

10

Utilities and Public Services

“Investment in infrastructure is a long-term requirement for growth and a long-term factor that will make growth sustainable.”

-Chanda Kochhar

Introduction

High quality, well-functioning, and reliable public utilities and services are important for maintaining quality life and economic growth among Littleton residents. and have a direct impact on natural, cultural, and financial resources.

This chapter analyzes the need for and discusses the present and future locations of public and private utilities in the greater Littleton area. These utilities include:

- Water
- Sewer
- Electrical
- Solid waste
- Telecommunications

LITTLETON WATER AND LIGHT DEPARTMENT

The Littleton Water and Light Department provides electrical power and potable water for residents, institutions, and businesses within the Town of Littleton and portions of the neighboring Towns of Bethlehem and Lisbon. They purchase wholesale electric power from suppliers from the New England Power Pool on an hourly basis. Littleton Water and Light is a separately chartered operational enterprise of the Town of Littleton with three commissioners as its governing body. The Board of Commissioners are appointed to 3-year terms by the Town's Selectmen and are charged with direct oversight and have the ability to change rates as needed to support its mission. The main department facility (which houses the administrative offices, equipment storage, and the repair area) is located on Lafayette Avenue.

Water Department

Littleton's **primary water source** includes 7.5 square miles of drainage area on the side of Mt. Garfield located in the Towns of Bethlehem and Franconia. An eleven-mile pipeline was laid in 1903 to the Railroad Street Chlorinating Station to service the Town and continues to provide service to this day. Water flows by gravity into Littleton at the design rate of up to 1.8 million gallons per day (gpd).

Littleton also has a **backup water source** that is a drilled rock well capable of supplying another 400,000 gpd, which was developed in 1961. Since then, further improvements included a new 1,500,000-gallon water storage reservoir and pumping station in 1969; industrial park improvements; improvements to the disinfection facility; and continued aggressive replacement of small diameter galvanized pipes and services

with emphasis on establishing loop feeds in the distribution system. Additionally, Littleton has over 2.5 million gallons of covered storage in Town with available fire flow in excess of 1200gpm in the industrial park for fire suppression capabilities.

Littleton Water and Light Department supplies water and electric power to 5,500 customers.

The Department currently serves 1,700 connections (the majority of the 6,000 residents of Littleton) in the Town, and a daytime population that swells much larger that include employees and visitors. Approximately 600,000 – 500,000 gallons of water are being consumed each day in Littleton.

Nearly 1.9 million gallons of water are available in Littleton each day for fire suppression needs, and of this amount, about 500,000 gallons are currently being utilized on average. Steps have been taken to secure additional secure water sources, and to understand to what extent the existing system is being strained by large scale development outside the downtown area. New water sources for Littleton should be located in the Town, and will be supplied by groundwater rather than surface water sources. Preliminary well development is under way and it is expected that a large public well will be permitted with the next five (5) years with in Town.

New uses are being created at the outer reaches of the Water Department's service area. Elevations above 990 feet are only serviceable from the Mann's Hill, Mt. Eustis, and Exit 43 vicinities, and cannot be connected to the gravity system. Its important for the Town to identify areas in for future development that do not strain the

water system, and any of the other resources discussed in this plan, or identify the infrastructure improvements needed to service these higher elevation areas outside the Downtown.

Electric Department



Above: Pattenville Station
Source: Littleton Water and Light

Littleton's Electric Distribution System consists of four distribution substations, approximately 150 miles of distribution lines, 3700 meters, and more than 4000 utility poles.

Littleton's largest industrial customers are taking advantage of free electrical thermo imaging and power quality monitoring to help make these users more competitive in their own marketplace. Power quality monitoring ensures that these customers are efficiently using power supplied to them so that sophisticated computer operated equipment and machinery will operate reliably.

The Town's **low electric rates** are reflective of local control and sound business decision making that puts the customers first. A low profit margin and lack of debt combined with a good mix of industrial, commercial, and residential customers helps to sustain the competitive rates.

With passage of a \$6,000,000 bond issue in December 1997, Littleton Water and Light terminated its long-term power supply contract with the New England Power Company, which enabled the utility to buy power on the open market. As a result, the utility continues to offer the lowest electric tariff in New Hampshire and one of the lowest in New England.

Littleton Water and Light is currently seeking additional power supply sources to increase redundancy and power quality, and improve reliability of its systems.

WASTE DISPOSAL

The Town's landfill on Riverside Drive was closed in July 1993 and a new transfer station and recycling center was opened to handle Littleton's solid waste. Unfortunately, the facility was destroyed in a fire in 1999 and had to be totally rebuilt. The new facility is now nearly 20 years old and was only expected to meet the community's needs for ten years. An assessment should be performed on the transfer station and recycling center to determine future improvements or expansions of this facility.

Property taxes are not used to cover the costs of waste disposal in Littleton. Any surplus revenues or unused expenditures remain in a special account that can only be accessed by a vote at Town Meeting.

