

Technology

Introduction

This chapter, including related goals, policies and programs is a critical part of Cheney's comprehensive plan, as technology – especially as related to communication and information systems – offers tremendous economic, educational and functional opportunities for the City and its residents.

Enhancing Cheney as a community of choice for living, business enterprise, and employment depends in part on harnessing the opportunities that technological advances provide. Over the next two decades, the community's ability to integrate technological advances will contribute to and benefit the lives of residents.

For the City, integration must certainly include the range of services it already provides. Civic services including wastewater treatment, water facilities, electrical utilities, police, fire, parks and recreation, education, transportation and library services are likely to benefit from such advances. So too will private sector services such as entertainment, dining, communication and retail options - making the smart use of technology a vital part of how the City and the enterprises that make Cheney their home may enable greater service efficiency, range, and delivery effectiveness.

In terms of businesses, jobs and its economy, Cheney has made strategic investments in technological assets that help create an environment where enterprise can prosper. The City's advanced wastewater treatment

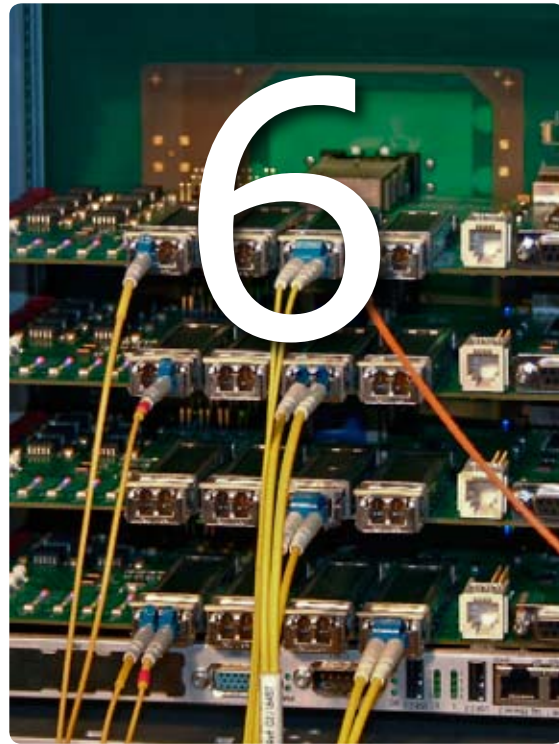


Figure 6.01 - One of Cheney's major opportunities involves its existing - and to date largely unused - fiber-optic network. (Image source: Studio Cascade, Inc.)

plant and the broadband network are two examples of technological assets supporting future economic growth. In creating this plan, feedback from the community emphasized an interest in seeking ways to better leverage EWU's technological expertise. Eastern's presence provides a multitude of technological assets - including personnel, applied research and program instruction in computer science, biology, multimedia and the arts. Access to a younger, skilled, and technologically-savvy demographic is another distinctive attribute of Cheney that few similarly sized cities can match. Going forward, the City, the University and the business community must leverage Cheney's assets, effectively incorporating technology each step of the way.

Communications and the sharing of information have changed dramatically in the past ten years. When Cheney's first GMA-compliant plan was adopted in 1997, e-mail and mobile phones were cutting edge, and the Google™ search engine

didn't even exist. Today's expectations are that information is rapidly available in a variety of formats and through a number of channels. Advances in communication technology will continue to be made over the lifetime of this plan, and this plan's policies work to embrace such advances in meeting the diverse needs of the Cheney community.

Civic services too, are expected to follow the technological pace. Advances should open opportunities to inform and connect with citizens on issues that affect their daily lives. Permitting processes should also benefit through enhanced permitting systems that provide easy access to information, and ease the approval process. As the topic of technology relates closely to Cheney's economic development objectives, readers should also review that element for a more complete understanding of the scope of this plan's treatment of technology as a topic. Though the following pages may effectively sort, introduce, and present those goals and policies related to technology, the entirety of Cheney's goal and policy framework, presented in Appendix B, should be considered the plan's overarching source.

