CITY OF ASHLAND, KY

Ashland
A Proud Past. A Bright Future.

E-NNOVATION
BROADBAND STRATEGIC PLAN

September 21, 2016

KCNA

Kentuckywired

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INTERNATIONAL
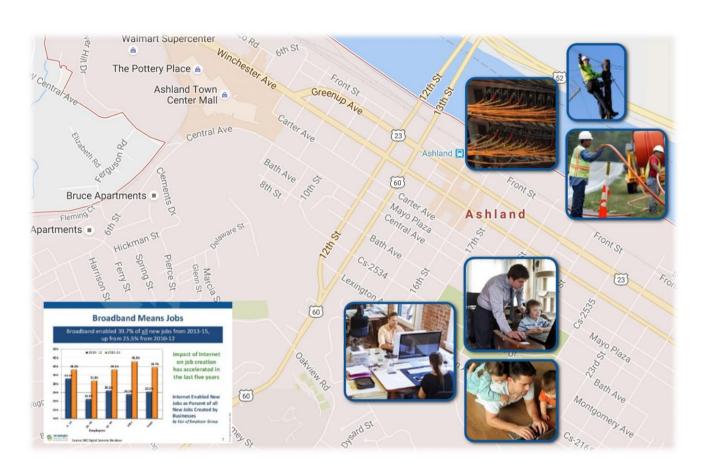
Ashland E-nnovation Broadband Strategic PLAN

In many places across America, broadband is transforming and expanding the ability for many communities to communicate more openly; participate in many business, civic and social endeavors; and create, educate, inform and compete more effectively. To enable the greater transformative power that broadband can bring to a region, the City of Ashland E-nnovation Team has developed this broadband strategic plan. The City and surrounding area seek to expand broadband access, adoption and utilization that is necessary for economic growth, to enhance government, healthcare and community services, and to promote overall sustainability of the region.

The City of Ashland and community stakeholders participated in a five month broadband strategic planning project funded under a grant from the Kentucky Communications Network Authority (KCNA). Ashland stakeholders formed four "community sector" groups (Economic Development, Community Development, Education and Healthcare), which met in a one day sector planning forum to speak about broadband issues that were specific to each of the four sectors. The four groups identified the issues of broadband access/adoption/utilization in the region. From those four sector meetings and the conference calls, email and individual phone calls that followed, findings, goals and strategies for broadband availability, adoption and utilization were developed that reflected the community inputs over the course of the project. A final plenary meeting was conducted with stakeholders from the four sectors on September 7th to review and finalize the input from the community. This draft plan summarizes the findings, goals and strategies of the four sector groups, and is respectfully submitted to the Ashland Board of Commissioners for final review. A final version of the plan will be completed in October 2016 after formal adoption by the Commissioners.

The Strategic Planning Process in Ashland Kentucky

On May 3, 2016, the City of Ashland E-nnovation Team brought together individuals from the four key sectors in the community to explore the following questions:

- What are the possibilities for broadband availability, adoption and utilization in the Ashland community?
- What are the broadband-dependent opportunities and innovations available now or on the horizon?
- What's at stake for the economic development, community development, educational and healthcare sectors   of the community if the level of broadband adoption and utilization inhibits those opportunities and innovations?
- What parts of our communities are most affected by lack of broadband access, awareness, adoption, and utilization capabilities?
- What are the barriers and constraints to obtaining adequate capacity, innovation and competition in networks, devices and applications? What are those constraints or barriers?
- What community assets and opportunities can be leveraged to overcome barriers?
- What sector gains could occur in a 3 year window through improved availability adoption and utilization of broadband resources? Longer?

