



JESSAMINE 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 Jessamine County. Detailed assessments and recommendations are provided in Tab 1 of this report. The full report provides an overview of ConnectKentucky’s findings and recommendations related to the assessment of Jessamine County’s technology needs, particularly related to computers, broadband and Information Technology.

Summary

Jessamine County’s e-Community Leadership Team is leading the way into a new economy for Jessamine 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 Jessamine County asked ConnectKentucky to facilitate an evaluation of its current uses of technology, identifying and filling broadband coverage gaps and developing a strategic plan to increase the use of technology in each sector of the local community, including:

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

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

ConnectKentucky recommends that Jessamine 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 Jessamine 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 Jessamine County businesses must adapt to the changing world in which they operate. Businesses have to learn the tools of the networked economy and innovate to survive.

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

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

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

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

K-12 Education

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

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

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

Healthcare

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

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

Libraries

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

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

Higher Education

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

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

Community-Based Organizations

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

Government

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

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

Tourism, Recreation, and Parks

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

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

Agriculture

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



C. WHERE ARE WE AND WHERE ARE WE GOING?

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BUSINESS AND INDUSTRY

Jessamine County businesses and industries employ a total of 14,080 workers.

The leading industries by employment are:

1. Services with 3,462;
2. Trade, Transportation, and Utilities with 3,209; and
3. Manufacturing with 2,678 employees.

The leading employers in Jessamine County are:

1. McLane Cumberland with 622;
2. Trim Masters Inc. with 436; and
3. McKechnie Vehicle Components with 268 employees.

Windstream is in the process of expanding its DSL service in Jessamine County, and WebCats is also a major wireless service provider of the county.

The Assessment

- **Networked Places** – In the category of networked places, Jessamine County's business and industry sector is currently at stage 4 on a 0 to 5 scale with some businesses using Voice over Internet Protocol (VoIP) to save money. Some office workers have converted from desktop computers to portable device. Furthermore, some office computers have webcams for videoconferencing.
- **Applications and Services** – In the area of technology applications and services, the business and industry sector is currently at stage 3 on a 0 to 5 scale with most businesses having informational websites. Some retail websites can accept credit card transactions. Additionally, some businesses participate in the electronic supply chain.
- **Leadership** – In terms of technology leadership within the business community, Jessamine County is currently at stage 4 on a 0 to 5 scale. In this category some businesses permit some employees to telework one or two days a week. Some businesses encourage employees to take work-related courses online. Moreover, some businesses are working with educational partners to raise workforce skill levels.

The Vision

While the Jessamine County eCommunity Leadership Team found that business and industry's current use of technology is somewhat limited, the team has an aggressive vision for how the county's business and industry sector will be using technology in two years. The team set goals that would move the business and industry sector to stage 5 in all three categories outlined above. The team's vision includes:

- Most businesses use Voice over **Internet Protocol (VoIP)** to save money
- Most computers have **video cameras**
- Some retailers and manufacturers use RFID (radio frequency identification) to **track inventory and equipment**
- Some businesses **send and receive** video mail
- Some businesses **outsource most of their computing services**
- Some businesses routinely use **multiparty videoconferencing** to coordinate operations

- Some businesses have restructured to focus on their core contribution and **outsource nonessential functions.**
- New hires are required to have **experience using new technology** in business applications

K-12 EDUCATION

Jessamine County has 11 schools in the system with 5 elementary schools, 2 middle schools, 2 traditional high schools, 1 non-traditional high school, and the Jessamine Early Learning Village. The non-traditional high school is called The Providence School. This evolved from the consolidation of four successful programs: Jessamine County Independent High School, Wide Open Spaces, Jessamine Central, and Jessamine County Night School.

There is also the Jessamine County Adult Education Center. As the center strives to improve technology, it is in the process of acquiring SMART boards for the facility.

Jessamine County Schools, <http://www.jessamine.k12.ky.us>, had a district enrollment of 6,850 students during the 2004-2005 school year. Located in the heart of central Kentucky, the Jessamine County School District is one of the fastest growing school systems in the state. They educate students in preschool through 12th grade and are growing by an average of 100 students per year. As visitors travel throughout the county, you have probably seen the many school construction projects that are currently underway as the district strives to provide high quality facilities for all their students. There will be new classroom additions to East Jessamine High School and new music facilities at West Jessamine Middle School. In addition, state-of-the-art fitness centers at both East Jessamine and West Jessamine High School are under construction. A new auditorium has been added to West Jessamine High, along with a new roof at Nicholasville Elementary. In addition to these projects, Brookside Elementary is currently experiencing major renovations to include the addition of a new movement center for physical education, a new media center and renovated classrooms throughout the building. The district is also anxiously awaiting the fall 2006 opening of the new Jessamine Career and Technology Center where students will be offered information technology, agribiotechnology, pre-engineering, health and human services and business and accounting classes. Despite the many challenges that come with growth, the mission of Jessamine County Schools remains to challenge every student, everyday, to think, learn and perform at high levels. They accomplish this mission through the commitment, support and active engagement of educators, support staff, families and the community. The district believes that all students can learn and achieve at high levels. The district also believes that family and community involvement are critical to the success and they strongly encourage all levels of involvement within the district.

