



Chapter Ten: Utilities

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Purpose and Intent

The provision of services, utilities and facilities is the primary purpose of any general or special purpose governmental agency and is direct evidence of the taxpayer's and utility customer's dollar in action. Governments are like businesses, which provide goods in exchange for tax dollars, fees, and utility billings. Their goal should be to provide the maximum benefits given a limited revenue base. This demands proper planning and efficient utilization of funds.

Planning plays a significant role in capital expenditures programming by providing a growth framework by which potential expenditures may be evaluated. For example, an area may be projected for industrial expansion, but is lacking necessary water and sewer utilities. Should the local government wish to stimulate development in this area, it can plan for and participate in the construction of these utility systems. On the other hand, lands retained for rural uses will demand relatively little expenditure of limited revenues.

Planning can also anticipate future gas and storm sewer needs, which will be generated by new development and propose a system for making those improvements. Other governmental agencies benefit by a plan which provides predictable growth patterns for the future. School districts can utilize planning data when forecasting student enrollments and space needs. Fire departments can utilize the plan to project future revenues and specialized equipment needs to accommodate specific types of development. The plan is the foundation of capital improvement programming for the City.

Goals and Policies

Maintaining high quality public utilities as the City grows will help preserve the quality of life. The following goals and policies focus on improving deficiencies in present service and to ensure services will be available when needed.

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Utilities

“Provide a full range of City services and other public services to the community at adequate service levels in an efficient, timely, and cost effective manner.”

Table 10.1

Utilities goals, policies and implementing programs

Goal	Policy	Implementing Program
Ensure the water system is safe and reliable.	Ensure water quality and supply meet or exceed state and federal standards.	Ensure the City's Comprehensive Water System Plan is updated every six years and meets or exceeds regulatory requirements.
Ensure the sewer system is safe and reliable.	Ensure the sewer collection system and capacity meet demands of a growing community and meet or exceed state and federal standards.	Ensure the City's Comprehensive Sewer System Plan is updated every six years and meets or exceeds regulatory requirements.
Ensure storm water system is safe and reliable.	Ensure new development's storm water systems meet City standards.	The City's technical review committee will enforce the City's storm water requirements as outlined in the City's Public Work Standards Manual.
Ensure citizens and businesses solid waste needs are met.	The City shall enforce a uniform compulsory solid waste policy on all businesses and citizens.	The City shall work with service providers to ensure all occupied dwelling units and businesses have garbage collection services.
All dwelling units, business and industry are connected to the electrical grid.	The City shall ensure all dwelling units; businesses and industry have adequate electrical supplies to achieve their goals.	The City shall work with providers ensuring a safe and reliable electrical network.
Ensure all dwelling units; businesses and industry adjacent to the natural gas system are connected.	The City shall ensure all dwelling units; businesses and industry have adequate natural gas supplies to achieve their goals.	The City shall work with providers to ensure a safe and reliable natural gas system.
All dwelling units, business and industry are connected to the telecommunications system.	The City shall ensure all dwelling units; businesses and industry have the ability to connect to the telecommunications system.	The City shall work with providers to ensure a safe and reliable telecommunications network.

Inventory of Existing Facilities

Water System

The City of Airway Heights Public Works Department provides potable water to the City of Airway Heights and a few areas outside the City limits. A complete inventory, analysis of need and capital facilities program is provided in the approved 2002 City of Airway Heights Comprehensive Water System Plan.

Service Area

The City of Airway Heights provides water service to approximately 4,680 residents in Airway Heights. The current service area includes approximately 5.5 square miles within the City. In addition, the City is a signatory to Spokane County's Coordinated Water System Plan. See figure 10.1.

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Facilities and Water Rights

The City of Airway Heights water system is comprised of four well stations that pump water from the aquifer.

Additionally the City is connected through an intertie to the City of Spokane's water system. An interlocal agreement governs this relationship. The City has two reservoir's comprising 1.3 million gallons of storage. Additionally, through a written agreement, the Department of Corrections reserves an additional 500,000 gallons of storage capacity for emergency use. The City has approximately 30 miles of pipeline. The existing rights when combined with the intertie, will be sufficient to meet projected instantaneous water demands into the near future and annual water usage through 2021.