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Findings

Discussion of the above questions by community members led to the following findings:

In The Economic Development Sector:

1. The current level of broadband service choices and the number of last-mile broadband service providers in the region supports the need for expanding Ashland's broadband capacity to address digital equity
2. Ashland should leverage the potential of high-capacity broadband in Ashland to accelerate business growth, enhance job creation and improve economic sustainability in the community.
3. Ashland's business community should be informed and assisted about the power of broadband to improve their business results
4. The current level of communication and cooperation between City Economic Development and broadband service providers needs to be improved – to optimize the efforts of officials in Economic Development

In The Community Development Sector:

1. Ashland should create a community culture where broadband and supporting technology is embraced and cultivated
2. Ashland should move faster to improve broadband services and to attract new service providers in the Ashland area – to provide more service choices to make broadband less expensive.
3. To build interest in broadband buildout regionally, Ashland should proactively identify and aggregate user demand to help drive infrastructure needs

In The Education Sector:

1. Enhance K-12 & higher education technologies and services by leveraging synergies between K-12 schools & higher education: Interactive/collaborative technology; Tech experiences by grade level; Enhanced tech applications for education
2. Outreach, engage and inform students, teachers and the community about the creative potential of broadband technology
3. While broadband service is not a public utility, the community should develop strategy and tactics that treat broadband as a "utility" in identifying needs of its citizens, business community, city plans, and the greater needs and uses at-large.
4. Because many students in school have little or no broadband connectivity at home, Ashland should investigate technologies and new programs to increase access and connectivity choices for students at home

In The Healthcare Sector:

1. Efforts should be made to thoroughly identify the technology needs in healthcare and the health-supplier community
2. Improving broadband service choices in the region will contribute to the improvement of access to quality healthcare via tele-health technologies in homes and healthcare facilities
3. A focus should be made to improve health care services for the public & healthcare professionals
4. Ashland should work to identify, prioritize and implement specific applications to enhance public healthcare IT services in the healthcare profession
5. Efforts should be made to develop Outreach/Education to the public and healthcare professionals about the value of broadband and related broadband-driven technologies

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Five Broadband Strategic Goals

The Ashland E-nnovation planning process produced five overarching strategic goals that address the findings from the economic development, community development, education and healthcare sectors. The goals and associated strategies are discussed below and arrayed on the summary "Conceptual Broadband Strategic Plan" in Attachment A.

Goal One:

<u>Leverage Kentucky Broadband Providers in the region to improve last-mile broadband service choices, capacity and connectivity</u>

The number of broadband providers in Ashland and the region presently offer limited choices and less than optimal service for the area. The current state of legacy business models among broadband providers is rigid and not open to change or innovation. The goal is to connect with broadband providers in a new way – communicating more about the interests and priorities of Ashland, its citizens, its businesses and institutions, and to work more closely with broadband providers as corporate citizens with an interest in the region and work toward more broadband choice and connectivity.

Strategies proposed for achieving Goal #1:

- Develop one or possibly two focused interest areas for broadband improvement in the community and rally community stakeholders, local government and current broadband providers to meet regularly each month as a committee to develop a working relationship to collaborate on the area of interest, identify technology or programmatic ideas, and ultimately work to execute those ideas for broadband improvement.

- While many areas of interest were noted during sector meetings and follow up conversations, to effectively channel community energy for shorter-term success, two areas for focus to begin this new initiative should be:
    - Improving broadband access and connectivity in downtown Ashland
    - Increasing after-school connectivity for public school students
- Ongoing meetings and communications between committee stakeholders should include:
    - Establishing committee contacts, relationships and points-of-contact
    - Elect Co-Chairmen for the committee
    - Discuss the focus of the group and identify connectivity goals
    - Work with broadband provider partners on committee to discuss the available technologies/ideas
    - Engage/interview potential community members to gather more input on specific needs for committee consideration
    - Develop technology and program solution options/investments/costs for committee consideration
    - Perform outreach to area businesses and institutions to build interest and involvement in the committee's efforts, including the active promotion of the project through ongoing engagement with interested providers, PR, business-tech events, community and sector events

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Goal Two:

Develop a closer and more collaborative working relationship with existing broadband service providers to identify new business opportunities, improve response to Ashland government, and to facilitate greater communication with the community

Limited ongoing interaction between Ashland and its current broadband provider community has resulted in a "business as usual" approach with service providers. By changing and improving the communication and substance of the relationship between Ashland government and current service providers, there can be substantive improvement in communication, the development of a working relationship where both sides can benefit, the exchange of more information to collaborate better on business opportunities, and an environment where broadband providers are treated as allies, not adversaries and a real chance for improving broadband in the region.

