

Yolo Broadband Strategic Plan

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1. Executive Summary

A. A Broadband Plan is Critical for Yolo

Broadband is a term used to identify high-speed data transfer and access on the Internet. Broadband allows Internet users to access a variety of information using a range of technologies. Broadband is essential for such activities as online video, streaming media, voice over Internet phone service, interactive websites and secure business applications. Broadband differs from dial-up Internet access in speed, capacity and the ability to provide uninterrupted service when in use. It supports a wide variety of online applications in business, education, healthcare, public safety, government and entertainment which has made access to these broadband services important **as part of daily life**.

Broadband is a vital element of Yolo's economic sustainability that will keep our community competitive, locally and globally. Where our road systems provide the infrastructure necessary to connect our communities physically, broadband provides the digital infrastructure necessary to connect our communities virtually to the rest of the electronic world. As more of our everyday lives are lived online, broadband has become a fundamental need for our homes, businesses, and communities. Broadband reaches many facets of everyday life by improving the delivery of healthcare services, enriching the educational experiences of children and adults, aiding in the management and conservation of energy resources, assisting public safety personnel in the performance of their duties, and facilitating citizen interaction with our government agencies. Broadband is a driving force behind the competitiveness of our businesses, fostering innovation, productivity and access to the global economy. Affordable, available access to broadband **means the difference between thriving in the new economy and becoming obsolete**.

Objectives of the Yolo Broadband Strategic Plan

- 1. Identify short, mid and long-term broadband policies and initiatives that agencies countywide can develop to facilitate a unified broadband policy and direction*
- 2. Identify broadband capacity, equity, access and affordability gaps with a goal of achieving consistent broadband services for all businesses, residents and visitors*
- 3. Positively affect how broadband infrastructure and services are likely to develop countywide over the next 10 years*
- 4. Positively impact the adoption of broadband services across our communities*
- 5. Identify key strategic broadband investments that could improve our communities' access to and competitiveness in the digital economy*

The Yolo Broadband Strategic Plan provides a roadmap to understand our local broadband environment and forge strategies that will ensure our communities are prepared to thrive in the digital economy. In 2012, about 70% of Yolo households maintained some type of broadband connection, 6%

lower than California's statewide average of 76%. The fundamental goal of this Strategic Plan is to increase access, availability and adoption of broadband to support our community's long-term prosperity, including our residents, our businesses, our agriculture, our schools, our hospitals and our overall quality of life. This Plan provides an action oriented roadmap to meet broadband needs based on an understanding of each community and how our local government organizations can utilize effective public policy, strategic partnerships and key investments to positively influence broadband in Yolo. The Plan sets forth achievable short, mid and long-term strategies for Yolo County and each city to achieve in order to meet the broadband requirements of their communities.

Broadband's Impact on Yolo's Critical Community Functions	
Economic Development	<ul style="list-style-type: none"> • Businesses are more reliant on broadband to maintain competitiveness, productivity and efficiency • High-quality, affordable broadband is becoming increasingly critical to attract new business and retain existing business
Agriculture	<ul style="list-style-type: none"> • Seed technology and farming are utilizing more broadband on a widespread basis • Agricultural organizations access global data to support locally-grown products
Education & Training	<ul style="list-style-type: none"> • A quality education is increasingly reliant on access to the Internet and online applications • Modern educational technologies depend on high-quality broadband services, at school and at home
Digital Literacy & Equity	<ul style="list-style-type: none"> • Increasing broadband adoption will improve the competitiveness of the workforce • Access to broadband increases opportunities for non-English speaking residents
Healthcare	<ul style="list-style-type: none"> • The quality of patient care is directly tied to the sufficiency of broadband services • Healthcare organizations increasingly need to connect with patients virtually; broadband is critical for these organizations and at home
Public Safety	<ul style="list-style-type: none"> • First responders rely on high-quality, reliable access to reduce response times during emergencies • Mobile and fixed broadband are key to delivering the right information to the right personnel
Government Services	<ul style="list-style-type: none"> • Broadband improves capabilities, increases security and reduces cost for public organizations • Increasing access provides more opportunities to interact with citizens

B. Broadband Issues Facing Yolo's Communities

Yolo contains a mix of urban, rural, and remote communities across a diverse demographic profile and varied geographic terrain. Due to these features, broadband supply and demand varies widely across the County. Some communities are well served with more modern infrastructure and multiple providers while others do not currently have any broadband services available and are forced to use satellite or dial-up to receive their Internet services.

