

MHC Reconnaissance Survey Town Report

LYNN

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.



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MHC RECONNAISSANCE SURVEY REPORT

Date: 1985; Updated: 1997

Community: Lynn

I. TOPOGRAPHY

II. POLITICAL BOUNDARIES

The name of the 17th century plantation of Saugus was changed to Lynn in 1637, and in 1639, the bounds, established between Lynn, Salem, Charlestown and Boston. Lynn Village was established as Reading in 1644; Lynnfield established in 1782; and Saugus, 1815. In 1850, Lynn was incorporated as a city. Swampscott was ceded from Lynn in 1852, and Nahant in 1853.

III. HISTORIC OVERVIEW

Lynn is an industrial suburban city on the northern axis of Metropolitan Boston. The city covers an extensive area from Nahant Bay to the headwaters of the Ipswich River. The area is divided between the open level plain of alluvial soil along the Saugus River and Lynn Common to Lynn Shore Drive to the south and the northern rock uplands of the Boston Boundary Fault in Lynn Woods with complex granite outcrops extending from Walnut Street and Parkland Avenue to Route 128 at I-95.

Plantation Period settlement was made in 1629 from Salem by the New England Company along the native trails of Boston and Essex Street from Salem. Surviving features include the Old Burying Ground and South Common with late period grave stones and a series of long lot streets from Lynn Common, the original civic core located on Shepard Street. Colonial Period settlement remained focused around Lynn Common with suspected period houses still intact on Essex and Maple Streets, and documented houses on Boston Street of Beverly Jog plan.

Significant expansion of development is marked by the Federal Period shoe craft industry sponsored by local Quaker merchants. Surviving period elements include a Friends Burying Ground and plain style Federal houses at Broad and Nahant Streets and the Eastern Burial Ground on Union Street. The other notable period site is the Mineral Springs Hotel complex at Edgemere Road with intact stone foundation plan. Shoe making continued as the propelling economy of the Early Industrial Period under Quaker control with notable Abolitionist activity by Abby Foster Kelley, including surviving house on Nahant Street of Frederick Douglass as celebrated African-American heritage. Elite development of Lynn Shore estates with Boston railroad line has been entirely redeveloped with only fragments of estate houses. Notable period houses include High Rock Cottage of the Hutchinson Family Singers in stone Gothic Style. Related suburban housing include Mansard and Italianate examples along Ocean and Baltimore Streets with some period barns intact. Workers housing developed a distinctive Gothic gabled type and side-hall cottage that remain around the fringes of central Lynn as the Union Street district and Brickyard area. Industrial prosperity likewise encouraged early Spiritualist

activity with the unique intact tunnel and Dungeon Rock in Lynn Woods and early walking trails, while the Mary Baker Eddy House on Broad Street, home of Christian Science Church founder remains as a restored museum. Adjacent Pine Grove was developed during the period as a rural picturesque cemetery on Mt. Auburn plan, now partially intact.

A few commercial or industrial period buildings remain with shoe lofts on Munroe Street a remarkable surviving streetscape of post-Civil War structures. Some ten-foot shoe shops have been located in outlying sections with intact examples on Alley and Walnut Streets, and preserved example at Lynn Heritage State Park.

Rapid economic expansion continued through the Late Industrial Period with much of the present urban fabric set in place before the First World War. The elite suburban district remained along the Lynn Shore, replacing earlier estate landscapes with more well-built houses of architect design, especially notable along Atlantic and Ocean Streets with towered Queen Anne Style of fanciful Victorian design that form an impressive streetscape of period examples among the most significant in New England. Later Colonial Revival houses followed the estate shore, many with intact early auto garages for access to Lynn Shore Drive parkway, an early reinforced concrete design, now rebuilt. Smaller shore cottages adopted gambrel Colonial Style infilling former estate lots, with large elevator apartment blocks of Neo-Classical Style built before zoning restrictions halted further high-rise development. Similar areas of Queen Anne suburban housing infilled with Romanesque apartments were developed along Chestnut and Franklin Streets and on the highlands of High Rock. Beyond central Lynn, large areas of the city were taken with two-family and three-decker housing along the major streetcar routes of Western Avenue, Essex Street and Eastern Avenue forming the majority of surviving examples.

Central Lynn was destroyed in the Great Fire of 1889 and rebuilt with multi-story brick shoe factories, notable in the Vamp Building at Liberty Square, fostered by mechanization invented by Jan Metzelienger, an African-American immigrant, now honored in memorials and located with some surviving houses in the Brickyard district. Other significant sites of industrial development include the Thompson-Houston electrical plant, now cleared as the GE West Lynn site, and an intact streetcar depot on Western Avenue. Downtown Lynn retains some landmark Panel Brick buildings of the period including the G.A.R. Hall with early Thompson-Houston electrical systems intact and Munroe Street blocks which escaped the Great Fire. The South Common area was developed as a Beaux Arts civic center with the Lynn Free Library and Classical High School, centered on a Civil War Soldiers Monument of notable design. The other civic project of note was the landscape plan for Lynn Woods, advised by Frederick Law Olmsted, now much modified with period water reservoir pump houses as the sole period structures.

The industrial prosperity continued through the Early Modern Period with a number of significant structures. The elite suburban area continued along Lynn Shore as the Diamond District with a number of Georgian Revival brick houses on Ocean Street and English Cottage stucco designs along Lynn Shore Drive, infilled on former estate lots with early examples of New England Colonial houses during the Great Depression. Elsewhere, suburban tracts were developed with modest

Craftsman bungalows and two-families, especially along the axis of Lynnfield Street (State Route 129) and along the shores of Flax and Sluice Pond from Wyoma business center. Industrial development shifted to fringe areas, most obvious with the GE River Works on Western Avenue, developed with an extended series of intact shop buildings, notable as the site of historic jet engine manufacture during the Second World War. Also of adjacent period interest is an original GE traffic signal at McGrane Square (State Route 107), possibly of national historic value as an early surviving example. Along the Lynnway is the landmark Champion Lamp Works in towered Gothic Style, originally built as a model shoe factory, while several period gas stations and diners remain intact around the edge of central Lynn, notably the Capitol Diner on Union Street, with some early auto showrooms on Central Avenue. During the Depression several landmark buildings were set in the Downtown, including the New England Telephone Building and the Edson Hotel, both in Art Deco Style of architect design. In Lynn Woods, several W.P.A. project structures remain with the Happy Valley Golf Club House and Burrill Tower among the notable examples.

Recent urban renewal in Lynn has razed much of the workers housing district in the Brickyard neighborhood along Summer Street and cleared several significant structures within the Downtown District. Much of central Lynn has suffered cycles of arson and abandonment, notable along Essex Street and Lynn Common. Elsewhere revival of the Diamond District along Lynn Shore Drive is apparent with restoration of Victorian Style homes with similar investment in Lynn Woods despite loss of original forest by recent drought fires. Commercial expansion has proceeded along the Lynnway (State Route 1A) with a secondary center along Boston Street to Broadway-Wyoma (State Route 129) leaving the Downtown area as an ethnic commercial zone. Large industrial complexes remain at GE River Works with its historic building fabric intact, while the original West Lynn site offers archeological potential of industrial development along Strawberry Brook.

IV. CONTACT PERIOD (1500-1620)

V. PLANTATION PERIOD

VI. COLONIAL PERIOD (1675-1775)

B. Population

Accurate population figures for Lynn are available only at the end of the Colonial Period. A Provincial census of 1765 indicates 2,198, while a second Provincial census of 1776 records 2,755, indicating a substantial increase of 16% during the decade before the Revolution. These two figures included the entire Colonial town of Lynn with present Lynnfield, Saugus, Swampscott and Nahant as part of the population census. A reconstruction of the Late Colonial population within the present bounds would subtract the parish populations of Lynnfield (established in 1712) and Saugus (established 1736). These two town figures could be estimated from the 1790 Lynn census (2,291) where Lynnfield had been separated as a town (1782) and from the 1820 Lynn census (4,515) where Saugus had been separated (1815). Assuming an estimated Colonial population for Lynnfield (400) and Saugus (300)

in 1780 with Swampscott (150) and Nahant (50), the estimated Late Colonial population within the present bounds of Lynn could be calculated at 1,855 in 1775.