Strategies proposed for achieving Goal #2:

- Ashland government should immediately establish a broadband provider advisory committee, with membership comprising of all current services providers in the Ashland and immediate area surrounding Ashland. Membership in the group should also include people from the City Economic Development group, as well as specific participation whenever possible from the Commonwealth Economic Development Cabinet and at least one representative from the Mayor's office. Meetings should be monthly to develop new approaches to improving broadband access, adoption and utilization in the region.

- Create a "broadband playbook" for the purpose of fostering closer relationships with area broadband providers, facilitate greater cooperation, faster network decisions, and broader community buildout. The playbook should include specific/detailed information on:
  - City rights-of-way, public lands or utility/vertical infrastructure
  - Provider infrastructure and hardware connecting points
  - Regional information about broadband provider connecting points
  - Development of city government "zones" on a master digital map to identify broadband upgrade and expansion priorities
  - Development of city-wide incentives to encourage buildout within priority areas
  - Work with public works, city GIS, and permitting to identify and potentially streamline and improve processes and workflow to facilitate a faster communication provider community

- Collaborate with area broadband service providers to develop a master map of all provider infrastructure and connecting points, to facilitate faster buildout and improve turn-around time on new service or middle mile infrastructure buildout

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Goal Three:

Improve broadband service choices through active engagement and recruitment of new broadband providers from the region, statewide, and from neighboring states.

Because of limited competition between broadband service providers in the area, Ashland has limited service choices, limited price differentiation, and limited service capacity among too few competitors. Beyond the immediate Ashland area, there are approximately 21 broadband providers in the regional three state area, including providers in neighboring states. All broadband providers are potential targets for recruitment – bringing new service into Ashland, adding additional service capacity, or offering new technology. Developing a proactive business strategy to engage and recruit new providers to the Ashland area is a way to improve competition and broadband capacity.

< See Broadband Provider Matrix in Attachment B >

Strategies proposed for achieving Goal #3:

- Ongoing business development/outreach to service providers outside of Ashland area – Just as Ashland Economic Development staff routinely reaches out to businesses to promote the Ashland as a place for relocation or to grow their business, a similar effort should be organized and executed for active and ongoing recruitment of providers to expand their service in the Ashland area.

- Further develop and share in-depth asset and right-of-way information of the City, as a means of identifying entry points and to lower their cost-of-entry into the Ashland market. By identifying important build-attributes for providers for network expansion and adding and enhancing the current information in city GIS archives, Ashland can proactively promote the city as an attractive place to expand broadband networks in the area

- Research and thoroughly investigate and develop an incentive plan for new service connection to the future KY-Wired middle mile in Ashland, through public-private partnership opportunities (P3), tax offsets or tax deferments, or "connectivity grants" to last-mile businesses/institutions.

- Collaboration on network investment/service expansion – Leverage findings in specific sectors, including community development and City network goals for buildout priorities to identify areas of need and collaborating with new providers on signature projects for promoting their entry into the Ashland market, to showcase their expansion to the public, and promote uptake for their broadband service. By working with potential new service providers project-by-project, the community benefits with more service choices, providers benefit by receiving recognition on a higher-profile project and the promotion of their service in a new market, and the city benefits by expanding broadband service in priority areas.

- Leverage information from Broadband Playbook to facilitate/encourage new regional network investment, including the development of streamlined processes, permitting, greater access to key contact points in government, and more in-depth information to make improved/faster network decisions.

