

MHC Reconnaissance Survey Town Report

BOXFORD

Report Date: 1985

Reconnaissance Survey Town Reports, produced for MHC's Statewide Reconnaissance Survey between 1979 and 1987, introduce the historical development of each of the Commonwealth's municipalities. Each report begins with an historic overview, a description of topography, and political boundaries. For the purposes of the survey, the historic period has been subdivided into seven periods: Contact (1500–1620), Plantation (1620–1675), Colonial (1675–1775), Federal (1775–1830), Early Industrial (1830–1870), Late Industrial (1870–1915), and Early Modern (1915–1940/55). Each report concludes with survey observations that evaluate the town's existing historic properties inventory and highlight significant historic buildings, settlement patterns, and present threats to these resources. A bibliography lists key secondary resources.

Town reports are designed for use together with a series of town maps that demarcate settlement patterns, transportation corridors and industrial sites for each historic period. These maps are in the form of color-coded, polyester overlays to the USGS topographic base map for each town on file and available for consultation at MHC. For further information on the organization and preparation of town reports, readers should contact MHC.

Users should keep in mind that these reports are now two decades or more old. The information they contain, including assessments of existing knowledge, planning recommendations, understanding of local development, and bibliographic references all date to the time they were written. In some cases, information on certain topics was not completed. No attempt has been made to update this information.

Electronic text was not available for digital capture, and as a result most of the reports have been scanned as PDF files. While all have been processed with optical character recognition, there will inevitably be some character recognition errors.

The activity that is the subject of the MHC Reconnaissance Survey Town Report has been financed in part with Federal funds from the National Park Service, U.S. Department of the Interior. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior. This program receives Federal financial assistance for identification and protection of historic properties. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, as amended, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, disability or age in its federally assisted programs. If you believe you have been discriminated against in any program, activity or facility as described above, or if you desire further information please write to: Office of Equal Opportunity, National Park Service, 1849 C Street, N.W., Washington, D.C., 20240.



MASSACHUSETTS HISTORICAL COMMISSION

William Francis Galvin, Secretary of the Commonwealth

Chair, Massachusetts Historical Commission

220 Morrissey Blvd.

Boston, MA 02125

www.sec.state.ma.us/mhc

mhc@sec.state.ma.us / 617-727-8470

MHC RECONNAISSANCE SURVEY REPORT

Date: September 1985

Community: Boxford

I. HISTORIC OVERVIEW

An agricultural community of gently rolling terrain in interior Essex County, Boxford contains no confirmed sites of native activity. European settlement initially attracted to East (southern) Boxford area ca. 1645 and to West (northern) Boxford area after 1670. Dual settlement foci continued to characterize the town, meetinghouse sites having been established in both east and west parishes, by 1701 and 1735 respectively. Dispersed agricultural settlement persists through eighteenth century, with small scale ironworks active on Fish Brook.

By the early nineteenth century, both meetinghouse centers had emerged as small crossroads villages, and settlement attracted to the town's principal north/south corridors (Main Street and Ipswich Road). With arrival of railroad in mid-century, several small manufacturies established (shoes, matches, textiles). Agricultural production continued as the town's primary occupation, and meetinghouse centers began to attract residential construction. With location of railroad depot in East Boxford, manufactories attracted to southern (eastern) town and First Parish (Boxford Center) emerged as town's primary residential and commercial focus.

After the Civil War, manufacturing output declined, population began to drop and building slowed. Nadir in 1925 when new period of growth began. Interstate 95 in southeastern town led to Boxford's conversion into residential community. Affluent single-family dwellings on large lots now lining many of its rural roads. Present development pressures came from potential condominium construction (already begun) rather than from commercial/industrial development. Meetinghouse villages remain intact, and at present, not in obvious danger.

II. POLITICAL BOUNDARIES

In 1685, Boxford was incorporated as Rowley Village and then included part of present Groveland and Middleton. In 1728, part was annexed to Middleton. The nineteenth century saw the town yield small cessations of land to Rowley (1808-1810), Ipswich (1846), Groveland (1856) and Georgetown (1879). Boxford's political boundaries have essentially remained stable since the first quarter of the eighteenth century.

III. TOPOGRAPHY

The town of Boxford is located near the center of Essex County, Massachusetts. Physiographically, the town lies within the New England Seaboard Lowland, a relatively smooth coastal strip of land with hills usually below the 400 and 500 foot contours. In

Boxford, land surfaces are irregular and generally slope southeasterly. Most elevations average 150 feet with several hills reaching heights of 250 to 300 feet or more.

