

**HISTORIC PRESERVATION IN CONNECTICUT**

**VOLUME V**

**Eastern Coastal Slope:  
Historical and Architectural Overview  
and  
Management Guide**

**1997**

**John Herzan**

Connecticut Historical Commission  
State Historic Preservation Office  
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# HISTORIC PRESERVATION IN CONNECTICUT

## VOLUME V

### Eastern Coastal Slope: Historical and Architectural Overview and Management Guide

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LETTER OF TRANSMITTAL

Historic preservation can play a vital role in maintaining and enhancing community character. Inadequate documentation on a community's cultural resources, lack of preservation planning, and the absence of mechanisms to protect cultural resources, however, can lead to loss or irreversible alteration of significant properties. To encourage greater awareness and stewardship of heritage resources, in 1992 the Connecticut Historical Commission initiated publication of a series of planning documents on regional patterns of historical development and architectural styles in Connecticut. Each report includes a management guide that outlines historic preservation protection programs/activities.

The Connecticut Historical Commission is pleased to publish *Historic Preservation in Connecticut, Volume V, Eastern Coastal Slope: Historical and Architectural Overview and Management Guide*. The report provides invaluable information about Southeastern Connecticut, with special emphasis on the region's unique maritime heritage.

Knowledge of the past helps chart a course for the future. The Connecticut Historical Commission urges communities to consider cultural resource planning as a tool for managing change and ensuring a future *with* a past.

A handwritten signature in cursive script, reading "John W. Shannahan".

John W. Shannahan,  
Director and State Historic  
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JOHN G. ROWLAND  
GOVERNOR

STATE OF CONNECTICUT  
EXECUTIVE CHAMBERS  
HARTFORD, CONNECTICUT  
06106

## FOREWORD

The Eastern Coastal Slope's rich maritime and scenic heritage is highlighted in this fifth volume of the Connecticut Historical Commissioner's regional planning series. The 18 towns of this shoreline region are oriented to Long Island Sound and three rivers: Connecticut, Thames, and Hammonasset.

Over the centuries, the Eastern Coastal Slope has attracted Native Americans and European colonists alike to its natural harbors, sandy beaches, and forested low-lying hills. The industrial history of the area has featured shipyards, quarries, foundries, and military installations. Also significant has been the region's role as vacation destination, beginning in the mid-19<sup>th</sup> century with numerous summer hotels and residential colonies, and culminating in the late 20<sup>th</sup> century with the opening of Foxwoods Resort Casino in Ledyard.

The purpose of a planning document is to direct future actions. Author John Herzan, through his history/architecture overview and management guide, has provided towns in the Eastern Coastal Slope with information to help safeguard their heritage resources.

I urge you to cherish, for ourselves, for future generations, and for our visitors, the buildings and special places which give our state its unique character.

Sincerely,

A handwritten signature in cursive script that reads "John G. Rowland".

JOHN G. ROWLAND  
Governor

# PRESERVING OUR HERITAGE

## An Introduction by the Connecticut Historical Commission

In Connecticut the complex interaction between people and the environment has created a rich and diverse cultural landscape, the physical record of humanity's hand on the land. Whether it be schools or factories, churches or synagogues, residential or commercial buildings, parks or archaeological sites, the built environment of Connecticut is a window to the past. Such properties are a tangible link to and embodiment of the historical development of the state.

The Connecticut Historical Commission was established in 1955 to undertake a range of activities to encourage the recognition and preservation of the state's cultural (i.e., historical, architectural, and archaeological) heritage. The scope of its responsibilities was broadened when, pursuant to the National Historic Preservation Act of 1966 which authorized a State Historic Preservation Office in each state and territory, the Connecticut State Historic Preservation Office was organized in the Connecticut Historical Commission. The goals of the Connecticut State Historic Preservation Office have always been the identification, registration, and protection of the state's cultural resources, including buildings, districts, structures, sites, and objects. These goals are achieved through survey, listing on the State and National Registers of Historic Places, environmental review, grants-in-aid, and technical assistance. A staff of archaeology, history, and architecture professionals at the Connecticut State Historic Preservation Office works with other state agencies, nonprofit organizations, local officials, and private citizens in administering these state and federal historic preservation programs.

Approximately 130 towns in Connecticut have been partially or fully surveyed, resulting in over 75,000 historic buildings and archaeological sites being included in the Statewide Historic Resource Inventory. In further recognition of their historical, architectural, or archaeological significance, over 40,000 historic properties have been placed, individually or as part of districts, on the State and National Registers of Historic Places.

### **Planning Partners: Historic Contexts and Property Types**

The implementation of a comprehensive preservation planning process makes it possible to carry out the goals of the State Historic Preservation Office with expanded coordination and effectiveness. The conceptual framework for such an approach is set forth in *Historic Preservation: A Cultural Resource Management Plan for Connecticut*, published by the Connecticut Historical Commission. The plan divides the state into six historic contexts that are geographically based and that correspond to Connecticut's major landscape regions. The towns and cities located within each region possess similar cultural histories and patterns of

development. These six geographic historic contexts are as follows: Western Coastal Slope, Eastern Uplands, Central Valley, Western Uplands, Eastern Coastal Slope, and Northwest Highlands (see Figure 1).

A second concept fundamental to Connecticut's comprehensive preservation planning process is that of property types. A property type is an expected category of buildings, structures, or sites (taverns, bridges, or cemeteries, for example) which is primarily defined by function and is related to an aspect of the historical development of a region. Taken together, the concepts of historic contexts and property types provide a frame of reference for the systematic collection and evaluation of cultural resource data and the formulation of protection policies for cultural resources.

### **Documenting Historic Contexts**

The Connecticut Historical Commission plans to issue a series of reports, one for each of the state's six geographic historic contexts, of which this report for the Eastern Coastal Slope is the fifth. A two-part format (historical/architectural overview and management guide) will carry through the entire series. The historical/architectural overview in Part 1 provides a brief analysis of the major factors that contributed to the development of a geographic historic context and a summary description of the principal architectural styles for each of four chronological periods.

Part 2 serves as a management guide based on the following components:

1. a network, or matrix, of expected property types to be found in a geographic historic context, organized within eleven historical themes and the four chronological periods noted above;
2. narrative descriptions of various federal, state, and local programs and activities, including those established by legislation, which protect cultural resources;
3. a consolidated table of programs/activities currently in place in the towns comprising a geographic historic context;
4. criteria established by the National Park Service, U.S. Department of the Interior, for including properties on the National Register of Historic Places;
5. a town-based listing of properties on the National Register of Historic Places in a geographic historic context.

Separate companion volumes dealing with the archaeological resources of each of the six geographic historic contexts are also planned.

## **Using the Information**

The geographic historic context reports will assist preservation planning efforts at the local level. In towns that have not been surveyed, the historical and architectural overview and list of expected property types are a useful starting point for identifying a community's historic properties. In towns that have been surveyed, this information can form the basis for reevaluation of existing survey data to determine gaps in the inventory of historic properties. By employing the concept of property types, communities can organize survey data by category to compile information about the number and ages of specific kinds of historic properties (for example, libraries, farmsteads, or lighthouses). For comparative purposes, any one example can then be placed within a larger group of similar properties.

Just as the nature of a community's cultural resources and the circumstances, both local and regional, affecting them will vary, so the tools used to protect these resources will vary from case to case. The management guide alerts towns as to which preservation tools are currently in place within their boundaries and which ones could be implemented to give expanded protection for local resources.

## **Heritage Preservation: It Matters**

The preservation of cultural resources is integral to the maintenance of community character and quality of life. Historic preservation is therefore part of the broader questions of managed growth and overall environmental concerns. The statewide comprehensive preservation plan and the individual geographic historic context reports that implement that plan offer Connecticut residents new opportunities for safeguarding their cultural heritage.

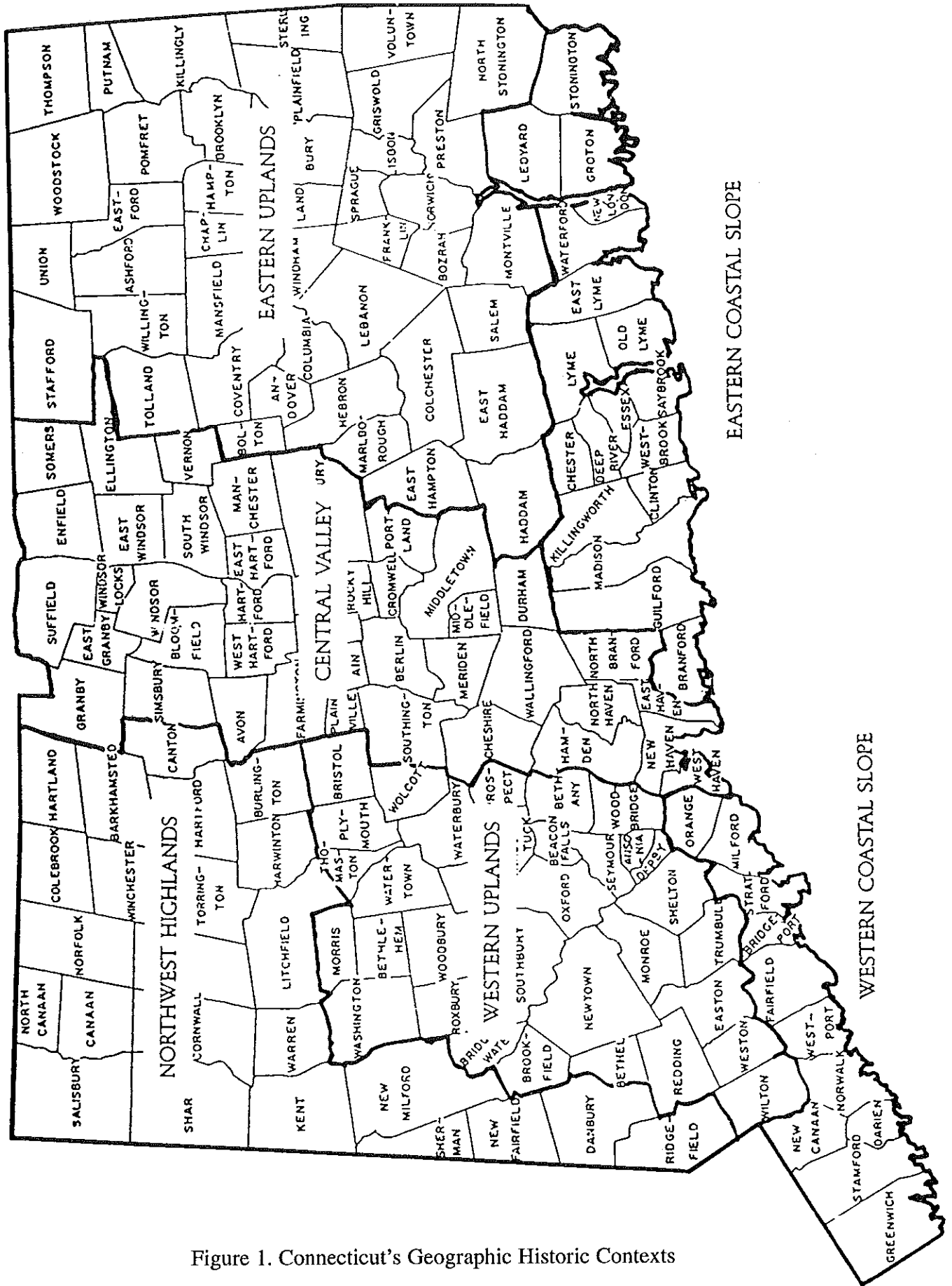


Figure 1. Connecticut's Geographic Historic Contexts

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## **Part 1**

### **Historical and Architectural Overview**

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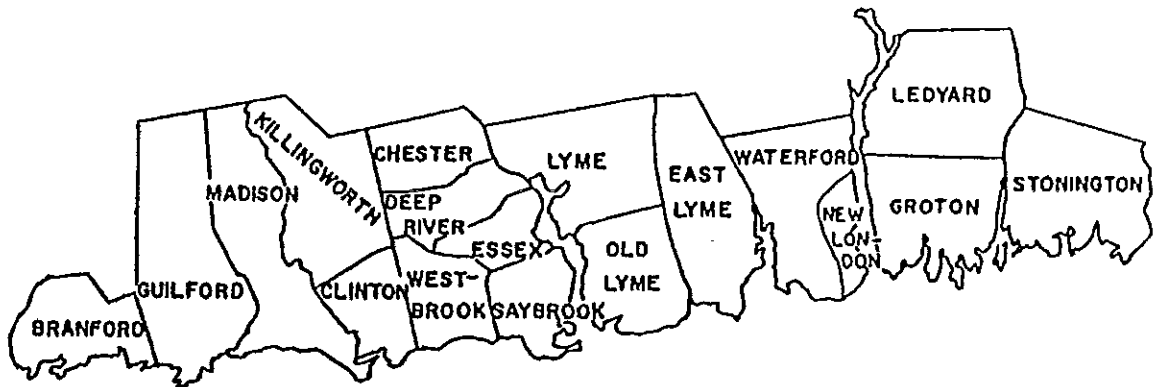
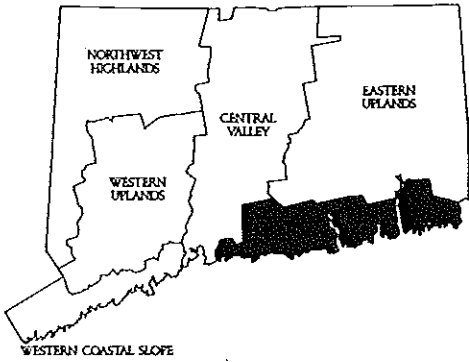