	Attendance Rate	Retention Rate	Dropout Rate	Graduation Rate	College	Military	Work	Voc/Tech Training	Work & Part-Time School	Not Successful
District	92.5%	6.3%	3.6%	74.5%	57.6%	1.9%	28.1%	6.6%	5.6%	0.3%
State	94.3%	3.3%	2.2%	81.5%	54.7%	2.6%	27.5%	4.8%	6.4%	4%

Technology is integrated into teaching and learning in a variety of ways in Jessamine County. There is an assortment of software available at the school and district levels used for instructional, remediation and enrichment purposes. The available software offers

opportunities to both teacher and students to participate in interactive group learning, simulation situations, critical thinking and/or multimedia products and presentations. In addition, all classrooms have Internet accessibility, which allows students to participate in research, webquests, interactive and collaborative websites and virtual field trips. Commercially produced software, which correlates with the district's adopted reading curriculum, is available at all levels. The district is licensed with NCS Learn to provide enrichment activities through their SuccessMaker software as well as the PLATO Learning Inc. software that addresses many of Kentucky's Core Content areas. Finally, every teacher and student has access to Technology Resource Teachers to provide modeling and support for integrating these technologies into classroom instruction.

	Spending per Student	Student Teacher Ratio	Student/Computer Ratio	% of Classrooms with at Least One KETS Workstation With Internet Access
District	8011	16:1	5.1:1	100
State	8663	16:1	3.7:1	100

The Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's K-12 education sector is currently at stage 2 on a 0 to 5 scale with many middle and high schools having computer labs for students. Furthermore, some classrooms and teachers have access to computer projectors.
- **Applications and Services** – In the category of technology applications and services, the education sector is currently at stage 2 on a 0 to 5 scale with many schools have an informational website. However, the Internet is rarely used as a resource for instruction or homework assignments.
- **Leadership** – In terms of technology leadership within the education sector, Jessamine County is currently at stage 2 on a 0 to 5 scale. Few schools have plans for better using telecommunications services and technologies in their classrooms. Nevertheless, some experienced teachers are trained on how to incorporate material from the Internet into their curriculum.

The Vision

The Jessamine County eCommunity Leadership Team recognizes that the school systems have made technology a priority, and the team has outlined a clear vision for enhanced technology usage and application in the classroom. The goals set forth by the Jessamine County eCommunity Leadership Team include reaching stage 3 in all three categories outlined above. The vision includes:

- Schools provide at least one **computer for every four students** in grades K-12
- Most classrooms have **computers for student use**
- Some teachers use **computer-based presentation** tools and projectors for their lessons
- Some schools have **an interactive website** that offers access to homework assignments and communication with teachers and administrators
- Many teachers can **incorporate Internet material** into the curriculum
- **Teachers welcome e-mail** from parents and students

- The school board sees **opportunities to use the network to raise test scores** and operate the school more efficiently
- **Teacher training on new technologies** is a priority at most school districts
- Schools are using consultants to take advantage **of e-rate and other school discounts**

HEALTHCARE

The EMS E-911 in Jessamine County has mobile data terminals and a 911 map. They are in the process converting electronic documentation exclusively and making it legal to have scanned documents as official records.

Although there are no hospitals in Jessamine County, Central Baptist Hospital is within nine miles of the area. Located in Lexington, Kentucky, Central Baptist Hospital, <http://www.centralbap.com/>, offers some of the most advanced medical facilities, technologies and capabilities available in the region. Since opening in 1954, they have been committed to finding better ways to serve the people of Kentucky's Bluegrass area. What began 50 years ago as a 173-bed community hospital is now a 371-bed major medical research and education center.

The Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's healthcare sector is currently at stage 2. Some doctors regularly use computers to enter and maintain patient records. Digital instruments and imaging equipment are being acquired.
- **Applications and Services** – In the category of technology applications and services, the healthcare sector is currently at stage 2 with some providers having informational websites and storing patient records electronically. Moreover, some offices are electronically transmitting records to insurers for reimbursement. In addition, telemedicine is being evaluated in Jessamine County.
- **Leadership** – In terms of technology leadership within the healthcare community, Jessamine County is currently at stage 2 on a 0 to 5 scale. Some providers have begun the conversion to electronic medical records and other providers are investigating how to deploy wireless technologies for mobile workers.

The Vision

The Jessamine County eCommunity Leadership Team sees great potential for the use of technology in the healthcare sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move to stage 4 in all three categories on a 0 to 5 scale. The team's vision includes:

- **Internet-based video conferencing** is used to consult experts and for training programs
- Some patients are being monitored at home and at work via **portable devices with wireless transmitters**
- Some providers allow patients to **e-mail doctors**
- Most providers **store patient records electronically**
- Some lab results and images are received **electronically**

- Work is underway by some providers to begin **online exchanging of test results** and other medical records with appropriate parties
- Healthcare leaders are talking with the community about enhancing online services and using the network to **improve communitywide healthcare**

LIBRARIES

The Jessamine County Public Library website, <http://www.jesspublib.org/>, provides contact information, an online catalog and location information.