Bedrock deposits in the Boxford area are mainly composed of Salem gabbro diorites (diorite and gabbro diorites). In some areas small deposits of Newburyport quartz and rocks belonging to the Marlboro formation are also present. Soils in Boxford are generally well drained or moderately well drained deposits. In the eastern and northern area of town soils belong to the Hinckley-Windsor-Merrimac and Canton-Charlton-Sutton associations. Both these associations occur in deep, nearly level to steep areas formed from outwash deposits and glacial till. In the southwestern portion of town soils belong to the Charlton-Rock outcrop-Medisaprist association. These soils occur in deep, nearby level to steep deposits formed in glacial till. Rock outcrops are common as well as mucky soils in areas of organic deposits.

Major drainage in Boxford is through surface formations; predominantly the Parker River in the north and Fish Brook in the south. Several ponds are also present such as Johnson's Pond, Stiles Pond, Spofford Pond and Baldpate Pond.

The original forest growth in Boxford and in Essex County in general consisted of a mixed growth of whitepine, oak, chestnut, poplar, maple, birch and some other birchwoods and conifers. However, second growth patterns characterize most of the town today, including oak and chestnut in upland areas; birch, cedar, juniper and white pine are also present.

IV. CONTACT PERIOD (1500-1620)

A. Transportation Routes

Native American transportation routes in the Boxford area likely emphasized combined water and land travel along the Parker River and Fish Brook area. Other conjectured trails may also have been present along the routes of the Ipswich Road and Main Street.

B. Population

Boxford was probably inhabited by members of the Pawtucket group which extended from the Saugus/Salem area north to the York area of Maine. Locally this group is commonly referred to as the Agawam Indians. Gookin (1972) lists ca. 3,000 men as belonging to this group prior to the 1617-19 epidemics, as many as 12,000 natives. These figures may be exaggerated, and Native Americans in the Boxford area probably never numbered more than 200 individuals. Following the epidemics, fewer than 50 to 100 natives.

C. Settlement Pattern

Contact period site locations are currently unknown for the Boxford area. Few sites dating to this period have been identified in eastern Massachusetts in general. Regional

ethnohistoric sources and known Contact Period site locations indicate a possibility that sites belonging to this period may be present in the Boxford vicinity. Preferred site locations appear to emphasize coastal estuary zones and major drainages, a pattern similar to that of Woodland period sites. In Boxford, Contact period sites may be present along the banks of the Parker River in the northern portion of town or along Fish Brook in the south. Such sites may also be present along the periphery of major ponds (Stiles Pond, Hovey's Pond, Lowe Pond, etc.) or other wetlands. While habitation or village type sites may exist in the Boxford area, smaller special purpose sites for fishing, hunting and burial may be more common in this area.

D. Subsistence Pattern

Native Americans in the Boxford area subsisted on a variety of seasonally determined activities including hunting, fishing, the collecting of wild plants and shellfish, and horticulture. In the Boxford locale, these activities were probably similar to subsistence activities practiced by Native Americans in other eastern Massachusetts areas. Hunting was a major activity focusing on larger mammals such as deer and smaller fur bearers. Upland game birds and ducks were also hunted.

Freshwater ponds and streams in this area offered a variety of fish for consumption. In addition, the Parker River presently contains alewives and may also have contained shad, smelt and possibly salmon in the past. Gathering activities were as important as hunting in the Native American subsistence system. Several species of terrestrial and aquatic plants available provided a valuable food resource. Gathering may also have focused on shellfish. Freshwater clams are available from most of Boxford's ponds. Domesticated plants such as corn, beans, pumpkins, squash and tobacco were important. The locations of native fields are currently unknown, however, they were likely located along rivers streams or other wetland areas.

V. PLANTATION PERIOD (1620-1675)

A. Transportation Routes

Indian trails continued in use in the Boxford area throughout most of the Plantation period. In fact, many trails may have been upgraded to horse or cartpaths before settlement linking areas to the south (Ipswich/Topsfield) with the Merrimack River. The Parker River and Fish Brook area are not navigable by larger craft.

Most land transportation in the Boxford area was laid out in ca. 1645-50 shortly after the original house lots were divided. These routes originated in the southern portion of town and included the Ipswich Road, Main Street, Middleton Road, Mill Street, Topsfield Road and Depot Road area. Most early roads were not greatly improved from natural conditions and were used mainly to move cattle or other livestock and to reach mills. Although Boxford was part of Rowley during this period its inhabitants were

isolated geographically from their parent settlement. Land routes to the Topsfield area were more common. West Boxford area transportation routes focused on the Main Street/Washington Street area.

B. Population

Houselots were laid out for 6 male settlers in ca. 1645 possibly representing up to 30 individuals at the time of settlement. Between that date and 1675 as many as 13 additional male settlers arrived in Boxford representing a total population of nearly 100 individuals by the end of the period. Boxford was exclusively settled by Puritans or Congregationalists. Many settlers prior to 1660 were from Yorkshire, England. After that date settlers were predominantly from nearby settlements such as Ipswich, Gloucester, Topsfield, Andover, Wenham, Rowley and Newbury. At least one settler was from Scotland.