Figure 2. Town-based Map of Eastern Coastal Slope Geographic Historic Context

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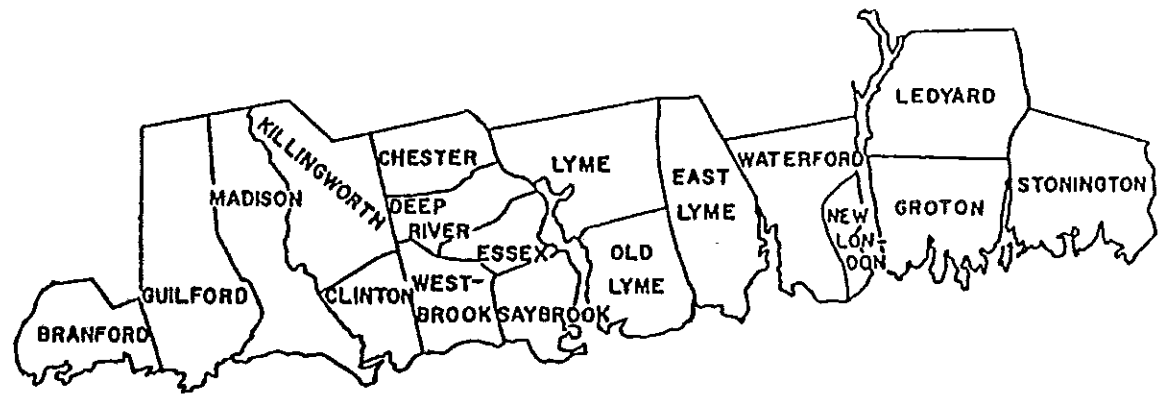
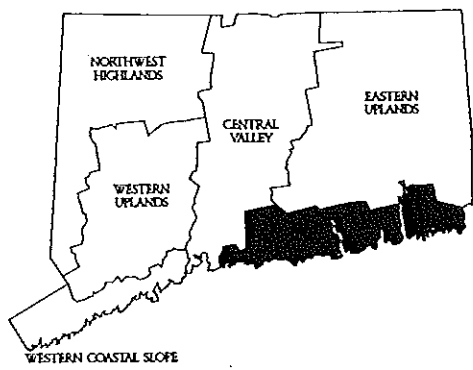


Figure 2. Town-based Map of Eastern Coastal Slope Geographic Historic Context

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Table 1: Eastern Coastal Slope Geographic Historic Context:  
Chronology of Town Establishment

<u>Town</u>	<u>Date</u>
Branford	1685 (from New Haven)
Chester	1836 (from Saybrook)
Clinton	1838 (from Killingworth)
Deep River	1635 (from Saybrook)
East Lyme	1839 (from Lyme and Waterford)
Essex	1852 (from Saybrook)
Groton	1705 (from New London)
Guilford	1639
Killingworth	1667
Ledyard	1836 (from Groton)
Lyme	1665 (from Saybrook)
Madison	1826 (from Guilford)
New London	1658
Old Lyme	1857 (from Lyme)
Old Saybrook	1854 (from Essex)
Stonington	1649
Waterford	1801 (from New London)
Westbrook	1840 (from Saybrook)

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## I. CHARACTER OF THE LAND

The Eastern Coastal Slope Geographic Historic Context lies along the southeast coast of Connecticut. Consisting of approximately one-tenth of the state's total area, it extends from Branford on the west to Stonington on the east and includes 18 towns in three counties: Branford, Guilford, and Madison in New Haven County; East Lyme, Groton, Ledyard, Lyme, New London, Old Lyme, Stonington, and Waterford in New London County; and Chester, Clinton, Deep River, Essex, Killingworth, Old Saybrook, and Westbrook in Middlesex County. Twelve of these communities border Long Island Sound, four towns border the Connecticut River, and Old Saybrook and Old Lyme border both. The Connecticut, the Thames, and the Hammonasset Rivers cross the region from north to south and serve as outlets for the major drainage basins in central and eastern Connecticut. The area's physical landscape is characterized by uniformly low hills and is forested mainly with hardwoods typical of the central eastern seaboard. The shoreline of the Eastern Coastal Slope consists of numerous natural harbors, inlets, salt marshes, sandy beaches, and rocky outcroppings which together produce an extraordinarily scenic environment. According to geographer Michael Bell, Connecticut's coast is made up of three principal topographical features: the coastal slope, a drowned coastline, and Long Island Sound.<sup>1</sup> Each of these features affected the region's historical development.

The coastal slope's relatively level landscape is believed by geologists to exist because the forces of erosion have not had time to whittle away the underlying foundation of bedrock found in this region. Covered by loose sediments from the former coastal plain, the bedrock has been protected. Consequently, during the colonial period, more favorable soil conditions existed here for agriculture than throughout the more rugged landscape of the Eastern Uplands to the north. Bedrock was, however, occasionally exposed along the coast in an irregular progression of headlands separated by coves of water. This geologic pattern created numerous harbors and beaches which not only stimulated the development of maritime activity in the historic period but also the actual settlement of the shoreline itself. The creation of Long Island, part of the glacier's terminal moraine, was followed by a rising sea level caused by melting of the ice cap. This sequence produced Connecticut's drowned coastline, Long Island Sound, and a series of rivers which provide ideal habitats for fish such as striped bass, Atlantic salmon, and American shad. These fish were important sources of food for Native Americans and early colonists.

The existence of Long Island is responsible for the most distinctive feature of the Connecticut shore: it is more sheltered than the rest of the eastern seaboard. Long Island and Fisher's Island, components of the glacier's terminal moraine, form a natural breakwater along the coast. In accordance with regional weather patterns, most major storms hit Long Island before Connecticut; the Connecticut coastline is protected from high-energy winds and waves as a result. The narrowness of the Sound is another controlling factor in wave height. Although devoid of exposed barrier beaches, Connecticut's sheltered coast with its calm and relatively small beaches has attracted the region's vacationing population from the early nineteenth century to the present. Steamships, railroad lines, and highways were built to transport people to the shoreline and its resort activities. It is no surprise that the Eastern Coastal Slope is among the state's most popular tourism areas.

## II. COLONIAL PERIOD 1614-1780

For thousands of years prior to English settlement indigenous peoples inhabited the section of Connecticut known as the Eastern Coastal Slope and obtained nourishment from its forests, rivers, and shoreline. European settlement challenged the Native American lifestyle. Both cultures were agricultural and water-oriented, and conflicts inevitably arose over land and fishing rights in the major river valleys and along the coast. In 1662 King Charles II of England granted Connecticut the charter under which it was established as a separate colony. Included in the region were the early settlements of Saybrook (1635), New London (1646), and Branford, part of the New Haven Colony (1638). The English colonists were guided by their Puritan heritage in establishing new communities, and rural traditions influenced the forms their towns and buildings took. Originally, agriculture was the foundation of the economy.

Gradually, New London and the region's smaller ports evolved from subsistence farming villages to relatively cosmopolitan centers of maritime trade where peoples and ideas, as well as goods, came and went. For example, the most fashionable styles in clothing and architecture reached Connecticut's seaports before its inland communities. The coastal locations with their ever-changing populations fostered openness of thought and intellectual unrest which helped move the colony towards independence during the American Revolution. Of equal importance to the cause were the militia, provisions, and ships which the region's towns contributed to the forces of the Continental Army and Navy. The presence of British warships on Long Island Sound hindered colonial trade. During the Revolution, life was extremely difficult for people who lived along the coast. Farmers hoarded their produce, thus inflating local market prices, and privateering became the most attractive option available to men trying to support their families. Merchants and seamen alike knew that trading as it had formerly existed was more lucrative and far less dangerous than privateering; however, it would not be until after the Revolution that opportunities for such maritime commerce would resume.

### Native Americans

According to radiocarbon dating, Paleo-Indian hunters frequented the state as early as 8200 B.C. in search of migratory animals. Semi-sedentary Native American village life is believed to have replaced nomadic patterns sometime after 1000 A.D. The six major tribes which inhabited the Eastern Coastal Slope by 1614 were the Pequots (Groton-Stonington area), the Mohegans (New London area), the Niantics (Lyme and Waterford), the Hammonassets (Saybrook and Clinton), the Menuncatucks (Guilford and Madison), and the Quinnipiacs (Branford). Relative to other parts of New England, Connecticut had one of the densest concentrations of tribes living in relative proximity to one another. Each tribe belonged to the Algonquian language group, thus facilitating intertribal communication along the coast and elsewhere in southern New England. The coastal Indians were adept at horticulture, with men and women sharing the tasks of cutting trees and clearing fields. Debris was burned and tree trunks eventually removed. Corn, kidney beans, squash, Jerusalem artichokes, and tobacco were planted, cultivated, and harvested predominantly by women. Fish was occasionally used as fertilizer. New fields were established

to allow old ones to recover their fertility, and villages were relocated accordingly. Maize was dried for winter consumption.

Sensitive to their environment, Native Americans lived in seaside settlements during spring and summer. Shelter consisted of dome-shaped structures made from bent sapling poles over which elm tree bark had been stretched; several families shared a single wigwam. From their seasonal camps along rivers or at the seashore, shoreline tribes tapped the bounty of Long Island Sound. With spears, hooks, and lines, in addition to nets woven from wild hemp, they caught many varieties of finfish and shellfish. They harvested their catch from canoes or from shore. Once caught, fish was smoked on large racks and consumed or saved for later use. In addition, the shoreline area had an abundant and readily accessible supply of wild berries and mushrooms, as well as acorns, beechnuts, chestnuts, hickory nuts, and sunflower seeds. During late fall and winter, Native Americans retreated for protection to forests with their rocky outcroppings, caves, and tall evergreen trees. Coastal tribes were accomplished hunters, and with bows and arrows and various trapping mechanisms, the men killed bear, deer, and moose, as well as fowl, rabbits, raccoons, squirrels, and turkeys. They also trapped beavers, foxes, wildcats, and wolves for their fur.

Dutch explorers were the first Europeans to observe the Native Americans of southeastern Connecticut. In 1614, during Adriaen Block's circumnavigation of Long Island Sound, his party recorded seeing Pequots along the Mystic River and Mohegans up the Thames River. Capitalizing on the Native Americans' skills as hunters and fur trappers, the Dutch established trade with both tribes. In 1632 the Pequots "sold" them land at the mouth of the Connecticut River on what is now Saybrook Point. The Dutch named it Kievit's Hook after a bird, the pewit, whose habitat was a nearby swamp. A year later the Dutch purchased a tract of land in what is now Hartford, also from the Pequots. On both these properties the Dutch erected small forts.

English explorers were quick to follow the Dutch example. In 1632 several English settlers from Plymouth, Massachusetts, were lured to Connecticut by a group of Indians who sought protection from the rapidly expanding Pequot control. The English settled in Hartford, Wethersfield, and Windsor, and surprisingly the Dutch offered no resistance. A group of English lords and gentlemen, including Viscount Say and Seale, Lord Brooke, and Colonel George Fenwick, were awarded a special patent from King James I to settle North America. In November 1633, Fenwick arrived in Kievit's Hook with great dreams of creating a highly cultured and civilized community complete with grand estates and servants. John Winthrop, Jr., son of the governor of the Massachusetts Bay Colony, was asked to oversee the settlement, named Saybrook after two of its founders. Again, the Dutch did not put up any resistance when it became evident that their original claim to land at the mouth of the river had been superseded. Winthrop did not arrive until April 1636, and a year elapsed before Lieutenant Lion Gardiner, a civil and military engineer, directed construction of a fort where he served for four years as commander. During the 1630s the Puritan "men of quality" who had planned to settle Saybrook decided to remain in England because local political conditions had changed for the better. Winthrop's tenure at Fort Saybrook was brief, and the Saybrook Colony never lived up to its founders' original expectations.

Initial relations between Native Americans and colonists were friendly, but as more and more English moved into Connecticut from Massachusetts, it became clear that the settlers' methods of acquiring good farmland posed a threat to the tribes, who did not share the European concept of land ownership. When Native Americans sold their lands, they did not realize they were relinquishing hunting, fishing, and planting rights. Intertribal relations were also not always peaceful in Connecticut. The Pequots killed several members from another tribe who had traded with the Dutch in the Hartford area. The Dutch in turn murdered the Pequot Sachem Woopigwooit, an action which motivated his son and heir Sassacus to defeat Uncas, leader of the Mohegans and longtime rival of the Pequots. Uncas was forced to find refuge among Rhode Island's Narragansetts.