They do not currently offer videoconferencing services, but are interested in becoming a clearinghouse to encourage those interested to come to the library. While they offer classes in various courses, they do not offer any computer training classes.

The Assessment

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

- **Networked Places** – In the category of networked places, the library sector is currently at stage 4 on a 0 to 5 scale. The public library has added network ports and a wireless network and electrical outlets to carrels.
- **Applications and Services** – In the category of technology applications and services, the library sector is currently at stage 4 on a 0 to 5 scale. Patrons may review their accounts online and pay fines by credit card. Furthermore, patrons can access the library online as a portal for other online information services.
- **Leadership** – In terms of technology leadership within the library system, the sector is currently at stage 5 on a 0 to 5 scale with the library continuing to upgrade the facility to offer the community the next generation in technology, services and training. The library also actively promotes information technology literacy to drive positive impacts on economic performance, skills and innovation in the community.

The Vision

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

- Public libraries offer patrons a **54 mbps or faster wireless network**
- Public libraries offer **live video consultations**
- Public libraries allow patrons to borrow **e-books over the Internet**
- They help patrons conduct research and assist with **legal access to copyrighted databases** and publications, including music and movies
- Libraries continue to **upgrade their facilities** to offer the community the next generation in technology, services and training
- Libraries actively **promote information technology literacy** to drive positive impacts on economic performance, skills, and innovation in the community

HIGHER EDUCATION

The higher education institutions in Jessamine County are Asbury College, Asbury Theological Seminary, and the Bluegrass Community and Technical College (BCTC).

The Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's higher education sector is currently at stage 3 on a 0 to 5 scale with most on-campus facilities having connections to the network in every room at least 10 mbps. Some classrooms have projection equipment that allows the instructor to display videos from the Internet into the classroom.
- **Applications and Services** – In the category of technology applications and services, the higher education sector is currently at stage 3 on a 0 to 5 scale most faculty being trained to use the Internet for instruction and using digital content and/or web-based content for instruction. Online registration, catalogs and payment are available. Furthermore, students use chat rooms to discuss lessons and ask questions of instructors outside of class hours.
- **Leadership** – In terms of technology leadership within the higher education community, Jessamine County is currently at stage 3 on a 0 to 5 scale. Specialized courses have been developed to cater to area businesses seeking to improve the skills of workers. Some colleges and universities have or are developing online classes to provide greater convenience for students and to increase student enrollment, and faculty training on new technology is a priority.

The Vision

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

The team's vision includes:

- Some classrooms have been remodeled to include **network connections** and power outlets at every seat
- Many students bring laptop computers or other **network-enabled devices** to class
- Some classrooms have **video equipment** for recording lectures
- Most of the faculty are trained to use the **Internet for instruction**
- Most classes use **digital content** and/or **web-based content** for instruction
- Some undergraduate students take **distance learning classes** for specialized subjects and graduate-level research
- Higher education and local businesses are working together to raise the **skill level of the current workforce**
- Community and technical colleges are expanding their capacity by using **distance learning** technologies to reduce the need for classroom time
- Some colleges and universities are **developing online classes** to market to students in other parts of the country and the world

COMMUNITY-BASED ORGANIZATIONS

There are approximately 149 community-based organizations in Jessamine County. Some of the more prominent community-based organizations in Jessamine County include the Lions Club, Rotary, Kiwanis, Boy Scouts, Girl Scouts, Jessamine Community Action and Habitat for Humanity.

Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's community-based organization sector is currently at stage 3 on a 0 to 5 scale. Most organizations with at least five paid staff have at least one computer for every three employees and they also have e-mail access for their employees.
- **Applications and Services** – In the category of technology applications and services, the community-based organization sector is currently at stage 3 on a 0 to 5 scale with many organizations having an informational website and accepting online donations. In addition, many local chapters of community-based organizations are able to share data electronically with the national parent organization.
- **Leadership** – In terms of technology leadership within the community-based organization community, Jessamine County is currently at stage 3 on a 0 to 5 scale. Some organizations are involved in specific economic development initiatives, but most do not participate. Moreover, some organizations plan to use telecommunications services and technologies within the next year, and they also provide technology training to their staff at least once a year.

The Vision

The Jessamine County eCommunity Leadership Team sees great potential for the use of technology in the community-based organization sector but understands the sector is limited in its resources and ability to implement changes within a brief period. The team has set goals to move each of the three categories to stage 4 on a 0 to 5 scale. The team's vision includes:

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

GOVERNMENT

Government entities in Jessamine County are:

- Jessamine County
- Nicholasville (County Seat)
- Keene
- Wilmore

The official Jessamine County website, <http://www.jessamineco.com/>, ranks 5th out of 60 official county websites across the state. The official Nicholasville city website, <http://www.nicholasville.org>, ranks 17th out of the 116, and the official Wilmore city website, <http://www.wilmore.org/>, ranks 89th out of the 116.