Fire Flows

Firefighting requires water at high flow rates and sufficient pressures for the time period necessary to extinguish the fire. A water system is require to have a supply, storage and distribution system grid of sufficient capacity to provide firefighting needs while maintaining maximum daily flows to residential and commercial customers.

The City of Airway Heights typically requires designs of the water system to ensure provision of the Insurance Service Office (ISO) standards administered by the Washington Survey and Rating Bureau (WSRB). In 2004, the City of Airway Heights and its water system was the subject of an extensive survey conducted by the WSRB. The results of this survey lowered the City's ISO rating to a three. This means the water system is able to handle flow requirements for fighting fires and that the fire department rates well in its capabilities, and with that, there are lower fire insurance rates for residents, businesses and the industry of Airway Heights.

Forecast of Future Needs

The City's existing demand, level of service, future demand and proposed facility improvements can be found in the City of Airway Heights Comprehensive Water System Plan. This plan is scheduled for its six-year update in 2007 with approval by 2008.

Sewer

The City of Airway Heights Public Works Department provides collection of the City's sanitary sewer flow through an interlocal agreement; the City of Spokane provides treatment and discharge of the City's flow to the Spokane River. A complete inventory, analysis of need and capital facilities program is provided in the 2003 City of Airway Heights Comprehensive Sewer System Plan, and the City's 2006 Wastewater Treatment Facility Plan which call for construction of the City's advanced wastewater reclamation facility. The City is currently in the design phase of this facility which is scheduled to come on line in 2011.

Discharge to the groundwater can occur through rapid infiltration basins, or infiltration wetlands. Rapid infiltration basins would consist of several constructed basins where treated wastewater would be applied intermittently and allowed to infiltrate directly into the soil. An infiltration wetland would consist of constructed wetlands to receive the wastewater, provide additional pollutant removal, and then allow infiltration through the bottom of the wetland.

Service Area

The City of Airway Heights provides sewer collection to approximately 4,680 residents in Airway Heights. The current service area includes approximately 5.5 square miles within the City. For treatment of the waste stream, the City has an interlocal agreement with the City of Spokane to provide treatment for a maximum daily flow of 680,000 gallons. See figure 10.2.

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The City's sewer collection system is relatively new and was built in the early 1990s. The City's storm water system is not connected to the collection system. It has little to no infiltration of ground or surface water. There are approximately 15 miles of collection system piping.

Forecast of Future Needs

The City's existing demand, level of service, future demand and proposed facility improvements are in the Comprehensive Sewer System Plan and Wastewater Facility Plan.

Storm Water System

The City does not have a comprehensive storm water management system servicing the City. The levels of service goals for storm water focus on site specific mitigation of impacts. This means that for particular areas where storm water may become a problem, mitigation measures are located at problem sites. Current practices for site specific storm water management rely on techniques such as the usage of drainage swales that allow for storm water to collect and infiltrate into the ground.

Due to the relatively flat topography and the lack of surface water within the City, there are no storm water problems. Furthermore, soils within the City tend to be highly permeable and thus allow storm water to infiltrate rather rapidly. As a result, ponding of storm water does not normally become a significant problem. As the City experiences further development and more of the City's land is converted to impervious surfaces, storm water management may become a problem, and development of a storm water management plan will be required.

Solid Waste

In the state, local governments hold the primary responsibility for solid waste planning and management. Counties are required to prepare a comprehensive solid waste management plan as individual counties or as a collaborative effort with other counties. Cities are also required to prepare a solid waste management plan. This can be done individually, with the county or another city, or by giving the county authorization to prepare the plan for them.

Solid waste disposal in the City is conducted by Waste Management of Spokane, which is a regional solid waste service provider. The City will continue to work with Waste Management of Spokane to provide services and explore innovative waste reduction strategies.