Early on, Sassacus and other Native Americans recognized the threat of English settlement. When Captain John Stone of Virginia and a small party from Massachusetts came to trade, initial relations were seemingly friendly; however, when the captain introduced liquor during his negotiations, the Pequots felt taken advantage of and murdered the entire group during the summer of 1634. Massachusetts authorities demanded that Sassacus turn over those responsible so that they could receive punishment; however, the sachem dismissed their claim. In 1636 another group of Indians on Block Island killed John Oldham, one of the early settlers of Wethersfield.

The foregoing incidents greatly troubled officials in Massachusetts. John Endicott, with the aid of 90 men, was directed to locate Stone's murderers and avenge Oldham's death. Endicott's men first destroyed a small Native American settlement on Block Island and then crossed the Sound to the Thames River, where they met the Pequots and demanded the murderers of Stone and his party. After a skirmish the Pequots fled and Endicott and his troops sailed to Fort Saybrook. There Lion Gardiner strongly urged that the war cease; however, Endicott continued to attack villages along the shore before returning home to Massachusetts. As Gardiner had foreseen, this course only served to antagonize the Pequots. During the winter of 1637 they retaliated by killing nine of the garrison at Fort Saybrook, and later during a raid of the Wethersfield settlement, they killed six men and three women and took two young girls as captives.

On May 1, 1637, colonists from Hartford, Wethersfield, and Windsor resolved to form an army to subdue the Pequots. Captain John Mason and John Underhill commanded the force of 90 men. Mason, who had been with Gardiner at Fort Saybrook during the winter of 1636-1637, was an experienced soldier. Leaving Hartford, Mason and his men sailed down the river aboard three small ships. Uncas and several of his followers willingly accompanied the expedition. Upon arriving at Fort Saybrook, Mason discovered that a Dutch trading vessel had rescued the two captive Wethersfield girls; from them he learned that the Pequots had limited ammunition in their possession. Deciding to surprise the Pequots by approaching their main camps in Mystic from the east, Mason sailed toward Point Judith in Rhode Island, home of the Narragansetts. The latter were well established as enemies of the Pequots and agreed to join in battle, contributing approximately 200 warriors.

With troops now numbering several hundred, Mason selected one of two existing Pequot fortifications for attack, and on June 1, 1637, his army surrounded a palisaded village and set it

afire. Approximately 400 of the inhabitants perished; some of the captives were sold as slaves. Shortly after, a small number of Pequots were taken prisoner and a few also escaped. Remaining tribal members from the surrounding area dispersed west of the Connecticut River and throughout southern New England as well. The Pequot War was significant in colonial history for shifting the balance of power to the English settlers, thus enabling them to establish roots in Connecticut.

Following the Pequot War, relations between the English and the Mohegans and the Narragansetts were friendly; on September 21, 1637, a treaty formalizing this relationship was concluded. No tribe would attempt war with the colonists for nearly 40 years, until King Philip's War. The English proceeded to purchase land during the seventeenth century, demanding signed contracts and paying nominal amounts for prime tracts. The Sachem queen of the Menuncatucks in Guilford sold all the land from the East River to Stony Creek for "12 coats, 12 fathom of wampum, 12 glasses, 12 pairs of shoes, 12 hatchets, 12 pairs of stockings, 12 hoes, 4 kettles, 12 knives, 12 hats, 12 porringers, 12 spoons and 2 English coats." <sup>2</sup>

In most transactions Native Americans believed they would share use of the land with their new neighbors. In some cases the English were valued as protection from hostile tribes. Branford's 1639 deed of purchase stated that should the Indians "become affrighted ... they may repayre to the English plantation for shelter, and that there in a just cause, ye English will endeavor to defend ye from wrong." <sup>3</sup> Land purchases such as these forced the Native Americans to adapt to a more sedentary and concentrated lifestyle. Perhaps contributing to this new development, the General Court in 1646 appointed a commission for the founding of New London to remove Pequots who were willing to relocate to the east side of the Thames River "or some other place for their convenient planting and subsistance, which may be to the good liking and satisfaction of the said Indians, and likewise to such of the Pequot Indians as shall desire to live there, submitting themselves to the English government." <sup>4</sup>

The Mashantucket Pequot Nation in Ledyard is the only tribal preserve in the Eastern Coastal Slope. Heavily forested, the Mashantucket area was an important hunting and foraging place for the Pequots both before and after the Pequot War. In 1666 Connecticut authorities designated some 3000 acres of land in Ledyard for use by the western branch of the Pequot tribe. In 1721 the Western Pequots acquired from the colonial government formal title to two large contiguous parcels within the original Mashantucket reservation: 989 acres in the vicinity of Cedar Swamp and 654 acres on Walnut Hill. In exchange for legal ownership of these lands, the Western Pequots relinquished their long-standing "fishing, fowling, and clamming" rights on Groton's Noank peninsula. Because of a substantially diminishing population during the eighteenth and nineteenth centuries, the tribe abandoned its claim on Walnut Hill to Connecticut in 1793, and in 1856 the General Assembly reduced the remaining holdings to 214 acres. While most members of the tribe lived elsewhere during the early twentieth century, a few Western Pequots remained on their land. In 1983, following a lengthy suit, Congress conferred federal recognition on the Mashantucket Pequot Tribe, which was authorized to reacquire up to 2,270 acres within its original 1666 reservation.

## Town Formation and Settlement Patterns

Between 1635 and 1667 all land in the Eastern Coastal Slope was settled by the English and incorporated into seven towns by the General Court of the Connecticut Colony. Proximity to Long Island Sound and/or an accessible waterway, coupled with availability of natural harbors, fostered settlement along the shore, resulting in development of trade, transportation, and communication between towns as well as along the eastern seaboard. Lyme, New London, Saybrook, and Stonington were founded in large part because of their locations. Branford and Guilford, however, had, in addition to water access, more favorable soil conditions, a combination which attracted settlers. In contrast, Killingworth, which had very poor soil for farming, was the last town to be established in the seventeenth century. The proprietors, or original owners of each town, anticipated the needs of their descendants as well as their own by initially acquiring large land holdings. The average number of square miles claimed for each town was about 85, approximately the same as in the Western Coastal Slope. Lyme, with 134.6 square miles, was the largest town, and Branford and Killingworth, each with about 53 square miles, were the smallest.

During the early seventeenth century town establishment was essentially achieved in a similar manner throughout Connecticut. Groups of families, usually a few dozen, sought permission from the General Court of the Connecticut Colony to settle and possess particular lands. Town government and official incorporation followed settlement relatively quickly. Proprietors determined which parcels to distribute for private use, which were to be held in common, and which would be set aside for future allotments. Although the exact configuration of each village varied, similar patterns of settlement emerged. Public aspects of town life were usually focused on the commons. The meetinghouse was centrally located, as was the home of the minister. Other public buildings and facilities were nearby: the schoolhouse, the blacksmith shop, the whipping post, and the pillory, as well as the burying ground. Each proprietor was assigned a home lot in the village around the "town plot," as well as outlying meadows for haying and grazing and fields for cultivation of crops.

Location and quality of a proprietor's holdings were based partially on how much he contributed to the acquisition of land from the Native Americans and partially on his social standing in the community. A notable exception to the settlement pattern for most home lots of this period is the extant house of the Reverend Henry Whitfield in Guilford (Photograph 1). Located south of the commons, it exhibited the isolation of an English manor house. Originally incorporating approximately 25 acres, Whitfield's parcel, with its substantial stone dwelling and choice location along the West River, recalled the prosperous agricultural environment he and his followers knew in Surrey, England. The property also proclaimed Whitfield's prominent position of leadership in the Guilford community.

Between 1670 and 1780 Connecticut's population density increased from 639 persons to 4,123 persons per square mile. <sup>5</sup> Prior to the Revolutionary War, coastal communities grew more rapidly than those inland, and by 1756 New London County's population density was the highest in the colony. This area benefited from growth of trade during the eighteenth century, and young men seeking economic opportunity were drawn to the region. As the number of people in each

town grew, it became necessary for reserved lands to be divided for younger sons of the proprietors and for newcomers to homestead and farm. Often these holdings were far from the original nuclear village, making attendance at weekly Sabbath meetings a hardship. For instance, while clearing land in North Guilford for settlement, men who received the first allotments there lived together Monday through Saturday before returning down steep, hilly roads to Guilford center on Sundays. As new villages evolved, arrangements such as these became increasingly unacceptable, especially in winter, and the General Court received numerous petitions to establish new parishes. Many of the towns established in the eighteenth and nineteenth centuries had their origin in these early parishes. Such was the case with Lyme and Groton, each of which broke away from their respective parent towns, Saybrook and New London, partly because of difficulties encountered crossing the Connecticut and Thames Rivers on a regular basis.

During the eighteenth and nineteenth centuries creation of new parishes or "societies" yielded the political foundation for establishment of additional new towns in the Eastern Coastal Slope. The most notable example was in the original Saybrook Colony, which spawned a total of seven towns: Deep River (1635), Lyme (1665), Chester (1836), Westbrook (1840), Essex (1852), Old Saybrook (1854), and Old Lyme (1855). Although the motives for separation, local self-government and worship, remained a common denominator for all the original shoreline parishes, none of the settlements in the region were as prolific in germinating new towns as Saybrook.

The New London Colony evolved into four towns: Groton (1705), Montville (1786), Waterford (1801), and Ledyard (1836). Part of East Lyme (1839) was also formed from western portions of Waterford. In the 1890s New London had second thoughts about having relinquished all its claim on Waterford, and in 1899 a bill was submitted to the General Assembly to annex about four and a half square miles of Waterford. A substitute bill was signed into law the same year which allowed New London to acquire about two square miles now in the vicinity of Connecticut College, the U.S. Coast Guard Academy, and Cedar Grove Cemetery. Presumably encouraged by this acquisition, New London attempted to annex the rest of Waterford in 1911, but the proposal was overwhelmingly defeated in the General Assembly. Fewer parishes emerged in Stonington, Guilford, Branford, and Killingworth than in Saybrook or New London; however, each of these towns respectively spawned another: North Stonington in 1807, Madison in 1826, North Branford in 1831, and Clinton in 1836.

### **Building on the Land**

Although colonists were faced with the formidable tasks of clearing forested land in addition to planning, developing, and sustaining their communities, the abundance of natural resources in the Eastern Coastal Slope must have given them great satisfaction when it came time to build homes, meetinghouses, mills, and ships. Paramount among these assets were the central hardwoods (chestnut, hickory, and black, red, and white oak), as well as hemlock, cedar, and white pine. Black oak and chestnut were popular among carpenter/housewrights for framing houses, and white and red cedar were suitable for shingles, clapboards, and fenceposts. Pine was used for flooring. White oak was the principal wood for timbers and planking of ships, as well as

barrel staves. Although the largest pines were reserved as masts for the Royal Navy, timber was free and readily accessible. In fact, timber was among the earliest commodities shipped back to England by colonists to pay their debts to financial backers.

Once shelter had been secured, colonists' attention naturally turned to constructing a center for town government and community life, namely the village meetinghouse. Town meetings, Congregational Church services, and elementary education were originally held there. As a measure of its central control and in response to petitions from communities, the General Court of the Connecticut Colony approved sites for meetinghouses and addressed controversies over potential locations as they arose. Towns were also concerned with attracting millers to provide essential services such as grinding flour and meal, and sawing lumber. Located either on tidal rivers or smaller inland streams, many mill privileges were established throughout the Eastern Coastal Slope. For example, water rights to a small stream in New London which emptied into the Thames River were granted to John Winthrop, Jr., by town meeting vote in 1650. He subsequently established a gristmill at that site, near what is known today as Mill Street. Winthrop, a founder of New London who also served as governor of the Connecticut Colony from 1657 to 1676, leased his mill privilege following his departure from New London, thereby maintaining a monopoly on this important town function.

Another responsibility of town meetings was development and maintenance of roads, both within each village and between towns. In the early seventeenth century, roads were probably no more than rutted cart paths, serving as rude links between population centers and outlying farms. As town government evolved, highway surveyors in each town were appointed, and a tax, payable either by labor or money, was levied on each household. The town meeting appointed local committees to alleviate all obstacles to travel on existing roads. Nevertheless, when feasible, travel by water was less difficult, and each shoreline town established a public landing either on Long Island Sound or an adjacent river. In 1662 the General Court granted Saybrook inhabitants John Whittlesey and William Dudley permission to operate a ferry at Tilley's Point near the mouth of the Connecticut River. The ferry was in service until 1911, when the first highway bridge was constructed, and over the years it provided a crossing for people, post riders, livestock, wagons, and stagecoaches traveling on the New York-Boston Road; prior to 1871, it even transported railroad cars. Other ferries operated between Lyme and Saybrook in the colonial period. In 1724 Brockway's ferry between Essex and Old Lyme was established. In 1769 the General Assembly granted John Warner a ferry privilege to cross the Connecticut River in the parish of Hadlyme, located within the Town of Lyme. The ferry was operated privately through 1877, after which it was taken over by the town. Since 1917 it has been owned and operated by the State of Connecticut Department of Transportation and has provided continuous seasonal ferry service since its inception.