The government agencies are interested in being linked together on the same network. They have identified some fiber lines between the facilities and are looking at ways to utilize them.

The Assessment

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

- **Networked Places** – In the category of networked places, the government sector is currently at stage 3 on a 0 to 5 scale with many employees having e-mail accounts. Furthermore, some field workers are collecting data on laptop computers or palmtops and webcams are starting to be deployed.
- **Applications and Services** – In the category of technology applications and services, the government sector is currently at stage 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, and some agencies routinely use the network to share data.
- **Leadership** – In terms of technology leadership within the government community, Jessamine County and its associated governments are currently at stage 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 information technology innovation. Moreover, employees are trained and knowledgeable about basic applications.

The Vision

The Jessamine County eCommunity Leadership Team has developed goals to provide a framework for robust e-government functions in the next two years, which will bring the sector to stage 4 in all three categories. The team's vision includes:

- Some field workers **use wireless networks to upload and download data** in the field
- Some employees use **desktop videoconferencing**
- **Sensors and webcams monitor locations**, such as rivers, that are important to public safety
- Customers **can make routine payments**, such as parking fines, online using credit cards or electronic fund transfer
- Parks and recreation classes have **online registration**
- Employees can enter building **inspections and violations** from the field

- Some agencies have a formal policy that allows some employees to **work from home** at least one day a week
- Rights-of-way and **tower siting policies** are in place
- **Elected officials understand the importance** of the network for economic development and quality of life

TOURISM, RECREATION AND PARKS

Jessamine County has two park systems; one in Nicholasville and the other in Wilmore. While Nicholasville has DSL service, Wilmore is on dial-up. Areas of interest in Jessamine County include the High Bridge, which was the first cantilever bridge in North America and the highest bridge over a navigable stream until the early 20th century.

Other recreational and tourism points of interest in Jessamine County include:

- Camp Nelson Civil War Heritage Park
- Camp Nelson National Cemetery
- Oliver Perry/White House
- Peddler's Mall
- Sugar Creek Resort
- Kentucky River Palisades
- Connemara Golf Course
- Golf Club of the Bluegrass
- High Point Golf Club
- Planters Row Golf Links
- Wilmore Railroad Museum
- Shadow Run Farm
- High Bridge Park
- Old Jail Museum
- Brooklyn Bridge on US 68
- Jim Beam Nature Preserve
- Wolf Run Wildlife Refuge
- National Softball Museum

The Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's tourism, recreation, and parks sector is currently at stage 2 on a 0 to 5 scale with some office employees having always-on connections to the Internet at their desks.
- **Applications and Services** – In the category of technology applications and services, the tourism, recreation, and parks sector is currently at stage 3 on a 0 to 5 scale. Most facilities have an informational website and some facilities transmit or receive reservations electronically. Some websites can accept credit card purchases.
- **Leadership** – In terms of technology leadership within the tourism, recreation, and parks sector, Jessamine County is currently at stage 2 on a 0 to 5 scale. The Internet is seen as essential to business operations, and employees are trained on basic applications.

The Vision

The Jessamine County eCommunity Leadership Team sees great potential for the use of technology in the tourism, recreation and parks sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move each of the three categories above to stage 4 on a 0 to 5 scale. The team's vision includes:

- Some facilities use **VoIP** to save money
- Some office workers have converted from desktop computers to **portable devices** with wireless connections
- Some office computers have **webcams for videoconferencing**
- Some facilities outsource most of their **computing services to local service providers**
- Some facilities **market out of state** or internationally
- Some employees **work remotely**
- Some facilities **permit some employees to telework** one or two days a week
- Some facilities encourage employees to take **work-related classes online**
- Facilities are working with educational partners to **raise workforce** skill levels

AGRICULTURE

In 2002, there were 770 farms in Jessamine County comprising 82,328 acres with an average of 107 per farm. The total market value of production was \$49,737,000 with an average of \$64,594 per farm. Crop sales accounted for \$7,897,000, and livestock sales accounted for \$41,840,000 of the total value in 2002. Government payments totaled \$183,000, averaging \$1,831 per farm. Jessamine County is ranked 17th in the value of agricultural products sold in the state. The leading agricultural products in sales in Jessamine County are:

1. Horses, ponies, mules, burros, and donkeys with \$35,388,000;
2. Cattle and calves with \$6,066,000; and
3. Tobacco with \$5,490,000.

Jessamine County tobacco farmers received \$37,843,611 in burley payments from the Tobacco Buyout Program in 2002, and there were no dark payments.

Less than 5 percent of farmers in Jessamine County have broadband. There are several agricultural websites available at the e-Extension service, but these are not yet being utilized significantly.

The Assessment

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

- **Networked Places** – In the category of networked places, Jessamine County's agricultural sector is currently at stage 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 is currently at stage 2 on a 0 to 5 scale with some growers, suppliers and processors having an informational website, and some growers, suppliers and processors transmitting or receiving some orders electronically.