Transfer Station

The Town of Littleton is a member of the Pemi-Baker Solid Waste District. At the 1993 Littleton Town Meeting, residents voted to start a "Pay by the Bag" program to help offset the costs of waste disposal. Special Littleton garbage bags must be purchased and used to dispose of waste at the transfer station. Recycling of most items is also available at no cost, and provides an incentive

to reduce the amount of waste each household throws away.

The transfer station also accepts construction debris, furniture, tires, appliances, and other bulky items for a fee. A separate fee schedule is available for these items. The “Pay by the Bag” system is also being used in several surrounding Towns.

Recycling

The recycling center accepts recyclables from residential, commercial, and industrial generators. The center also accepts recyclables from sources outside of Littleton including Bretton Woods, the Town of Dalton, Grafton County, and others. The Town relies on the Pemi-Baker Solid Waste District for an Electronics Recycling Program, Paint Recycling, Florescent Bulb Recycling, and a Household Hazardous Waste Collection.

WASTEWATER TREATMENT

The Town operates a wastewater collection and treatment facility which services about **70%** of the population, and is supported by the collection of user fees. Wastewater treatment is important to ensure that pollutants are being removed being wastewater is deposited back into the natural environment. The facility is located on Meadow Street and discharges the treated effluent into the Ammonoosuc River. The Town contracts with a private firm to operate the treatment facility. Littleton is responsible for maintenance of the facility and all of the collection lines on the system.

The wastewater treatment facility is a secondary treatment plant, which began operation in 1989. The facility’s capacity is 1.5 million gallons a day and is operating at slightly more than **65%** of its capacity. The wastewater treatment facility currently

serves the needs of the facility, though will need some upgrades in the future to modernize and improve efficiency of the plant.

TELE-COMMUNICATIONS

Littleton’s ability to attract, retain, and generate businesses will increasingly depend upon the availability of telecommunications infrastructure to support the needs of these companies. This requires the availability of high bandwidth connections to the Internet and wireless connections, both for industrial and commercial areas where companies are located, and in residential areas where employees, residents, and small businesses are located. Littleton is mainly served by two wired providers. Both Consolidated Communications and Charter Spectrum offer wired internet access covering the majority of Littleton residents. Littleton should undertake an assessment of the existing carriers and bandwidth, and promote the improvement of this infrastructure if it is deemed insufficient.

Land Lines

Local telephone service in Littleton is provided by Verizon, and long-distance services are available through many providers, including MCI, AT&T, Verizon, and others. Internet connections also are available through such companies as Earthlink, NCIA, AOL, and Verizon through the existing land line network. This land line system is also an integral part of the wireless telecommunication system, and necessary for transmitting calls.

Wireless Services

Littleton currently has 3 towers providing communications, broadcast, and personal wireless service. The Mann’s Hill facility is owned by Atlantic Cellular of Colchester, Vermont and broadcasts for

New Hampshire Public Television, WLTN, Verizon personal wireless service, and communications for the Littleton Fire, Police and Highway Departments. The Pine Hill facility is owned by Profile Broadcasting of Littleton and broadcasts radio signals for WLTN. The Mount Eustis facility is used to provide personal wireless service through US Cellular. Another facility is located in the Town of Bethlehem on Mt. Agassiz. The Mt. Agassiz facility provides personal wireless service through U.S. Cellular. Another broadcast facility, owned by WLTN, is located on Breezy Hill in Lisbon.

Wireless service is an increasingly sought-after service for phone and internet access. Increased wireless service throughout Littleton would be beneficial to all users. As the number of users increases in Littleton wireless providers will be looking at add additional wireless telecommunications facilities to the network to handle the capacity and peaks in demand. The western portion of Littleton has already been identified as a region that still needs coverage.

Cable Services

Littleton's cable television service is currently provided through Spectrum. Spectrum also provides high bandwidth residential connections over its cable infrastructure for internet access. There are, however, competing technologies such as Digital Subscriber Lines (DSL) that offer advantages in some cases, which are difficult to provide to large areas of the Town. DSL facilities generally require equipment to be housed in the local telephone company central office and within 17,000 to 20,000 feet of the subscriber property. The distance of these facilities to some rural areas makes DSL unfeasible.

In new developments and redevelopment projects infrastructure planning should include the installation of conduit to accommodate wiring for existing and future telecommunications technology.

This feature will allow people to access services online, easily work from their homes, and will potentially reduce the number of vehicles traveling on local and regional roadways.

Future Infrastructure Expansion

Despite the Town's predominately rural nature and relatively small population, the citizens of Littleton demand access to new and emerging telecommunications infrastructure. Zoning and other local regulations should allow for the careful siting and installation of telecommunications capabilities such as fiber optic cabling, and the wireless, cellular and satellite communication infrastructure needed to support and retain commercial and residential interests. Whenever possible, unobtrusive installations and co-location should be encouraged.