

City of Georgetown 2030 Comprehensive Plan
Utility/Infrastructure Plan

WATER AND ENERGY SERVICES

The City Charter includes Potable Water, Wastewater, Electric and other utilities as crucial and required Elements of the City's Comprehensive Plan. The City has historically updated Utility Master Plans approximately every three years for Water Services (including potable water, wastewater, and irrigation) and Energy Services, in order to plan for the long-term expansion and development of those utilities. This executive summary reviews the functional operations of the City's utility system, the water and energy master plans and their impact on the City's comprehensive planning.

The Georgetown Utility System (G.U.S.), as it's currently known, began as a communityowned utility in the late 19th Century, with the creation of the Water Utility. By the 1920's, the electric and wastewater components had been added to the system. At the time, City leaders determined that owning and operating a public utility would be in the long-term interests of the citizens and the government. Periodically, various utility service additions have been made to the System but the three main components of the utility have remained water, wastewater and electric. In addition to the above, G.U.S. currently includes transportation, solid waste/ environmental services, and drainage as public services to the community.



Since its founding, G.U.S. has relied on the following objectives (excerpted from the G.U.S. Mission Statement):

To provide safe, reliable, efficient and cost-effective utility services to customers in order to enhance the quality of life of the community.

In order to achieve the goals of the Mission Statement, G.U.S. plans for the future of its services in order to maintain a proficient and functional system. The primary way to achieve this goal is to develop long-term planning tools, such as master plans, in order to achieve the desired outcomes. The Utility Master Plans' main purposes are to evaluate the existing systems and contribute to the development of the short and long-term Capital Improvement Plan (CIP) for infrastructure capacity and facilities. The CIP, based on the Master Plans' 5-year, 10-year and "build-out" scenarios, is then implemented on an annual basis as part of the overall capital plan for City services.

The water and electric utilities each operate under a Certificate of Convenience and Necessity (CCN), which is a utility service boundary that is set and controlled, in part, by its particular State regulatory institution. The CCN does not dictate a certain type or amount of service within such boundaries, but establish where the City has legal right to provide services, depicted in this summary as "Jurisdictional Service Boundaries." Both the Water and Electric Utilities are offered as a public service to its customers in order to provide a safe, efficient system, although neither system provides certainty or absolute right to service. The CCN boundaries vary for water and electric and do not conform to other jurisdictional boundaries such as the City's corporate limits

City of Georgetown 2030 Comprehensive Plan

or Extraterritorial Jurisdiction (wastewater does not have service boundaries). For this reason, there are areas within Georgetown's city limits that G.U.S. does not provide services to; conversely, there are areas outside of the city limits that fall within the CCN boundaries and may have services. The CCNs and the City's Ultimate Boundary Line help the Utilities develop a model for a "build-out" area to plan for ultimate growth and capacity needs. The Master Plans use information gleaned from population projections, existing and planned projects, desired growth areas, and cost determinations in order to establish both short and long-term facility upgrades to the overall systems. This allows for comprehensive, efficient planning for the future as the City anticipates growth and expansion of the utility needs of the area.

Water Services provides potable water to customers in the Water CCN, wastewater (sewer) to customers where it is necessary, efficient or desired to do so, and an irrigation component for irrigation water within the CCN. Potable water is provided using resources from the Edwards Aquifer, Lake Georgetown and reinforcements from Lake Stillhouse Hollow in Bell County. The Utility has planned for the long-term to provide safe drinking water for all users and will continue to plan for the future based on the projected needs in the area. Wastewater collection and treatment service is also available to customers that use City water and, where feasible, to areas outside of the Water CCN such as the sensitive Edwards Aquifer Recharge Zone, where the alternative might be on-site septic facilities. The irrigation component of the Master Plan calls for increasing the amount of reclaimed water for irrigation, lessening the burden on the Edwards Aquifer and the need for potable and untreated, raw water for irrigation purposes. The Water Services Master Plan calls for future expansion and new construction of potable water, wastewater, and re-use or "gray" water treatment facilities and infrastructure. Water Services focuses on the ability to provide high-quality treatment and delivery to the public in areas that will have the most demand and the least environmental impact.



Energy Services provides electricity to residential and non-residential customers in the Georgetown and Round Rock areas. G.U.S. uses various sources of energy generation, the balance of which will continue to change in the future. The Energy Services Master Plan, like the Water Services Plan, models its projections based on the present and historical demand of certain uses, helping determine the future demands for electric loads, peak capacity and corresponding improvements needed. The Energy Utility operates as a competitive entity in dual certified areas, which does not detract from its objective as a public service provided for electricity for its customers.

Each of these plans use the City's adopted future land use and growth framework plans to determine overall service needs of the future population in the designated service areas. G.U.S. and master planning consultants approach the long-term modeling aspect of the plans in conjunction with the City's Planning Department. Using the assumptions of the 2030 Plan's Land Use Element, a model is

Utilities Element Executive Summary

developed that factors in the anticipated ultimate density and growth pattern, using these forecasts to establish sensible short-term capital improvements to the system. The modeling begins with the existing conditions and projects the immediate and future utility demands while simultaneously focusing on the long-term needs for facilities and improvements.

The Water and Energy Master Plans develop a framework for the infrastructure needs of development and re-development in the City's service areas. They are a necessary function for the planning of future needs, including increased capacities, construction or upgrades to facilities, and the ongoing cooperation of public and private projects. The development community contributes to the overall utility system by using these plans to determine a project's infrastructure needs and, quite often, constructing portions of the infrastructure. The costs associated with new and upgraded infrastructure are determined, in part, by the assumptions of these plans and much of the system is funded by a combination of impact fees paid by developers and capital outlays by the City through the annual CIP.



The Georgetown Utility System is a broad, comprehensive and ever-changing organization that benefits from a long-term outlook and ongoing reevaluation of the utility needs of its customers. The Master Plans for Water and Energy Services are the mechanism to collect and analyze the necessary information in order to provide sound planning for each utility system. The Master Plans will continue to go through the update process approximately every three years, adhering to the Mission of the organization: encourage innovative solutions, flexibility and a willingness to adapt to changing needs. The Utility System will continue to behave as a dynamic and complex, multifaceted network that is strategically, technically and systematically changing in order to



insure efficiency, reliability and integrated customer services.

City of Georgetown 2030 Comprehensive Plan	

Jurisdictional Service Boundaries