- **Leadership** – In terms of technology leadership within the agricultural community, Jessamine County is currently at stage 1 on a 0 to 5 scale. In this category the Internet is seen as a possible enhancement to the way daily business is conducted.

The Vision

The Jessamine County eCommunity Leadership Team sees great potential for the use of technology in the agricultural sector but understands the industry is limited in its resources and ability to implement changes within a brief period. The team has set goals to move to stage 3 in the category of networked places, to move to stage 4 in the category of applications and services, and to move to stage 2 in the category of leadership on a 0 to 5 scale. The team's vision includes:

- Most growers, suppliers and processors have **always-on connections to the Internet**
- Some mobile workers have laptop computers and can **access the network remotely**
- **Affordable videoconferencing** facilities are available in the community
- Some suppliers and processors **outsource most of their computing services**
- Some growers, suppliers and processors **sell goods out of state** or internationally
- The Internet is seen as **essential to business operations**
- Employees are **trained on basic applications**

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

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

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

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


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

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

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

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

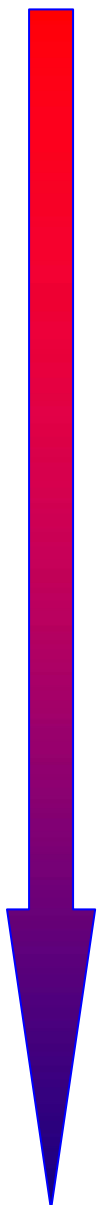
	Stage	Networked Places	Applications & Services	Leadership
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">Least Connected</div>  <div style="margin-top: 10px;">Most Connected</div> </div>	0	Not using the Internet.	Customers use phone and postal mail. No website.	No technology or telecom plan.
	1	Some physicians and/or staff have access to the Internet through a dial-up connection.	Physicians and/or staff use a dial-up connection in order to access health-related sites.	Healthcare providers are considering what advantage may come from using the Internet in the office.
	2	● Some doctors regularly use computers to enter and maintain patient records. Digital instruments and imaging equipment are being acquired.	● Some providers have informational websites. Some providers store patient records electronically. Telemedicine is being evaluated. Some offices are electronically transmitting records to insurers for reimbursement.	● Some providers have begun the conversion to electronic medical records. Some providers are investigating how to deploy wireless technologies for mobile workers.
	3	Some doctors and nurses are using laptop and palmtop devices connected to wireless networks to enter patient information and access databases.	Many providers have informational websites. Many providers store patient records electronically. Telemedicine is being evaluated. Some offices are electronically transmitting records to insurers for reimbursement.	Many providers have begun the conversion to electronic medical records. Many providers are investigating how to deploy wireless technologies for mobile workers.
	4	■ Internet-based video conferencing is used to consult experts and for training programs. Some patients are being monitored at home and at work via portable devices with wireless transmitters.	■ Some providers allow patients to e-mail doctors. Most providers store patient records electronically. Some lab results and images are received electronically.	■ Work is underway by some providers to begin online exchanging of test results and other medical records with appropriate parties. Healthcare leaders are talking with the community about enhancing online services and using the network to improve communitywide healthcare.
	5	Most equipment has been converted to digital. Desktop videoconferencing is routine at all hospitals and major clinics. Telephone systems have converted to Voice over Internet Protocol (VoIP) to save money. Remote monitoring of patients with chronic conditions is standard procedure.	All providers allow patients to schedule appointments, view records and get advice online. All patient records are stored electronically and routinely sent electronically to distant providers to aid diagnosis and treatment for emergency patients. Telemedicine routinely is used to access specialists. Wireless feeds in ambulances provide real-time patient assessment to ER staff.	Healthcare leaders see themselves as a key part of the community's overall economic strategy. Leaders are visible and active in strategy development and implementation. Executives of the region's hospitals, clinics, insurers, employers and other healthcare providers are meeting regularly to find ways to collaboratively reduce the cost of healthcare without compromising quality of service.

Libraries

Jessamine County

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


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

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

Higher Education	Jessamine County
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● Jessamine County's Benchmark Assessment Results are presented in red.