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Goal Four:

Increase the awareness and importance of broadband in Ashland and the region through ongoing community education, outreach and promotion

During all four-sector meetings, each group identified the importance of outreach and promotion of broadband and related technology applications the community – to show how technology can be a part of Ashland's future and contribute to improving business, the economy, community, and enhance the lives of citizens. To meet Goal Four, community stakeholders can actively lead and participate in the effort. The strategy for Goal Four provides a range of ideas for participants to utilize or modify to maximize community understanding and awareness.

Strategies proposed for achieving Goal #4:

- Business-Tech Utilization/Engagement – Develop business-specific events in collaboration with area broadband providers to promote technologies and applications that improve business productivity and utilization

- Promoting Digital Literacy & Awareness in Schools & Community – Work with IT companies, higher-education institutions and area service providers to periodically hold "tech open house" events in area schools

- Tele-Health Promotion to the Community – Jointly collaborate with the area healthcare / health business community to showcase health-technology events for healthcare workers and consumers. To be held in area hospital facilities or health business locations

- Periodic development and delivery of technology education modules from each sector & online -- "How-To" learning modules to inform all ages on value of broadband to improve utilization and the quality of life in the community.

- Sponsored Community "Tech Expo's" Downtown -- Collaborate with the business community, IT businesses, local radio, and broadband service providers downtown to showcase consumer devices, applications and technologies of all kind in central downtown locations. Work with local merchants to develop online offers, "coupon" promotions and product drawings during events to attract community interest/activity

- Promote Public Computer access points, WiFi Hot-Spots, and Internet Access – Develop an area access campaign in the downtown and 1-2 other key areas and collaborate with local business, community stakeholders and broadband providers to expand internet access and connectivity to more public places.

- Tie community needs/services/public safety to better broadband – Promote broadband technology in public safety, the "social" value of broadband technology for all ages, and Ashland's regional appeal as a "hub" for business, community, and health. Tie these promotions to other local events in downtown, open houses, digital literacy, business events.

- Actively investigate other broadband initiatives and regularly communicate to Ashland stakeholders via an online tech/event web page on by leveraging an Ashland government web site that can communicate all broadband events, promotions, and aggregate business and community interest in broadband technology.

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Goal Five:

Quantify regional demand of broadband as a means of attracting more service choices and promoting the Ashland community as a desirable regional market

During the four sector meetings, there were many comments from participants about the need for having more input on network and service choices from providers of broadband service. Additional input pertaining to broadband technology from each sector also added to this area and ultimately brought this goal to the forefront of the E-nnovation plan. By systematically identifying and aggregating the uses/users/usage of broadband among the region's citizens, businesses and its institutions, Ashland has the opportunity to build a valuable regional database that can help drive network investment and positively influence broadband service providers in the area. It can also be a key driver in the recruitment strategy of Goal Three. Executing a demand aggregation strategy is a key and central component in attaining Goal Five.

Strategies proposed for achieving Goal #5:

- Develop a campaign to comprehensively identify, register and compile the users/uses/usage of broadband in Ashland and the greater Ashland area among citizens, institutions and businesses.

- Create and administer on-line and hard-copy broadband surveys that support the campaign and compile broadband demand for citizens, community institutions and businesses.

- Develop a web presence on the Ashland government online site to self-administer the collection of the broadband survey information, and create a database to securely compile, store, and report the information from the community. Utilize the available IT resources already working in Ashland government.

- Form a citizen committee to oversee the data collection campaign, with the committee and supporting volunteers collecting information from offline sources, while communicating outward to promote the importance to the Ashland community, while also collecting offline data through canvassing. Campaign promotion should include a public awareness and outreach ("Ashland is Getting Wired! ")

- Thoroughly compile and output the data in database reporting format and regularly communicate to support other E-nnovation Goals, and to factually influence network investment decisions when engaging with broadband suppliers.

Ashland E-nnovation Broadband Strategic PLAN

Attachment A: E-nnovation Conceptual Broadband Strategic Plan

PROJECT CHARTER
To expand broadband access, adoption and utilization to improve economic growth, enhance government and community services and promote overall sustainability to continue meeting the city's goals of prosperity, health and equity.