Existing Conditions

Currently, Cheney's main municipal buildings are connected to a central hub at City Hall with fiber-optic cable. These connections provide staff with essential phone, e-mail, network drive, and internet service. Most buildings have an Ethernet local area network (LAN), and many buildings have wireless networks for added convenience.

The City's servers can be viewed as the brain of the entire network. They are critical to the day-to-day government operation. They manage the many dozens of phone and data connections from all the different buildings at their central location in City Hall.

While fiber optic is state-of-the-art, it's important to keep in mind that a network is only as fast as the slowest component. For Cheney, the existing wiring in most of the municipal buildings is due for an upgrade. The Police Department has recently installed a 1 GB/s network that offers speeds ten times faster than what was previously

used. Eventually, this is expected to become the City-wide standard.

A new virtual server setup, known as VMWare, was installed in winter of 2010. These virtual servers have proven to be more stable and reliable while providing energy and maintenance savings.

The City currently lacks a plan and associated strategies for the expansion and build-out of its fiber-optic infrastructure. Even though this high-speed network is a major asset for economic development, a significant portion of the fiber sits dark and unused. Many companies require high-speed connections to run their businesses and the fact that Cheney possesses this capability gives the city a major advantage in business recruitment.

Information Systems

City staff utilizes desktop and laptop computers running Windows XP with a wide range of software applications. The Microsoft Office 2007 software suite is routinely used throughout the city, with each department also having access to more specialized programs. For example, the Building Department uses permit-tracking database tools, the Finance Department maintains a large database of utility accounts, and the Planning Department uses specialized mapping software known as GIS (Geographic Information Systems).

Cheney police cars have recently been equipped with laptop computers, allowing officers to remain in the field longer with less downtime associated with accessing information. So equipped, officers are better informed and are able to serve more efficiently, directly benefitting the public.

Plan Review, building permits, inspection logging, and code enforcement activities all utilize the same software program - PTWin, purchased by the City thirteen years ago. This technology should be upgraded to provide greater stability, more robust features, and allow the Public Works, Fire, Building, Planning, and Parks departments to provide improved service and more timely information to customers.