Electricity

The provision and level of service is regulated by the Washington Utilities and Transportation Commission and contains the obligation to serve customers.

"All available...electricity...as demanded."

Inland Power and Light and Avista provide electrical service to the City through a jointly used 115kV substation located just outside the City limits on the west side of Craig Road north of U.S. Highway 2.

This substation currently has the capability to provide 53 Mega Volt Amperes (MVA), which is a measure of the units of electrical demand, in the winter and 46 MVA in the summer. The current load on the substation for both winter and summer is 19.2 MVA.

Natural Gas

The provision of natural gas service is regulated by the Federal Department of Transportation and Washington Utilities and Transportation Commission. Natural gas regulation relies on economic provision of service based on a capital investment analysis.

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To ensure that customers receive adequate service, natural gas transmission and distribution systems have the ability to connect to more than one source, to route gas on different paths, and to store gas to meet peak-flow conditions. This provides flexibility for maintenance of facilities, and to ensure service to customers are maintained during abnormally low temperature conditions when demand for natural gas supplies is the greatest. Avista provides natural gas within the City.

Telecommunications, Phone, Cable and Fiber Optic

In order to provide residents with a broad range of information and services now and in the future, a telecommunications infrastructure system is required. The Telecommunications Act of 1996 and the Federal Communications Commission (FCC) sets the regulatory climate for siting telecommunications infrastructure. It is important for the City to work with citizens, service providers, and other local governments in coordination efforts. The City should explore policy and management options to fit the specific needs of the City. A telecommunications ordinance is included in City development regulations to deal with these issues.

Qwest delivers phone services to the City as regulated by the Washington Utilities and Transportation commission. Qwest is subject to various federal laws and regulations (out of service regulations, busy signals, etc.). The service lines in the City are primarily aerial. The main feeder cable runs primarily along U.S. Highway 2 with a distribution facility located at the southwest corner of U.S. Highway 2 and Craig Road.

Qwest operates under internal and external service standards and objectives are set internally. RCW 80.36.090 requires Qwest to provide adequate telecommunications services on demand. Accordingly, Qwest will provide facilities to accommodate whatever growth pattern occurs.

Cable television is provided by Comcast. Cable service is delivered to its customers through electronic components and cable installed on overhead lines throughout the community. There are two newer developments, located in the 12th and Lawson and the 8th and Lawson areas, which receive service through underground cables. Like telephone service, cable television is requested by Comcast customers. All future growth demands will be met.

Time Warner is the fiber optic provider and has a main line adjacent to U.S. Highway 2 with just a few "drops." The City limits encourage Time Warner to expand its fiber system.

Future Utility Development

Through the referenced City utility plan, future development and service is identified, evaluated and planned. With respect to the wastewater treatment facility proposed by the City, this facility has been the subject of separate study which is available through the public works department.

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For future utility development by public and private entities, the City, through its Public Works Standards Manual and other adopted policies, will encourage the use of right-of-way by multiple utility providers. The City will coordinate road and street construction in order to facilitate the installation of utilities in a manner which is cost effective and the least disruptive to the public.

The City will seek to develop consistency with respect to the operation of regional utilities that are in or adjacent to the City. The City will encourage interties between its utilities and other regional providers in order to promote the efficient and safe operation of the utility. The City recognizes that the City of Spokane is a regional sewer provider and operates the waste-to-energy plant which receives and processes solid waste. The City of Spokane water and sewer lines on U.S. Highway 2, as well as those that run through the City, serve Fairchild Air Force Base and adjacent properties outside City limits. These utilities should be and are subject to a county planning process as well as various state laws to include the Coordinated Water Services Act. Service areas are described and utility providers offer services to the property owners and residents. The City will comment on and suggest regional policies that are consistent with sustainable growth within the City as well as the Joint Planning Area established by Spokane County. With respect to the development of land within or adjacent to the City, Airway Heights, will ensure that the public utilities and any required facilities are consistent with the locations and densities for growth established through the land use element.