■ Jessamine 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.	Use phone and postal mail.	There is no technology or telecom plan.
	1	Some on-campus residents have broadband connections through non-university providers.	Few faculty members are trained to use the Internet for instruction. Few classes use digital content and/or web-based content for instruction.	Few departments have plans for better utilizing telecommunications services and technologies in their operations.
	2	Most on-campus residences have a 10 mbps connection to the network. Some classrooms are wired to the college/university network and are equipped with digital projection capabilities.	Some faculty members are trained to use the Internet for instruction. Some classes use digital content and/or web-based content for instruction.	Few departments have plans for better utilizing telecommunications services and technologies in their operations.
	3	● Most on-campus residences have connections to the network in every room at least 10 mbps. Some classrooms have projection equipment that allows the instructor to display videos from the Internet into the classroom.	● Many of the faculty are trained to use the Internet for instruction. Many classes use digital content and/or web-based content for instruction. Students use chat rooms to discuss lessons and ask questions of instructors outside of class hours. Online registration, catalogs and payment are available.	● Specialized courses have been developed to cater to area businesses seeking to improve the skills of workers. Some colleges and universities have or are developing online classes to provide greater convenience for students and to increase student enrollment. Faculty training on new technology is a priority.
	4	■ Some classrooms have been remodeled to include network connections and power outlets at every seat. Many students bring laptop computers or other network-enabled devices to class. Some classrooms have video equipment for recording lectures.	■ Most of the faculty are trained to use the Internet for instruction. Most classes use digital content and web-based content for instruction. Some undergraduate students take distance learning classes for specialized subjects and graduate-level research.	■ Higher education and local businesses are working together to raise the skill level of the current workforce. Community colleges are expanding their capacity by using distance learning technologies to reduce the need for classroom time. Some colleges and universities are developing online classes to market to students in other parts of the country and the world.
	5	Many classrooms have been remodeled to include network connections and power outlets at every seat. Most students bring laptop computers or other network-enabled devices to class. Many classrooms have video equipment for recording lectures.	Many undergraduate students take distance learning classes for specialized subjects and graduate-level research. All aspects of higher education are available through the network including instruction and administration.	Colleges and universities see themselves as a vital partner in the community's economic development strategy and have formed partnerships with local businesses to provide skilled technology workers and innovative solutions. Colleges and universities actively promote information technology literacy to drive positive impacts on economic performance, skills, and innovation in the classroom.

Community-Based Organizations

Jessamine County

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

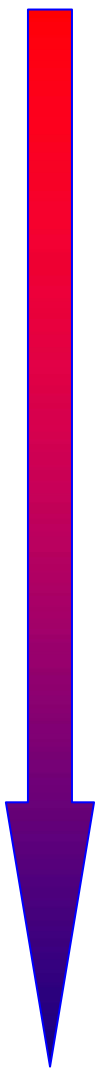
■ Jessamine County's Vision for this Sector is presented in blue.

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

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


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

Tourism, Recreation and Parks	Jessamine County
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● Jessamine County's Benchmark Assessment Results are presented in red.


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

	Stage	Networked Places	Applications & Services	Leadership
 <p style="text-align: center; font-weight: bold;">Least Connected</p> <p style="text-align: center; font-weight: bold;">Most Connected</p>	0	Not using the Internet.	No computer use. No website. Customers use phone and postal mail.	There is no technology or telecom plan.
	1	Some employees can access the Internet through a dial-up connection.	Some employees currently use the Internet for 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 Voice over Internet Protocol (VoIP) to save money. Some office workers have converted from desktop computers to portable devices with wireless connections. Some office computers have webcams for videoconferencing.	■ Some facilities outsource most of their computing services. Some facilities market themselves 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 work with educational partners to raise workforce skill levels.
	5	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 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	Jessamine County
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● Jessamine County's Benchmark Assessment Results are presented in red.

■ Jessamine 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.	No computer use. No website. All contacts via phone and postal mail.	There is no technology or telecom plan.
	1	Some growers, suppliers and processors have limited access through a dial-up connection.	Some growers, suppliers and processors use e-mail and Internet.	● The Internet is seen as a possible enhancement to the way daily business is conducted.
	2	● Some growers, suppliers and processors have always-on connections to the Internet at their desks.	● Some growers, suppliers and processors have an informational website. Some growers, suppliers, and processors transmit or receive some orders electronically.	■ The Internet is seen as essential to business operations. Employees are trained on basic applications.
	3	■ Most growers, suppliers and processors have always-on connections to the Internet. Some mobile workers have laptop computers and can access the network remotely. Affordable videoconferencing facilities are available in the community.	Most growers, suppliers and processors have informational websites. Some websites can accept credit card purchases. Some growers, suppliers and processors participate in an electronic supply chain.	Some suppliers and processors permit employees periodically to telework. Some growers, suppliers and processors encourage employees to take work-related classes online.
	4	Some growers, suppliers and processors use Voice over Internet Protocol (VoIP) to save money. Some workers have converted from desktop computers to portable devices with wireless connections. Some office computers have webcams for videoconferencing.	■ Some suppliers and processors outsource most of their computing services. Some growers, suppliers and processors sell goods out of state or internationally.	Training on new technology is a priority. Some processors and suppliers permit employees to telework one or two days a week.
	5	Most growers, suppliers and processors use Voice over Internet Protocol (VoIP) to save money. Most computers have video cameras. Some use Radio Frequency Identification (RFID) to track inventory and equipment.	Some growers, suppliers and processors send and receive video mail. Some outsource most of their computing services. Some routinely use multiparty videoconferencing to coordinate operations.	Some suppliers and producers have restructured to focus on their core contribution and outsource nonessential functions. New hires are required to have experience using new technology.
Most Connected				



D. HOW DO WE GET THERE?

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The Leadership Team identified the following project ideas during an extensive meeting process. The first three projects listed are the most important areas to focus on over the next 12 to 18 months. Project teams are already underway in each of these areas. Brief project overviews for each, followed by initial plan outlines, are described below.