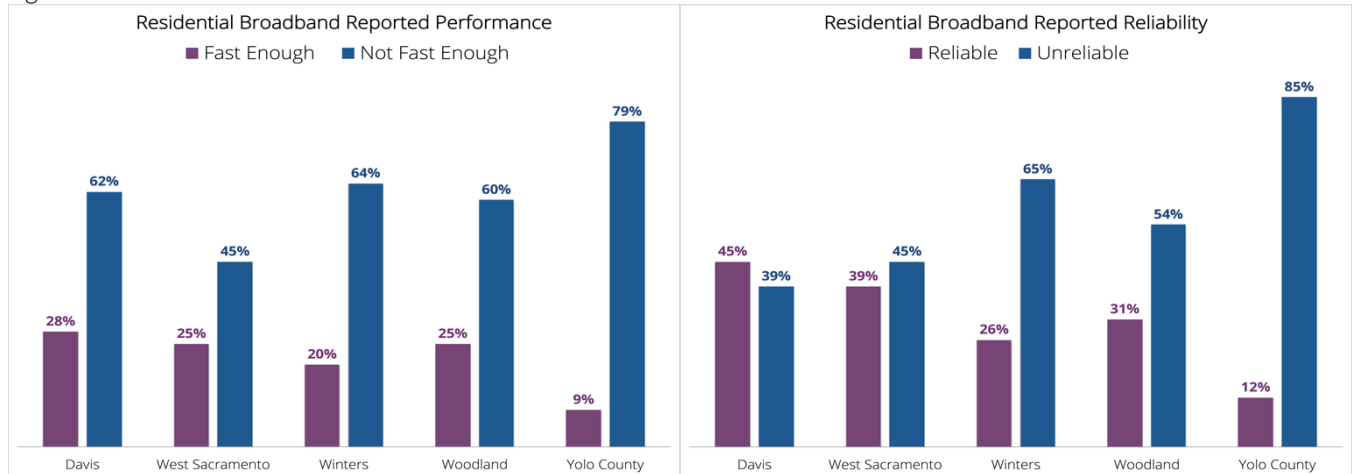
In rural and remote communities, a serious lack of broadband availability exists. Within the unincorporated county, residents are generally limited to low-speed connections that prevent these users from accessing the majority of online content. Using the Internet for anything but simple web browsing is a challenge in these communities, limiting their access to most modern Internet applications. Watching YouTube videos, making Skype calls or participating in online education is a significant challenge in these communities. The lack of broadband impedes home-based businesses from accessing their files and healthcare clinics from treating patients. Broadband adoption is also low in the rural communities, which may be attributable to affordability, the relevancy of broadband to specific users or a combination of both.

Yolo's agricultural populations are challenged as well, particularly in the farming and seed technology areas. Farms, which represent both residential and business subscribers, cannot gain access to suitable broadband services to meet their needs. With the technological revolution occurring in agriculture, these users need reliable broadband to connect their local farms with global data that helps them achieve greater productivity, and better management of their natural resources.

Yolo's cities generally have greater broadband availability and choice of providers. They don't face the critical infrastructure issues as the rural communities, and broadband providers maintain networks that provide coverage to the vast majority of residential and business addresses in each city. The challenge in each city is that in some cases, current services are not keeping up with subscriber demand. In many cases, residents and businesses need greater speeds and more reliability at prices they can afford.