## **Agriculture**

In Connecticut's early colonial period most settlers were directly involved with various aspects of agriculture, from field cultivation to raising livestock. Farmsteads were in many ways self-sufficient, providing much of their own produce and meat for consumption as well as materials



for clothes. However, they were also dependent upon neighboring farms for services, tools, goods, and food which they were unable to produce themselves. Grain crops such as corn, wheat, rye, oats, and barley were harvested, in addition to vegetables such as peas, beans, leeks, cabbages, and asparagus. Root vegetables (radishes, onions, potatoes, carrots, and turnips) were important because they kept well, and flax was grown for cloth. Colonists adopted Indian planting customs at first: hillocks (small mounds of earth) were formed within which corn kernels and dried pumpkin seeds were planted. Beans were sown between each mound. Simple wooden farming implements were used (flails, harrows, hoes, scythes, and sickles), and later in the seventeenth century plows pulled by oxen replaced hand hoes. Early settlers also laid out orchards for fruit trees, as their Pequot neighbors had done. In addition, farmers raised cattle, swine, sheep, and horses. Cattle and swine provided meat, leather, and dairy products for domestic consumption, and sheep were sources for wool which was carded, spun, and woven.

Agricultural skills brought by the first Connecticut colonists were successfully adapted to local soil conditions and climate. Because land was readily available, local farmers cultivated less intensively than they had in England and were later criticized by those who took a more scientific approach to farming. Jared Elliott (1685-1763), an agricultural critic and reformer from Guilford, attempted to promote change by advising farmers to use lime for soil fertilization and plant clover for grazing, and to reclaim salt marshes for hay production. Although most small-scale farmers found his advice impractical, Guilford's Leete family, who lived near Eliot, heeded his advice, and their extensive salt hay farm is evident from Route 146 today (Route 146 Historic District).

As had been the practice in England, animals were given scant shelter and food, even in winter. Understandably, their owners' first priority in Connecticut was survival. Cattle and sheep were grazed in natural pastures, often on land too infertile to cultivate. This approach was followed on New London County's stony coastal strip, as evidenced in communities such as Ledyard where several extant farmsteads still exhibit that town's rocky soil. Stonewalled pens and pentways survive on several farmsteads. Hogs were also kept, being able to forage the natural bounty of nearby woods.

The average acreage available for a typical family in Connecticut to farm declined steadily during the late seventeenth and eighteenth centuries. This phenomenon contributed to some fundamental changes in agricultural practices colonywide. Because land became scarce, farmers could no longer afford to clear new fields as old ones became infertile. They gradually realized that Indian corn depleted the soil, crop rotation was important, and grains such as wheat, rye, and oats would be better at maintaining the soil's fertility. As different types of land were brought into use because of shortages, farmers became more knowledgeable about what crops or livestock would be best suited to a particular area. When demand for Connecticut's agricultural products developed with other colonies and the West Indies, crop marketing became increasingly specialized. Since the uplands of the Eastern Coastal Slope were more suited to grazing than cultivation, livestock, meat, and dairy production began to exceed grain crops. With development of new transportation networks, coastal trading ports of the Eastern Coastal Slope were in a favorable geographic location to support the colony's emerging economy.

## Commerce

Connecticut's coastal towns, such as New London and Stonington, were never in as politically or economically advantageous a position as their more prominent neighbors (Boston, Newport, and New York) to trade with England on a regular basis. Nevertheless, as area farmers began to produce a surplus of grain, livestock, and timber products, potential markets were identified. As early as the seventeenth century, New London merchants shipped barreled meat and other provisions to Newfoundland in exchange for fish, which was sold at West Indian ports for sugar, molasses, rum, and slaves. Among the more typical produce which Connecticut exported was grain in the form of biscuit and flour, barreled meat (beef and pork), fish (dried and salted), and oysters from Long Island Sound. Timber products (barrel staves and shingles) were shipped to the West Indies as well, but ship masts and other lumber by-products (pitch, turpentine, potash, and pearlsh) were mainly exported to England.

During the later colonial period, livestock commanded greater value than grain in the export market. Consequently, Connecticut farmers shifted their agricultural focus and merchants developed a very profitable trading relationship with the Caribbean islands where horses, mules, cattle, swine, sheep, and poultry were in great demand by planters. In the eighteenth century New London ships traveled to Spanish ports on the Mediterranean Sea to trade flour and lumber for mules which were sent on to the West Indies. Livestock and other farm produce were traded for bills of exchange, molasses, sugar, salt, and rum. At neighboring coastal ports, Connecticut merchants exchanged a large percentage of those products, particularly molasses, for English manufactured goods such as cloth, pins, buttons, knives, and pots. Consequently, although Connecticut failed to establish a regular trade link with England, merchants were able to obtain English goods without the peril of trans-Atlantic passage.

Merchants constructed warehouses in coastal towns such as New London to store goods from abroad, and local storeowners distributed available commodities to inland towns where farmers sold produce and purchased West Indian goods (such as sugar, spices, and molasses) and English manufactured products. Due to a general cash shortage, local shopkeepers bought and sold goods on account. They forwarded agricultural products to suitable markets at nearby ports in exchange for imported goods that could be sold to customers or to other storekeepers in their vicinity. By the mid-eighteenth century every town in Connecticut had at least one merchant or shopkeeper. As the colony's maritime economy grew, so did the rising merchant class. With expansion of the West Indian and coastal trades, large-scale merchants became wealthier, their economic role and status more distinct from those of local shopkeepers. They built new wharves, warehouses, shops, and ships at key waterfront locations along the shoreline and in river ports of the Eastern Coastal Slope.

Nathaniel Shaw, Jr. of New London is probably Connecticut's most famous pre-Revolutionary "merchant prince." The Shaw papers at Yale University contain his extensive trading record with individuals and firms in such ports as New York, Philadelphia, Boston, Newport, the West Indies, Amsterdam, and London. For example, references to the 1769 voyage of Shaw's ship *Lucretia* to the West Indies include a description of its extensive cargo: "48 horses, 15,000 pine boards, 148 shaken casks, 8,000 hoops, 2,300 staves, 28 barrels of beef, 8 barrels of pork, 9 tierces of bread,

11 tons of hay, 600 bushels of oats, 68 casks of water and sundries.”<sup>6</sup> Although coastal trade was common, merchants such as Shaw found the West Indian trade to be more profitable. As exported goods multiplied and the overall working population rose, the colony’s evolving market economy supported many specialists in crafts and trades. In New London alone, 11 silversmiths practiced between 1750 and 1790. While it is believed that a number of artisans also farmed, maintained shops, or operated taverns, others had no connection with farming and worked as engravers, jewelers, watchmakers, blacksmiths, gunsmiths, tinsmiths, and pewterers. A wide range of opportunities developed during this period of maritime commerce. In addition to carriagemakers and wagonmakers, wheelwrights were in demand as colony-wide transportation networks evolved. Coopers crafted barrels required for packing cured meats and dried fish, and basketmakers produced containers for exporting both shellfish from Long Island Sound and agricultural products (flour, cornmeal, etc.) from nearby farmsteads. Cobblers, potters, and clockmakers addressed domestic needs of prosperous as well as average citizens. Certainly farmers, merchants, and craftspeople benefited from the lively coastal and West Indian trade that emerged when Connecticut’s agriculture shifted from crops to livestock and when small-scale manufacturing became an important economic force in the life of each seaport.

## **Industry**

Development of industrial activity in the Eastern Coastal Slope paralleled other parts of the colony in many ways. Shortly after each community’s settlement, gristmills and sawmills were constructed to tap the energy potential of local streams and tidewater rivers. Mill wheels ground cornmeal and flour for domestic use and saws cut lumber for carpenters and joiners. The area’s virgin forests provided more than enough timber for local needs. Surpluses were exported: ship masts, shingles, barrel staves, and cedar posts, in addition to wood by-products such as turpentine and potash. Construction and operation of mills was a collaborative effort. Each miller, often a part-time farmer as well, applied for a mill privilege through the local town meeting, which in turn negotiated terms of the mill’s operation such as physical location and extent of available public assistance, either financial or in the form of labor. For such help the miller agreed to a set price for his services. Each town eventually sustained several gristmills and sawmills.

Connecticut’s earliest known ironworks was established around 1655 on the town line between Branford and East Haven in the vicinity of the Farm River’s confluence with the southern tip of Lake Saltonstall. It was the colony’s first documented attempt to produce iron for the manufacture of products such as cooking utensils, axes, and guns, goods which until then were available only from England. John Winthrop, Jr., well known in Connecticut for securing Connecticut’s Charter from King Charles II, and also a highly experienced metallurgist, held an ownership interest in this industry where several men were employed. The blast furnace was supplied with bog iron shipped down the Quinnipiac River from North Haven; oyster shells were collected for flux. Waterpower for the furnace was available at Lake Saltonstall, and both Branford and New Haven provided wood for charcoal. The ironworks at this site was operated for only about 25 years. Small bloomeries were later established in Deep River, Essex, Killingworth, and Westbrook. As each town’s population grew, so did the community’s

requirements for additional products and foodstuffs. References to the establishment of cloth fulling mills date from the late seventeenth century: 1693 in East Lyme and 1700 in Stonington. The process of fulling, which was preparatory to making garments, involved shrinking woven wool to increase warmth and durability. Tanneries converted animal hides into leather; cobblers in turn crafted leather products. If a town sought a skill that no local resident possessed, it sometimes provided attractive incentives for relocation. For example, in 1651, when New London needed a blacksmith, the town offered the prospective candidate just about everything he needed to live and work there: proprietorship, house, home lot, and lands for farming, as well as blacksmith shop complete with raw metals and even transportation to New London.

Of major importance to the region's coastal communities was the abundance of fishing and oystering opportunities. Dried fish and oysters were not only processed for local consumption, but were also marketable commodities. Oyster shells were a source of lime, an essential ingredient in mixing both mortar and plaster. Although most farmers raised livestock for domestic use from the beginning, it was not until the early eighteenth century that new trends in animal husbandry began to occur in response to the export market. Coastal farms in New Haven and New London Counties specialized in sheep and cattle, respectively. In addition to selling their livestock, many farmers also cured and barreled meat for export. Regulated by the colonial government, packing pork and beef was an important food-processing industry in eastern Connecticut.

Shipbuilding commenced in many coastal towns shortly after their settlement. In 1642 the General Court ordered that hemp seed be sown in order to supply more cordage for rigging ships. Connecticut builders specialized in sloop construction; designed by master carpenters, no two vessels were identical. By 1670 shipbuilding was a moderately successful industry. Most ships built in Groton, New London, and Stonington were sold outside the colony; the others were engaged in coastal trade. By 1730 the influx of English capital inspired shipbuilders to build more vessels. Unlike Boston, where lumber had to be transported great distances, Connecticut had lower construction costs, and skilled labor was readily available. While shipyards existed in nearly every town located on navigable water, New London emerged as the earliest center for shipbuilding in colonial Connecticut. The seaport had the most active shipyard and produced the largest merchant ships, some of which were sailed abroad and sold to English merchants. The shipbuilding industry in Connecticut was the colony's only major manufacturing activity that went beyond serving local needs.<sup>7</sup>

## **Society and Religion**

In seventeenth-century Connecticut each town's sense of community was guided by the colonial government's regulations on most aspects of daily living and by its expectation that each town would assume responsibility for educating its residents and caring for the poor and the ill. Although class distinctions were not well defined, persons of affluence or good education, clergymen, elected or appointed officials, and high-ranking military officers were all regarded as part of the upper class. Their house lots were located close to the town center, they received the choicest agricultural land, and they sat in the best pews on Sabbath day. The majority of the

middle class was made up of farmers, tradespeople, and artisans. Although it was considered the responsibility of the upper class to manage town affairs, all male inhabitants had an equal vote at town meetings. Towns appointed freemen to a wide variety of local positions—town criers and warners, rate collectors, keepers of weights and measures, and inspectors. The lower class comprised those who were landless or bound servants. Also included were those who could not pay their taxes, although by 1765 the General Assembly had authorized selectmen at their discretion to waive colony taxes for the poor as long as the town made up the difference. Vagabonds and beggars were often sent to workhouses which by 1769 were regulated by the General Assembly. Care of the destitute, disabled, and aged was presumed to be the responsibility of their families, and, if none could be located, the town.

