

## SECTION 3

# Purpose of and Need for Proposed Infrastructure

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The purpose of and need for the proposed infrastructure is a function of the Town of Holly Springs' commitment to its residents. One of the missions of the Town is to provide infrastructure to meet its residents' needs. Through effective short- and long-range planning, the Town anticipates infrastructure needs and problems, then develops cost-effective, viable solutions for implementation through the Town's capital improvements budget. Through proper planning, the Town ensures that infrastructure meets the expectations and needs of its residents. It is the goal of the Town to provide quality service that results in the highest achievable levels of customer satisfaction and recognition for excellence.

Infrastructure planning strategies must be formulated and implemented in a manner to balance the competing goals of growth and the environment. By integrating its growth management strategies, land use planning strategies, and infrastructure plans, the Town is able to preserve important ecological areas in the form of open space and other preserved areas; ensure that its residents have adequate recreational resources; and meet water, wastewater, and transportation demands simultaneously. By integrating these processes, the Town also ensures that infrastructure is being planned commensurate with the projected population of given sections within the Planning Area.

The Town carefully and cooperatively integrates its infrastructure plans with its other planning processes. This requires close and frequent communication between the Engineering, Planning, and Parks and Recreation Departments and the Town Planning Board and Town Council. The Engineering Department is responsible for long- and short-range planning, design, and construction of capital improvements for the Town. Improvements include street improvements, right-of-way and easement acquisition, stormwater and utility system improvements, utility plant expansions, utility extensions, thoroughfare planning, and management of development contracts.

The main infrastructure elements provided by the Town that are relevant to this plan are wastewater, water, and reclaimed water, and transportation. The Town's objective is to ensure that adequate infrastructure is available to supply services to the current and future population in an efficient and reliable manner.

The Town's goals for wastewater (and reclaimed water) projects are to:

- Provide adequate collection and treatment of wastewater produced by the system's customers to a level that at least meets the permit limits issued by regulatory authorities as cost-effectively as possible.
- Ensure that sufficient capacity and facilities of wastewater collection and treatment continue to exist, increasing with customer needs.
- Improve maintenance and reliability efficiencies.

- Discharge treated wastewater in a manner that protects the receiving streams from pollutants and contamination and manage the land application of reclaimed water to protect groundwater supplies.
- Continue implementation of a reclaimed water program to limit demands on the potable water system.

The Town's goals for water projects are to:

- Provide customers with a safe, cost-effective, reliable, and adequate supply of treated water.
- Ensure that sufficient capacity and transmission of treated water continues to exist, increasing along with customer needs.
- Improve maintenance and operational efficiencies and reliability.
- Ensure that environmental and regulatory requirements are met in the design, construction, and operation of the Town's water system.

The Town's primary objective for transportation is to provide a safe and efficient transportation system that supports economic development and livability. General goals for transportation projects are:

- Provide capacity to maintain an acceptable level of service on existing roadways and provide additional capacity in advance of future growth.
- Maintain efficient and safe traffic patterns.
- Offer other modes of transportation to move people, goods, and information—specifically to encourage and provide facilities and interconnections to facilitate pedestrian and bicycle travel.
- Provide for the maintenance of infrastructure.
- Prepare for projects in advance to reduce cost and provide better community acceptance of projects so that more informed decisions can be made relative to future individual projects.

To meet these infrastructure goals, the Town identifies future infrastructure needs as part of the Vision Holly Springs Comprehensive Plan (Design Based Planning, 2009) and Comprehensive Transportation Plan (Kimley-Horn and Associates, 2013). The various sections of the Comprehensive Plan, including a Future Land Use Plan, are based on projected population numbers to ensure adequate future capacity at the proper locations.

The Town grew rapidly in the 1990s and 2000s – from less than 1,000 in 1990 to more than 24,000 in 2010 (U.S. Census Bureau, 2010). Population projections for the Town indicate about 81,900 residents by the year 2045 (Table 3-1). The population projections are consistent with the Town’s Future Land Use Plan element of the Vision Holly Springs Comprehensive Plan, which are described in Sections 5 and 6. Excerpts from the Town’s Land Use Plan, as well as small area land use plans, are included in Appendix D. The population projections are consistent with future land use planning and are the basis for projected water demand and wastewater flows for the service area, described in the Triangle Regional Water Supply Plan (TJCOG, 2012).

The environmental documents that are developed for each infrastructure project will contain thorough justification on why the project is needed to support the Town’s growing demands. Population projections such as those provided above serve as the basis for the projected infrastructure needs. As demonstrated through its planning processes, the balance between growth and environmental protection is of critical importance to the Town.

TABLE 3-1  
Projected Population for the Town of Holly Springs

Year	Projected Population
2010	24,661 <sup>1</sup>
2015	35,681 <sup>2</sup>
2020	46,700 <sup>3</sup>
2025	54,300 <sup>2</sup>
2030	61,900 <sup>3</sup>
2035	68,350 <sup>2</sup>
2040	74,800 <sup>3</sup>
2045	81,900 <sup>2</sup>

<sup>1</sup> U.S. Census Bureau, 2010

<sup>2</sup> Interpolated

<sup>3</sup> TJCOG, 2012

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