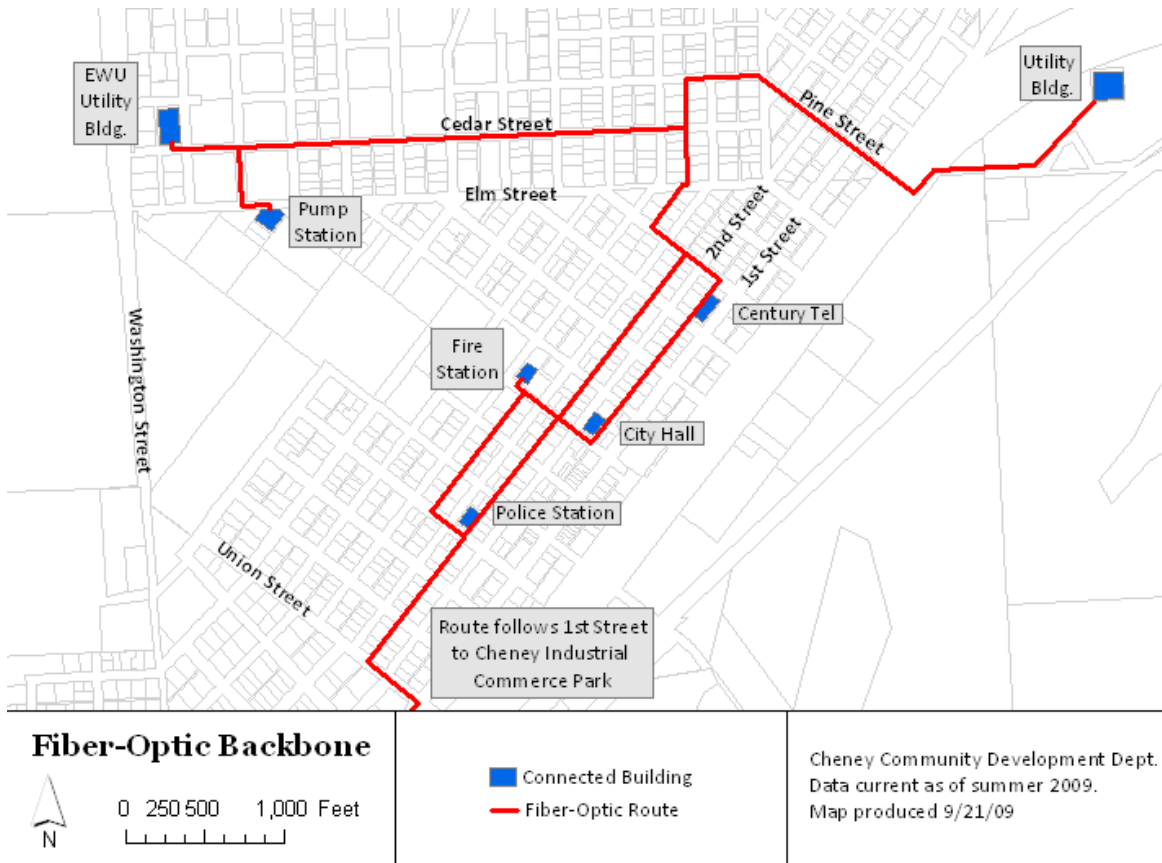


Figure 6.02 - Cheney's existing fiber-optic network includes this primary "backbone," which compliments the City's overall policy objectives quite well, with routes serving the industrial park, police and fire stations, EWU and the downtown area. (Image source: City of Cheney)

Information technology is constantly advancing, and this plan includes policies directing the City to advance along with it. New hardware and software help make staff more efficient while providing better service to the public. Mobile technology is one way to increase productivity, and laptop computers and programs able to synchronize remote connections with City databases can be very helpful for staff in the field to update information on the fly. Public Works and Light departments, with help from Community Development, have been expanding the use of global positioning system (GPS) surveying, integrating the data with GIS to help manage city assets and reduce costs to ratepayers. Plan policies direct the City to continue to look for new ways to utilize technology to cut costs and improve efficiency and services.

Services

The City's website is an existing and opportunity-rich tool to help keep the public informed of upcoming community events, various programs, and emergency situations. The website also provides numerous public services. A recent addition adds online payment for utilities and court-related bills, which supports customer convenience and reduces staff time associated with manually processing payments.

Another service available on the City website is code enforcement complaint forms. This streamlines the process of reporting violations of certain parts of the municipal code.

As new software is made available to staff, the public will also benefit. The City's website

is planned for an overhaul and is expected to eventually incorporate dynamic mapping abilities based on GIS. The new website will also be moving towards what is known as "Web 2.0," boosting information sharing, social networking, and an enhanced multi-media experience.

Prior to the Wren Pierson Building closure due to damage incurred during 2008's harsh winter, the Parks and Recreation Department housed a public computer lab providing community access to modern equipment and fast internet connections. The current temporary Parks and Recreation office is too small to host such a lab, but plans have been made to revive this service at the new community center when completed.

Economy

As a review of this plan's goals and policies show, technology plays a key role in economic development for Cheney. The city's fiber-optic network provides a strong foundation to build upon if planned for and leveraged properly. The presence of EWU's technology and engineering-based programs offer significant opportunities, including large numbers of students, knowledgeable staff and researchers - all of which could be better utilized to assist existing companies, attract new companies, and help startup firms. Integrating these assets into long-range strategies, coupled with more focused City efforts, will greatly enhance the economic future of Cheney.