Although slavery in Connecticut never attained the economic importance it achieved in the Southern colonies, wealthier members of society often owned one or two slaves and engaged them in either household tasks or farm work. Indian slavery started shortly after the Pequot War, but because of diminished numbers and problems with runaways, Native American slaves never became as numerous in Connecticut as African slaves, who by 1680 were being imported from Barbados on a regular basis. According to the 1756 census, just 617 Indians were recorded in three towns—Stonington (365), Groton (158), and Lyme (94), while the African population for the colony totaled 3,019 (although it is not known what percentages of these individuals may have been free).

Slavery was not openly questioned by the Puritans, and the Code of 1650 prescribed punishments for disobedience and rebelliousness. By 1690 the General Court forbade slaves to leave their township and made the costs incurred by such behavior their owners' responsibility. In 1702 the General Assembly discouraged manumission by making a freed slave's owner liable for his or her former charge's care. Slaves often ate, worked, and worshipped with their owners' families. Adam Jackson, a slave in New London during the early 1700s, helped Joshua Hempstead rear his children following Joshua's wife's death after the birth of their ninth child. Branford's church records of 1742 refer to a "negro" servant being admitted to all privileges except voting. Although Connecticut did not participate in the slave trade on a large scale, several local sea captains found it profitable prior to 1774, after which the General Assembly prohibited importation of slaves. The census of that year indicated a substantial growth in the colony's African population (5,101). Of the 15 towns with the highest (slave and free) populations, four were in the Eastern Coastal Slope: New London (316), Stonington (219), Groton (174), and Lyme (124). Although slavery was not totally abolished in Connecticut until 1848, several laws allowing for gradual manumission were passed by the General Assembly after the American Revolution.

Education of "children and apprentices" was regarded as a benefit to the community as a whole. Knowledge of the "Laws" and the "Scriptures" was of paramount importance to members of Puritan society in Connecticut. Originally, responsibility for teaching reading and writing fell upon the head of every household. In 1712 the General Assembly voted that each parish or church society oversee its children's schooling. The General Assembly provided towns with supplemental financial aid and authorized each community to levy taxes if needed to cover additional educational expenses. In 1726, for example, a committee chosen by the Second

Ecclesiastical Society of the Saybrook Colony (now Centerbrook Congregational Church) met with Saybrook town officials to raise money for this purpose.

As colonial society became more complex during the late seventeenth century, demand for ministers and professionals increased. Harvard, located relatively far away in Cambridge, Massachusetts, was the only college in New England capable of offering an advanced education. Consequently, in 1700 a group of ministers gathered in Branford at the home of the Reverend Samuel Russell to propose founding a college in Connecticut and to pledge books for its library. In 1701 the Collegiate School, as Yale University was first known, was incorporated by the General Assembly. Shortly thereafter, trustees met at the home of the Reverend Thomas Buckingham in Saybrook (now Old Saybrook) and chose the Reverend Abraham Pierson of Killingworth, son of Branford's first minister, to be rector of the college.

Saybrook was selected for the college's location, largely because of Pierson's willingness to relocate there; however, because his parishioners strongly opposed his departure, Pierson initially held classes at his rectory in Killingworth (now Clinton). Eventually Pierson sought permission from the selectmen of Killingworth to locate the college in town, but by 1707 at the time of his death, the matter had still not been resolved. Classes were temporarily held at the Milford home of the new rector, Samuel Andrews, and at the Reverend Buckingham's house in Saybrook. In 1708, in an attempt to strengthen Saybrook's hold on the college, Nathaniel Lynde, a prominent citizen, deeded the institution the use of a large building and ten acres of land in the vicinity of Fort Saybrook at Saybrook Point. Although the Collegiate School's early years were troubled by small enrollment and limited financial resources, over 50 students were graduated by 1716 and the trustees sought additional funding from the General Assembly to house the expanding library and the president's domicile. New trustees, tutors, and students were divided, however, as to the school's future location, and New Haven, Hartford, and Wethersfield competed to support the college.

Eventually, trustees agreed to move the school from Saybrook to New Haven because it was considered a more convenient location and because New Haven had offered the most generous terms. In 1717 the college's first building was erected in New Haven; however, the transition did not proceed without difficulty. Some students continued to study independently with ministers in Saybrook and Wethersfield. In addition, Saybrook citizens actively resisted relocation of the school's library, which had recently received a major donation of books from Elihu Yale, a Boston-born English merchant who had amassed a fortune in India. In 1718 the colonial governor ordered the removal of books and papers from Saybrook to the school's new library in New Haven. During the journey, which was fraught with many obstacles caused by angry Saybrook residents, a large number of books were lost. Nevertheless, at the Collegiate School's commencement later that year, the college was renamed Yale in honor of its library's benefactor.

Books were a rare and valuable commodity in colonial Connecticut and reading was regarded as a privilege. Because most citizens could not afford books, the concept of a circulating library was popular. In 1737 a Four Town Library was formed by the proprietors of Guilford, Killingworth, Lyme, and Saybrook. Structured like a corporation with individual shareholders, it sponsored the transport of books by mule once a month to each town within the region.

Presumably, new books were purchased by the corporation's revenue. The library dissolved sometime in the 1790s.

The religious faith of the early settlers permeated every aspect of their culture. Originally church societies were closely connected with the colonial government. Expenses of church and minister were met by public taxes. Puritan ministers wielded great influence and authority from their pulpits, and high standards of social and religious conduct were expected of everyone. Sabbath-breaking, sleeping during sermons, excessive drinking, swearing, overdressing, and sexual laxity were sins punishable by fines, brandings, whippings, or time in the pillory. Ever-mindful of such misbehavior, citizens deemed it their duty to report violations when they occurred.

By the later seventeenth century Connecticut had experienced a decline in Puritan piety and church attendance. In 1669 the General Assembly approved the Half-Way Covenant, which allowed the baptism of children even if their parents had not professed conversion. The Half-Way Covenant established more inclusive participation in the church, although many regarded its tenets as an abandonment of the original Puritan faith. The population of eastern Connecticut grew, in part from migrations from southeastern Massachusetts, and religious dissenters such as Quakers, Anglicans, and Baptists entered the colony. Problems ensued in New London during the 1670s when John Rogers and his followers disrupted Congregational services by professing that the Bible did not mandate infant baptism or Sunday worship. The Rogerenes, as they became known, were influenced by Seventh-day Baptists from Newport and believed in pacifism and faith healing. By 1705 more traditional Baptist meetings took place in Groton, and in 1726 a Baptist church was established in New London, followed by congregations in Saybrook and Lyme. Although the Anglican Church made a stronger showing in Connecticut's southwestern communities, it too had established a congregation in New London by 1734.

In an attempt to adopt a more energetic system of church government, the General Assembly recommended reworking the Congregational Church's constitution. Twelve ministers and four laymen met in Saybrook in 1708 to draft what was perceived as a compromise between clergy, who in essence wanted more power, and church members, who wanted freedom of choice in defending themselves from centralized ministerial control. The resulting Saybrook Platform created permanent consociations on a county basis to hear the appeals of parishioners. The Saybrook Platform is credited with being the first book printed in Connecticut; it was published by Thomas Short of New London in 1711.

The Saybrook Platform met with strong opposition from many congregations in the Eastern Coastal Slope. For example, Branford church members voted to renounce the Saybrook Platform in 1735 and Guilford's Fourth Church society formed in opposition to a minister who supported the platform's position. Connecticut's religious malcontents were receptive to preachings of revivalist ministers who traveled the region in the 1740s, advocating the importance of conversion or true religious experience. This movement, known in New England as the Great Awakening, pitted the "Old Lights," who upheld the strong civil and clerical authority of the Saybrook Platform, against the "New Lights," who actively sought reform. In Saybrook, under the revivalist leadership of the Reverend James Davenport, "New Lights" demonstrated their

convictions by marching up and down Main Street until they were driven out of town. In Lyme Jonathan Parsons berated the false piety of "unconverted" traditional ministers in his 1742 publication entitled *A Needful Caution in a Critical Day*. By 1759 "New Lights" were in the majority of the lower house of the General Assembly and in the minority of the upper house.

## The American Revolution

British parliamentary decisions to subordinate the colonies' maritime commerce through a series of trade taxes adversely affected Connecticut's economy. Following passage of the Stamp Act in 1765, Connecticut stampmaster Jared Ingersoll was symbolically tried, indicted, and hung in effigy in several towns, including New London and Lyme. Later that year about 500 men, known as the "Sons of Liberty," gathered from throughout eastern Connecticut to intercept Ingersoll's journey from New Haven to Hartford and force his resignation. Supplemental to these demonstrations were six influential articles condemning British policy written by the Reverend Stephen Johnson of Lyme and published in the *New London Gazette*. His essays were important because they essentially presented the argument for independence and foreshadowed the possibility of revolution. Through efforts of the colonial Stamp Act Congress and the "Sons of Liberty," the Stamp Act was repealed in 1766, but such parliamentary action was unfortunately accompanied by other laws asserting England's right to legislate for the colonies "in all cases whatsoever."

Anti-British sentiment in Connecticut steadily moved towards revolution. The Boston Tea Party had its counterpart in Lyme on March 17, 1774, when William Lawson, an itinerant peddler, attempted to sell tea imported after passage of the Tea Act. Several "Sons of Liberty" gathered, burned the tea in protest, and buried its ashes. Later that year towns such as Groton and Lyme adopted manifestoes which supported Boston, condemned punitive legal action taken by Parliament, and formed Committees of Correspondence similar to the one authorized by the Lower House of the General Assembly to attend the Continental Congress. Local committees were also formed to aid the poor in Boston. In 1774 Gurdon Saltonstall of New London chaired a convention of Whigs in Norwich on the topic of common safety. Representatives from 18 towns in New London and Windham Counties (excluding Saybrook and Killingworth) were advised to increase their stock of military supplies and provide proper equipment and training for their militia. The following month the General Assembly passed acts which encouraged military training and defense and doubled the quantity of ammunition for town use. The Continental Congress recommended establishment of an association committed to the non-importation, non-consumption, and non-exportation of all British goods and urged towns to form committees to observe local conduct with respect to such policies.

On April 20, 1775, "the Lexington Alarm" reached New London and some 3,600 men from 49 towns throughout Connecticut responded to the call. Governor Jonathan Trumbull rallied the colony's resources to supply General George Washington's army. Quotas of grain, meat, and other staples were established by the General Assembly for each town based on assessed evaluation. As the war continued, two laws were passed to aid towns in filling their quota of enlistees: any two men could hire another as their substitute to serve a full three-year term in the



Continental Army; and some slave owners emancipated their slaves so that they too could be hired to fill town quotas. During the Revolutionary War 289 African Americans from Connecticut served, several as seamen. The colony readied itself for the possibility of British attack by sea. In 1775-1776 Connecticut's colonial government fortified the New London-Groton area by constructing Fort Trumbull (rebuilt in 1812 and between 1839 and 1852) on the New London side of the Thames River (Photograph 10) and Fort Griswold on the Groton side. The General Assembly also stationed militiamen at Lyme, New Haven, New London, Saybrook, and Stonington in order to protect those vulnerable posts. Connecticut's coastal geography with its small and treacherously shallow harbors and its wide sandbar at the mouth of the Connecticut River was advantageous in war because it limited access by Britain's large and awkwardly designed frigates stationed at both ends of Long Island Sound.

The Connecticut River became a refuge for construction of vessels for the Continental Navy. The first Revolutionary warship, *Oliver Cromwell*, was built in 1776 at Uriah Hayden's shipyard in Essex and a dozen others were built or converted in river ports. David Bushnell of Westbrook is credited with designing and constructing a one-man wooden submersible vessel in 1775. A forerunner of the modern submarine, *American Turtle*, as it was called, was intended to blow up British ships. Following several trials in Connecticut waters, Bushnell took his craft in 1776 to New York, where he convinced General Washington of its military potential in defending that port from the British squadron. No British vessels were sunk by *American Turtle*; however, its operator, Sergeant Ezra Lee of Lyme, was able to disperse enemy ships by releasing explosives not far from Governor's Island in the Upper Bay of New York Harbor.

The British were able to gain control of New York City, and as long as they were there, Connecticut and in particular its coastal communities were at risk of invasion. In 1777 Major General William Tryon, Governor of New York, landed in what is now Westport and led his men north to Danbury. After burning a storehouse of Continental supplies, he was forced by Brigadier General Benedict Arnold and his militiamen to retreat to Fairfield where they reembarked for New York. Although relatively quiet over the next two years, Connecticut's coast was the target of repeated raids from Long Island Loyalists who confiscated supplies and harassed civilians.

The British blockade of Long Island Sound disrupted routine maritime trade and hampered the economy by shortages of supplies, especially salt used for preservation of meat and fish. Farmers withheld their produce from market in an attempt to secure higher prices; merchants and seamen turned their energies to privateering. Over 100 privateering ventures originated from New London alone, and Saybrook was an active center as well. The General Assembly enacted laws against hoarding but privateering was considered patriotic, albeit dangerous, and was encouraged. If a British prize was captured, the bounty was equally divided between the colonial government and a ship's owner, captain, and crew. In 1778, when British attention turned to the South, the blockade of the Sound relaxed somewhat and privateering decreased.