One half of the town's ministerial taxes were paid to Rowley, the other half to Topsfield. Rowley Village residents trained for military service, worshipped and were buried in Topsfield throughout the Plantation Period. Boxford residents had little to do with Rowley and were more aligned with the Topsfield settlement. Boxford residents joined with residents of Topsfield to build a meetinghouse there sometime before 1658.

C. Settlement Pattern

Rowley Village or the Boxford Center area was first settled in ca. 1645. About that time six 30 acreouselots were laid out in the center of town along the Main Street area. Later grants of several hundred acres were also laid out. House lots were distinctly larger and different in composition in Rowley Village than in its parent village Rowley. Wealth determined the size of the land grant. A training field, meetinghouse, burial lot or common fields were not present during this period. While some settlement was concentrated in Boxford Center, dispersed farmsteads were also present shortly after the initial settlement. West Boxford was settled late in the Plantation Period but did not really expand until after 1670. Land grants in this area followed patterns established in Boxford center. Larger contiguous grants were common, often exceeding several hundred acres. Smaller grants (less than 100 acres) were also present.

D. Economic Base

As Colonial settlers moved into the Boxford area they likely hunted, fished and gathered wild food in much the same manner as their Native American predecessors would have done. However, the combined efforts of agriculture and husbandry were clearly the most important aspects in the economic lives of Boxford's early settlers. Indian corn, wheat and barley were the most important food crops grown as well as rye when possible. Fruit and vegetables were also important but grains were the most important food produce. Evidence also exists that hemp and flax were also grown on Boxford farms, but not as important here as in Old

Rowley. Salt marshes were not present in Boxford, but farmers owned marshes in Newbury, Rowley and Ipswich and cut considerable salt hay in these areas. Husbandry was also an important activity in Boxford. Cattle, horses, sheep and swine were the most important animals on many farms. The fattening of cattle and raising of horses may have been a local specialty in the Boxford area. Many early land grants note the importance of certain areas for cattle grazing rather than farming. When early roads were laid out their importance for moving cattle from one location to another may have superseded human travel. Oxen and fowl were also present as well as cows and dairying activities.

An iron works was established by Henry Leonard of Lynn in 1669 near the site of the Andrews Mills. Iron mining (bog iron) was also carried out in Boxford, and the surrounding towns of Danvers, Ipswich, Middleton, Topsfield and Saugus supported the works. Saw mills, grist mills or fulling mills were not present in Boxford during this Period. Tanneries were in operation probably in service of local shoe makers. Some weaving was also present although not to the extent as in Old Rowley. Most manufactured goods were small scale and probably for local consumption.

VI. COLONIAL PERIOD (1675-1775)

A. Transportation Routes

Few native trails likely remained by the Colonial Period as most had been upgraded to horse paths, cartways or overgrown by this time. In West Boxford the Main Street/Washington Street/Willow Street routes developed as the main transportation corridors joining the Ipswich Road south of West Boxford center. The Ipswich road extended southeasterly on the eastern side of town. In the west, Main Street continued south to the Old Rowley Village center where it split forming the Middleton, Topsfield and Depot Roads. Other important roads from Boxford center included the Herrick and Georgetown Roads which linked with the Ipswich Roads and Mill Street, extending across the Fish Brook area. Early bridges were established at the junctures of Main Street and the Parker River, at the Ipswich, Herrick, Georgetown and Depot Roads Across Rye Brook and on Main Street, the Middleton Road and Mill Street where they cross Fish Brook. Several river crossings may have been combined with dams, mills being present at several of these locations.

B. Population

Boxford's population at the beginning of this period was probably around 240 individuals as 48 families living in Rowley Village petitioned the general court to be set off from Rowley in 1685. The town's population grew rather quickly after this date. After 1670 West Boxford's population grew steadily. In fact, between 1670 and 1735 it's population developed to the point that it may have had a larger population than the east end of town. At the time the first census was taken in 1765, 851 individuals were listed in the town. By 1776 this figure increased by 16.2% to 989

individuals. By 1765 no Native Americans are listed in Boxford. However, 10 negroes were present comprising 1.19% of the town's overall population. Ethnically virtually all of Boxford's population continued to be of English decent born in Boxford and the surrounding towns. All of the town's residents worshipped the Congregational faith. Some Anabaptists may have been present after the 1730's-1740's, but their numbers or place of worship remains unknown.

C. Settlement Pattern

Colonial Period settlement of the Boxford area continued to be based primarily on the economic status of individual settlers. The amount of land granted was based on what individual colonists could afford. Grants ranged from 30 acres or less to over 1000 acres, although grants of 200 to 300 acres were more common. Most later grants in the Boxford area were laid out around 1666-67 but not settled until early in the Colonial Period. Common lands or a common field system as found in Rowley were not used in Boxford. However, settlement was most dense in two locations: near Boxford center and, after 1670, in West Boxford.