Awareness and Education

Project Leaders: Rob Amburgey, Susie Lawrence

Team Members: Nancy Crewe, Wayne Foster, Jan Bates

This project will be a cooperative effort between schools, library, business, government and adult education to improve knowledge, awareness, skills and use of technology in the community.

- Provide hands-on exposure in an effort to showcase and demonstrate uses in various sectors.
- Provide basic training to overcome the fear factor by educating citizens regarding how to use technology and the benefits of going online.
- Provide i-safe training use KSP, PTO and PTA to resolve safety and security issues.
- Promote online banking, bill pay, buying, selling, as well as scheduling vacations and trips over the Internet.
- Identify classes and seminars to promote Internet and computer use throughout the community, including home, business and agriculture, using adult education and students as teachers.
- Identify creative ways to inform people of what is available through marketing and advertising. Working with the local paper, start a "Get Caught Online" activity, or a "GeoCaching Event" to make it fun. Using the library as a clearinghouse for information, create a new online cafe.

eCommerce - Online Information

Project Leaders: Terry Morgan, Ren Bates

Team Members: Jeff McDanald, Debbie Griswold, Scott Campbell

This project will engage the community, residents and organizations, in organized online activities to improve the online presence and collaboration for the entire county and area.

- Enable small businesses to have an online presence and ask students to help develop websites.
- Enable timely, accurate and current information for the community.
- Include all businesses and organizations in county, and links to current websites.
- Engage all organizations, including the Chamber of Commerce, Tourism, K12, farmer's market and festival committees.
- Integrate information and provide an easy user interface for the entire community
- Create a directory of various technology services and resources within the county.
- Engage parents with online access to schools via STI Home module.

eGovernment – Online Services

Project Leaders: Shelly Mulcahy, Kelly Woolums

Team Members: Shelby Horn, John Carpenter, Jeff McDanald, Richard Taylor

This project will work to improve communications between government and citizens, and implement a wireless Internet system to cover the county

- Create strategic plan for technology utilization in government utilizing online applications.
- Create a Kentucky.gov website for county incorporating P&Z , PVA, EMS for less duplication.
- Develop a city/county collaboration for improving online information, forms and services
 - fiscal court and city council meetings, payments, license renewals
 - Include application and registration forms for recreation & sports
- Promote content management to keep online information current without programming changes.
- Identify locations for public access, including the library, college and the Extension Office.
- Work with wireless providers to share tower locations for expansion throughout county.
- Investigate the Connected Courthouse model as T1 at Courthouse is needed.

Project Concept Outline – Awareness and Education

GOAL

This project will work toward the organization, promotion and delivery of technology education, training and awareness to the community. The Team will develop a strategy and plan to help the community become more aware of what can be done and the benefits available through using the Internet and computers in their daily lives and activities. Some suggestions mentioned include adult coaching, awareness of need and easy access.

IMPORTANCE

An educated community is essential in today's global economy. There are opportunities to leverage existing resources to expand and enhance workforce training programs, encourage more postsecondary education, and create additional awareness within the community in regard to broadband and technology utilization.

OUTCOMES

1. An integrated approach to the organization, promotion and delivery of technology education, training, and awareness for the community.
2. Inventory of all technology training resources available in the county.
3. Increased citizen usage of computers and the Internet.
4. Improved basic computer skills and knowledge levels for residents encouraging greater economic opportunities.

STEPS

1. Identify all organizations performing technology education and training services.
2. Create a list of training classes currently being offered.
3. Determine what additional classes need to be included.
4. Develop a collaborative and cooperative approach for delivery between all organizations.
5. Educate community through local banks about online banking.
6. Partner with local media to provide knowledge to community through local newspaper and radio.
7. Use Mobile Skill Unit for training and awareness in outlying areas.
8. Partner with local ADD to provide more education and training as needed.
9. Engage high school students to provide part-time help.
10. Provide computers and training for senior citizens.

PARTICIPANTS

Jessamine County Schools
Jessamine County Community Education
Jessamine County Public Library
Jessamine County Adult Education
UK Cooperative Extension Service

Project Concept Outline - eCommerce - Online Information

GOAL

Members of this project will work to offer an increased online presence for local organization via the development of a community portal and websites for local businesses, organizations and agencies.

IMPORTANCE

Businesses of all sizes and industries benefit from the implementation of high-speed Internet. For smaller businesses, technology creates an even playing field with companies much bigger than themselves. E-commerce allows the small or even home-based business 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.

OUTCOMES

1. New and enhanced websites for local businesses and organizations.
2. Improved communications and marketing via increased online presence.
3. Enable B2B interaction and social networking, plus skill matching database.
4. List of available technology resources within county and surrounding area.
5. Coop program for students to assist local businesses.
6. Increased information available online for every sector of the community, including government, business and tourism.