Policy Overview

The technology-related goals, policies and programs contained in this chapter cover critical themes including:

- *Growing a diverse, vital economy*
- *Improving Cheney's partnership with EWU and its resources*
- *Boosting the City's use of technology in providing services*
- *Facilitating the growth of the arts and culture in Cheney through improved communication tools*

- *Improving public access to high-speed networks*
- *Improving educational opportunities for residents using and related to technology*
- *Developing a technology strategic plan for Cheney, providing additional and highly specific strategies and actions.*

Few if any resources at Cheney's disposal offer as immediate, easily adopted and marketable benefits as tapping the city's existing fiber-optic network. Strategies blending the network with City's industrial park plans, EWU human and capital resources, and the city's downtown infrastructure could provide not only the direction, but much of the impetus for the type of positive, sustainable growth this plan envisions.

Goal, Policy & Program Listing

Each of the goals, policies and programs contained in the following section have been selected from the entire matrix as closely associated with technology objectives, though there may be others arguably key to the success of community goals not under this heading. All are presented in the order in which they occur in the overall matrix, and do not necessarily reflect plan or City priorities. Each goal is followed by a brief "discussion" paragraph expanding on the origins, objectives and overall benefits associated with it. Similarly, each policy is followed by discussion text, but also includes a paragraph entitled "direction," which outlines one or more ways the policy might be implemented. Program listings in this and other elements do not include the estimated timeline or likely agencies to be involved in their completion; for this level of program detail, refer to Table 13.03 in the Implementation element.

Electronic versions of the matrix are hyperlinked to Appendix B for review and cross-referencing purposes.

■ Technology & Related Goals

Grow and sustain a balanced, resilient economy for Cheney, providing community prosperity and fiscal health. (G.01)

Discussion: In seeking long-term prosperity, residents understand the need to maintain economic diversity - capitalizing on the presence of Eastern Washington University as well as developing a strong business base independent of the school. Reflecting these values, this plan supports strategies that build and sustain a diverse, balanced economic base, retain existing quality of life assets, and help keep Cheney prosperous.

Enhance Cheney's relationship with Eastern Washington University, improving economic, educational, facility and cultural opportunities for all. (G.02)

Background: Cheney owes much of its success to the presence of Eastern Washington University, but residents sense that greater opportunities exist for both City and school, given greater collaboration. Throughout the process, participants noted the need to coordinate curricula with economic initiatives, to plan infrastructure and facilities in ways that achieve broader goals, and to help integrate educational and cultural offerings into what residents perceive as part of Cheney life. As a result, this plan includes goals, policies and programs to help the City and the EWU establish and maintain a more dynamic partnership.

Improve Cheney's use of technology, benefitting the economy, services and civic health. (G.03)

Background: Technology is generally defined as the application of knowledge and equipment toward practical purposes. In developing Cheney's comprehensive plan, residents frequently identified greater utilization of the City's fiber-optic network as one way to grow the economy, improve City services and improve civic networking. This goal and other plan policies urge Cheney to embrace, utilize and support technological innovation, developing both the knowledge and the tools necessary to sustain a vibrant economy.

Sustain and expand Cheney's arts, cultural and civic environment. (G.11)

Background: Throughout its history, residents of Cheney have worked to develop and support cultural and social organizations, events and facilities. Today, numerous groups and associations help facilitate dozens of annual and ongoing events, taking advantage of the many worthwhile venues that currently exist in Cheney. This goal, and several supporting policies, direct the City to help sustain and expand community arts, venues and other cultural resources, benefitting the civic health, quality of life, and economic vitality of Cheney.

Grow and maintain Cheney as a self-reliant community, aiding the provision of necessary health, retail and service needs for citizens. (G.13)

Background: Cheney's history and small-town nature is rooted in its independence and self-reliance. Essential goods and services, employment, social activities, and primary

and secondary education have always been available within City boundaries. In recent years, transportation and other factors have enabled residents to seek specialized services and establish residence well outside the City, to the point where concern now exists that Cheney is becoming a 'bedroom community.' This goal urges the City to develop and enact strategies that help maintain the provision of essential health, retail and service needs within Cheney.

Involve the community of Cheney in all local government planning and decision-making. (G.17)

Background: By intent, the development of this plan update has been community-driven, involving scores of residents and participants representing many hundreds more. For plans to succeed, community buy-in and support is critical. Future conditions will certainly require the creation of new objectives and strategies directing Cheney efforts, and this goal supports keeping residents highly involved in such work.