With the Late Colonial population recalculated (1,855) the Early Colonial population can be possibly reconstructed. It is estimated that the Plantation Period population of greater Lynn in 1640 was 400-500 with a single meetinghouse (established 1632). An approximate population estimate at the beginning of the Colonial Period (1675) might be taken at 800-1,000 within present Lynn. It is reported that no permanent residents were located within Nahant until 1690, indicating that marginal lands were not occupied until the middle Colonial period. Population increase is marked by the formation of a Quaker Meeting House in 1678 by the Society of Friends, with a congregation possibly estimated at 100. A larger First Congregation Meeting House was erected in 1682, indicating a response to expanding population within Lynn, with an expanded Quaker Meeting House in 1694, and a larger Meeting House again in 1722. Growth figures for the period are masked by the lack of precise population census until 1765 (see above), thus regarding Lynn as a town of modest expansion with a significant Quaker population of expanding size.

E. Architecture

The most reliable record of Colonial Period architecture is a listing in the 1790 census of 300 houses within the town of Lynn, including present Saugus, Swampscott and Nahant. Reconstructing from this data, possibly 175-200 houses existed within present Lynn during the Colonial period, of which a possible two dozen are known from later 19th century photographs. The oldest examples appear as expanded First Plantation Period houses of two-story, single cell (half-house) plan with additional side bays leaving a central chimney stack in off-center line as a signet of early construction. Such is the case of photographs of the Origin House (1710) and the Mansfield-Moulton House (1666), both now razed. A distinctive regional feature appears on several period houses as the "Beverly Jog," a two-story side ell with rear roof matched to the main frame as the Samuel Graves House and the Ashton House, later the Almshouse, both now razed. Two surviving examples of suspected Late Colonial date include the Stone House at 199 Boston Street, and the Ramsdell House at 239 Maple Street. The recently discovered half-house frame of 149 Shepard Street and 87 Essex Street likewise have integral jogs that likely date to late 18th century construction. More typical is the standard mid-18th century Georgian Style two-story, center chimney plan farmstead, apparently quite common in Lynn during the Colonial Period as the Breed-Thompson House (1740) and the Collins-Dwyer House (1750), both now demolished.

A recently discovered example at 252 Essex Street retains 18th century Georgian stairhall plan within a remodeling. Of similar plan was the Flagg-Gray House (before 1750) with a full gambrel roof and the Raddin-Walker House with a Late Georgian center-hall plan (ca.1770), both now lost. More typical was the single-story gambrel cottage with photographic record of several examples on Boston Street and a well-preserved example intact on Perrot Street, with later modifications.

The most notable institutional building of the period was the Old Tunnel Meeting House (1682) set on Lynn Common. The two-story square plan with facade gable and open belfry followed a similar plan of the Old Ship Meeting House in Hingham (1681), surviving into the early 19th century. The first Quaker Meeting House (1678/1696) was of unknown design, likely of simple domestic form, while the Second Friends Meeting House (1722) was an extended two-story plan of eight bays with enclosed box porch of plain details typical of Quaker style.

[] early 20th century on Broad Street at Washington Square.

Industrial buildings of the period were limited to tanning mills along Strawberry Brook at Boston Street, with possible archaeological site potential on Waterhill Street.

VII. FEDERAL PERIOD (1775-1830)

A. Transportation Routes

Lynn village (at the Common) was situated at the center of four major thoroughways. Boston Street to the south joined the Common with Saugus and Boston, and to the north, with Salem. To the East, via Broadway and Essex Streets, Lynn was linked at the Common with Swampscott and Marblehead. The network was a hub of north/south linkages, and oriented nearly exclusively to overland transport, despite the town's coastal location. Few roads penetrated to the harbor. Although the town had a large water frontage, its channel was narrow and shallow, and allowed only the smallest vessels to enter. The major addition of the period was the opening of Salem Turnpike in 1803, running dead straight through central Lynn. Several other roads were opened during the period, among them, Summer Street and its cross streets: Pleasant, Commercial and Shepard Streets; plus Centre, Mall, and Water Hill Streets.

Although the town had weekly stage service since 1761, and thrice weekly since 1774, daily service did not commence until 1796. The age of dependable stage travel began with the incorporation of the Great Eastern Stage Company in 1818. A famous stage house in Lynn was the Breed's Hotel.

In 1804, Lynn's Floating Bridge was constructed. 511 feet long and 28 feet wide, it was akin to a raft moored at each end. The original structure consisted of five layers of pine timbers, each layer at right angles to the next. It was secured together by three-inch dowels, with top planking about five inches thick. It remained in use throughout most of the 19th century.

B. Population

Federal Period population figures are first available from the 1790 census. This census includes present Lynn with Saugus, Swampscott and Nahant for the total population of 2,291. The town of Lynnfield had been established in 1782, and thus the gross population increase since 1776 (2,2775) at 12% must be adjusted by the loss of Lynnfield (464). The 1790 census also includes the number of houses in Lynn at 300, with 7.65 as the number of persons per house. This figure matches the

number for Lynnfield (491/66) at 7.41 and is similar to figures for Salem (8.5).

Continued increase in population is recorded in the 1800 census for Lynn at 2,837 with an increase of 19% from 1790, again including Lynn within Saugus, Swampscott and Nahant. A Methodist Church was established in 1791, closing in 1815. The census of 1810 listed 4,087 persons for larger Lynn, a substantial increase of 43% from 1800, likely reflecting the rise of the shoe making industry within the town. The population of the 1820 census was listed at 4,515, with a low growth rate of 9% directly affected by the separation of Saugus in 1815, still including Swampscott and Nahant within the Lynn. The 1820 census lists economic occupation with 986 persons in manufacturing, likely shoe craft industries, 157 in agriculture and 57 in commerce, with 10 foreign born and 3 free colored persons. Church formation continued with a Baptist congregation in 1816 and a Second Congregational Parish in 1824 reflecting the continued expansion of the population during the period.

C. Settlement Pattern

Overland transportation routes did much to dictate the spatial dynamics of Lynn's early development. Not only was its harbor shallow, its waterfront an expanse of wide beaches and swampland, the town forced to turn inland for its survival, it sat astride major communication lines between the Boston and Salem locales. At the common (and the juncture of these routes) Lynn's early civic and religious building was focused. Dependent upon neighboring Boston and Salem for many services, not until the turn of the century did significant construction commence. Before period's end, the common locale had attracted the post office (1793 and 1803), an engine house (1797), the Lynn Academy (1806), a school (1810), and the town hall (1814), but it was also encircled by residences.

The erection of the Salem turnpike in 1803 only reinforced the primacy of the common locale, and spurred development in the Federal Street, Market Square vicinity. By 1830, Market Square had emerged as Lynn's primary center of commercial activities, and was a cluster of stores, small manufactories, and the site of the Lynn hotel (1803). Minor commercial districts developed near the eastern common and at Woodend (Essex and Chesburt Streets), concomitant with the moderate clustering of small manufactories there. Although never a mainstay of the town's economy, Lynn did maintain active wharfs at both Commercial Street and along Broad (from the millpond to Sagamore Hill), both attracting some settlement activity in their vicinities.

Contrary to its neighboring coastal towns, Lynn's population was not clustered along its waterfront but scattered in small nodes, their centers oriented to the town's major north/south transportation routes. The greatest concentrations of settlement fanned eastward from the common along Essex and Broad Streets toward the town wharves, the Woodend vicinity and Salem. More isolated nodes of population emerged in the west, at the juncture of the Saugus River and Boston Street, north of the common, Boston from Federal to Franklin, and north off the Salem turnpike on Maple.

D. Economic Base

Over the course of the Federal period Lynn's economy underwent a "drastic reorientation, with a large portion of the population directing its efforts to shoemaking" (Faler 1981: 13). From a community of farmers and an occasional shoemaker, Lynn developed into a regionally and even nationally important shoe manufacturing center. By 1820, the population employed in manufacturing outnumbered those employed in agriculture by better than 6 to 1. The primary stimulus for this reorientation was the American Revolution which temporarily halted British shoe and other imports to the U.S. prompting calls for the development of domestic manufactures in order that both meet basic needs and to satisfy rising nationalist sentiments. Lynn was well suited to take advantage of the newly opened market for American made shoes: Lynn inhabitants had been involved in the craft production of shoes for several generations. The town had a shallow harbor and rocky soil, thus prohibiting the emergence of prosperous maritime or agricultural industries. Consequently, there were many inhabitants in search of a better source of livelihood and a few wealthy inhabitants in search of a profitable investment. In addition, Lynn's proximity to the ports of Salem and Boston provided ready access to the raw material necessary for making shoes on a large scale.

