

CHAPTER II

COMMUNITY PROFILE

Geographic Location

The Town of Salem, New Hampshire (Town) was legally established as a corporation in 1750, and has developed into a robust self-governing municipality. It is centrally located in southern Rockingham County, New Hampshire. Situated astride Interstate Highway 93 and State Routes 28, 97 and 111, the southern town line is bounded by the Massachusetts and New Hampshire State line (Methuen MA), Pelham and Windham to the west, Derry to the north, and Atkinson at the east. These adjacent highways provide access to the Town from Boston, Manchester, Concord, Nashua, and the seacoast area.

Demographics

Currently (September 2004), Salem's population is estimated to be approximately 30,000. That figure represented a population increase of approximately 1.6% since 1990. The estimated number of housing units in Town is approximately 10,595 units. Future projections for the Town, as prepared by the Rockingham County Planning Commission (RCPC), indicate that over the next 10-year period the population will continue to grow at an approximate rate of 1.6%.¹

Commerce dominates Salem's economy as the business district is centered on several large regional malls and many "big box" retail outlets. Rockingham Race Track, Canobie Lake Amusement Park, and Campbell's Scottish Highlands Golf Course add a commercial recreational component to the community. The average daytime population is estimated to be 85,000 swelling to 120,000 during the Christmas shopping season².

Natural Features

The Town of Salem covers approximately 24.5 square miles of land area, with varying topography from approximately 100-feet (MSL) on the Spicket River near Hampshire Road, to approximately 366-feet MSL atop Gordon's Hill on the Windham border. Vegetation is typical of New England including both deciduous and conifer forests, open fields, swamp, marshlands, and riverine areas.

Salem's generally hilly terrain lends itself to the abundant number of lakes, ponds, and streams in Town. Notable impoundments of concern include Canobie Lake (shared with Windham) and Arlington Mill Reservoir, which also serve as resources for the Town's public water supply, and Millville Lake. The Town's major waterway, the Spicket River, serves as the outlet for most of the in-town streams and drainage areas. Reservoirs formed by dams along the Spicket River basin are owned, maintained, and controlled by the Town's Public Works Department. These impoundments and their surrounding lands not only serve as the water supply, but as public and private recreational areas and as valuable natural resources for the Town, residents, and wildlife.

Climate

Salem's climate is classified as having four definite seasons with winters that are relatively long, cold and snowy, and hot and humid periods during the summer, ranging in temperature from about 85°F for July and 0°F for January. Hail and thunderstorms are common throughout the spring and early summer seasons with a historical average annual rainfall of 42-inches and an additional 55-inches of snow on average for the winter months. Salem has experienced several flooding events in the past years including the highest recorded 100-year flood in March of 1987.

¹ Salem Planning Department

² "Financial/Service Impact Analysis", Video Gaming Task Force 1998

The Watershed

Sourced at the outlet of Big Island Pond in Derry NH, the Spicket River has a total drainage area of 77.7 square miles with an average gradient of 2-feet per mile. The river flows south, and outlets into the Merrimack River in Lawrence MA. A sluggish river, its majority lies in Salem (80%) and is characterized by numerous areas of swamp, wetlands, and natural valley storage. The basic bedrock geology for the Spicket River system is composed of glacial till and glacial outwash. The maximum relief in the sub-basin is approximately 246-feet MSL. Surrounded by woodlands and residential-agricultural lands, the river bisects the easterly-side of the Town of Salem along a north-south axis. The Spicket River watershed is shown on Map 1.

From its source at Big Island Pond, the river runs about 2-miles from the head of Taylor and Arlington Mill Reservoir. From Wheeler Dam, the outlet to the Reservoir, the Spicket meanders through the wooded, rural, and commercial areas of Salem. It is along this 10-mile stretch that the majority of its main tributaries join the Spicket, increasing the drainage area from 23.5 square miles at Wheeler Dam, to about 70 square miles at the state line.

Leaving Salem, and New Hampshire, the river continues 2-miles further on a flat gradient into a more urban setting, to the “Methuen Falls” Dam. Here, the river drops approximately 30-feet and then runs another 2.5-miles through a very urban system of narrow channels and dam structure, before reaching the Merrimack River.

Salem’s major tributaries of the Spicket River include Captain Pond Brook, Providence Hill Brook, Hittytitty Brook, Widow Harris Brook, Porcupine Brook, Policy Brook, and World End Brook. Although these streams generally have much steeper gradients than the Spicket, the overall characteristics are similar, flowing through areas of wetlands, natural storage, and impoundments. Of the seven drainage areas, only two do not discharge directly into the Spicket River; these are Hittytitty and Porcupine Brooks. Hittytitty Brook is impounded by the Millville Dam in central Salem, which outlets into the Widow Harris Brook, while Porcupine Brook is an extensive tributary of Policy Brook.

In Salem, many residential developments are located along the Spicket River and tributary riverfronts and in the floodplains. This river continues to be a primary concern during flood events.

Current and Future Development Trends

Current Development is predicated on the Town of Salem’s Zoning Ordinance. The Town is divided into thirteen zones, as seen on Map 2. These thirteen zones include: residential, garden apartment, rural, business office I & II, industrial, commercial A, commercial-industrial B&C, recreational, limited community shopping village, town center and manufactured housing park. For more information on these specific zones see the Salem Zoning Ordinance.