Maintain and improve the provision of affordable, efficient community services in Cheney. (G.18)

Background: Municipalities exist to provide infrastructure and services that would be unfeasible for individuals to provide. While pooled resources make essential services achievable, they also require strong levels of coordination and management to assure accountability and efficiency. Many actions have clear and immediate effects on resources. Other actions may be more difficult to associate with fiscal impact, but over time, may profoundly affect the costs of services. This goal anchors the need for the City of Cheney to consider the long-term cost implications of choices including land use, investments in transportation, and provision of service infrastructure - maintaining efficiency and accountability for the community it serves.

Technology & Related Policies

(P.02) Expand the number of local living-wage jobs.

Discussion: Cheney's long-term vision includes having those employed in the city also live in the city, maintaining Cheney's self-contained, self-reliant image. Direction: This policy may be acted upon in ways including efforts to recruit well-paying jobs; strategic provision of infrastructure; efforts to reduce housing and other living costs in Cheney.

(P.04) Position Cheney's quality of life and assets on regional, state, and national levels through lobbying and collaboration.

Discussion: Cheney's natural setting, quality of life and university are primary assets in attracting businesses and maintaining a healthy economy. Important regional assets, such as those found in neighboring communities, are important factors as well, and should be considered in Cheney's economic development strategy. Direction: This policy may be acted upon in ways including efforts to define, recognize and strategically market Cheney's unique qualities through collaborative lobbying efforts with local and regional partners.

- (P.05) **Support small businesses, entrepreneurship and innovation as a fundamental component of Cheney’s economic resilience.**
- Discussion: Given its size, relative affordability and the presence of EWU, attracting small, innovative businesses is a particularly suitable economic strategy for Cheney. Direction: This policy may be acted upon in ways including efforts to build a diverse local economy - with local, small-business and entrepreneurial enterprises as a focus - through economic development efforts, education, training and networking assistance.*
- (P.06) **Support the growth and recruitment of industries complementing existing and technology-related business clusters in Cheney.**
- Discussion: Cheney’s economic policies support efforts to build a diverse local economy, but the development of related fields known as ‘business sectors’ - agricultural ones, for instance - are also key. Direction: This policy may be acted upon in ways including efforts to identify, market and develop existing business clusters as well as new ones including technology-related enterprise.*
- (P.08) **Collaborate with Eastern Washington University on economic development by aligning Cheney’s economic development objectives and opportunities with University programs and research.**
- Discussion: The presence of Eastern Washington University has always been a key component in Cheney’s economic fortunes, but many believe additional opportunities exist to coordinate Cheney’s economic development efforts with EWU program specialties. Direction: This policy may be acted upon in ways including work with the University to maximize the relationship between degree fields and job opportunities in Cheney.*
- (P.09) **Expand opportunities for Eastern Washington University students to find employment and remain in Cheney after graduation.**
- Discussion: Strong economies rely on a well-trained workforce, and the presence of EWU provides Cheney with tremendous opportunities to strengthen its economy. Direction: This policy may be acted upon in ways including efforts improving job opportunities during and after graduation for EWU students - leveraging student knowledge, energy and expertise toward local business growth.*
- (P.11) **Include technology in Cheney’s economic development efforts.**
- Discussion: Cheney’s economic future - especially given its intent of building a more diverse and knowledge-based economy - depends on attracting compatible businesses. Direction: This policy may be acted upon in ways including identifying and incorporating technology-based businesses into all City-led economic development efforts; time and capital investments in technology infrastructure.*
- (P.12) **Coordinate all long-range planning efforts between the City and Eastern Washington University.**
- Discussion: Community and work groups emphasized the need for the City and EWU to cooperate to position Cheney among the best places to live and do business in the Inland Northwest - something many felt wasn’t being achieved. Direction: This policy*

may be acted upon in ways including City and EWU efforts to establish, improve and sustain a stronger partnership regarding all long-range planning issues.