In 1779 Major General Tryon returned to the Sound in full force and began a series of raids and attacks which led to destruction of several coastal town centers. The most devastating result was the burning of New London and the Battle of Groton Heights in 1781, the final year of the war.

Benedict Arnold, who by then had deserted the American cause, was familiar with the New London Harbor area and landed the British forces in two divisions. One, under command of Lieutenant Colonel Edmund Eyre, took Fort Griswold in Groton after a valiant defense by Lieutenant Colonel William Ledyard. Following Ledyard's surrender, he and most of his troops were killed or wounded. Arnold, along with 800 British Regulars, led the charge against Fort Trumbull in New London. In the course of the attack, that port's extensive stockpile of goods and naval supplies was destroyed and, while some ships managed to escape up the Thames River, the rest were trapped. Arnold's troops met with limited resistance and succeeded in burning nearly all of New London's building stock and shipping.

### **Post-Medieval and Georgian Architecture**

Little architectural evidence of Connecticut's earliest settlers has survived. Consequently, knowledge of regional building styles and features is relatively limited, as is an understanding of who in Puritan society lived in what kind of house. Until a systematic documentary and physical survey of Connecticut's colonial building stock is compiled, all the forms that domestic and non-domestic architecture took in the Eastern Coastal Slope will not be known, nor the frequency with which these building types originally occurred. Nonetheless, scholars agree that Connecticut's first settlers applied rural building traditions of their homeland to construction of their new houses, barns, meetinghouses, and mills. A post-and-beam framing system of heavy timbers held together by intricate mortise-and-tenon joinery was commonly used. In Essex, England, the eastern county from which many colonists emigrated, the typical farmhouse was rectangular in form, two floors in height, and topped by a steep gable roof. Each floor consisted of two rooms flanking a large center fireplace. Walls were composed of cob (clay and straw) or sheathed with clapboards, window casements were leaded glass, and roofs were thatched.

Many of the early houses which do survive in the Eastern Coastal Slope exhibit some of the foregoing English building characteristics. Examples in the region were typically built on a stone foundation, timber-framed, and one or two stories in height. Clapboards or shingles were applied to exterior walls, although houses with stone walls were also built in the region. The Reverend Henry Whitfield House (c.1639) in Guilford (Photograph 1) is Connecticut's earliest surviving stone house (see note below). Although it underwent two major restorations in the early twentieth century, the first by architect Norman M. Isham (1864-1943) and the second by architect J. Frederick Kelly (1888-1947), its north elevation and portions of the west wall retain original stonework. Kelly conjectured that the floorplan consisted of a large hall and chamber on each of three floors. This layout is evident to visitors today, although the creation by Kelly of a later stairway to the third floor necessitated subdivision of the large hall on the second floor into two chambers. In the Eastern Coastal Slope's early houses, central entryways and small-scale

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Note: Many of the historic buildings discussed in this report are either individually listed on the National Register of Historic Places or are located in National Register historic districts. Those buildings not individually listed will be followed by the name of the district in which they are found. For further information the reader is referred to Chapter XI.

leaded window casements were often used. Second-floor and attic-level overhangs were occasionally employed, either as a decorative custom or to offset mortise joints, thereby enlarging interior volume. Massive chimneys were constructed of stone or brick. Roofs were usually in a gable form, although some were gambrel, and thatch was probably used due to the availability of reed grass (phragmites) along the coast, although shingles were applied later.

As time went on and resources permitted, settlers constructed larger homes. Two-story entrances with gable roofs were sometimes built onto facades, thereby creating additional room and light, as in New London's Joshua Hempstead House (1678, expanded 1728). More prevalent were rear eaves or lean-to projections which served to increase space on the first floor, primarily for cooking purposes. A good example in Madison is the Deacon John Graves House (c.1700, Madison Green Historic District). During the late seventeenth century such service space was either contained under the house's main roof, resulting in the familiar "saltbox" form, or, in the case of an enlarged earlier house, under a reframed lean-to roof. An extraordinarily well-preserved seventeenth-century Colonial with added lean-to is Guilford's c.1695 Comfort Starr House (Guilford Town Center Historic District, Photograph 2).

By the early 1700s the basic New England house type known as the Colonial had appeared. Characterized by a rectangular two-and-a-half-story form, three- or five-bay facade, center entrance, and gable or gambrel roof, this house type was usually sided with clapboards or shingles. Small wooden multiple-pane fenestration, often found in a 12-over-12 pattern, was symmetrically arranged on the facade and side elevations. Its comparatively large floor plan, two rooms wide and two rooms deep, was organized around a central chimney, thus allowing the positioning of fireplaces in rooms on either side of the stack as well as in the back kitchen.

Although the Colonial became the predominant residential building form in the Eastern Coastal Slope for the next century, several variations of this basic plan were represented. The two-story gable-roofed "half-house" was popular in the region's densely settled coastal centers. Essentially a three-bay Colonial type with a side entrance, it featured a floor plan consisting of one or two large rooms situated to the side of the chimney. In some cases additional bays were eventually added to form the basic center-chimney plan. This alteration is evident at the Thomas Lee House (c.1672, expanded c.1710) in East Lyme. Another variant, the one-and-a-half-story Cape Cod, or Cape, was commonly found along Long Island Sound by the mid-eighteenth century. Its floor plan conventionally contained two rooms one on either side of a central chimney and, on occasion, a back room formed by a lean-to addition. The original design of the Elisha Bushnell House (c.1680) in Old Saybrook was a one-and-a-half-story Cape. Although Capes were commonly built with gable roofs, some in the region used the gambrel, and a few rooflines gracefully flared over the facade.

Interior walls of Post-Medieval houses were usually covered with horizontal or vertical sheathing which was sometimes accented by molding. Paint was rarely applied prior to 1700, although there is evidence of its use before that time in the Eastern Coastal Slope. Major structural elements such as corner posts, girts, and summer beams were exposed. Plastering appeared in the region during the early eighteenth century, but was not found in most houses until the 1740s. Plaster, a composite of ground oyster shells and animal hair, gradually replaced wood sheathing

and was eventually applied to ceilings as well. Parquetting, an ornamental patterning treatment applied to wet plaster, was common in England and is in evidence in at least one seventeenth-century interior (Comfort Starr House, Guilford Town Center Historic District) in the Eastern Coastal Slope. Floors were traditionally laid with hard pine, oak or chestnut boards. Hardware such as nails, hinges, and door latches was often made of locally wrought iron, and glass for window panes was originally imported from England.

As the Connecticut Colony prospered from maritime trade during the mid-eighteenth century, the emerging merchant class in the Eastern Coastal Slope had wealth with which to build larger and more comfortable homes. The Georgian period, as this important phase in architecture is known, produced residences such as the General William Hart House (1767) in Old Saybrook (Photograph 3), a more elaborate design than its earlier Colonial counterparts. Georgian houses were distinguished by craftsmanship of high quality and elegance of architectural detailing. A long central hall and staircase rather than a chimney stack divided the living spaces, and fireplaces located within end chimneys heated rooms on each floor. Gable roofs, and to a lesser extent hip and gambrel, were utilized.

The focal point of the Georgian house was the main entrance with paneled front door and flanking pilasters surmounted by a row of small transom lights and a decorative entablature or pediment. Later entrance styles became even more elaborate, featuring shallow two-story pedimented pavilions. Cornice moldings accented by dentils or modillions served to unify a building's decorative program. On the interior elegant raised paneling was commonly applied to walls, beams were encased, and fireplace surrounds, particularly in front rooms, became more refined. Master builders and housewrights had the benefit of carpenters' handbooks which popularized classical details of the Italian Renaissance. There they found illustrations for doorways, windows, pilasters, cornices, and mantels which they could apply to their own buildings.

### III. AGRICULTURAL AND EARLY INDUSTRIAL PERIOD 1780-1850

Connecticut earned the title of "Provisions State" because of its ability to supply the Continental forces with foodstuffs during the American Revolution. In the course of the war effort, communities in the Eastern Coastal Slope shifted their energies to commerce, a trend which shaped the region's economy in the early nineteenth century. Nevertheless, with the coming of peace and independence, a decline in agriculture and shipping prompted some Connecticut natives to relocate to New York, Pennsylvania, and Connecticut's Western Reserve in Ohio in search of a better livelihood. Tillable land was becoming scarce and local farms were less profitable as a result of poor soil conditions, inefficient farming practices, and competition from Western agricultural products transported East.

From 1790 to 1850, town populations in the region either dropped or remained relatively static; the most notable exception was New London, whose population almost doubled when it became the state's largest whaling port. Although maritime trade and shipbuilding remained among the most important commercial activities, merchants were quick to discover markets for the sea's natural resources: China and Europe wanted seal fur and there was a strong local demand for whale oil and bone as well as fish and oysters. These successful industries, along with maritime-related trades, provided employment for many in the region, as did numerous granite quarries and small-scale manufactories. Later, the economy of the Eastern Coastal Slope was greatly enhanced when an extensive transportation network of turnpikes, steamships, and trains was put into service.

Long identified as Connecticut's principal shipbuilding center, New London was incorporated as a city by the General Assembly in 1784 along with Hartford, Middletown, New Haven, and Norwich. The well-established seaport of Stonington was chartered as a borough in 1801, shortly after development of its thriving sealing industry. Recognition as a city or borough was important to a community, for it meant greater autonomy, including authority to levy taxes for specific projects. From 1801 to 1840, seven new towns were created in the region, each having evolved from a previously established church society: Waterford, Madison, Ledyard, Chester, Clinton, East Lyme, and Westbrook.

Rapid maritime and industrial developments along the coast necessitated the creation of financial institutions to meet day-to-day requirements of the business community. New London's Union Bank (1791) is credited with being the first bank in operation in Connecticut; it was also among the earliest financial institutions established in the United States. In addition to handling large sums of money which accrued to merchants' accounts, banks provided investment capital for building turnpikes and railroads as well as establishing new business ventures. By 1860 New London claimed a total of eight banks.

The early nineteenth century was an era of social and political reform; among important issues in the public eye were quality of public education, temperance, and abolition of slavery. In 1818 the lack of a written constitution (other than the Charter of the Colony of Connecticut, 1662) and the central role of the Congregational Church in Connecticut were called into question by a

constitutional convention which eventually led to formation of a two-party system, restructuring of government, and greater religious tolerance. However, the restriction of voting rights to free white males continued to be in effect. The constitution of 1818 disestablished the Congregational Church and put all Christian denominations on an equal footing. The period was also one of educational advancement; private academies were founded to provide learning beyond the grammar-school level and to prepare students for college. County agricultural societies attempted to promulgate improved farming techniques and introduce new products to their members at regular meetings.

## Transportation

During the early nineteenth century the General Assembly encouraged development of a statewide turnpike system for efficient transport of people, goods, and mail between towns and cities, including major ports, by granting charters of incorporation to local individuals or groups in exchange for improving a poorly maintained existing road or constructing a new one. The turnpike era lasted from the 1790s until the 1840s, with most turnpike companies being in existence between 20 and 30 years.

The General Assembly supervised nearly all aspects of turnpike operation, construction, and maintenance. Gatekeepers were required to collect tolls 24 hours a day and it is probable that their dwellings were on site as well. The Killingworth and Haddam Turnpike Company voted "to build a toll house near the upper gate twenty seven feet long and sixteen feet wide as soon as convenient and to purchase land if necessary for a garden."<sup>8</sup> Tolls were charged to cover a company's road construction costs as well as to realize a return on shareholders' investments. Eventually the General Assembly would revoke a corporation's charter, thereby dissolving the company and ultimately transferring a road's ownership back to the towns it intersected. Turnpike authorities were resented by town governments because the latter were forced to relinquish their previously purchased rights-of-way, and by townspeople and travelers because they were routinely charged tolls. The General Assembly exempted the collection of tolls from persons going to meetinghouses, mills, town functions, and funerals; fees were reduced for barreled cargo and cords of wood as well. Towns benefited economically from their proximity to these routes since traffic generated a market for inns and taverns, and local blacksmiths and shopkeepers prospered.

The turnpike boom resulted in a network of east-west and north-south routes which brought population centers in the Eastern Coastal Slope closer together by facilitating stagecoach travel, movement of goods for trade, mail service, and communication of news. In 1792 the state's first turnpike company was chartered to link New London and Norwich, and in 1802 the 32-mile Middlesex Turnpike was laid out roughly paralleling the course of the Connecticut River from present-day Old Saybrook, Essex, Deep River, and Chester north to Haddam, Middletown, and Wethersfield. Other north-south toll roads followed: Durham and Madison Turnpike in 1811, Haddam and Killingworth Turnpike in 1813, and Guilford and Durham Turnpike in 1825. The 16-mile Guilford and Pettipauge (Essex) Turnpike, incorporated in 1818 as a critical east-west segment in the route between Norwich and New Haven, connected travelers with Ely's Ferry in

Essex or with Lyme, thereby enabling them to cross the Connecticut River and proceed in either direction. In addition, the turnpike accessed the northern sections of shoreline towns, passing through Essex, Deep River, Killingworth, Madison, Guilford, and North Branford. During this period shorter routes were also developed throughout the Eastern Coastal Slope, thereby meeting the demand for continuous through roads between towns.

