecommunications services are available and the benefits of using technology in business.

Education K-12

- Provide all high school students a wireless laptop. This laptop will be available for their use 24/7 and will provide all the tools and access that students will need for academic and economic success.
- Pilot a 12-square-mile wireless hot-spot to give free Internet access to students and teachers and extend the pilot to make the whole county wireless.
- Develop a plan that would regularly replace technology and ensure teachers are trained to integrate technology into everyday classroom instruction.

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: (a) educate healthcare professionals through distance learning; (b) use as medium to inform public of current healthcare activities.
- Educate healthcare professionals on available technologies and benefits of technology in medicine.

Libraries

- Upgrade from barcode to RFID technology.
- Create self-checkout system for patron use.
- Upgrade online system, add the capacity to pay fines, apply for library cards via the library's website.
- Provide community access to affordable broadband and community wireless "hot" zones.

Higher Education

- Complete connectivity to KPEN and establish progress between educational institution resources.
- Increase methods of instruction delivery over the Internet in terms of video and/or audio, and 3D visualization technology.
- Encourage the use of Internet for online learning.

Government

- Implement an online bill pay and record search that can make some government services more convenient and user-friendly.
- Provide more rural WiFi hot spots so employees can access enterprise information while away from their desks.

Tourism, Recreation & Parks

- Encourage more local companies to sell their goods and services online to promote local businesses and increase sales.
- Use technology to market our county attractions to potential in-state and out-of-state tourists.
- Develop programs to set up public access points in malls, public buildings, and farm worker communities.

Agriculture

- Develop educational materials to help the agriculture community understand the importance of broadband and its positive potential for their farm-based business.
- Increase broadband awareness among the agriculture 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.