- (P.13) **Work with the private sector to increase the adoption and penetration of a high-quality broadband signal.**

Discussion: Cheney's economic future - especially given its intent of building a more diverse and knowledge-based economy - depends on establishing solid information technology infrastructure. Direction: This policy may be acted upon in ways including City action to collaborate with private-sector signal providers towards boosting Cheney's broadband capabilities.

- (P.14) **Collaborate with key public institutions including Eastern Washington University, the library and the Cheney School District to increase public access to technology-related training and education.**

Discussion: Information technology is an essential part of the global economy, and with the presence of EWU, Cheney enjoys excellent opportunities to improve access to related training for residents. Direction: This policy may be acted upon in ways including working to identify areas of technology expansion, and with EWU and the school district as partners, facilitating the growth of technology-related education.

- (P.15) **Improve communication and public access to all City services, deliberations and activities.**

Discussion: Community success relies on the active involvement and support of residents, in part dependent on transparency and strong communications. Direction: This policy may be acted upon in ways including improving the use of existing and/or using new and innovative technologies to optimize communication and improve public access to various City services, deliberations and activities.

- (P.39) **Direct public investment in transportation and other infrastructure within the existing urbanized area, promoting infill, limiting sprawl and helping the City provide affordable services.**

Discussion: Growth patterns have significant implications in terms of community character, mobility, land use, livability, and the cost of service provision. Through the planning process, participants urged the City to promote growth and infill within existing urbanized areas. Direction: This policy may be acted upon in ways including maintaining supportive transportation and service improvement plans; minimizing public investment outside the urbanized area.

- (P.42) **Protect the function and utility of industrial land uses, buffering them from conflicting uses and maintaining necessary access and services.**

Discussion: Commercial activity is critical to the economic fortunes of Cheney, and the City should manage its growth to ensure the continued viability of such uses within the planning area. Direction: This policy may be acted upon in ways including managing land use policy and regulations in ways that buffer potentially conflicting uses; by maintaining freight mobility and access in the City's transportation improvement planning; coordinating with the SRTC on supporting transportation policies.

- (P.51) **Raise awareness of the arts, and develop arts-related resources in the City.**

Discussion: In light of the city's heritage and EWU personnel, resources and student body, Cheney enjoys unique opportunities to keep arts and culture on the forefront. Participants noted a particular need to generate community awareness and to develop additional resources for arts in Cheney. Direction: This policy may be acted upon in ways including facilitating the creation of an arts and culture commission, coordinating and stimulating further cultural growth; improvements to City communications regarding events; assistance to organizations seeking to hold events in Cheney.

- (P.53) **Budget to implement plans and implementing programs adopted or supported by the City.**

Discussion: Many participants felt the City has a poor track record with long-range planning, often neglecting to implement or budget for planned recommendations. This policy establishes the basis for Cheney to implement plans and programs developed, adopted or supported by the City. Direction: This policy may be acted upon in ways including ongoing work and collaboration by department heads, the City Administrator and City Council to appropriate necessary funds to invest in supported programs.

- (P.55) **Coordinate with local and regional agencies in developing capital facilities, seeking cost-efficiencies and shared resource opportunities for Cheney.**

Discussion: Spokane County's Countywide Planning policies provide the over-arching framework of how development should occur in Spokane County. This policy establishes the basis for inter-jurisdictional cooperation for large capital facilities, particularly when cost-efficiencies can be achieved. Direction: This policy may be acted upon in ways including adoption and update to capital facilities planning; identification of need and collaboration on potential shared facilities.

- (P.57) **Provide or accept the provision of public facilities and services only if the City or other entities are able to pay for subsequent operation and maintenance costs.**

Discussion: Many residents expressed concern that growth pay for itself whenever possible, keeping taxes low and reducing effective subsidies for unwanted growth. This urges the City to balance the costs of service and infrastructure provision with community desire and ability to absorb new development, ensuring service investments are either strategically desirable or self-sustaining. Direction: This policy may be acted upon in ways including financial cost analysis evaluating long-term costs of development versus likely income.