Fifty four percent of Yolo's residents who participated in a recent countywide survey reported having at least 5 devices at home connecting to the Internet such as including laptops, phones and tablets. Each of these consumes a portion of the home Internet connection; a particularly large portion when they are streaming video such as Netflix, YouTube, and Hulu. However, home Internet services are used for more than entertainment; they support home-based businesses, videoconferencing and home security services. And, as more devices access more applications, residential demand for bandwidth will continue to grow. Figure 1.1 shows satisfaction levels with current residential broadband services as reported by approximately 900 residents across the 4 cities and unincorporated Yolo County. Many of Yolo's communities reported performance and reliability issues with their current services.

Figure 1.1: Broadband Satisfaction Levels in Yolo Communities



Small and medium businesses across the cities have significant need for expanded broadband services. In most cases, they utilize the same cable and DSL services that are provided to residents; however, providers generally offer greater support and performance in these “business class” packages. Across each city, these businesses report the need for higher speed and greater reliability. Larger businesses have procured fiber-optic services from local providers, however; the costs of these services are prohibitively expensive for the majority of Yolo’s business community. In most cases, a significant pricing gap exists between the services they currently have and the services they need.

Community anchors across Yolo are mixed in terms of their broadband issues. Yolo’s schools must meet the State’s Common Core¹ criteria for online testing and curricula, which mean that they will need additional broadband capabilities to meet these requirements. Yolo Office of Education and the individual School Districts are concerned that students in low-income neighborhoods will not have adequate Internet services at home to support the transition to more online education. Healthcare organizations also experience broadband availability issues. CommuniCare facilities need expanded access to telehealth services to serve patient needs. Winters Healthcare Foundation cannot treat patients when their Internet is down, which has occurred frequently. Improved access to these services is critical for these organizations as more healthcare services are carried out online.

C. Strategies to Resolve Broadband Issues

The County and the cities have the opportunity to positively impact the availability, affordability and adoption of broadband in their region. Doing so involves a multi-faceted approach that will be carried out over different timescales; however, positively changing Yolo’s broadband environment will take time. The process begins now and there are immediate steps laid out for the County and each city to take to shape how broadband will progress in Yolo. A summary of the Action Items for each community follows.

¹ Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school. www.cde.ca.gov/re/cc/

City of Davis Action Items:

Recommendation 1: Pursue viable options to mitigate the impending expiration of the Comcast I-Net agreement and additional costs the City may incur:

- a) Identify potential partnerships with other broadband providers that may provide a means to replace the current I-Net agreement and support stakeholder needs for broadband;
- b) Consider conducting a feasibility study to develop the business case for a community broadband network. This feasibility study should include:
 - (1) What organizations and service providers are anticipated to use the network;
 - (2) An engineering design for the network;
 - (3) An estimated timeline for construction of the network
 - (4) Cost estimates, financial plan and financing options for the network;
 - (5) A plan for managing the network's operations and maintenance; and
 - (6) Community benefits to be gained from a network; and,
- c) Should the City seek renegotiation of the expiring Comcast agreement, ensure that negotiations are not delayed such that it jeopardizes the City's strategic options.

Timing: The City should agree on the terms of the renegotiation with Comcast or plan to utilize another network (which may include building its own community broadband network) no later than September of 2016.

Common Action Items

Recommendation 2: Adopt General Plan policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate. This includes:

- a) Tailoring the sample policies and standards (included in the appendix) to the City's specific needs and adopt them into local policy, codes and standards (including policies, dig-once, joint trenching, engineering standards, etc.);
- b) Incorporating broadband in the City's Development Impact Fee program and the City's Capital Improvement Plan (CIP) as appropriate and make a commitment to fund broadband infrastructure;
- c) Identifying opportunities to install broadband infrastructure in conjunction with public and private construction projects as appropriate;

- d) Developing a process so that Planning and Public Works coordinate with IT to identify projects that could install this infrastructure at reduced costs;
- e) As the City builds out its network, maintaining broadband infrastructure in the City's GIS system, requiring GIS-based as-builts and implement any other means for accurate documentation;
- f) Evaluating ways to streamline the broadband permitting processes within public rights of way to ensure broadband providers do not face unnecessary obstacles to building infrastructure; and
- g) Evaluating fees levied to broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

Timing: The City should adopt General Plan policies and implementing codes and standards over the next 12 months. Implementation should be ongoing.