Reference Documents

All referenced documents are incorporated but not be limited to facility plans of the City of Airway Heights, the City of Spokane, Spokane County and other public or private utility providers.

Figure 10.1
Water system

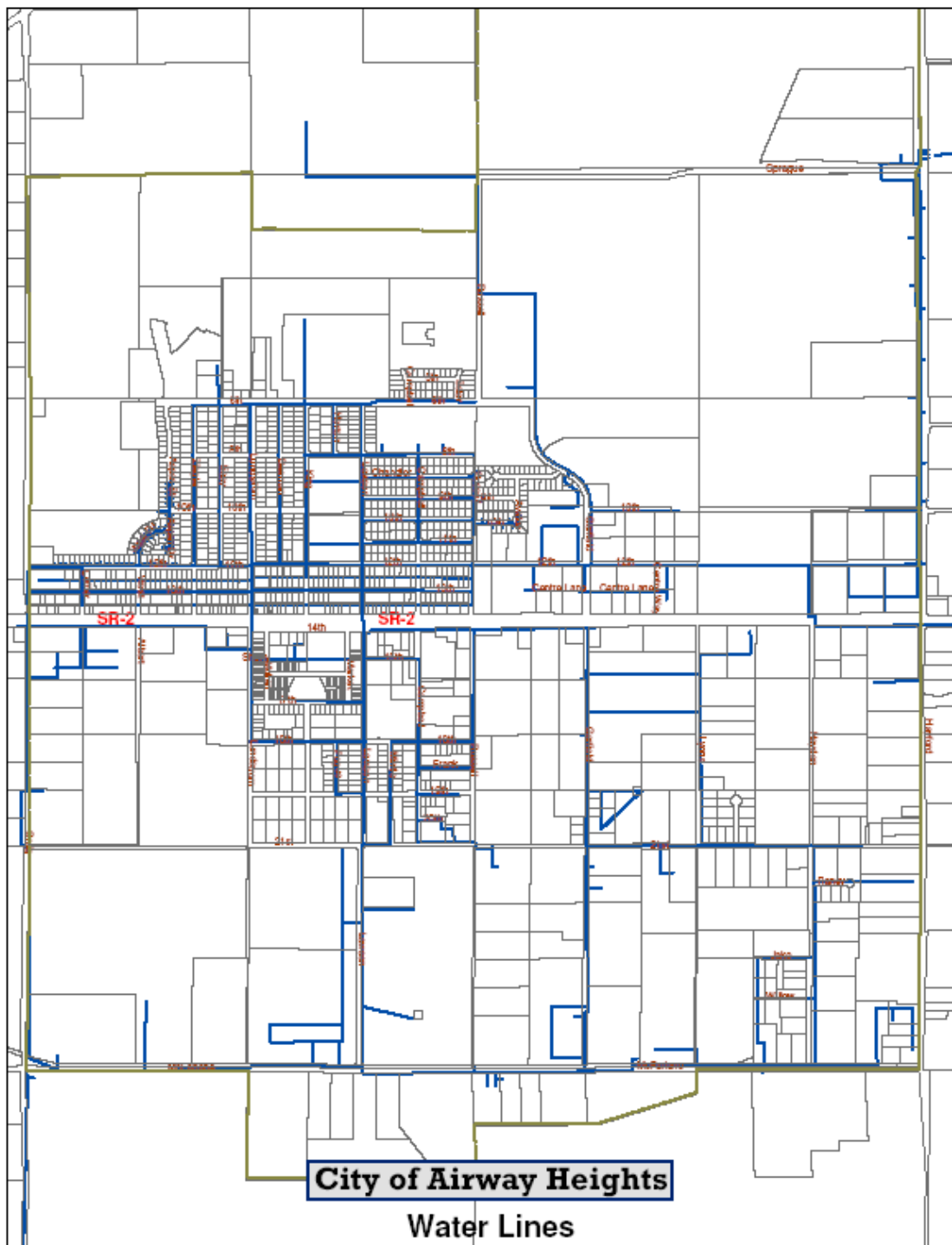


Figure 10.1
Sewer system