Boxford center or the First (East) Parish did not have a meetinghouse until 1701 when one was built near the juncture of the Georgetown and Middleton Roads. A new meetinghouse was built in the First Parish in 1735. In West Boxford, a meetinghouse was erected in 1734 near the juncture of Main Street and Willow Road. However, this area was not incorporated as the Second or West Parish until 1735. This parish included several families from the North Andover area. Both the First and Second Parish were Orthodox Congregational. Boxford received it's first school teacher in 1701 when classes were held in private homes. In 1738 or 1739 the town was divided into school districts with a school house built in each district.

D. Economic Base

Agriculture and husbandry continued to characterize Boxford's economy throughout the Colonial Period. Only husbandry may have somewhat diminished in importance in favor of corn production. Indian corn increasingly became more important than barley, wheat or rye as soil fertility began to fail and English preferences for wheat and barley diminished.

Industry and manufactures increased during this period although they were still secondary in importance to agriculture. In 1680 the Lemond Mill was discontinued after which iron smelting would not resume until 1770 when Samuel Bodwell of Methuen and Thomas Newman of Boxford established a smelting operation about 1770 at the site of the "match factory" (Hurd 1888:965). About 1695 William Peabody erected the town's first saw and grist mill near the Herrick estate. An additional sawmill was built near the Batchelder residence in 1710. Pegs were manufactured at this mill for about 25 years. The Howes and Andrews saw and gristmills were established in 1710. The Day mill in the West Parish was established as a grist mill in 1740. The Herrick sawmill was

erected about 1760. West Parish mills were established along the Parker River (Hasseltine Brook). However, most mills in the town were established with the initial settlement along Fish Brook and later along Rye Brook to the north. Manufactures in the town continued to be local attempts at tanning, shoemaking and weaving for local consumption. Blacksmiths and wheelwrights shops were also present.

E. Architecture

Residential: Few inventoried structures date from the 17th century except as portions of now larger houses; these include a portion of the Abraham Redington house dated to 1683, of the Watson Hall House dating to 1687, and of the Tyler-Wood house dating to 1690. Eighteenth century houses survive in exceptional numbers here, and are predominantly 2 & 1/2 story, center entry and chimney types. Several examples house their rear pile of rooms in added or integral lean-tos forming the familiar salt box profile; about 7 of these are known in the town, but some received later modifications. More common among survivals are house types that employ a symmetrical profile in the side elevation, numbering about 10; in 2 examples the chimney is placed before, rather than straddling the roof ridge. One example survives with 3 bays, side entry and chimney, the G.B. Austin House of 1745; the Thomas Knowlton House of 1730 is 1 & 1/2 stories in height. Double interior chimneys and Georgian plans are quite rare; the Thomas Knowlton House is said to date to this period, and the gambrel-roofed Holyoke-French House was constructed in 1760.

Institutional: The first meetinghouse was constructed in 1699, after discussion of the correct location; it was 34 x 30 feet with 18 foot studd height, a pyramidal roof with a turret, galleries and pews and a pulpit as good as Topsfield; the turret was dismantled in 1732. There is no information available on the meetinghouse of the second parish, constructed in 1734. The first parish built their second house in 1742-45; in size it was to be 38 x 48 feet and 24 foot stud, with two tiers of windows on each side wall, a window above the pulpit and in each gable, and a "fashionable roof". The second parish rebuilt in 1774 "according to the same plan (of New Rowley)...excepting a steeple, instead of which...a porch built as at the other end...." The town voted to construct a poorhouse in 1706, 34 x 14 feet with 6 foot studs, but it is doubtful that this was accomplished. In the 1730s school houses were constructed but their appearance is unknown.

VII. FEDERAL PERIOD (1775-1830)

A. Transportation Routes

The town's road network experienced little change during the period. Main Street and Ipswich Road remained Boxford's two principal north - south corridors, while Washington Street and Willow Road (Rt. 133) continued as the town's major east-west route, linking Boxford with Georgetown and Rowley.

B. Population

Boxford's population grew from 989 individuals in 1776 to 935 individuals in 1830 with an overall growth rate of 5.46%. Population growth was the lowest (2.95%) from 1810-1820. From 1776 to 1800 population actually declined (-13.85%). Most population growth (3.29%) occurred from 1800 to 1830 (3.2%).

Voluntary associations were popular during the period: the East Parish formed a Proprietors Library in 1794; temperance advocates joined with the like-minded in Topsfield to form a Moral Society in 1815. Discord within the Parish brought a brief withdrawal in 1818; a 2 story house was constructed for worship as well as a 2nd floor for schools or education, and was the site of an academy after 1826. Both Unitarian and Universalist preaching was heard before reunion.

C. Settlement Pattern

Since the middle decades of the 18th century, the West Parish had exceeded in population that of the east. Following the erection in 1774 of the West Parish meetinghouse at the junction of Main and Washington Streets, West Boxford emerged as a small crossroads village and a secondary focus of residential and civic activities.