Recommendation 3: Coordinate with other agencies with facilities in the City (i.e. Davis Joint Unified School District, UC Davis, Unitrans, Yolo County, Yolo County Housing, Yolo County Office of Education, etc.) on a regular basis to leverage opportunities to reduce broadband construction costs by:

- a) Reviving the regular Utility Coordination Meeting attended by the cities/County (and potentially add the public agencies listed above) to facilitate the long-term planning of broadband infrastructure; and,
- b) Coordinating on a regular basis to identify opportunities for joint construction, use and broadband infrastructure sharing between local agencies to lower costs and maximize public benefit.

Timing: The City should develop these collaborative programs with other public agencies over the next 3 months.

City of West Sacramento Action Items:

Recommendation 1: The City should continue to develop its broadband infrastructure to reduce internal costs, expand capabilities and protect against future cost increases by:

- a) Developing a GIS-based map that identifies the City locations that should be interconnected including the City's current infrastructure;
- b) Installing conduit with all public projects;
- c) Expanding the City's capability in negotiating agreements for private providers to utilize the City's infrastructure for public benefit; and,

- d) Coordinating with other local public agencies (i.e. WUSD, Los Rios Community College District, Yolo County Transportation District, Yolo County, Yolo County Housing, Yolo County Office of Education, etc.) as potential users of the City's infrastructure.

Timing: The City should begin the process of identifying areas for direct and joint investment in broadband infrastructure with other public agencies over the next 12 months.

Recommendation 2: The City needs to work with local broadband providers to ensure business corridors are equipped with the necessary broadband services to support the City's economic development needs as follows:

- a) Actively market and make any City-owned infrastructure available for use by broadband providers;
- b) Equip business corridors with City-owned broadband infrastructure in the areas identified in the Demand Areas for Expanded Broadband Services, as detailed in the West Sacramento Community Profile;
 - (1) Developing relationships with broadband providers who will utilize City-owned infrastructure; and,
 - (2) Making this infrastructure available to broadband providers on a non-discriminatory basis.

Timing: The City should work internally to institute the processes to incorporate broadband infrastructure into its planning over the next 12 months.

Common Action Items

Recommendation 3: Adopt General Plan policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate. This includes:

- a) Tailoring the sample policies and standards (included in the appendix) to the City's specific needs and adopt them into local policy, codes and standards (including policies, dig-once, joint trenching, engineering standards, etc.);
- b) Incorporating broadband in the City's Development Impact Fee program and the City's Capital Improvement Plan (CIP) as appropriate and make a commitment to fund broadband infrastructure;
- c) Identifying opportunities to install broadband infrastructure in conjunction with public and private construction projects as appropriate;

- d) Developing a process so that Planning and Public Works coordinate with IT to identify projects that could install this infrastructure at reduced costs;
- e) As the City builds out its network, maintaining broadband infrastructure in the City's GIS system, requiring GIS-based as-builts and implement any other means for accurate documentation;
- f) Evaluating ways to streamline the broadband permitting processes within public rights of way to ensure broadband providers do not face unnecessary obstacles to building infrastructure; and
- g) Evaluating fees levied to broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

Timing: The City should adopt General Plan policies and implementing codes and standards over the next 12 months. Implementation should be ongoing.

Recommendation 4: Coordinate with other agencies with facilities in the City (i.e. WUSD, Los Rios Community College District, YCTD, Yolo County, Yolo County Housing, Yolo County Office of Education, etc.) on a regular basis to leverage opportunities to reduce broadband construction costs by:

- a) Reviving the regular Utility Coordination Meeting attended by the cities/County (and potentially add the public agencies listed above) to facilitate the long-term planning of broadband infrastructure; and,
- b) Coordinating on a regular basis to identify opportunities for joint construction, use and broadband infrastructure sharing between local agencies to lower costs and maximize public benefit.

Timing: The City should develop these collaborative programs with other public agencies over the next 3 months.