Success in capturing a share of the market vacated by the British was critical to the development of Lynn's shoe industry. Local merchant capitalists such as Ebenezer Breed played a crucial role in this area. In the 1780s Breed traveled to Philadelphia and Baltimore where he established trade agreements with prominent merchants who themselves had access to the southern and western shoe markets. Using his available capital, Breed purchased large quantities of leather and other materials in Salem and Boston and distributed the raw materials to Lynn shoemakers who worked up the shoes in small ships and at home and returned them to him in exchange for groceries, dry goods, and occasionally cash. In his role as middleman, Breed (like other merchants) created a market for large quantities of Lynn shoes in exchange for an often considerable share of the profit. This arrangement led to enormous growth in shoe production. In the decade prior to the war, Lynn artisans made an average of 80,000 pairs of shoes annually. By 1783, annual production exceeded 400,000 pairs and there were at least fifty shoe shops. Despite their importance in establishing Lynn as a shoe manufacturing center, merchant-capitalists like Ebenezer Breed began to lose control over the industry in the 1790s. As some Lynn shoemakers acquired capital they were able to purchase raw material themselves and even to sell the shoes to traveling merchants or by taking the shoes to Boston. Thus they gained direct access to the market and increased wealth.

The growing wealth and control of the market of some shoemakers in the early decades of the nineteenth century signaled the demise of the handicraft stage of Lynn shoe manufacturing. Long before other towns in the region Lynn's shoe industry witnessed the rise of master shoemakers (hereafter manufacturers) who, though skilled cordwainers, no longer made shoes themselves. The pressure to increase production and profits resulted in specialization of tasks and thus ended the tradition of cordwainers making the entire shoe from start to finish. The first step in reorganization was for the manufacturer to limit his

role in production. While he still worked in the ten footer with hired journeymen shoemakers and perhaps his sons, the manufacturer devoted his time to cutting the leather patterns, supervising his employees, cost accounting and shipping. As business increased, the larger manufacturers moved the cutting, accounting and packing processes from the ten-footers to the "central shop" where he would work with leather cutters, while renting or selling the ten-footer to journeymen who did the actual production. The production process was eventually divided among "binders" and "makers"; the former involved stitching the pieces that formed the upper part of the shoe and was performed almost exclusively by women, while the latter involved lasting and bottoming the shoes, and was the exclusive domain of men. Both were paid by the piece. Because of these divisions of labor the "putting-out" system was possible. In order to meet rapidly increasing demand without the benefit of significant technological change manufacturers simply divided tasks and expanded the workforce to include men and women in the surrounding countryside to produce the various component parts. Farm families throughout Essex County were enlisted in the service of the Lynn shoe industry during the later year of the Federal period, as were increasing numbers of male and female inhabitants of the town. By 1810 Lynn manufacturers produced 1 million pairs of shoes annually and in 1828, 1,138,189 pairs. A factory for production of morocco shoe leather was established during the period.

Despite the grip the shoe industry had on the Lynn economy some residents continued to farm or to experiment with other manufacturing activities. In 1791 a slightly higher than average number of acres (773) were under tillage. Tillage and haying combined accounted for 35.5% of the total agricultural acreage; while pasture and woodland accounted for the remaining 64.5%. Crops included English and salt hay and moderate yields of corn, wheat and barley. Grazing animals included large numbers of cows and pigs, and some sheep. Processing establishments servicing the agricultural community included four grist and saw mills, a fulling mill and two slaughtering and tanning houses. By 1820 only 157 men were employed in agriculture compared to 986 in manufacturing.

Manufacturing establishments unrelated to the shoe industry included two calico textile printing mills and salt-making firm, neither of which succeeded for very long, and a small but successful chocolate mill. Two banks were established during the period: the Lynn Mechanics Bank (1814) and the Lynn Institution for Savings in 1826.

E. Architecture

The majority of early surviving buildings date to the Federal Period when an expanding economy of the shoe craft industry fostered wide spread growth of central Lynn. The 1790 census lists 300 houses within the greater town limits, including Saugus, Swampscott and Nahant, indicating a possible figure closer to 175-200 houses within present Lynn at the beginning of the Federal Period. The most accurate early record is a picture map of Lynn Common dated ca.1810 (Lynn Historical Society) that shows a variety of Federal Style houses of two-story plan facing the central green, with some remodeled survivals remaining on North Common Street. These include older central chimney Georgian Style examples and more stylish hip-roofed end chimney plan houses of

Federal Style with fan light doorways. These are presumed to be of wood facades, possibly inspired by Salem fashion of Samuel McIntyre, although no record survives. Some later period brick double houses remain intact on Franklin Street near City Hall, indicating urban row plans adopted from Boston with paired end chimney gables. The majority of the surviving houses show a plain simple style influenced by Quaker builders around Washington Square on Nahant Street. These are central entry plans with rear ells typical of the early 19th century, now the most convincing group of Federal Period houses in Lynn. Other examples remain along Boston Street near the Saugus River Bridge and along Western Avenue near the former Floating Bridge (State Route 107). A unique example is the surviving section of the Mineral Springs Hotel (1804) on Edgemere Road with granite stone foundation, later modified (1847), retaining a Federal Period plan and setting. Other period houses appear to remain in the Wyoma Square district and possible survivals along Lynnfield Street (State Route 129) of suspected late 18th century date.

The prosperity of the Federal Period encouraged a number of elaborate civic and institutional buildings in central Lynn, none of which survive. These included the First Methodist Church (1812) of two-story meeting house plan with projected porch entry and simple belfry and the Lynn Hotel (ca.1805), a large three-story structure of Palladian plan with Salem-styled balustrade, both set on the eastern end of the Common. Other period structures of suspected architect design included the Methodist Meeting House (1791), rebuilt for the Baptists (1816), also on Lynn Common depicted on the 1810 map. No commercial buildings remain in central Lynn, although period views show two-story shops of residential plan along Market Street, later replaced by brick business blocks.

Industrial: Several "ten-footer" shoe shops were erected during the period. In 1791 there were around 70 shops. None are known to survive. Late in the period the first "central shops" were built. A surviving example is the Micajah Pratt Shoe Factory, built ca. 1812-1820, a two-story frame structure with slight gabled roof and an arched light in the gable, at 89 Broad Street. A morocco factory and tanneries were also established during the Federal period. In 1791, there were two tanneries connected with slaughterhouses. There were four grist, saw and slitting mills and a fulling mill as well. Two textile printing mills were erected during the period, as were chocolate mill and salt works. Dates of construction and appearance are unknown.

VIII. EARLY INDUSTRIAL PERIOD (1830-1870)

A. Transportation Routes

Stage travel reached its heyday in 1836 when 23 stages (of the Salem and Eastern lines) ran daily between the Lynn Hotel and Boston. To protect travelers against rain, an unbroken line of horse sheds then extended along the entire eastern side of Centre Street, from North Common to the turnpike. The Eastern Railroad opened between Salem and Boston, through central Lynn, in 1838, and stage travel was rapidly rendered obsolete.

With the construction of the railroad south of the common, Lynn's street network began to intensify in its vicinity, over doubling in mileage during the period. The street network increased in density particularly to the east and south, near Market, Broad, and Essex Streets early in the period, and after the opening of the Saugus branch in 1853, intensified in the western town between the common and the Saugus River. In 1860, Essex County's first street railway—the Lynn and Boston Railroad Company's horse car line—opened between these cities.

B. Population

The 1830 census listed 6,138 persons in Lynn, including Swampscott and Nahant, with a substantial growth rate of 26% from 1820. Church formation continued to expand with the First Universalist in 1833, a Christian congregation and a Catholic parish in 1835, and the Episcopal Church in 1836. The census of 1840 listed a population of 9,367 within greater Lynn, again a substantial growth of 34% since 1830, reflecting the expanding shoe industry activity within central Lynn and the opening of the Eastern Railroad (1838) to Boston. The population census for 1850, the first year of the Lynn city charter, reflected the expansive industrial growth with a figure of 14,257, and increase of 34% since 1840. Of the total, the census list 115 Free Colored persons, a minimal percentage compared with Salem (324 at 1.5%).

In 1852 Swampscott was set off as an independent town and in 1853 Nahant was likewise separated from Lynn. The state census of 1855 reflects the loss of population with a figure of 15,713 and a modest growth rate of 9% from 1850. The full census of 1860 lists 19,083 for the City of Lynn with a growth rate of 17% since 1855 and an overall rate of 25% from 1850. Of these 226 were Free Colored, about 1% of the total population, with an African Methodist Episcopal Church (A.M.E.) established in 1856. The final period census of 1870 lists 28,233 persons within the City of Lynn, returning to the substantial industrial growth rate of 32%.