STEPS

1. Update website for Chamber of Commerce with list of businesses and sites.
2. Integrate community portal for easier navigation and consistency in linking sites together.
3. Create an online calendar for local events and training and education classes and activities.
4. Enhance websites for tourist facilities and attractions.
5. Offer classes for website design and maintenance for local businesses in conjunction with education project team.
6. Create a Kentucky.gov website for county government.
7. Provide basic information online about offices, services, meetings, forms and events on County website.

PARTICIPANTS

Jessamine County Fiscal Court
Jessamine Chamber of Commerce
Jessamine County Library
Jessamine Economic Development
Wilmore Tourism
Nicholasville NOW!
UK Healthcare

Project Concept Outline: eGovernment – Online Services

GOAL

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

IMPORTANCE

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

OUTCOMES

1. Have government entities working together to eliminate duplication of functions.
2. Determine the public need for electronic access to government.
3. Develop a strategy for significantly reducing visits by the public to government offices for routine transactions.
4. Identify applications specifically designed to help businesses interface with governments more efficiently.
5. Wireless Internet connectivity across the county.

STEPS

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

PARTICIPANTS

Jessamine County Fiscal Court
City of Nicholasville
Jessamine County Schools
Emergency Management Services
City Of Wilmore

POTENTIAL ACTION ITEMS

Business and Industry

- Educate small businesses about telecommunications services and the benefits of using technology in business.
- Create a high-tech center to showcase the latest technology.
- Create a technologically capable workforce through training and skills development.
- Develop a local directory of information technology services.
- Organize demonstrations of the new technologies and present local role-model users.
- Encourage more hotspots in locations such as bookstores, businesses and libraries.

Education

- Enable citizens to acquire their GED online.
- Provide more online training and testing.
- Acquire and implement SMART board.
- Provide training in information technology resources, especially for support staff and classified personnel.
- Make technology a regular part of professional development for teachers.
- Develop strategies for bridging the digital divide, such as after-school programs and community centers.
- Expand wide-area resources and increase bandwidth.
- Make it easier for low-income families to access computers and the Internet to facilitate communications with teachers and schools.

Healthcare

- Have all medical device technology (MDT) running so that all patient care reporting and billing is done electronically.
- Facilitate better coordination between the different entities in healthcare.
- Partner with higher education institutions to include training on Internet use in the medical field as part of the standard coursework for nurses and other healthcare professionals.
- Develop a providers' survey to gather baseline information on usage of technology in healthcare. Topics should include: e-mail access, Internet access, websites, electronic records, billing and telemedicine initiatives.
- Identify funding methods for enhancing educational infrastructure.
- Educate providers on available technologies and the benefits of technology in medicine.
- Seek grants to upgrade technology and train medical staff.

Library

- Increase the number of public-access computers.
- Provide ports or wireless access points where patrons with laptop computers can connect to high-speed lines.
- Develop expanded Internet training programs for the public, targeting specific needs and groups.
- Market the current capabilities and services of the library system.
- Identify and catalog technology training programs already in place.

Higher Education

- Substantially increase the number of web-enhanced and fully web-based courses.
- Improve countywide access to distance learning classes.
- Identify an ongoing source of funds for technology acquisition and support.
- Provide continuous training to all educators and staff on technology use and applications.
- Provide information technology resources to the community as well as educate the end-users in the use of technology.
- Inventory and market existing online training opportunities in the county.
- Increase awareness of national research information available across the country.

Community-Based Organizations

- Identify the community-based organizations in the county and list their websites.
- Develop a list of potential funding sources for technology acquisition.
- Develop collaborative partnerships with educational institutions and corporate partners to provide web services/design and equipment.
- Develop a networking event to share information, ideas, and innovations in technology deployment.
- Recruit university and high school students to develop websites.
- Encourage community-based organizations to use e-mail and the web to reduce the use of paper mail.
- Provide training on web page development, including the use of free web pages.

Government

- Improve infrastructure to facilitate connectivity for citizens.
- Increase web presence for local government.
- Implement Voice over Internet Protocol (VoIP) technologies in some facilities.
- Connect government facilities to wireless/fiber network.
- Develop policies to encourage real estate developers to wire new buildings and communities for high-speed services.
- Encourage collaboration between city and county government.
- Improve the ability to conduct business with government over the Internet, such as permitting, purchasing and payments.
- Increase the number of public access terminals in the county.

Tourism, Parks and Recreation

- Enable real-time reservations for programs and facilities.
- Make parks, trails etc. accessible in GIS.
- Market county attractions online.
- Enable interactive capabilities for website users.
- Provide video on demand at the parks.
- Establish a countywide web portal to share information, market the community, list attractions and hotels and provide a calendar of events.
- Encourage more local companies to sell their goods and services online to promote local businesses and increase sales.
- Develop affordable, high-speed services for rural parts of the county.
- Provide wireless access at parks.

Agriculture

- Provide more user friendly farm records.
- Expand the E-Extension program.
- Expand the use of PDA for records and communications.
- Enable real-time communications with producers for any emerging issues.
- Increase broadband awareness among the agricultural community.
- Develop educational materials to help the agricultural community to understand the importance of broadband.
- Promote online sales and auctions.
- Use GPS and Radio Frequency Identification on farms.