Steamboats, with their impressive decors and time-saving speeds, attracted heavy passenger traffic in the early nineteenth century. Travelers from New York to Boston could cruise to New London in great comfort and continue their journey to Boston by stagecoach or sailing sloop. Stopping-off points such as New London and Stonington thrived economically from the transient influx of people. Steamboats offered commuters between Connecticut River ports an alternate mode of transportation. As early as 1815, a 134-foot-long vessel, *Fulton*, cruised from New York to New Haven, making side trips up the Connecticut River to Old Saybrook and Hartford. In 1822 the Connecticut Steamboat Company, founded by William C. Redfield of Cromwell, was incorporated. It operated *Experiment*, a 62-ton sidewheeler which ran biweekly trips between Hartford and Essex; two years later the company added *Oliver Ellsworth*, which commuted regularly between Hartford and New York. Responding to the obvious profitability of this new service, promoters established the Hartford Steamboat Company in 1826, offering the traveling public a much larger and more luxurious steamer, *Macdonough*. By staggering their schedules, both steamboat companies were able to survive. As other competing interests emerged in the 1830s and 1840s, bigger and more luxurious steamboats offering faster service and less expensive rates were introduced; older steamers were either abandoned or retrofitted for new purposes. By 1850 approximately 16 steamers actively plied the Connecticut River, stopping at various river landings and ports along Long Island Sound before leaving Connecticut waters.

Spurred by the nation's increasing volume of maritime transportation and commerce, the federal government gave high priority to construction of lighthouses along the eastern seaboard. By marking dangerous headlands, shoals, bars, and reefs, these structures served as important navigational aids. Thirteen stations were established along Connecticut's shoreline between 1801 and 1837; seven of them were situated in the Eastern Coastal Slope. The earliest lighthouse towers to survive in the region are New London Harbor Light (1801), Falkner Island Light in Guilford (1802, Photograph 5), Lynde Point Light in Old Saybrook (1838), and Stonington Harbor Light (1840).<sup>9</sup>

Although by the 1830s Connecticut had developed a relatively complete system of turnpike and steamboat travel in the coastal region, the traveling public was quick to realize the advantages of railroad transportation when it became available. In 1832 the General Assembly granted a charter to the newly formed New York and Stonington Railroad after lengthy debate on the merits of trains. By 1837 passengers from New York could take a steamer to Stonington and continue their journey by rail to Boston. As Connecticut became a leader in manufacturing, merchants also realized that the railroad had the capacity to safely and rapidly transport large quantities of produce and goods to out-of-state markets, New York City in particular. Plans for the New York and New Haven Railroad began in 1844 and service commenced four years later.

Coastal geography posed several challenges to railroad construction: rivers and streams had to be bridged, wetlands filled, and hills and headland scaled. Nevertheless, the route was generally flat when compared with other parts of the state, and railroad lines were laid out relatively parallel to traditional overland ways such as the Boston Post Road. In 1848 the New Haven and New London Railroad line was chartered; built over the next four years, it eventually connected the intermediate shoreline towns. Specially built steam-powered ferries carried trains across the Connecticut River. A sister line, the New London and Stonington Railroad, began service in Groton, crossed the Thames River, and stopped in Stonington where passengers could transfer to the Boston train. In 1856 the General Assembly approved the merger of the two coastal railways and in 1864 they were reorganized as the Shore Line Railroad. Many of the region's Irish, German, and African American residents came to southeastern Connecticut to work on the railroad's construction. They found employment on trains and steamships as well as in the freight yards and repair shops which supported the transportation network. Some also worked in early hostelrys which had been built by the railroad to accommodate the traveling public.

## Commerce

Following the American Revolution, maritime trade with the West Indies revived and again became an important commercial activity in the major ports of the Eastern Coastal Slope. When war between England and France broke out in 1793, Connecticut merchants and farmers took advantage of America's neutral status to expand their own business interests, and between 1790 and 1807 exports from American ports nearly doubled. Horses, cattle, mules, dried fish, lumber, and other produce comprised most of the outgoing cargo. Unfortunately, local businessmen could not develop a strong domestic market during this period; consequently, they were unable to sustain the economic hardships imposed by the Embargo Act of 1807, the Non-Intercourse Act of 1809, and the War of 1812. While a few Connecticut sea captains and merchants were daring enough to break the British blockade off Long Island Sound, some local ships were captured during such attempts.

In 1813 a strong British fleet blockaded the Sound; U.S. naval vessels were bottled up on the Thames River north of New London and local ships sought refuge in coves near the mouth of the Connecticut River. On the night of April 7, 1814, vessels from the British fleet sailed up the Connecticut River and the next morning set fire to 23 anchored ships. They also captured and planned to take on their return voyage a privateer schooner as well as two sloops loaded with cordage, rum, and other cargo. These vessels were eventually abandoned and burned following an attack by a local artillery company from Killingworth (Clinton). Later that year, on August 9, 1814, the British fleet appeared in Stonington; inhabitants were advised to move out of town but refused to leave. A scattered regiment, made up of men from Stonington, Mystic, and Groton, successfully resisted the invasion for three days, during which time 21 British soldiers were killed and another 50 wounded. Only one American, Frederick Denison, died in the Battle of Stonington.

Shipping activity gradually resumed after the war and shipbuilding once again began to flourish in the Eastern Coastal Slope. In 1789 New London was designated headquarters for the U.S.



Customs district in southeastern Connecticut, and Stonington's rapid growth as a seaport in the early nineteenth century led to formation of a smaller U.S. Customs district there in 1842. Both ports continued to be active shipbuilding centers along with Branford, Chester, Clinton, Deep River, Essex, Lyme, and Old Saybrook. Connecticut shipyards produced a wide variety of vessels such as brigs, schooners, and clipper ships, employed many kinds of craftsmen, and spawned related business ventures, including ropewalks, sail lofts, and chandleries.

Built in 1813, the Hayden Chandlery in Essex is a rare survivor of a once-common building type. Moved from its original site nearby, it features a simple two-story gable-roofed form characterized by distinctive Federal fanlights and denticulated cornices. Although not directly linked with maritime commerce, the Gurdon Bill Store (1818) in Ledyard is widely regarded as Connecticut's best-preserved example of a rural country store of the period. Capitalizing on his location at the intersection of two well-traveled roads, one from Preston to New London and the other from Norwich to Mystic, Bill sold grains, flour, and a wide range of manufactured goods to local customers in his simple frame building until his death in 1856.

## Agriculture

Although by the early 1800s Connecticut had barely enough tillable land to support its population, farming prevailed in the hinterlands of the Eastern Coastal Slope and provided the region's inhabitants with a moderately prosperous livelihood. In addition to wheat, rye, and corn, great quantities of root vegetables were grown, especially potatoes, turnips, parsnips, and onions, both for local use and for trade with towns and cities along the Atlantic coast. After the Revolution farmers resumed raising livestock, including horses, mules, and cattle, for export to the West Indies. Guilford also marketed its lumber and firewood in New York.

Proximity to tidal rivers, marshes, and Long Island Sound was advantageous to the shoreline's agricultural economy in many ways. Shad, menhaden, and whitefish were netted for fertilizer in coastal area farms; seaweed and peat were also used. In addition, marsh grass (*spartina patens*) grew naturally and in abundance along the shore, providing farmers with feed for their animals in winter as well as protection against the cold for their plants. Tidal gates were built to regulate the flooding of salt meadows, thereby enabling farmers to cut and harvest grass with their horses and baling wagons during high tides. Local waterways provided convenient access to Long Island Sound and the eastern seaboard for transportation of produce and livestock to ports in America and abroad.

Despite the foregoing advantages, several factors threatened the agricultural well-being of towns in the Eastern Coastal Slope during the early nineteenth century. Grain and livestock raised by Western farmers offered stiff competition to local growers at markets in the East. Western produce was less expensive and readily available via an extensive inter-regional distribution network in place following completion of the Erie Canal in 1825 and development of the railroad. Many farmers in the region responded to the challenge by shifting their energies to dairy production and other specialized activities.

The county agricultural society evolved during this period; its principal mission was to improve proficiency of its members in raising crops and livestock by disseminating new scientific information on farming practices. Concurrently, technological advances in agricultural equipment were enabling farmers to better till the soil, although availability of such labor-saving tools depended upon a farmer's economic means. While the iron plow was first patented in 1797 and redesigned many times thereafter to improve its performance, it was not widely used in New England until the 1840s. Cultivators, both walking and riding, also became popular during the period. Designed to break up ground surfaces while crops were growing, these machines left the soil in a porous condition, thereby conserving moisture and eliminating weeds. Grain cradles, slow in arriving in Connecticut, gradually replaced the sickle in cutting wheat and hay, and horse-drawn hay rakes assisted in harvesting crops.

## Industry

Following the War of 1812 Connecticut's coastal communities found it difficult to reestablish maritime trade with the success they had experienced prior to the Revolution. From 1819 until after the Civil War, merchants from the state's major ports turned with astonishing determination to development of the sea's economic potential. Whales, seals, oysters, menhaden, salmon, and shad all figured in the dramatic growth of maritime industries during the mid-nineteenth century.

Whaling became the premier enterprise in the Eastern Coastal Slope during this period as investors and merchants responded to public demand for sperm oil, whale oil, and whale bone. Sperm oil, not really an oil but a fatty substance extracted from the head cavities of sperm whales, was valued as a lubricant because its consistency was not affected by heat or cold. Sperm oil was also used in manufacturing soap, leather cleaners, and candles. Whale oil, produced by boiling the blubber of whales, was more abundant and less expensive than sperm oil; it was also used for lubrication, although its primary application was illumination. Lamps for household use, streetlights, and even lighthouse beacons were fueled by whale oil. Whalebone, a horny substance removed from the upper mouths of right whales, was used for products requiring strength and flexibility such as corsets, umbrellas, and whips.

Although vessels regularly departed from Mystic and Stonington to hunt whales in the distant waters of the Arctic and South Atlantic Oceans, Connecticut's most active and renowned whaling port was New London. Whaling had played only a minor role in New London's economic history prior to the Revolution, and no large-scale whaling operations had developed there between 1784 and 1809 (years that merchant capital had been tied up in reviving the West Indian trade). However, local agents began to establish themselves in the 1820s and 1830s following the return of several successful whaling expeditions. Firms such as Deshon and Williams, founded in New London in 1819, were prepared to handle all organizational and business aspects of prospective whaling journeys; during the industry's heyday, 60 agents were located in New London alone.

Agents usually held prominent civic or political positions and set the social pace and lifestyle for the community, as epitomized by their imposing Greek Revival mansions on Whale Oil Row in New London (c.1840, Photograph 7). In addition to holding a controlling interest in each

whaling voyage, agents received commissions on the profits of others' investments and became wealthy from whaling-related undertakings such as provision of supplies for and operation of candle and soap manufactories, warehouses, wharfs, and freight transportation. Nearly every New London family's livelihood was intertwined with whaling during the industry's peak; for those not directly employed at sea, opportunities existed at home as tradespeople, laborers, and professionals. Blacksmiths, carpenters, coopers, ropemakers, and sailmakers were needed as well as dockhands and warehouse workers, and the establishment of hotels, financial institutions, and insurance companies necessitated further employment.

There was great demand for able-bodied seamen, and consequently, men (and sometimes women) of many nationalities and races could readily find jobs on board. In the late 1840s and 1850s nearly half the crew of the whaler *Charles W. Morgan* (built in New Bedford in 1841 and now berthed at Mystic Seaport Museum) consisted of free African Americans, Native Americans, Cape Verdeans, Azoreans, South Americans, and Polynesians. Because of manpower shortages agents also recruited drifters, adventurers, and law-escaping criminals to join ocean-going whaling journeys for periods of up to four years. For those who signed on board whaling ships, life was hard, strictly controlled, dangerous, and not always profitable.

During the whaling boom New London was a thriving, cosmopolitan port from which its many ships made hundreds of far-reaching voyages in search of valuable whale oil and whalebone. Eventually the city's whaling trade declined as the discovery of petroleum in Pennsylvania made available a cheaper and more efficient fuel than whale oil and the diminishing number of whales necessitated longer and more expensive hunting expeditions.