C. Settlement Pattern

Stimulated by the opening of the railroad line in 1838, during the next two decades the city grew rapidly, both in population and in commerce. 1836 saw Lynn with only 17 brick blocks within the town, and buildings on large lots scattered over 60 streets. Market and Central Squares were still largely residential, and the common vicinity, a smorgasbord of shoe factories (15), shops and stores (11), miscellaneous factories, churches and schools, the town hall, and nearly six dozen residences. With the opening of the railroad, however, Lynn's focus shifted from the common vicinity to Central Square and the tracks. This area had become by 1856 a hub of 49 of the town's 74 shoe manufacturers, Lynn's factory district now dominating an area roughly defined by Market, Liberty, Mulberry and Broad Streets. Commercial activities were most concentrated on Monroe and Union Streets, but were scattered throughout the manufacturing district. The Lynn Common after the 1850s gradually became more residential and institutional in focus, important new structures including a new city hall (1864, burned and rebuilt in 1867), and the

Lynn Public Library (1862). Market Square continued now as a secondary commercial node.

Residential patterns of development remained moderate in density, and predominantly single-family in nature. Lynn's worker population was clustered near the railroad and the manufacturing district early in the period, and by mid-century with the opening of the Saugus branch, had pushed inland and to the west. The town's densest settlement was found east of the common encircling Central Square, the common locale now fully displaced as the coups of residential construction. From Central Square, building spread to the east along Essex Street to Woodend, south of the common across Summer to Neptune, and north toward Boston Street along Washington Street and the turnpike (Western Avenue). Especially dense nodes of building occurred in the west at the junction of Boston and Summer Streets, and to the east along Chesburt and Chatham at Essex. Elite building was attracted to the Broad Street/Highland Square vicinity, with fine residences now beginning to appear on Nahant and Atlantic Streets leading to the waterfront. By this time building was as yet scattered in the northern town, with modest clustering beginning to occur at Wyoma.

D. Economic Base

Lynn's economy continued to resolve around the shoe industry during the Early Industrial period. As in the previous period, Lynn was practically a one-industry town, with an unmistakable manufacturing character. In 1832, 69% of the workforce was employed either directly in the shoe industry or in related industries, while the remainder was composed of small numbers of farmers, carpenters and other craftsmen, fishermen, shopkeepers and merchants. In 1840, nine of every ten employed men were employed in manufacturing occupations, the overwhelming majority in shoe manufacturing. Growth in manufacturing gave rise to a significant commercial and service sector. While the number of shoemakers continued to grow rapidly, the figure declined during the period as a percentage of all occupations. By 1860, the occupational structure had further diversified and shoe and related manufacturing employees declined to 56% of the total workforce. In addition to larger numbers of carpenters and other craftsmen, the town experienced considerable growth in the number of shopkeepers, merchants, clerks, managers, laborers and professionals.

The period from 1830 to 1869 was one of tremendous growth in the shoe industry both in the number of firms, their size, and employees, and in the number and value of shoes produced. From 1830 to 1860 the number of shoe manufacturers increased from 68 to 210 while the number of employees per firm increased from 50-100 to 300-400. Between 1837 and 1855 the total number of men and women engaged in the industry grew by 112% to 11,021. Much of the increase was due to the growth in the female workforce—in 1837, the ratio of men to women was 1:1, whereas in 1855 women outnumbered men 3 to 2. During the same span productivity increased by 453% to 9.2 million pairs of shoes and boots, evidence that productivity per employee was also on the rise despite the lack of significant technological improvement. Early in the period Lynn made women's shoes almost exclusively. By 1855, 1/3 of the product was men's boots, probably for sale in the slave south. The value of shoes and boots product grew by 146% to \$4.16 million in

1857, thus indicating that the price per pair fell considerably. In 1869, Lynn was second in the U.S. to Philadelphia in the value of boots and shoes produced.

Despite the overall growth registered from beginning to end of the period, the Lynn (and indeed the national) shoe industry was subject to sharp fluctuation and increasingly prolonged depressions. During the first six years of the period, business expanded by 66% then in 1837, a general economic depression hit the U.S., several curtailing Lynn's shoe industry. Of eighty firms operating in 1836 only six survived the 1837 depression. While many manufacturers were able to reopen in the early 1840s, 32 of the 110 firms in business in 1841 had previously failed. The industry suffered until ca. 1845 when a boom period began. Most of the increase in employment and production for the entire 1837 to 1855 period occurred after 1845. During the decade 1845-1855, production increased by 300% and from 1853 to 1855 production grew from 4.6 million pairs to 9.2 million pairs, or by 100%. Importantly, though, employment among Lynn shoemakers only grew by 57% over the same ten year period. The explanation for the sharp difference between gains in production and employment during a period of technological stasis is twofold. First, many Lynn shoe workers experienced a slow but steady drop in wages during the period and could only maintain a livable wage by working longer hours, often late into the night. Secondly, Lynn manufacturers were able to lower wages because they continued to expand the workforce by venturing further into the countryside, even as far as Southern New Hampshire, thus increasing competition between outworkers and the Lynn shoe workers. By 1855, 60% of all shoes produced for Lynn manufacturers were made outside the town.

The increasing consolidation of the wealth and power of the capitalist manufacturers, their physical separation from their employees, their ability to dictate lower wages and long hours, as well as the increasingly frequent industry-wide depressions, caused relations between the bosses and workers to worsen. In the late 18th century, the master shoemaker and journeymen had experienced and articulated a "mechanics ideology," a belief in the primacy of labor, that is, "that labor is the source of all value and wealth." This ideology distinguished producers from non-producers like the merchant capitalist Ebenezer Breed who extracted a share of the wealth generated by the shoemakers. During the period 1830-1860, the shoe manufacturer came to represent a non-producer in the minds of the Lynn shoe workers and consequently "there was a gradual dissolution in the belief in the mutuality of their interests" (Faler, 1981: 29-30). In 1858 following another serious depression the class-conscious shoe workers formed the Journeymen Cordwainers' Mutual Benefit Society, a labor union that immediately established a strike fund and informally adopted a more lucrative wage schedule. In February 1860, having strengthened the strike fund and the organization's membership, the Cordwainers' Society formally declined the new wage schedule in effect and, rebuffed by the manufacturers, went on strike. The vast majority of the 10,000 or so Lynn shoemakers and many of the outworkers struck, paralyzing the industry for at least three months in what was the largest strike of any kind in Massachusetts and the U.S. history to that date. When the strike ended in April 1860 both sides declared victory because some of the manufacturers agreed to the higher wage

rates while others did not.

The strike of 1860 also marked the end of the "putting-out" system in Lynn. Introduction of the sewing machine in 1852 and steady improvements in the steam-powered machine and a heel-making machine in the late 1850s-early 1860s enabled shoe manufacturers to begin the process of centralizing the production process in factories, thereby giving them greater control over the workforce and vastly increased productivity. One immediate consequence of introducing the McKay stitcher was to sharply curtail employment of women. From 1855 to 1865 the ratio of women to men fell from 3:2 to 2:3 and the number of women declined in real term by 22%.

Other growing industries related to shoe manufacturing included leather production and paper and wooden box construction. In 1832 there were four leather tanning and dressing factories, employing a total of 36 people, with a product value of \$63,000. By 1865 there were sixteen such firms, employing 253 people, with a product value slightly under \$1 million, a 1476% increase. Shoebox manufacturing employed six people in 1837 and 57 in six firms in 1865. Production of shoemaker's tools was also a significant industry, especially in the pre-factory period before 1860. In 1855, 52 people made tools worth \$75,000.

A variety of other small-scale manufacturing took place during the period. Among the more important were coffee and spice milling, glue manufacture, clothing production, iron and tinwork and manufacture of cotton and woolen textile machinery. In addition there were smaller firms engaged in production of bricks, soap and tallow, snuff and cigars, confection, sewing machine needles, chaises and wagons, sails, cordage, chairs and cabinets, and farm utensils.

Early in the period Lynn capitalists attempted to establish the town in the maritime economy. "In the decade 1829-1839 Hezekiah Chase, Nehemiah Berry, and others bought, or built, a few ships, dredged the Saugus River... and constructed a wharf, warehouse, cooperage shop, sail makers' loft and ropewalk and tried to capture a share of the business that had long chided Lynn. (They) used their vessels for trade with Capetown, the West Indies and towns on the Atlantic seaboard. The whaling business gave a boost to the enterprise... and the group formed the Lynn Whaling Co. in 1834. With five whalers and three fishing schooners for cod fishing on the Grand Banks, the firm prospered until the panic of 1837 put an end to Lynn's attempt to become a port city" (Faler, 1981: 6).

Farming continued to decline in importance. Land under cultivation fell to only 1,279 acres, 379 of which were under tillage, 74 in market gardens and the remainder in haying land. In 1865 there were only 25 farms employing 32 men. Small crops of vegetables, hay, potatoes, corn, rye and barley were raised. There was one grist and flour mill still in operation in 1865.