City of Winters Action Items:

Recommendation 1: Conduct a study to determine the feasibility of constructing a citywide broadband network that can serve the needs of Winters' residents, businesses and community anchors. The feasibility study should:

- a) Determine the physical network required to serve the City's needs;
- b) Identify the best business model for Winters to utilize to meet the broadband needs of the community, retail, wholesale or infrastructure-only;
- c) Incorporate the broadband needs of other public agencies that have offices in Winters into the study;

- d) Determine the role local service providers will play in the development of this network, including potential public-private partnerships;
- e) Assess the financial feasibility and funding requirements for the network, including potential federal and State grant opportunities; and,
- f) Develop an action plan and timeline for buildout of the network.

Timing: The City should consider conducting the feasibility study within the next 12 months and implement any action plan per its timelines.

Recommendation 2: To improve local broadband conditions, the City needs to help key community anchors get the broadband services they need, by:

- a) Focusing on community anchors described in the Winters Community Profile that are currently not receiving adequate broadband service;
- b) Developing a broadband construction fund (via Development Impact Fees or other mechanism) that will allow the City to jointly fund construction of broadband infrastructure to these anchors, in cooperation with local service providers;
 - i) Finance the upfront costs for “last mile” connection fees to get community anchors the services they need; and,
 - ii) Work with local providers to jointly build this infrastructure and ensure that the City maintains rights to install additional conduit and fiber-optic cable in these projects.

Timing: Ongoing until broadband has been extended throughout the community.

Common Action Items

Recommendation 3: Adopt General Plan policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate. This includes:

- a) Tailoring the sample policies and standards (included in the appendix) to the City's specific needs and adopt them into local policy, codes and standards (including policies, dig-once, joint trenching, engineering standards, etc.);
- b) Incorporating broadband in the City's Development Impact Fee program and the City's Capital Improvement Plan (CIP) as appropriate and make a commitment to fund broadband infrastructure;

- c) Identifying opportunities to install broadband infrastructure in conjunction with public and private construction projects as appropriate;
- d) Developing a process so that Planning and Public Works coordinate with IT to identify projects that could install this infrastructure at reduced costs;
- e) As the City builds out its network, maintaining broadband infrastructure in the City's GIS system, requiring GIS-based as-builts and implement any other means for accurate documentation;
- f) Evaluating ways to streamline the broadband permitting processes within public rights of way to ensure broadband providers do not face unnecessary obstacles to building infrastructure; and
- g) Evaluating fees levied to broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

Timing: The City should adopt General Plan policies and implementing codes and standards over the next 12 months. Implementation should be ongoing.

Recommendation 4: Coordinate with other agencies with facilities in the City (i.e. WJUSD, Yolo County, Yolo County Housing, Yolo County Office of Education, PG&E, etc.) on a regular basis to leverage opportunities to reduce broadband construction costs by:

- a) Reviving the regular Utility Coordination Meeting attended by the cities/County (and potentially add the public agencies listed above) to facilitate the long-term planning of broadband infrastructure; and,
- b) Coordinating on a regular basis to identify opportunities for joint construction, use and broadband infrastructure sharing between local agencies to lower costs and maximize public benefit.

Timing: The City should develop these collaborative programs with other public agencies over the next 3 months.

City of Woodland Action Items:

Recommendation 1: The City should continue to develop its broadband infrastructure to reduce internal costs, expand capabilities and protect against future cost increases by:

- e) Developing a GIS-based map that identifies the City locations that should be interconnected including the City's current infrastructure;
- f) Installing conduit with all public projects;

- g) Expanding the City's capability in negotiating agreements for private providers to utilize the City's infrastructure for public benefit; and,
- h) Coordinating with other local public agencies (i.e. WJUSD, Woodland Community College, YCTD, Yolo County, Yolo County Housing, Yolo County Office of Education, etc.) as potential users of the City's infrastructure.

Timing: The City should begin the process of identifying areas for direct and joint investment in broadband infrastructure with other public agencies over the next 12 months.