Forty years ago, over three-quarters of the land area that comprises the Town of Salem was in open space. Today, three-quarters of the Town’s land area is developed. [Table 1.1](#) compares the present use of land in Salem with data from 1962 and 1982 when similar studies were conducted. The land devoted to residential development has quadrupled over the forty year period while non-residential land use occupy almost six times more land than was occupied in 1962. At the same time the open lands of Salem have

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declined to the point where they represent about one-quarter of the Town’s total land area. As the amount of vacant, developable land declines in a community, it is appropriate to quantify the residential development potential of this remaining open land. This type of analysis, referred to as a “buildout” analysis, provides not only a sense of the quantity of potential residential development, but also some insight as to the time frame during which the buildout will occur.

Table 1.2 arrays the results of a buildout analysis utilizing the density standards for the existing zoning districts as applied to the area of developable land. The analysis indicates the potential for 2,771 additional dwelling units, 70 percent of which would be single-family dwelling units and 25 percent of which would be multi-family, with the balance being manufactured homes and duplexes. If development occurs at the average rate that it has occurred over the past 16 years, the buildout would take 28 years to achieve; however, the projected growth rates suggest that the buildout could occur within half of that time period.

A second buildout analysis was conducted; **Table 1.3**, based on the assumption that as the municipal sewer service is extended into the Rural District these areas will be rezoned to the Residential District, as the rural classification will no longer be appropriate or defensible. The Lakes Area Infrastructure Plan was used to identify the land to which this change could apply with a resultant increase in the total potential for residential dwelling units of 3,295. Buildout of these units could take anywhere from 16 to 32 years, depending on the rate of development. However, there is no increase in the number of total multi-family units or the proportion of units for general occupancy vs. senior housing.

Table 1.1 The Future Residential Buildout of Land in Salem and Changes in Land Use 1962 - 2000	1962		1982		2000	
	Acres	Percent	Acres	Percent	Acres	Percent
1. Residential						
a. Single Family	1,557	9.5%	3,600	21.9%	6,417.8	39.1%
b. Manufactured Housing					69.22	0.4%
c. Two-family					432.78	2.6%
d. Multi-family	85	0.5%	150	1.0%	312.53	1.9%
e. Seasonal	153	1.0%	100	0.6%	103.7	0.6%
Residential subtotals	1,795	11.0%	3,850	23.5%	7,336.03	44.7%
2. Non-residential						
a. Commercial	203	1.2%	1,320	8.1%	1,716.44	10.5%
b. Industrial					323.41	2.0%
c. Commercial/recreational	159	1.0%	159	1.0%	---	---
Non-residential subtotals	362	2.2%	1,479	9.0%	2,039.85	12.4%
3. Public/Semi-public	80	0.5%	1,100	6.7%	355.21	2.2%
4. Rights-of-way	398	2.4%	1,250	7.6%	1,830.52	11.2%
5. Open lands						
a. Flood Plain	---	---	2,737	16.7%	---	---
b. Wetlands	186	1.1%	690	4.2%	---	---
c. Farm land	4,884	29.8	652	4.0%	---	---
d. Woodlands	7,918	48.4%	3,865	23.6%	---	---
Open Lands subtotals	12,988	79.3%	7,944	48.5%	4,056.39	24.7%
6. Water	761	4.6%	761	4.6%	783	4.8%
TOTALS	16,384	100.0%	16,384	100%	16,401	100%

The pattern of development indicates a continued growth in the community from the 1960's until today. The peak of the residential growth occurs in the period between the 1960's and 1980's in the residential sector. The result of this peak is the creation of roadways, facilities, and other infrastructure that is now 30 to 40 years of age, the typical depreciation period for most capital assets.

**TABLE 1.2
SALEM BUILDOUT SCENARIO #1**

Completion of Residential Development as Permitted by the Current Zoning Ordinance

Zoning District	Total Land Area	Developable Land	85% of Developable Land Area ¹	Development Density	Total New Units
	acres	acres	acres	Units per Acre	#
Rural	8,009	2,035	1,729.75	0.5	865
Residential	4,458	729	619.65	1.8 ²	1,115
Recreational	424	48	40.8	1.74	71
Garden Apt	93	15	12.75	12.45	159
Manuf'd Hsg	35	18	15.3	1.74	27
Town Center	426	67	56.95	20 ³	380 ⁴
Bus/Com/Ind	2,174	182	154.7	20	155 ⁵
Totals	15,619	3,094	2,629.9		2,771

¹ Developable land area is reduced by 15% to allow for road construction, utility installation, layout inefficiencies caused by the shape of the lot, etc.

² Assumes that 90% of new development in this district will be single family dwellings and 10% will be two-family dwellings.

³ Density estimate for senior housing is derived from FAR's and other design requirements in Section 309-177 of the Zoning Ordinance.

⁴ One-third of the developable land in the Town Center District is assumed to be used for senior housing.

⁵ Five percent of the developable land in the Business, Commercial, and Industrial Districts is assumed to be used for senior housing.

**TABLE 1.3
SALEM BUILDOUT SCENARIO #2**

Completion of Residential Development under the Current Zoning, Assuming the Rezoning of 1,862 Acres from Rural to Residential (Based on Planned Sewer Extensions)

Zoning District	Total Land Area	Developable Land Area	85% of Developable Land Area ¹	Development Density	Total New Units
	acres	acres	acres	Units per Acre	#
Rural	6,147	1,561	1,326.85	0.5	663
Residential	6,320	1,203	1,022.55	1.8 ²	1,841
Recreational	424	48	40.8	1.74	71
Garden Apt	93	15	12.75	12.45	159
Manuf'd Hsg	35	18	15.3	1.74	27
Town Center	426	67	56.95	20 ³	380 ⁴
Bus/Com/Ind	2,174	182	154.7	20	155 ⁵
Totals	15,619	3,094	2,629.9		3,295

¹ Developable land area is reduced by 15% to allow for road construction, utility installation, layout inefficiencies caused by the shape of the lot, etc.

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