E. Architecture

Large-scale expansion of the shoe making industry encouraged extensive residential and institutional building in the Early Industrial Period. The earliest examples retain the plain style of local Quaker merchants as seen in surviving houses along Broad and Nahant Streets from Washington Square and in the Garland Street subdivision with Late Federal gable-end plans. The most notable residential designs of the period were built along the shore estates of Ocean Street for Boston families during 1845-1855, none of which remain intact beyond partial foundations. These included the Francis Alexander estate, The Castle (1847), in mock Gothic-Flemish style of stuccoed wood frame, surviving to 1936, and Greystone (1848), an Italianate stone design, of which the granite walls remain in much modified form at 16 Greystone Park. Two intact stone houses remain in suburban locations, High Rock Cottage (1858) a Gothic Style residence of the Hutchinson Family Singers on High Rock and the Newhall House, an Italianate design above Walnut Street (1854). Other Boston shore estate houses followed simple Italianate or Gothic designs such as the Lawrence House, matched by surviving examples as 59 Baltimore Street by local builder Samuel Tozzer. Some established Boston architects have been documented for shore estate designs, including Gridley J.F. Bryant with a surviving barn on Ocean Circle and N.J. Bradlee with a brick row on Kensington Park. Beyond the shore estates, simple gable end suburban houses were built after the opening of the railroad in 1838. Examples such as those on Green Street show simple Greek Revival and Italianate features in the doorways and dormers, with more elaborate examples preserved in the Hyde-Mills House (1837), now the Lynn Historical Society. Other substantial suburban houses remain along the axis of Franklin and Chestnut Streets with Greek Revival and Italianate designs of innovative style. More modest housing adopted a distinctive Gothic feature in the use of paired facade gables, a design common to the Lynn area, with examples along Lewis Street and the subdivisions off Union Street. The majority of period workers housing was located in the Brickyards neighborhood of West Lynn along Summer Street. Only fragments of surviving examples remain following urban renewal clearance, indicating double-house plans of simple period details. After 1850 through the building boom that followed the Civil War, large sections of Lynn were built with a simple gable-end side-hall cottage that marked the Lynn shoe workers neighborhoods. Well-preserved examples are documented on Violet and Pinkham Street off Union Street with surviving streetscapes of the Brickyards district and the West Lynn area to Boston Street.

Few institutional or civic buildings remain from the Early Industrial Period. Of the notable surviving examples, the Lynn High School (1852) a Italianate design of wood frame by Boston architect N.J. Bradlee, is the best preserved, and Pine Grove Cemetery (1850) by Boston landscape architect H.A.S. Dearborn modeled in picturesque plan after Mount Auburn Cemetery, although it has a later Mansard Style gatehouse and entry posts. Several landmark buildings are known from period views such as the Greek Revival Lyceum (1841) and the Eastern Railroad Station (1848) of Italianate Style, with the Lynn City Hall (1867) by Gridley J.F. Bryant with a Mansard towered form (now surviving only as granite gateposts at Pine Grove Cemetery). Early period churches have likewise suffered loss as well, such as the Methodist Church at Market

Square (1830) a Late Federal design and St. Stephens (1837) in severe Greek Revival Style facing the South Common. Other churches remain in altered form, as the First Universalist (1837) rebuilt from the Old Tunnel Meeting House (1682) and St. Mary's (1861) a brick Gothic design, now without its steeple.

The noted period commercial buildings of central Lynn remain only in fragmentary form. The oldest is the Italianate Style Exchange Building (1848) on Market Street with only the rear walls intact. A similar fragment also remains of the Music Hall (1870) on Central Avenue, later remodeled as an auto showroom. Remarkably, several early shoe factories survive on Munroe Street, escaping the Great Fire of 1889. The most elaborate is the Renaissance-Italianate brick facade of the Newhall Block (1868) with other wooden lofts now remodeled from original Italianate facades, such as the Filenes's Building (1869-1871), retaining intact interior framing.

Transportation: The first depot of the Eastern railroad (at Central Square) was a one floor wooden building 40 feet long with a bell on its roof. The depot lacked any shelter over the rack. The new station erected in 1848 was a gable roofed brick two floor building of Classical design. The building's gable was massive, and spanned the track itself, with passenger facilities on either side.

Industrial: Anywhere between seventy-five and two hundred "central shops" may have been erected during the period 1830 to 1860. Usually they were mostly one or two stories and of wood or brick construction. Surviving central shops include the Nathan Dow Chase Shoe Factory, a two-and-one-half story Federalist/Greek Revival style brick structure with gabled facade, irregular fenestration, and a granite foundation standing at 5 Broad St. This 1836 building is the earliest surviving brick factory in Lynn. The facade has been altered by a 20th century storefront. The J.B. Chase Shoe Factory ca. 1831-1840, a 2 & 1/2 story farm building stands at 43 Broad St. A third survival is the Robinson Factory Building erected in 1849, it is also 2 & 1/2 stories of brick, built in the Greek Revival style with sandstone trim and pedimented gable, and stands at 120 So. Common St. As Lynn entered the industrial era larger factories were built in the downtown area. Two of the earliest surviving examples stand on Munroe St. The Nichols and Ingalls Factory, at 31-33 Munroe St., was erected in 1869, is a three story brick building with brick arched windows, granite keystones, granite courses and corbelled cornices set on a parapet. The Harrison Newhall Factory, at 21 Munroe St., was also erected in 1869, and is three-story brick structure with decorated window lintels and brackets. Both buildings have 20th century storefront alterations. By 1837, there were seven tanneries and morocco factories. Other manufacturing buildings erected during the period included a spice mill on Waterhill St. near Federal St, a soap factory on Washington St., opposite Munroe St., a carriage factory on Willow St., near Oxford St., and a glue factory on Washington St.

IX. LATE INDUSTRIAL PERIOD (1870-1915)

A. Transportation Routes

The existing street network was improved and greatly extended during the period. In 1879, there were 125 miles of streets in Lynn and 480 in all, an increase of 125 streets and, of 208 in the twenty years prior to 1899. The most important additions during the period were the opening of the coastal route, the Lynnway, in 1906, and the erection of the elevated railroad bridge over Union Street in 1911.

In 1872, cheap railroad trains, intended especially for the benefit of the worker population, commenced running on the Eastern line, between Lynn and Boston. At five cents per trip, this early commuter line left Lynn at 5:30 a.m. and left Boston at 6:30 p.m. In 1874, the Glenmere stages were still running on Chatham Street. In 1875, the Boston, Revere Beach and Lynn narrow gauge steam railroad began service. The terminus of the line was located at the junction of Market and Broad Streets and an ancillary station, in West Lynn. In 1885, both horse car and steam railway lines operated within the town. In 1890, the Lynn and Boston electric railway opened, it was the first important electric line in Essex County. Between 1890 and 1900, nearly all existing horse railroad mileage was converted to electric existing horse railroad mileage was converted to electric trolley, and the total street railway mileage, more than doubled.

In 1871, two wharves were erected at the foot of Pleasant Street.

B. Population

In 1870, Lynn's population of 28,233 was second largest in the county after Lawrence. By 1915, on the strength of a 239% growth rate, the population of 95,803 made Lynn the largest Essex County town. The largest growth spurt came between 1880 and 1885 when population increased from 28,274 to 45,867, a 62% increase in five years. Lynn had a very large foreign born population at the beginning of the period and an even large one at the end. In 1875 the foreign-born accounted for 17.5% of the total while in 1915 they accounted for 30.7%. In the early years the Irish were the large majority of the foreign born, followed by Canadian, English and Scottish groups. By 1915 there were several large ethnic groups the largest of which were the Canadians, followed by the Irish, Russian, Italians, English, Polish, Greek, Swedish, and Scottish.

Lynn had a large working-class population with strong class identification. They formed several associations to meeting both their economic and social needs. In addition to unions there were several mutual benefit associations that provided workers with insurance against layoffs, sickness and industrial accidents, in addition to serving as a community social center that held banquets, balls, concerts, talks, etc. Very often the union sponsored then mutual benefit association as in the cast of the Laster Union. The Laster's Union Hall was the shoe workers center for many social activities. There were also many working class lodges, the strongest of which was the Independent Order of Odd Fellow, organized in 1872. By 1914, Lynn had fourteen Odd Fellows Lodges. Other working class associations

included the Lynn Mutual Benefit Association (1880); the Washington Mutual Benefit Association; the Independent Order of Industry, the United American Mechanics, and the Ancient Order of United Workmen (1881). Working class clubs included the Highlands Club, the Tremont Club, the Elmore Club and the Prospect Club. Middle class efforts to weaken working class consciousness and solidarity were many and resulted in the formation of competing associations. In 1880 some wealthy Lynn Families formed the Lynn Workingmen's Aid Association, "to encourage shoe workers to purchase land and building homes and thus to make the working-class respectable middle-class homeowners" (Cumbler, 1979:50). Other such organizations included the Glenmere Mutual Benefit Association and the Young Men's Benefit Association, both organized and run by wealthier members of the community. However, these associations did not "have any appeal among the workers." Efforts to attract children of working-class families to middle-class institutions and customs included the formation of the YMCA and the Boys Club. Meanwhile, the Masons established the Lynn Ancient Free Accepted Masons to compete with the Odd Fellows, but failed to gain "substantial working-class membership." The Lynan Damascus Lodge of the Masons explicitly excluded discussions of "political or other exciting topics" at its meetings, thus causing most shoe workers to stay away. The Catholic Church also attempted to lessen working by discouraging membership in the worker's lodges and benefit associations. Another middle class club was the East Lynn Club.