Recommendation 2: The City needs to work with local broadband providers to ensure business corridors are equipped with the necessary broadband services to support the City's economic development needs as follows:

- a) Actively market and make any City-owned infrastructure available for use by broadband providers;
- b) Coordinate with Yolo County to identify infrastructure to serve agricultural businesses surrounding Woodland, potentially using wireless to reach these organizations;
- c) Equip business corridors with City-owned broadband infrastructure in the areas identified in the Demand Areas for Expanded Broadband Services, as detailed in the Woodland Community Profile;
 - (1) Developing relationships with broadband providers who will utilize City-owned infrastructure; and,
 - (2) Making this infrastructure available to broadband providers on a non-discriminatory basis.

Timing: The City should work internally to institute the processes to incorporate broadband infrastructure into its planning over the next 12 months.

Common Action Items

Recommendation 3: Adopt General Plan policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate. This includes:

- a) Tailoring the sample policies and standards (included in the appendix) to the City's specific needs and adopt them into local policy, codes and standards (including policies, dig-once, joint trenching, engineering standards, etc.);

- b) Incorporating broadband in the City's Development Impact Fee program and the City's Capital Improvement Plan (CIP) as appropriate and make a commitment to fund broadband infrastructure;
- c) Identifying opportunities to install broadband infrastructure in conjunction with public and private construction projects as appropriate;
- d) Developing a process so that Planning and Public Works coordinate with IT to identify projects that could install this infrastructure at reduced costs;
- e) As the City builds out its network, maintaining broadband infrastructure in the City's GIS system, requiring GIS-based as-builts and implement any other means for accurate documentation;
- f) Evaluating ways to streamline the broadband permitting processes within public rights of way to ensure broadband providers do not face unnecessary obstacles to building infrastructure; and,
- g) Evaluating fees levied to broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

Timing: The City should adopt General Plan policies and implementing codes and standards over the next 12 months. Implementation should be ongoing.

Recommendation 4: Coordinate with other agencies with facilities in the City (i.e. WJUSD, Woodland Community College, YCTD, Yolo County, Yolo County Housing, Yolo County Office of Education, etc.) on a regular basis to leverage opportunities to reduce broadband construction costs by:

- a) Reviving the regular Utility Coordination Meeting attended by the cities/County (and potentially add the public agencies listed above) to facilitate the long-term planning of broadband infrastructure; and,
- b) Coordinating on a regular basis to identify opportunities for joint construction, use and broadband infrastructure sharing between local agencies to lower costs and maximize public benefit.

Timing: The City should develop these collaborative programs with other public agencies over the next 3 months.

Yolo County Action Items:

Recommendation 1: The County should continue to develop its broadband infrastructure to reduce internal costs, expand capabilities and protect against future cost increases by:

- a) Developing a GIS-based map that identifies the County locations that should be interconnected including the County's current infrastructure;
- b) Installing conduit with all public projects;
- c) Expanding the County's capability in negotiating agreements for private providers to utilize the County's infrastructure for public benefit; and,
- d) Coordinating with other local public agencies (i.e. cities, school districts, UC Davis, YCTD, Yolo County Housing, YCFWCD, Yolo County Office of Education, etc.) as potential users of the County's infrastructure.

Timing: The County should begin the process of identifying areas for direct and joint investment in broadband infrastructure with other public agencies over the next 12 months.

Recommendation 2: The County needs to develop additional broadband infrastructure in cooperation with cities, other local agencies and local broadband providers by:

- a) Working with each County and other public agencies to build a map of locations where these organizations jointly need broadband connectivity by:
 - i) Developing a GIS-based map illustrating these locations by utilizing the existing Yolo GIS Cooperative;
 - ii) Incorporating County and County CIP projects onto this map to identify the companion projects and joint build opportunities;
 - iii) Sharing maps and data between organizations; and,
 - iv) Making sure the maps are updated at least annually.
- b) Coordinating with broadband providers on specific broadband infrastructure projects in communities described in the Critical Unserved and Underserved Communities in Yolo County's Community Profile:
 - i) Identifying infrastructure routes that the County needs;
 - ii) Identifying infrastructure routes that the broadband providers need;
 - iii) Sharing information between organizations for joint build opportunities;
 - iv) Developing a joint build agreement with local broadband providers that allows each organization to install their own broadband infrastructure in these projects; and,
 - v) Identifying resources that would be available to fund these projects, including internal County funds and/or available grant or loan programs as described in Recommendation 3.
- c) Coordinating with public agencies and private broadband providers to use broadband infrastructure, towers and other resources to expand wireless coverage into agricultural areas, by:

- i) Working with broadband wireless providers to make access available to County-owned tower infrastructure, ground space at the base of towers and rooftops, ensuring compliance with legislative and security requirements governing access to these resources;
 - ii) Collaborating with other agencies with physical assets in the rural areas such as Yolo County Flood Control and Water Conservation District, Yolo County Transportation District, Yolo County Housing and UC Davis to leverage joint opportunities to expand wireless access in the rural areas of the county;
 - iii) Developing agreements for lease or in-kind exchange of these County-owned assets by broadband wireless providers; and,
 - iv) Where feasible, interconnecting County-owned fiber-optic networks with these assets to provide fiber backhaul to broadband wireless providers.
- d) Developing agreements with each County and broadband providers for joint use of broadband infrastructure by:
- i) Strengthening the current MOU to include joint use agreements that allow sharing of infrastructure between the County and the cities;
 - ii) Actively marketing and identifying opportunities to expand infrastructure with broadband providers.

Timing: The County should accelerate the process of coordinating with other public agencies and broadband providers over the next 12 months and identify opportunities to leverage public broadband infrastructure continuously as a County-level initiative.

Recommendation 3: Target specific State and federal grant and loan programs that will provide funding for Yolo County's unserved and underserved communities by:

- a) Through the Tactical Plan, designating a resource at the County that will develop, apply for and manage broadband grants;
- b) Building on the initial grant analysis completed in this Plan for the County to pursue CASF funding (and other programs defined in Appendix D) for these communities;
- c) Developing relationships with broadband providers that define how grant funds will be received and managed and how broadband services will be provided to these communities; and,
- d) Applying for CASF grant funding to expand wireless and broadband services in Yolo County Public Housing facilities;

Timing: The County should immediately identify an internal resource to manage the broadband grant efforts on behalf of the County.

Common Action Items

Recommendation 4: Adopt General Plan policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate. This includes:

- a) Tailoring the sample policies and standards (included in the appendix) to the County's specific needs and adopt them into the Tactical Plan, local policy, codes and standards (including policies, dig-once, joint trenching, engineering standards, etc.);
- b) Incorporating broadband in the County's Development Impact Fee program and Capital Improvement Plan (CIP) as appropriate and make a commitment to fund broadband infrastructure;
- c) Identifying opportunities to install broadband infrastructure in conjunction with public and private construction projects as appropriate;
- d) Developing a process so that Planning and Public Works coordinate with IT to identify projects that could install this infrastructure at reduced costs;
- e) As the County builds out its network, maintaining broadband infrastructure in the County's GIS system, requiring GIS-based as-builts, and implement any other means for accurate documentation;
- f) Evaluating ways to streamline the broadband permitting processes within public rights of way to ensure broadband providers do not face unnecessary obstacles to building infrastructure; and,
- g) Evaluating fees levied to broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

Timing: The County should adopt General Plan policies and implementing codes and standards over the next 12 months. Implementation should be ongoing.

Recommendation 5: Coordinate with other agencies with facilities in the County (i.e. cities, school districts, UC Davis, YCTD, Yolo County Housing, YCFCWCD, Yolo County Office of Education, etc.) on a regular basis to leverage opportunities to reduce broadband construction costs by:

- a) Reviving the regular Utility Coordination Meeting attended by the cities/County (and potentially add the public agencies listed above) to facilitate the long-term planning of broadband infrastructure; and,

- b) Coordinating on a regular basis to identify opportunities for joint construction, use and broadband infrastructure sharing between local agencies to lower costs and maximize public benefit.

Timing: The County should develop these collaborative programs with other public agencies over the next 3 months.