Activities in the east Parish were also attracted to the meetinghouse vicinity during the period. The town's first post office was established in East Boxford in 1804; at the failure of that hamlet to develop, it was moved to Boxford Center in 1826. Members of the ephemeral Third Parish opened the Boxford Academy (1826-29) opposite the First Parish meetinghouse, fronting Georgetown Road. With the addition of several stores and inns and a small library (1794) to the town center, Boxford had undisputably emerged as the primary civic and commercial focus. Little residential construction was attracted to either of these two centers, however, as dispersed agricultural settlers remained pervasive in Boxford throughout the period. Following the Colonial Period transportation net, what residential building did occur tended to follow the town's two major longitudinal axes, the one Main Street linking Boxford and West Boxford, the other Ipswich Road, leading from West to East Boxford and on to Ipswich. Local industrial sites were similarly aligned to these axes. Following a series of small ponds (roughly in a pattern parallel to Ipswich Road near East Boxford) and along Fish Brook (south and west of Boxford Center parallel to Main Street and Topsfield Road), milling activity was vigorous throughout the period.

D. Economic Base

At the beginning of the period the vast majority of Boxford's population was engaged in agricultural pursuits. In 1791 there were 590 acres of land under tillage, 1203 acres of English mowing hay, 1301 acres of fresh meadow hay, 5078 acres of pasturage and 2566 acres of woodland and unimproved land; another 1381 acres were unimprovable. The pasture and haying lands were used to feed

123 three-year-old horses, 233 four-year-old oxen, 672 three-year-old steer and cows and 212 six-month-old swine. The 1791 tax valuation 815 barrels of cider pressed and that there were 118 barns and two grist and saw mills.

The only known manufacturing was the forging of iron and the fulling of wool. David and Samuel Kimball purchased the privilege on the Fishing Brook and the forge in 1782, which they operated until 1804; they also had an ore smelting operation. For the next five years (1804-1809) the brook was used to power a fulling mill, which Justus Coburn built on the site. In 1809 Captain Solomon Town, employed his two brothers as grist millers. In addition, he rented some space to the Reddington brothers who turned wooden trays, bowls and wheel hubs beginning ca. 1820. At the Howe's Pond site a grist and saw mill was run throughout the period.

The 1820 Federal Census lists 97 men in agricultural occupations and 50 in manufacturing in Boxford. It is likely that some Boxford residents who were employed in manufacturing did shoe work, perhaps in Georgetown or Rowley shops.

E. Architecture

Residential: Boxford builders continued to employ traditional house plans through the period. During the remaining years of the 18th century center-chimney types were built and several examples are known to survive of 2 & 1/2 stories and five bays, as well as one of four bays. Double interior chimney or Georgian plan houses became more common, all 2 & 1/2 stories in height and five bays in width, most with gable roofs, one with a gambrel roof, two with hiproofs, as well as the L-plan, hip roofed, expanded Tyler-Wood house. Related to these are isolated examples employing exterior rear wall chimneys, as well as end wall chimneys, as at the house associated with the Match Factory.

Institutional: A two story meetinghouse was constructed ca. 1818 by the Third Society with the floor above for a schoolroom; converted to an Academy in 1826; used as a house thereafter; burned 1867. Schoolhouses were constructed in some districts; two in 1791 and one in 1797 but their appearance is unknown.

Industrial: Scattered saw and grist mill construction. Also one fulling mill, and an ore smelting works. A small railroad depot was built in southeastern Boxford at mid-century (at the junction of Bare Hill Road and Depot Road in East Boxford) but no longer survives.

VIII. EARLY INDUSTRIAL PERIOD (1830-1870)

A. Transportation Routes

The town's Federal period roads continued in use, with minor additions and improvements. The only major change of the period for Boxford was the addition of a railroad from Danvers to Newburyport, running across southeastern Boxford, in 1854. Within

5 years the line had been sold to the Boston and Maine Railroad Company and extended to Wakefield.

B. Population

The population of Boxford grew slowly from 935 in 1830 to 1034 in 1855 before falling to 847 in 1870, an overall rate of -9.4%. The proportion of foreign-born was small: 4.4% in 1855, 3.6% in 1865. Most were Irish, followed by English and Canadians in small numbers.

Militia companies were active and popular during the 1830s. The community continued the district school system, adding a school in 1840, but reducing the number from seven to five in 1869, probably in response to the state legislation advocating centralized systems.

C. Settlement Pattern

Within the first decade small-scale shoe manufacturing had entered Boxford, and by 1854, the Boston-Maine Railroad ran thrice daily circuits through the town to Lincoln, Danvers, and Newburyport. A brisk period of growth ensued. A new meetinghouse (ca. 1838) was built at Boxford Center; a town farm was purchased for the care of the poor (1847) West Boxford's town cemetery was enlarged and formal avenues laid out; and the town's dual civil and commercial foci, West Boxford and Boxford, become important centers of residential construction. The latter, however, continued as the town's principal settlement during the period. Inasmuch as the Boxford Depot was located in the First Parish (at East Boxford), it was to the southern portion of the town that Boxford's proliferating manufacturing and industrial concerns were attracted. Small shoe shops congregated along the southern reaches of both the Main Street/Topsfield Road axis and that of Ipswich Road, in the same general region as that in which the town's small industrial sites had been operating since the 18th century.