Workers also organized ethnic clubs including the Independent Order of British Abrahams, the Rober Bruce Club, the Order of Scottish Clans, the Orangemen (Protestant Irish men), the Ancient Order of Hibernians (Catholic Irish men), the Scandanavian Benefit Association; the Workingmen's Circle (a national Jewish society that taught Jewish culture and socialist thought), and the Young Men's Italian Club. In 1870 Lynn workers published The Little Giant, a labor newspaper. In 1894 a socialist club was organized as was a "labor church" composed entirely of working people.

C. Settlement Pattern

Growth continued at a frenzied pace as manufacturing town became industrial city. Institutional building formed a loose cluster around the park off North and South Common Streets, and now spread from city hall onto Essex, Washington, Central and Market Streets. Primary commercial activities continued to mobilize at Central Square amid the city's factory district, with peripheral nodes at Market Square, Woodend, scattered along lower Western Avenue.

In 1889, a conflagration leveled 338 buildings over an area of 30 acres in Lynn's downtown, including 87 shoe manufacturers and 75 shoe/leather houses. But immediately thereafter arrived a period of explosive redevelopment (1890-1901), during which virtually the whole Lynn Central Business District was rebuilt. With this new construction came a shifting of functional activities. Central Square and Exchange Street changed from areas of factories prior to 1889 to a corridor of financial, legal and commercial activities. Union and Monroe Streets continued their development as commercial corridors. Union by 1890 having emerged as the main thoroughfare in downtown Lynn, lined not only with businesses but also boardinghouses. Manufactories clustered

around Mulberry and Almost Streets, and secondarily now further south between Central Square, Liberty Square, and Broad Street at Washington. When new land was created at the waterfront of Broad, it was quickly built up with factories. At the western common, the Thompson-Huston Electric Company began operations in 1883, beginning Lynn's involvement with the electric industry.

By the 1880s and 1890s the era of free-standing cottages in Lynn had passed. As housing shortages abounded and space arose to a premium, multifamily dwellings accounted for the bulk of construction within the central town. Population densities increased dramatically, and within a decade, the city's older neighborhoods were transformed. Former streets of Greek Revival cottages on spacious lots now became densely lined corridors of multifamily dwellings, existing cottages now wedged between. Such a transformation characterized all the residential areas of the worker population in central Lynn, from the vicinity of the common south to the waterfront and beyond Western Avenue, and to the east encircling the burned district and pushing northeast Woodend.

Elite building was attracted to the waterfront area south of Broad and Lewis Streets, construction there escalating with the opening of the Lynnway in 1906. The finest residences lined Ocean and Nahant Streets, with ornate frame boarding houses being erected off the Lynnway in 1906. The finest residences lined Ocean and Nahant Streets, with ornate frame boarding houses being erected off the Lynnway in the vicinities of Surfside and Newhall Streets. The city's expanding streetcar lines now opened up the interior town for building. The formerly isolated communities at Wyoma and Glenmere were now integrated into Lynn proper, and enveloped by the inland push of new buildings. Single-family construction increased in proportion in these neighborhoods, the three-family houses reaching no farther north than Sluice Pond. By 1905, communities at Lakewood and up Lynnwood to the north and at Fairmount off Walnut and Greenwood to the west were laid out but as yet had attracted little building.

D. Economic Base

In the decade following the American Civil War the Lynn shoe industry, and therefore, the community, was consolidated by the forces of industrial capitalism. Centralization of the production process in large factories was accomplished more quickly than in any other shoe town in the U.S., catapulting Lynn to the forefront of the American shoe industry. By 1875, two-thirds of all shoe workers were employed in factories and in the next decade the transformation from shop and outwork to factory production was complete. Using steam-powered sewing machines, leather-shaving machines, self-feeding eyelet machines and other innovations the manufacturers were able to further divide and specialize the tasks in the production process so that by 1880 there were thirty-three distinct jobs. Centralization and job specialization vastly increased productivity. The introduction of the modified McKay stitcher to the factory system "reduced the effort of stitching the uppers to the isles and cut the number of seams in half as well, by sewing directly through the inner, upper, and outer soles" (Cumbler, 1979:16). Formerly a skilled worker could complete one pair of shoes in an hour, whereas with the sewing machine it was possible to

complete eighty pairs per hour. In 1865, almost 11,000 employees produced 5.3 million pairs of boots and shoes worth \$8.8 million. In 1875, with only 9,011 employees, production exceeded ten million pairs and product value was over \$14 million. For the remainder of the period production levels and product value expanded rapidly while employment remained fairly steady. In 1900 the number of employees was about the same as in 1865 but the numbers of shoes made in Lynn factories had jumped 300% to around twenty million pairs. By 1905 the value of boots and shoes manufactured was \$35.4 million, also 300% higher than in 1865.

Economic conditions for shoe workers did not improve significantly in the late 19th century. In addition to the general depressions of 1873 and 1893 there were shoe industry specific downturns that caused considerable unemployment. Moreover, real wages declined sharply 1872-1881 and even though they rose thereafter, the 1897 rates were below those for 1872. These conditions were met with considerable resentment and resistance. In the 1870s, Lynn shoe workers formed "one of the nation's strongest and most militant branches of the knights of St. Crispin," engaging in a successful strike in 1872 and an unsuccessful strike in 1879 (Cumbler 1979:58). In the 1880s the Knights of Labor organized several locals in Lynn and later, when the AFL undermined the K of L and attempted to organize the Lynn shoe workers, they resided in favor of the more radical and militant United Shoe Workers of America. The union engaged in several strikes during the period.

The leather industry, once ancillary to the shoe industry, emerged as an economic force in its own right. From 1875 to 1905, the value of Morocco leather increased 200% to \$4.5 million and employed almost 2000 people in twelve large factories, making Lynn the second leading center of leather manufacture in the U.S. By 1890 only a small portion of this leather was sold to Lynn shoe firms.

Other shoe-related industries like box-making, heel-making and manufacture of blacking (polish) continued to be important. The value of shoeboxes increased from \$64,500 to almost \$400,000 between 1875 and 1905. Likewise, manufacture of clothing and wagons continued to grow. New industries like food preparation, drug and medicine and electrical equipment manufactures gave some diversity to the manufacturing base. In 1883 a Lynn shoe manufacturer, Charles Coffin, purchased the American Electric Co. of Bridgeport, Conn., moving the operations to Lynn and changing the name to Thompson-Houston Co. In 1892 the firm was merged with Edison Electric Co. of Schenectady, N.Y. to form General Electric Co. By 1910, G.E. had over 10,000 workers in Lynn, as many as all the shoe factories combined. In 1895 Lynn was still the largest manufacturing town in Essex County with product value of \$34.4 million compared to \$31 million in Lawrence. Between 1875 and 1905 the total value of manufacture goods increased 207% to \$55 million. In 1875 shoes and leather accounted for 85% of the total while in 1905 they accounted for 72%.

The already bustling commercial economy mushroomed during the period. In 1870 over 700 vessels entered the port at Lynn, delivering lumber, bricks, grains and potatoes. Employment in commerce grew from 2021 in 1875 to 6461 in 1915, 219% increase. Likewise with the service sector. Government and professional occupations reached 2546 in 1915, a 787% increase over 1875.

Agriculture was relatively insignificant as a source of employment and capital. Greenhouse products accounted for 50% of the agricultural product value, followed by dairy products and vegetables.

E. Architecture

Transportation: As the need for a new facility grew after mid-century, a controversy arose over the location of the depot. Finally, the issue was resolved by the erection of two fine brick and iron stations—at Central Square and at State Street near Market. The Central Square contingent of Lobbying citizens won, however, and the State Street depot was demolished within a few months of its construction, to be replaced with only a small wooden building.