STRATEGIC SECTORS			
Economic Development	**Community Development**	**Education**	**Healthcare**
Sector Findings			
ED1 Expand Ashland's broadband capacity to address digital equity ED2 Leverage the potential of high-capacity broadband in Ashland to accelerate business growth, enhance job creation and improve economic sustainability ED3 Inform/assist area business about the power of broadband to improve business results ED4 Improved communication, cooperation and response is needed between broadband service providers and officials in Economic Development	CD1 Create a community culture where broadband and supporting technology are embraced and cultivated CD2 Move faster to improve broadband services and new service providers in the Ashland area – provide more service choices to make broadband less expensive. CD3 Identify demand in Ashland, to help drive infrastructure needs	E1 Enhance K-12 & higher education technologies/services E2 Engage/inform students, teachers and the community about the creative potential of technology E3 Treat broadband as a "utility" in identifying needs, plans, uses E4 Increase access and connectivity choices for students at home	H1 Identify technology needs in healthcare and the health-supplier community H2 Improve access to quality healthcare via tele-health technologies in homes and healthcare facilities H3 Improve health care services for the public & healthcare professionals H4 Identify, prioritize and implement specific applications to enhance public healthcare IT services in the healthcare profession H5 Develop Outreach/Education to the public and healthcare professionals

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Sector Strategies

ED S1 Encourage public/private partnerships with existing tech providers to expand enhance and support Ashland's digital infrastructure. ED S2 Finalize and execute a robust strategic plan to facilitate new business and industry development, job growth and retention among existing employers, and to help-facilitate network growth and service expansion with the broadband provider community ED S3 Develop business outreach, tech utilization poll, and engagement program with local business (Investigate SBDC partnership) ED S4 Develop ongoing/closer relationship with service providers: • Meet monthly to communicate specific needs/expectations for info and turnaround time • Define new info / process to cooperatively work with Economic Development officials & others in gov	CD S1 Develop and execute outreach campaign to increase community awareness of online technology CD S2 Actively collaborate with other community stakeholders on a monthly basis to facilitate improved service and greater competition in the region CD S3 Develop process / methods to actively identify demand in Ashland to drive infrastructure need	E S1 Define and leverage synergies between K-12 schools & higher education: *Interactive / collaborative technology *Tech experiences by grade level *Enhanced tech applications for education E S2 Develop and integrate the promotion of digital literacy to increase community understanding and awareness E S3 Increase broadband access, connectivity, and use by: • Facilitating more WiFi access • Developing more open computer access areas • Downtown "internet cafes" • Expanded school app's/use E S4 Collaborate with educators, school administration, and the technology service community to develop a school-specific at-home tech access "program"	H S1 Aggregate heath community needs: • User #'s • Location • Type • Applications/uses/capacity • Contracts/caps/service plans H S2 Develop digital tele-health services for public & healthcare professionals: • On-line training, • Recruiting • EMR Capability • Others -TBD H S3 Identify and pursue grant and loan program opportunities for healthcare innovation and technology improvement H S4 Develop application examples and tech requirements for enhanced healthcare IT services: • EMR, • Telemedicine, • Outbreak Investigation, • Specific Training Modules, • KHIE, H S5 Develop Health Outreach/Education Modules. *Topics:* - Technology link to health uses/usage - Tech utilization for enhancing & expanding healthcare service.

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E-nnovation Broadband Strategic Goals

1) Leverage KY Broadband Providers in the region to improve last-mile broadband service choices, capacity and connectivity

2) Develop a working relationship with existing broadband service providers to identify new business opportunity, improve response to Ashland government, and to facilitate greater communication and collaboration with the community

3) Improve broadband service choices through active engagement and recruitment of new broadband providers in the region and statewide

4) Increase the awareness and importance of broadband in Ashland and the region through ongoing community education, outreach and promotion

5) Quantify regional demand of broadband as a means of attracting more service choices and promoting the Ashland community as a desirable regional market

Strategies
(Note: Some strategies support multiple goals)

1a) Investigate options through commercial broadband providers in the region and outside the area to improve broadband service and capacity in down town Ashland and elsewhere over time.