D. Economic Base

Boxford's economic activity continued to revolve around the farm throughout this period. Agricultural occupations outnumbered manufacturing occupations by 2 to 1 in 1840. Nonetheless, some economic diversification did occur. In 1855 total agricultural product value was \$40,625, of which more than 50% was accounted for by various hays. Butter, Indian corn, apples and potatoes accounted for another 40% of product value. By 1865 the agricultural product value had increase 76% to \$71,303. This increase occurred despite the apparent decline in the number of farmers. These 155 men worked on 125 farms whose combined improved acreage was 6158 acres. Of these 2409 (39%) were devoted to salt marsh, wet meadow and english hay and another 420 acres (7%) to tillage. The remaining 3329 acres were probably used to grow apples and as pasturage for sheep, horses, oxen, milk cows, heifers and swine. Together poultry and dairy products, and the butchered livestock accounted for nearby 50% of the increased agricultural product value in 1865.

The first evidence of shoe making is found in 1832. McLain reported that two men and two women produced 2500 pairs of shoes worth \$1800. By 1837, 154 people (84 men and 70 women) produced 70,190 pairs of boots and shoes worth \$52,975. This appears to have been the peak of such activity because in 1855 the number employed in shoe manufacturing was down to 97 (50 men, 47 women) as were production (61,550 pairs) and product value (\$52,550). Despite the 35% drop in numbers employed, shoe production was down only 12% and product value declined by less than 1%. During the 1850's two shoe factories were built, by John Hale (1851), and by Issac Hale (1859). By the end of the Civil War both had failed. The 1855 census indicates that two support industries to shoemaking were established in Boxford. The firm of Kimball and Sawyer manufacture shoe pegs (800 bushels worth \$800 in 1855) and shoe boxes worth \$3,000. They built a factory in 1860 which burned in 1875. By 1865 shoe making (and manufacturing generally) had all but disappeared from Boxford. Only ten people were employed in manufacturing occupations that year, six in saw-milling, two making shoe pegs and two making boxes. The firm of Kimball and Sawyer continued making shoe pegs and boxes probably for neighboring Georgetown and Rowley. The product value for these goods was only \$4000 and with lumber and firewood the total product value in Boxford was \$23,000, or less than half of the 1837 figure.

Another important mill site formerly the iron forge on Fish Brook, was altered once again in 1832, this time from a grist mill to a cotton manufacturing establishment. Soloman Towne, who ran the grist mill, sold the mill and privilege to George Blackburn who the rented the property to John Bently, an Englishman from Yorkshire. While cotton wicking was the primary product (14 men and women ran 372 spindles and produced wicking worth \$45,000 in 1837), poorer grades of cotton were carded into batting. In addition, this factory turned out straw hats and twines. By 1855 Bently was running 612 spindles and probably employed 25 to 30 men and women in the mill, as well as some area residents who wound the yarn and wicking in their homes. This establishment was in operation until the mid-1860s when Blackburn sold the whole property to Bryan, Carlton and Co., a Boston-based match manufacturing company. No data is available on the match factory before 1875.

Another significant industrial activity was the cutting of wood products. Lumber and firewood worth \$19,000 were cut by 26 men in 1865. Six sawmills cut 625,000 ft. of lumber and 20 men cut 1900 cords of wood for market.

The only other known manufacturing activity in Early Industrial Boxford was plough and wagon production. In 1837 one man was employed making 15 ploughs worth \$105, while in 1855 four men were employed in two establishments making \$500 worth of wagons and coaches.

E. Architecture

Residential: Early in the period builders continued to build in familiar forms primarily 2 & 1/2 stories in height, 5 bays in width, and favoring paired chimneys. The Greek Revival elements of ornament at doors, windows and cornice help to date these to the 1830s and 1840s though builders favor double interior chimney, end wall chimney, and even center chimney plans. A smaller number of houses were constructed of 1 & 1/2 stories. Gable front house types are comparatively rare here.

Institutional: East Parish built a new meetinghouse in 1838; it is gable front in form with square tower and domed belfry, paired entries and pilasters. Five years later West Parish built a new house; its gable front form included a recessed pair of entries behind a screen of in antis doric columns; its facade is flush board with a parapet above the entry, a slightly projection square tower with belfry and spire. Schoolhouses were constructed in 1840, 1845, 1854; possible survivals indicate small, 1 & 1/2 story gable front structures with both single and paired entries.