- (P.64) **Encourage City and community energy conservation.**

Discussion: Energy conservation helps reduce immediate costs and the need for long-term upgrades to system capacity, aids City sustainability goals, encourages compact development patterns, and offers opportunity for technological innovation. Direction: This policy may be acted upon in ways including consideration of conservation incentives; economic development strategies supporting energy-conservative businesses; enactment of City-specific conservation goals.

- (P.68) **Maintain and improve Cheney's police and fire protection services.**

Discussion: High-quality public safety services are vitally important to the residents of Cheney, and are one of the critical functions of City government. Direction: This policy may be acted upon in ways including maintenance of police and fire planning efforts;

the encouragement of inter-jurisdictional cooperation among law enforcement and corrections agencies to further develop, where practical, shared service and facility use; addressing requirements providing for adequate road access, fire department or district ingress/egress, and water supply for fire protection in commercial and residential developments.

(P.69) Support the continued provision of high-quality public education in Cheney.

Discussion: Cheney residents enjoy a good K-12 educational system, and understand the need for the City to help, where possible, its continued provision. Direction: This policy may be acted upon in ways including supporting land use policy; City encouragement of school facility capacity matching projected development and demographic trends; pursuit of opportunities for shared access to facilities for recreational or other public purposes.

(P.70) Maintain and improve Cheney’s municipal library system.

Discussion: Today’s libraries have evolved with technologies to offer a broad variety of media beyond books and periodicals. For Cheney, the library is extremely important to the quality of life and intellectual opportunities offered here. Direction: This policy may be acted upon in ways including working with the Spokane County Library District to explore opportunities to ensure the expansion of capacity and service proceeds at a rate comparable to resident needs.

(P.71) Maintain Cheney’s municipal offices and worker facilities, improving efficiency and access to City services wherever possible.

Discussion: In support of resident desires for improved services and access to ongoing City functions, and expanded off-hours opportunities for civic activities, the maintenance of and improvements to City facilities are needed. Direction: This policy may be acted upon in ways including research and review of opportunities for greater efficiencies in operations; long-range facilities planning; development of multiple-use facilities; public access improvements.

(P.72) Sustain the provision of affordable, reliable energy resources for residents and businesses in Cheney.

Discussion: Providing affordable and reliable energy is a key deliverable of Cheney’s municipally-owned utility, and also plays a significant role in economic growth strategies. Direction: This policy may be acted upon in ways including consideration of a blend of conservation, incentives, and technological advancements to ensure affordability and reliability.

(P.75) Establish and improve efficient telecommunication services in Cheney.

Discussion: Access to high quality telecommunication and broadband services are increasingly recognized as a critical component of economic development and maintaining a competitive business environment. Direction: This policy may be acted upon in ways including City working with utility providers and EWU to promote long-term planning and encourage full utilization of the existing fiber optic network; coordination with utility providers; long-term planning; support for full utilization of Cheney’s fiber optic network.

Technology & Related Programs

- (PR.06) Technology Strategic Plan – Develop a technology strategic plan addressing technology infrastructure; e-government; entrepreneurial support; innovation and technology-related job creation. Plan to aid incorporation of world-class connectivity for business, education, and government institutions in Cheney using existing broadband infrastructure, provide roadmap for evolving internal technology infrastructure into next-generation systems and applications.
- (PR.07) Economic Development Plan – Prepare an economic development plan for the City of Cheney, possibly in collaboration with Eastern Washington University, and possibly including: the development of a suite of metrics to monitor and compare Cheney’s regional share in job creation and private sector growth; business environment analysis focused on policy and labor resources necessary to sustain the long-term growth of existing industries in Cheney.
- (PR.09) Citizen Involvement Strategy – Draft and adopt a process that ensures early and continuing citizen and neighborhood participation in land use planning.
- (PR.12) Progress Measures - Develop community benchmarks, indicators or performance measures to evaluate the comprehensive plan’s success in goal achievement and policy implementation, and to guide its adaptation to new circumstances as conditions change.