As many as seventy-five larger shoe factories may have been built between 1870 and 1889. These industrial buildings, usually of around five floors, enabled manufacturers to house all shoe making operations in the same location. Often these factories, resembling commercial buildings, had storefronts on the first floor, and were rented by the floor to two or three different shoe firms. Survivals include the Sherry Block (1879) a five-story brick factory of utilitarian industrial design with a pressed metal cornice and flat roof stands at 70-78 Munroe St. The facade was altered in 1911. Another survival is the Spinney and Caldwell Building, ca. 1871-1885, a five-story Victorian and Romanesque revival brick building at 190-194 Oxford St. A four-story brick building from around the same time stands next door at 198 Oxford St. The central Shoe Building (1876), a five-story Victorian brick factory stands at 34-36 Central Ave. In 1880 the still surviving Tebgbetts Shoe Factory was erected at 19-29 Willow St. This five-and-a-half story brick structure with a variety of decorative brickwork and arched windows is now an apartment building. Ca 1879-81 the Richardson Shoe Factory was erected at 69-77 Central Ave. This four-story brick building, with a fifth floor added in 1890 and removed in 1930, still stands. Likewise, the Aborn Building (1882), a five-story brick factory with decorative brickwork stands at 334-340 Broad St.

A disastrous fire in 1889 destroyed many of the factories in the manufacturing district. Thereafter, still larger factories were built. These 1890s-1900s factories were between five and eight stories and built in the Romanesque Revival style. Several of these still stand. The S.N. Breed Co. erected two identical factories at 647-677 Washington St. in 1892, in the Romanesque Revival style, of brick with their facades divided into three sections by pilasters. A thirty foot brick connector was added in the mid-20th century. The "Archer Block" (1892) is also a five-story brick building with flat roof decorative brickwork over the windows and a facade divided into three sections by pilasters. The building has cast-iron storefronts and stands at 581-593 Washington St. Other surviving Romanesque Revival factories

include the Frank Breed Block (1890), at 491-499 Union St., the Dacy Building at 13 Willow St. (1891), the Tapley Building (1890) at 206-210 Broad St. (1890), the Abbott Building (1890) at 445-457 Union St., all five-story brick buildings. Among the larger 1900s factories still standing are the Vamp Building, built by the Lynn Realty Co. ca. 1903-1907, an eight -story trapezoidal structure with granite arched window lintels that lacks the ornamentation of the Romanesque Revival buildings. Later additions were made in 1907 this factory at 3-15 Liberty Square was one of the largest shoe factories in the world. Another ornamented Lynn Realty Co. brick factory was erected in 1902 at 672-680 Washington St. of eight stories and with colored brick window arches. The Lennox Building (now Harborview Apartments), a seven-story brick factory of utilitarian design, still stands at 184-186 Market St., but has had extensive alterations. Other large shoe factories were demolished in a disastrous fire in 1982.

Factories not associated with the shoe industry were also erected during the period. Survivals include the Pinkham Medicine Co. complex at 267-271 Western Ave. The first building was a three-story farm structure erected in 1886. Additions to the plant were made in 1896 when a four story Romanesque revival style building with arches and carved sandstone capitals was constructed, and in 1905 when a brick structure was attached to the original frame factory. The Chase and Sawyer Building, a two-story utilitarian brick structure with flat roof, brick quoins, a pressed metal cornice and a cast iron and plate glass storefront, was erected in 1895 for carriage manufacture still stands. In 1904, a furniture factory was erected at 124-130 Oxford St., four stories, brick, with limestone courses, window trim and arched windows on the fourth floor, and also still stands. G.E. erected factory buildings beginning in the 1880s.

Continued expansion of the industrial economy encouraged extensive building during the Late Industrial Period in a wide variety of styles and plans with increasing urban density of building types. The Lynn shore estates remained the most advanced area of suburban architecture with numerous well-preserved examples remaining intact along the axis of Ocean Street in the Diamond District. Some Stick Style houses survive on Cherry Street with a few modest Single Style examples on tight lots. The majority of suburban designs followed the towered Queen Anne Style, apparently by architect Samuel J. Kelley with notable examples on Atlantic Street. Other Kelley designs in the Colonial Revival Style were built along Ocean Street with modest houses the gambrel Colonial Style on the side streets along Lynn Shore Drive. In the suburban highlands of Lynn, Queen Anne sidehall plans were constructed with outlying examples in Pine Hill and Wyoma. Before the First World War a number of innovative English Cottage designs were built along Lynn Shore Drive in stucco and brick with a similar area of English inspired houses in the highlands of Western Avenue on Brookside Road. Many of these have preserved early auto garages as part of the original landscape design of the suburban lots.

Beyond the elite architecture of the shore estates, the majority of residential designs followed the basic workers side-hall house form from the post-Civil War period. These were built in extensive numbers on the side streets from Western Avenue to Essex Street, with simple Queen Anne porch and shingle details. Well preserved neighborhoods

remain in the highlands along Chatham and Chestnut Street and in fringes of the West Lynn neighborhood, often in two-family plans. Increasing urban density shifted building types to three-decker housing of the flat roofed Boston style before the First World War, often as corner store blocks at major intersections, notable along the Western Avenue and Boston Street carlines. A similar urban density was developed along Ocean Street in the Diamond District with elevator apartment blocks by Boston builders before the First World War.

The Late Industrial Period established the basic fabric of civic and institutional architecture now remaining in Lynn. Several major Protestant churches were built that still serve as landmarks, including the Washington Street Baptist Church (1872) by J. Foster Ober in Ruskinian Gothic Style, now without steeple and the notable Romanesque towered design of St. Stephen's (1880) by Boston architects Ware and Van Brunt. Of similar Boston based design is the Pine Grove Chapel (1889) in Romanesque-Celtic Style by Shepley Rutan and Coolidge. Later church buildings adopted the Gothic Revival style, notable in the Second Congregation Church (1909) on Baltimore Street in the Diamond District. The influx of ethnic immigration fostered a variety of local religious congregations with Catholic, Jewish and Greek Orthodox churches, primarily in the Brickyards area of West Lynn and along Western Avenue, most in wood-framed Queen Anne designs, such as the Liberty Street Church (1892) and the A.M.E. Church (1909) on Shorey Street. The most impressive civic building of the period is the Lynn Free Public Library (1900) by George A. Moore of Boston in granite Neo-Classical Style This is matched only by the Classical High School (1911) by Lynn architect Penn Varney, with the bronze-cast Soldiers Monument (1883) by John A. Jackson on South Common. Such civic monuments were also erected at High Rock Tower (1905) with an observatory, now removed, and in the extensive 2200 acre plan for Lynn Woods (1890) under the guidance of Frederick Law Olmsted, now greatly modified, with its municipal water reservoir system and surviving period gatehouses. Other municipal buildings of the period include the Lynn Pumping Station on Boston Street (1889) and the surviving Police Department Stables (1890) on Liberty Street.

The commercial core of central Lynn was developed during the Late Industrial Period with a number of notable surviving buildings. These include the G.A.R Hall (1880) on Market Street and the Tucker Block (1881) on Munroe Street, both in Ruskin Panel Brick Style. Much of central Lynn was destroyed in the Great Fire of 1889 and rebuilt with plain brick lofts, as the eight-story Vamp Building (1903) or in Neo-Classical Style as the Old Post Office (1897) and the apartments blocks at the Hotel Osmund (1898) on Liberty Street. Large department stores were built along Market Street, the best preserved being the Goddard-Zinnman's Block (1911) with glazed facade in Classical Style. Several large movie theatres were also built during the period, with only a section of the Comique (1908) intact on Munroe Street.

X. EARLY MODERN PERIOD (1915-1940)

A. Transportation Routes

Still at the hub of major north/south transportation routes, Lynn is serviced not only by Interstate 95, but Route 1A (the Lynnway), Route 107 (the Salem turnpike), and Route 129. By 1930, Lynn had lost its electric trolley service. Commuter rail connects Lynn with both the Salem and Boston vicinities, the trip to Boston averaging thirty minutes.

B. Population

As was the case with Haverhill, after nearly a century of extraordinary growth (360% and 239% during the Industrial period), Lynn's increases came to an abrupt halt. During the four Early Modern Decades the city's population fluctuated and stabilized, in the end registering only a 3.3% increase. With just under 31% of its population foreign-born in 1915 (near the country average), Lynn claimed Canadians (over half Nova Scotians) (32%) and Irish (17%) as their major nativities. 1950 saw the city's percentage of foreign born drop to 17% and the Canadians increasing in numbers (to 37%) while the Irish decreased (11%).