Industrial: At least three shoe factories were built, in 1845, in 1857 and in 1859. None is known to survive, though the 1845 structure probably stood until around 1900. The cotton spinning mill was built in 1832 and survived until 1867 when it was replaced by the match factory. One-half of the match factory foundation still stand behind the residence once belonging to the match factory owner south of Lawrence Road on Fish Brook. The peg and box factory established in 1860 burned in 1875. On the site a silver polish factory was established two years later, but no evidence of its survival was found.

IX. LATE INDUSTRIAL PERIOD (1870-1915)

A. Transportation Routes

The town's transportation network remained stable during the period, the major routes remaining Route 133 through West Boxford (Washington Street) running east-west, and Main Street/Topsfield Street Road and Route 97 (Ipswich Road), both running north-south through Boxford.

B. Population

Boxford's population declined steadily from a total of 847 at the beginning of the period to only 714 at the end. This amounts to a 15.7% decrease, the largest part of which occurred between 1890 and 1895. The foreign-born population grew during the period from 6.2% of total population in 1875 to 10.8% in 1915. English, Irish and Canadian immigrants constituted the vast majority of the total foreign-born populations with the Irish-born being the largest portion in 1885 (37 people) and Canadian-born occupying that position in 1915 (39 people).

Two Orthodox Congregational parishes had more than town hundred members. Both had financial difficulties which were lessened during this period. In the winter of 1888-89, a religious

awakening is said to have swept the town. The evangelist Rev. Whittier added twenty-one members to his church during this enthusiasm. Some time in this period a grange of the Patrons of Husbandry was organized. In 1872 the Barker Free School was established. The following year the Boxford Public Library was established in the East Parish. West Boxford's public library was formed in 1881.

C. Settlement Pattern

Despite the manufacturing growth of the earlier decades, late 19th century Boxford remained a predominantly agricultural town, and its population, largely dispersed. The few dwellings constructed were scattered along the town's rural routes, rather than clustering at either town center. Although at this time Boxford's population was in a state of gradual but perpetual decline, the town nevertheless enjoyed enough prosperity that it made incremental improvements to the town's civic foci. In 1873 a public library was opened in the East Parish and in 1875, a gothic church was constructed in the West. By 1891 a town hall had been erected in Boxford, in the symbolic meetinghouse/commons locale and accommodated the meetings of the numerous benevolent societies formed in the town during the period,

D. Economic Base

The manufacturing reputation of Boxford depended almost entirely on the match factory established in 1867. Of \$59,171 in manufacturing product value in 1875, \$40,000 derived from the match factory established on the Kimball iron works site on Fish Brook. In 1880 Carlton, Byers and Co. employed 40 people in the factory, using a 30 horse power steam engine to power the machinery (which included a saw mill). Boxes were manufactured on the site both for use in packaging the matches and for sale perhaps to neighboring shoe manufacturers. This business was sold to the Diamond Match company around 1885.

Only one shoe factory in Boxford appears to have survived the initial Civil War decline in shoe production and then the shift to large-scale factory production. This firm, begun by Edward Howe in 1838 and moved to a larger factory in 1845, produced \$8065 worth of goods in 1875, and 6000 pairs in 1880. The business remained in operation at least until 1895. Other than lumber for market, the only significant manufacturing activity in Boxford was a steam powered carriage building and repairing factory, located near the B&M depot in the east Parish and run by the Perley brothers. In 1875 they made wagons and carriages worth \$4,750.

Silver polish was manufactured, beginning in 1877, on the site of the shoe peg factory at Howe's Pond. (A shoe knife forge, as well as an ice house, were also established on this site ca. 1877.) As the period advanced the number of people in manufacturing occupations fluctuated wildly. With the arrival of the match factory in the late 1860s, the number of employed jumped from 10 (1865) to 99 (1875). From 1875-1895 the number declined from 99 to 31. This may be attributed to the slow down of the match business

as area tree supplies were depleted. In 1895, the value of manufactured goods was a mere \$20,147. While this figure increased to \$34,255 in 1905, it is clear that manufacturing occupied a marginal position in the economy.

Farming, meanwhile, continued to provide Boxford's residents with employment. Though the number of people in agricultural occupations fell from a high of 192 in 1885, there were still 129 so employed in 1905. The number of farms in 1905 (122) was only three fewer than in 1865. From 1885 to 1905 the value of agricultural products grew from \$114,595 to \$216,183, an increase all the more significant considering that there were 63 fewer agricultural workers in 1905 than in 1885. Moreover, the number of improved acres increased from 6158 (1865) to 7372 (1905). According to one Boxford historian, "Haverhill, Lawrence and Salem furnished ready markets for the produce of Boxford" (Perley, 1880). Wood and dairy products constituted the largest portions of the goods produced in Boxford in 1905, accounting for \$61,825 (28.6% of total agricultural product) and \$46,937 (21.7%), respectively. Next in order of importance were hays at \$36,688 (17%) and vegetables at 10.5%, poultry at 8.7%, fruit at 6.4% and meat and animal products at 5%. Between 1895 and 1905 the value of wood products jumped from \$11,156 to \$61,825, or from 8.1% of total product value to 28.6%. Likewise dairy products increased from \$5835 worth in 1865 (8% of total) to 46,937 (21.7%). Declining in significance from 1865 to 1905 were hays and meat and animal products. Dressed meat constituted 16% of the 1865 total (\$11,392 worth) and only 5.0% (\$10,915 worth) of the 1905 total, while hay constituted perhaps 30% of the 1865 total and only 17% of the 1905 agricultural product values.