1b) Identify government, private-sector, and institutional stakeholders for service improvement, develop project planning objectives and engage with broadband service providers for soliciting interest in downtown broadband improvement

1c) Actively promote the project through ongoing engagement with interested providers, PR, business-tech events, community and sector events

1d) Leverage provider engagement/provider recruitment strategies to align City/Community goals with the project -- develop market strategy for broadband deployment and last-mile service utilization

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2) Create and execute a **Provider Engagement Plan** -- Utilize a free-market approach, while incorporating "broadband-as-utility" principles to reinforce the City's greater community interests:

- Ongoing meetings between current service providers for planning/developing P3 opportunities,
- Exchanging network infrastructure information,
- Collaboration on network investment/service expansion, and community broadband grants/funding sources
- Development of in-depth asset information for the City,
- Collaborate on City network/connectivity goals for the community,
- Develop and secure provider sponsorship on *Public Computer Access Points, *WiFi Hot-Spots, and *Internet Cafes in
- Downtown Ashland district and in several other key community locations
- Collectively develop "Broadband Playbook" to facilitate greater cooperation, faster network decisions, and broader community buildout

3) Develop and execute a **Provider Development Plan** -- Recruit 1-3 new service providers:

- Ongoing business development/outreach to service providers outside of Ashland area
- Develop and share in-depth asset information for the City,
- Develop incentive plan for new connection service to KY-Wired MM in Ashland/ P3 opportunities,
- Collaboration on network investment/service expansion,
- Collaborate on City network goals for the community,
- Leverage information from Broadband Playbook to facilitate/encourage new regional network investment

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4) Collaborate with all sector stakeholders to initiate a **Community Education, Outreach and Awareness Program** for broadband technology:

- Business-Tech Utilization/Engagement
- Promoting Digital Literacy & Awareness in Schools & Community
- Tele Health Promotion to the Community
- Periodic development and delivery of education modules from each sector & online "How-To" Learning modules that inform all ages
- Sponsored Community "Tech Expo's" Downtown
- Promote Public Computer access points, WiFi Hot-Spots, and Internet Access
- Tie community needs/services/public safety to better broadband – promoting the social imperative and Ashland's regional appeal
- From community/sector needs, identify tech applications and find solutions in the marketplace to meet community needs
- Actively investigate other broadband initiatives and regularly communicate to Ashland stakeholders

5) Create, execute and promote an online and offline Demand Aggregation Plan for Ashland and the region:

- Utilization polling for business, sectors, citizens and community institutions – online & offline
- Aggregation "portal" on government website
- Supporting outreach to business, institutions, citizens, governments
- Develop aggregation database and supporting analytics/metrics to leverage info to current & new service providers over time
- Develop supporting PR Campaign: "Ashland-Is-Getting-Wired!"

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Attachment B

Regional Broadband Service Providers						
	Kentucky				Ohio	West Virginia
	Boyd County	Carter County	Greenup County	Lawrence County	Lawrence County	Wayne County
Wireline						
Armstrong Utilities	X		X		X	X
Armstrong Telephone Company						X
AT&T				X	X	
Comcast						X
ConnectLink	X		X			
FiberNet					X	
Foothills Broadband	X	X		X		
Frontier					X	X
Integrated Networks	X		X			
Level 3 Communications					X	
Lumos Networks	X					X
Lycom Communications	X			X		
Mountain Telephone		X		X		
Suddenlink Communications	X	X		X		X
Time Warner Cable	X	X	X		X	
TOAST				X		
Windstream	X	X	X	X		
Wireless						
Appalachian Wireless	X	X	X	X		
AT&T Mobility	X	X	X	X	X	X
NTELOS	X	X	X	X		X
Sprint	X	X	X	X	X	X
Verizon Wireless	X	X	X	X	X	X