C. Settlement Pattern

There was little growth early in the period. By the mid-twenties, Lynn's factories were nearly empty. Despite the construction of the elevated railroad downtown, few buildings were erected in the central district in the following decade, and by the thirties, business had virtually stagnated there. Promise arrived with General Electric, which by the thirties had come to dominate the city. Union and Monroe Streets remained the town's primary commercial corridors, businesses on Union now pushing eastward as far as Green Street. Secondary nodes of commercial activity remained at Market Square and scattered along lower Western Avenue, at Broadway and Lynnfield Streets, and at major intersections along Essex. The Lynnway began its evolution into a strip of both fringe industrial development and auto-oriented businesses, the core of the town's manufactories now localizing within the southern waterfront zone between Western Avenue and the Lynnway at Commercial Street. Single-family residential building continued its push inland, along Walnut and Lynnfield Streets to the north, and as infill in the area to the east between Western Ave and Lewis Street, while apartment complexes arose, still at a small scale, nearer the waterfront.

D. Economic Base

The critical importance of the shoe industry to the town's economy diminishes during the Early Modern period, both in real and relative terms. In real terms shoe manufacturing suffers tremendous losses. Production declined sharply so that by 1921, Lynn factories made only five million pairs, fewer than at the end of the Civil War. From first in production in the U.S., Lynn fell to third, behind Haverhill and NYC. In the first four years of the 1920s Lynn lost 67 factories and 4000 jobs as firms either folded or moved to the South and West, where

unions were absent and wages were significantly lower. Fortunately for Lynn, the G.E. Co. took up some of the slack, giving employment to many former shoe workers. Still, many shoe workers were unemployed. G.E. came to dominate Lynn's economy as the shoe industry had in the previous period, transforming Lynn from a virtually one-industry town to a one-company town. In addition to producing electrical goods for commercial use, G.E. became a major defense contractor, thus experiencing periods of enormous growth during WWI and WWII.

From 1915 to 1953, manufacturing employment actually increased 55% to over thirty-one thousand people. In 1953 G.E. employed 14, 614 or 47% of the total manufacturing workforce, while 5409 worked in production of transportation equipment and 4680 in shoes and leather products. In addition there were several small firms engaged in food processing, clothing production and other manufacturing activities including the West Lynn Creamery and the North American Phillips Lighting Co. In all, manufacturing accounted for 66% of the employment base, while 843 wholesale and retail firms employed 16.8% and the service sector 5.3%,

E. Architecture

Industrial: The General Electric Co. expanded its physical plant several times during the period. By 1955 these were three separate large complexes in the West Lynn area. Because of the close relationship with the military these facilities are off limits and could not be inventoried. The North American Phillips Lighting Co. also established a plant in West Lynn. The main building of this facility is located on the Lynnway and is a four story poured concrete and brick structure with six-story stair and clock tower. Further south on the Lynnway is an industrial park in which standard of Lynn, a plumbing, heating and industrial supply firm is situated. At 567 Lynnway, the Lynn Iron Foundry was established. The 1921 structure, a two-story brick building with a parapet on the facade, still survives. At 626 Lynnway are the facilities of the West Lynn Creamery. They include brick and corrugated metal buildings and large silo-shaped storage tanks.

The local prosperity fostered by the shoe and electrical industries continued to expand the residential, civic and commercial development of Lynn through the Second World War. The elite residential area remained along Lynn Shore Drive in the Diamond District with a number of large Georgian Revival brick houses on Ocean Street built after the First World War with adjacent auto garages. In the outlying districts as the highlands of Western Avenue and Lynnfield Street, English Tudor and Craftsmen Bungalow designs were used for suburban houses. On smaller suburban lots of the shore estate side streets, early examples of New England Colonial Cape Cod and Garrison houses were built through the Great Depression, indicating the prosperity of the Diamond District in the 1930s. A similar series of New England Colonial suburban designs were set around Flax Pond and Walnut Street at the base of Pine Hill with outlying examples on Lynnfield Street (State Route 129). Increasing urban density set apartment house development around the fringes of the Diamond District, outside the 1924 zoning area, notable on Broad Street and the side streets from the central district. In the residential districts of West Lynn, Eastern and Western Avenues, two-family houses and three-deckers were infilled on

available lots until the Depression halted further development.

Civic and institutional buildings continued to replace earlier Industrial Period structures in central Lynn. A series of schools and fire stations were built in the expanding suburban districts like Pine Hill seen in the Anderson School (1915) and the Woodlawn Street Fire Station (1917), both of modified Craftsmen-Classical brick designs, and the Lincoln Elementary School (1938) on Friend Street in Art Deco Style. Few substantial churches were built during the period, most by ethnic immigrant congregations as Temple Beth-El (1927) on Breed Street in Neo-Classical Style. The largest civic project was the development of Lynn Woods under the Works Projects Administration during the Great Depression with the Happy Valley Golf Course and Club House (1936) in Rustic Tudor Style and the Lookout Tower (1934) on Burrill Hill, now in disrepair.

Commercial building of the Early Modern Period continued to define the urban density of central Lynn. A number of business blocks were set along Market Street, including the Arco Building (1923) on Andrew Street and the Goodman Building (1927) at City Hall Square, both in modest Classical style with cast concrete details. The notable buildings of the period were completed during the Depression with the New England Telephone Company (1931) at City Hall Square and the Hotel Edson (1931) on Exchange Street, both of innovative Art Deco Style that match similar designs in Boston. Smaller period commercial buildings were located on the auto routes through Lynn with a number of surviving filling stations on Western Avenue (State Route 107) and Lewis Street (State Route 1A) in Cottage and Moderne Styles. Similarly, a series of early auto showrooms remain in the central district, notably the Whitten Company (1927) on Central Avenue and Union Motors (1929) on Liberty Street. A few period diners remain intact, as the Capitol (1928) on Union Street and the former Boston Diner (1941) on Boston Street. The most unique surviving structure of the period is the GE traffic signal (ca.1925) at McGrane Square on Western Avenue (State Route 107), possibly the oldest such traffic light now operating on a state highway.

XI. SURVEY OBSERVATIONS (1997)

Vast portions of historic Lynn have been damaged by modern development. The residential area south of the common, among the town's oldest, has succumbed to a combination of deterioration and new building - from condos to apartment complexes. The historic integrity of the 19th century neighborhood no longer survives. Neptune Boulevard and the concomitant construction along this new axial destroyed everything south of Summer Street from Commercial to Market. The Lynnway is one giant auto strip, and much of Western Avenue from the bridge to Washington Street is overwhelmed by commercial infringement. Boston Street from Franklin to Broadway has been gradually rebuilt, until now it is an inland equivalent of the Lynnway. New single-family buildings, because of the density of the old neighborhoods, are most concentrated in the extreme northern town, beyond upper Boston Street.

Large sections of the city have been surveyed within recent standards of the MHC. This includes Central Lynn, Lynn Common, the Diamond District, East Central, Pine Hill, Pine Grove Cemetery and Lynn Woods

comprising about half of the potential survey area. Portions of High Rock and East Boston Street have received preliminary survey assessment, with Wyoma and the Chestnut-Franklin Street district also with partial survey data. Outstanding areas in need of priority survey include the workers housing districts of the Wood End (Essex Street) the Brickyard and West Lynn neighborhoods where the potential of Colonial, Federal and Early Industrial buildings remain to be researched. Also of concern is the area around Flax Pond and Long Hill with Federal and Early Industrial Period houses obvious in field surveys. The industrial archaeology of Strawberry Brook likewise needs a full survey assessment, the GE West Lynn and River Works being of potential historic value.

XII. FINDER'S AID

Plantation-Colonial	Old Burial Ground
Federal residential	S. Common Street
	Washington Sq. at
	Nahant-Broad Sts. Lafayette-Park Sts
Scattered Federal building	Maple Street, Boston Street, Essex
Early 19th century residences	Boston Street at the Saugus River
Late 19th century boarding houses	Newhall and Surfside Streets at the Lynnway
E. Industrial residential	Baltimore Street
Suburban elite	Atlantic Street
E. Industrial residential	Violet-Pinkham Sts.
Workers housing	James Street
Early Industrial cottages	Chatham near Essex; Chestnut near Essex; and
	Summer Street at Boston.
" " with early multifamily construction	Gardiner Street
E. Industrial commercial	Munroe Street
Elite Late Industrial dwellings	Ocean Street and vicinity
Pre-1889 Fire shoe lofts	
L. Industrial residential	Ocean Street
Suburban elite	
L. Industrial residential	Western Ave. at
Workers housing	Washington Street
	Alley Street
L. Industrial commercial	Central Square
L. Industrial industrial	Liberty Square
E. Modern residential	Lynn Shore Drive
Suburban elite	
E. Modern commercial-civic	City Hall Square
E. Modern industrial	GE River Works

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