E. Architecture

Residential: Surviving evidence of new housing starts is scarce, but consistent with the drop in population. An occasional small house remains: a two story, three bay mansard, a handful of simple, gable front, three bay 1 & 1/2 or 2 & 1/2 story types, as well as a few pyramidal or four-square houses were observed. One exception is the large Hale House of 1890; Richardsonian in design, its main hip block sits on a high foundation with projecting facade bays and corner tower, in clapboard and half timbering.

Institutional: The town hall was constructed in 1890, a large 2 & 1/2 story, gable front structure with center entry and simple finish. Lincoln Hall (undated) is a one story pyramidal block with entry into the center of its three bays and an eyebrow dormer above; it was also used as a grange hall.

Commercial: A 1 & 1/2 story gable front store, originally three bays, survives in West Boxford.

Industrial: The only known manufacturing enterprise established during this period was a carriage and wagon shop near the B&M depot in the East Parish. There is no evidence of its survival, nor when it was destroyed.

X. EARLY MODERN PERIOD (1915-1955)

A. Transportation Routes

The town's principal throughfares by 1940 were Route 97 (Ipswich Road) and Route 133 (Washington Street). Between 1940 and the end of the period, however, Interstate 95 was constructed through southeastern Boxford. The other principal change was the loss of Boston and Maine Railroad service to the town in 1941.

B. Population

After a half century of decline, Boxford's population numbered 714 in 1915. It fell a full 23% during the next decade to 581 persons in 1925. The town then began a period of steady growth; by 1955 its population had increased fully 150% (1177). The percentage of foreign-born in Boxford's population was 10.8% in 1915. Among the groups represented, Canadians dominate (39), followed by English (16), and Irish (7). Increasing to 13.3 % by 1930, it then began a gradual decline, falling under 10% again by 1940.

C. Settlement Pattern

Boxford in the first half of the 20th century experienced change when Interstate 95 supplanted the railroad as the town's chief transportation artery. Now encompassed within the range of Boston's commuter sphere, Boxford was transformed from stagnate agricultural town to a rural outpost for urbanites. Building during the period was restricted to the renovation of the town hall after a 1947 fire and the construction of scattered (perhaps more affluent) homes along Boxford's rural roadways.

D. Economic Base

No information is available on the manufacturing activities of Early Modern Boxford. The sole late 19th century survivors, the match factory (Diamond Match) and the Howe Shoe factory may have continued into the 20th century but this cannot be confirmed.

There is evidence that Boxford remained a commercial agricultural town into the 20th century. While the number of sheep was only one-half of the 1865 figure, there were as many horse and sows in 1920 as there were 55 years earlier. In 1915 the occupational distribution was approximately the same as it was throughout the 19th century. Agricultural worker outnumbered manufacturing workers by almost two to one (128 and 58 respectively). In addition there were 25 people in trade and transportation and 13 in government and professional jobs.

E. Architecture

Residential: Period structures are even rarer than the previous period; a handful of historic revival houses survive near the village centers.

XI. SURVEY OBSERVATIONS

The Boxford Survey neglects the town's post 1850 structures, both residential and institutional. No other building types are considered. It is residential, rather than commercial development which represents the greatest agent of change within the town. Buildings have been constructed individually and on large lots along rural roads. Tract development has not yet entered the town.

XII. FINDING AID:

First Parish Congregational	Inventory #44
West Boxford	Inventory #7
Town Hall	Middleton Rd.
West Boxford Village, 1800-50	Washington/Rt. 133 and Main St.
Boxford Center, 1800-50	Georgetown Rd. from Middleton Rd. To Main St.
Lincoln Hall	

XIII. BIBLIOGRAPHY

Fuller. Donald C. and Charles F. Holtz

1980 Soil Survey of Essex County, Massachusetts, Northern Part. United States Department of Agriculture, Soil Conservation Service.

Gage, Thomas

1840 The History of Rowley. Boston, Ferdinand and Andrews.

Hurd, D. Hamilton

1888 History of Essex County, Massachusetts. Philadelphia, J.W. Lewis and CO. Volumes I and II.

Parkhurst, Winnifrid C.

1952 History of the First Congregational Church, Boxford, Massachusetts 1702-1952.

Perley, Sidney

1880 The History of the First Congregational Church, Boxford, Massachusetts. Boxford, MA.