Although more than 50 whaling vessels put out of Stonington in the 1820s and 1830s, that seaport received greater renown as the center of Connecticut's prosperous sealing industry. Beginning in the 1790s, sealers from Stonington traveled to islands off the coast of South America in search of seal rookeries. No animal was spared, not even pregnant and nursing females. Luxurious fur skins were salted for shipment to China, where they were either sold for Spanish dollars or traded for tea and silk; in addition, cargo was brought back to Stonington and auctioned on borough wharves. Since sealing was immensely profitable, competition between American and foreign crews was intense. By 1819 the inevitable depletion of this natural resource led Captain Edmund Fanning and Nathaniel B. Palmer of Stonington to further explore the southern oceans where, on the South Shetland Islands, they discovered and exploited huge fur-seal colonies. During a subsequent seal-hunting voyage on November 17, 1820, commanded by Palmer, the continent of Antarctica was first seen from his Groton-built 47-foot sloop, *Hero*. The Captain Nathaniel B. Palmer House (1852-1853) on Palmer Street in Stonington (Photograph 8) commemorates Stonington's distinguished maritime heritage and Palmer's historic sighting.

The Connecticut shoreline's natural bounty of oysters, primarily in proximity to the state's major estuaries, had been a boon to European settlement since the seventeenth century. While the region's tidal rivers and embayments created abundant habitats for oysters, the most extensive beds for commercial growers were found along the western end of Long Island Sound. Nevertheless, some oystermen throughout the Eastern Coastal Slope had sufficient bushels to sell

from their homes or to local fish markets. Because the demand for oysters increased in Connecticut, Rhode Island, and New York City during the nineteenth century, several small oyster companies within the region were able to flourish.

Laws regulating oyster harvesting appeared in the early nineteenth century, when oystermen had to apply to a town committee for a fee simple title to farm a plot of underwater land. Later in the century only leases were given, and the "R" law (referencing months without the letter "R") ensured propagation of the species by prohibiting oystering during the warm-weather months of May, June, July, and August, when oysters normally spawn. Oyster cultivation did not begin in the United States until the early 1800s, after which time it became common practice to set oyster larvae on clean underwater objects such as oyster shells in the summertime. In 1845 Connecticut permitted individuals to transplant oysters into its waters from other states, and a year later, the privilege of transplanting native oysters within and outside the state was granted. Although both laws encouraged local oyster production as well as trade with the South, it was not until the 1890s that the Connecticut oyster industry realized its economic potential.

Finfishing in Connecticut never developed into as large-scale a commercial activity as shellfishing. Salmon and shad fishing were pursued by the early settlers and contributed to the local economy by providing income for many coastal residents. During the eighteenth century, salmon fishing was prevalent, but beginning in the 1790s, construction of dams on the Connecticut River upstream in Massachusetts caused a gradual decline in the salmon population. Shad was not as greatly affected by this development. Small share-held fishing companies were organized for the duration of the shad run (April to mid-June) and local farmers were hired to haul nets and pack salted fish seven days a week. In 1817 in the river towns which comprised what was then known as Saybrook, 2,194 barrels of shad were salted, and from 1827 to 1848, annual catches at Parsonage Pier, just above Old Saybrook's North Cove, averaged about 10,000. Numerous other fishing piers were built along the river during the first half of the nineteenth century; from these points barreled shad was shipped to New York City, Philadelphia, Baltimore, and the West Indies.

Fishing fleets also operated from numerous ports along Long Island Sound, including Branford, Clinton, East Lyme, Groton, Lyme, Madison, Stonington, and Westbrook. Vessels such as the *Emma C. Berry* (1866) contained water-filled compartments which allowed cod, mackerel, and halibut to remain alive for transport to local markets, New York City, and Southern ports. In addition to edible fish, an abundant quantity of menhaden and shad was gathered during the mid-1800s for use as fertilizer; oil extracted from menhaden also had commercial value in the tanning industry. Fish were boiled in large iron pots until their oil rose to the surface; because of the stench, menhaden processing plants were located in relatively isolated locations such as Kelsey Island in Branford and Latimer's Point in Stonington. Later in the century, menhaden's commercial use was replaced by synthetic fertilizers and mineral oils, and eventually recreational uses co-opted the attractive shoreline sites of processing plants. Full-scale finfishing declined in the late 1800s and today only Stonington retains its commercial fishing fleet.

Industrial activities of the Eastern Coastal Slope were not limited to natural resources of the sea, Long Island Sound, and the area's rivers. Extensive granite deposits were located in coastal

towns, and several profitable quarrying operations developed aided by the perfection of high-grade blasting powder in 1804 by Irenee du Pont, a French immigrant working in Delaware. Quarrying in Deep River was active by 1821; building stone and paving blocks were shipped from its river landing to New York City, Philadelphia, and New Orleans. The Stone House (1840) on South Main Street (headquarters of the Deep River Historical Society) is an example of local granite construction.

During the 1820s and 1830s other small family-run quarries opened in Branford, Chester, East Lyme, Guilford, Old Saybrook, Stonington, and Waterford. Some were short-lived, closing after their granite supplies were exhausted; other sites expanded and prospered into the twentieth century. The George Simon Smith Quarry, which operated in the Oswegatchie Hills section of East Lyme, was active in the 1830s and 1840s; the granite-built Smith homestead (1819) and the stone foundations of demolished workers' housing attest to the existence of a thriving local enterprise. The Millstone Quarry in Waterford was so large that its north and south sections were leased to different concerns. Paving stones were first quarried there in 1830, and 30,000 tons of granite were shipped annually to New York City, Philadelphia, and Charleston by 1847; one of the quarry's first contracts was to provide stone for construction of the Harlem Railroad.

Although Millstone workers originally came from surrounding towns, additional labor was needed as the quarry's business developed; men from Rhode Island worked there as well as English, Irish, and Scottish immigrants. Later in the century nearly 100 men were employed at the quarry and lived nearby in Graniteville, a complex of homes and boarding houses built to quarter the workers. In 1840 Westerly's granite quarries opened in Rhode Island, and hundreds of Stonington men found employment there, including immigrants who came to Pawcatuck following the potato famine in Ireland. The Irish colony built their homes in the Downerville section of town and by 1859 had constructed St. Michael's Catholic Church.

Although manufacturing was very subordinate to shipbuilding in the Eastern Coastal Slope, industries related to agriculture, fishing, and maritime activities, as well as waterpowered mills for sawing lumber, grinding grain, and producing textiles, proliferated along many small rivers and streams in the lower Connecticut River Valley during the early decades of the nineteenth century. A wide range of specialized industries evolved for which the principal products were clothing (including cloth, suits, uniforms, hats, and shoes), saddles and horse harnesses, paper goods, inkwells, furniture, clocks, and metal products (including iron anchors, augers and bits, brass hardware, silver, tin, and pewter).

One of the largest and most innovative industries in this part of Connecticut was production of ivory products, including combs, keyboards, and piano keys. In 1798 Phineas Pratt and his son Abel devised tools for cutting teeth in ivory combs at a waterpowered factory near the present Pratt, Read and Company complex in Ivoryton (Essex); their invention enabled them to successfully compete with English manufacturers. Between 1802 and 1829 a number of ivory comb works were established in Essex and Deep River, and in 1839 one of these factories, George Read and Company, began cutting ivory for piano keys as well. In 1847 Comstock, Cheney and Company was formed in Ivoryton to manufacture musical keyboards and subsequently became that village's largest employer. Following a series of partnerships, George

Read and Company, Julius Pratt and Company, and Pratt Brothers Company merged in 1863, becoming Pratt, Read and Company in Deep River (Photograph 15). Comstock, Cheney and Company and Pratt, Read and Company competed for dominance in the ivory products market until 1936, when they were consolidated in Ivoryton under the name of Pratt, Read and Company. Most of the ivory used in Connecticut was imported from Zanzibar, off the coast of East Africa, where thousands of elephants were slaughtered for their valuable tusks (since the late 1950s piano keys have been made of plastic).

## Education and Social Reform

Responsibility for educating boys and girls originally lay with individual church societies and towns; as population shifts occurred and new settlements and towns emerged, additional schoolhouses financed primarily by local taxation were built. The necessity for children to work at home or on the farm usually meant a short four to five-month term under less than desirable conditions. In 1798 the oversight of schools was transferred to "school societies"; the territory of these societies was further broken down into school districts. Each district was charged with construction and maintenance of its own schoolhouse. The "school fund," established in 1795 by the General Assembly from sale of lands in Connecticut's Western Reserve, assisted public education well into the twentieth century.

During this period numerous private academies were opened in the Eastern Coastal Slope to provide instruction beyond the elementary skills of reading, writing, and arithmetic commonly taught in district schools. By 1799 a Female Academy had been founded in New London. The Academy in Branford and the Lee Academy in Madison were initially financed by private benefactors whose goal was to provide children with a classical education. Branford's Reverend Timothy Gillette had tutored young men for the ministry from his home since about 1812; in 1820 he endowed the elegant Federal-style academy building situated on the Branford town green. The Reverend Gillette also provided parents with the opportunity to purchase "shares" in the Academy's operation. A year later, in 1821, Frederick Lee, who served in the War of 1812, founded a similar institution for boys and girls near the intersection of Neck Road and the Boston Post Road in Madison. Although both buildings have been moved, they survive and are relatively well-preserved.

In 1824 the Stonington Academy enjoyed an excellent reputation for its preparatory courses in Greek, Latin, French, surveying, navigation, mathematics, grammar, and bookkeeping which students could take for two to four dollars a term. Some of the region's district schools also taught navigation to boys wishing to become sailors. The Guilford Academy opened its doors in 1825, and in 1830 Jonathan Whipple of Mystic established a private school in Ledyard; he is credited with being the first American teacher to use the oral method to instruct the deaf.

In 1832 Hill's Academy in Essex was built on land donated by Joseph Hill, a prominent merchant, and financed by local subscription, private donations, and an operating shad fishery (part of Hill's bequest). Courses offered in this stately Greek Revival brick building included chemistry, philosophy, and astronomy, as well as Greek, Latin, and advanced mathematics;

tuition varied, depending on complexity of the subject. One of the earliest schools at the secondary level in the lower Connecticut River Valley, Hill's Academy, soon experienced a change in enrollment from all-male to co-educational, and by 1848 it accepted boarders.

On the eve of the American Revolution, Connecticut's African American population numbered 5,101. The abolition movement had begun to stir in New England prior to independence, and after the war the General Assembly enacted a series of anti-slavery laws. A law passed in March, 1784, provided that all children would be free once they reached the age of 25; the age was later dropped to 21. In 1788 the slave trade was restricted and by 1790 it was stopped altogether. Nevertheless, 97 of Connecticut's 8,000 African Americans remained in slavery in 1820; all slaves were finally emancipated in 1848. Passage of these laws was supported by a number of anti-slavery societies in Connecticut, the first being formed in the early 1790s under the guidance of Ezra Stiles, then president of Yale College. These societies, which favored the gradual emancipation of slaves, remained active until the 1840s. Their efforts, coupled with emergence of a more radical abolition movement in the 1830s, heightened public awareness of social injustices and poor living conditions experienced by slaves as well as free blacks.

Although few citizens in Eastern Coastal Slope communities were wealthy enough to own slaves, it was generally felt that those who had benefited from slave labor should assume full responsibility for their charges in the event the latter became infirm or too old to work. For example, in 1821 Branford's selectmen voted to "make diligent inquiry" as to whether Delia Brown, a slave, had been legally emancipated and whether or not her master should be exempted from his obligation to support her. In some cases owners deeded former slaves land on which to build homes and start new lives; in Groton, for instance, one out of five black family heads owned property by 1820. During this period the names of black children were found with increasing frequency on school lists and by 1837 a school for black youth had been established in New London. Congregational and Baptist churches continued to welcome black members as well; records of the Second Baptist Church in Mystic indicate they were accepted as early as 1787. It was not until the turn of the twentieth century that two African American churches were established in New London: the Shiloh Baptist Church (1894) and Walls Temple, an African American Episcopal Zion church (1903).

On July 1, 1839, in Long Island Sound, 53 kidnapped Africans who had revolted aboard the Spanish slave ship *Amistad* were captured. Their subsequent judicial hearing in New London and trials in Hartford and New Haven galvanized widespread abolitionist support under the auspices of the *Amistad* Committee and eventually resulted in the surviving Africans being returned to their homeland in 1841. Dedicated individuals in the region also helped fugitive slaves from the South make their way to freedom in Canada along the state's Underground Railroad. Slaves either trekked into Connecticut from southern New York or stowed away on steamers destined for shoreline "stations" in Old Lyme and New London. From these points they could travel to Worcester, Massachusetts, or Rhode Island; others went to New Haven, then Guilford, and on to Chester or Deep River, often being taken by boat up the Connecticut River to Middletown and Hartford before arriving in Westfield or Springfield, Massachusetts. Daniel Fisher, an escaped slave from Virginia, decided to stay in Deep River in 1828 after the "station master," Deacon George Read, persuaded him to assume a disguise, change his name to William Winters, and find

local employment. The Fugitive Slave Act of 1850 protected rights of slave owners; it also provided further impetus to abolitionists to hide fugitive slaves in their cellars, tunnels, and secret rooms. Connecticut's Underground Railroad remained in service until the end of the Civil War.

Part of the land in the Hempstead Historic District in New London was developed by local abolitionists to provide housing for freed slaves. In 1842 Savillion Haley, one of New London's first abolitionists, purchased land on Hempstead Street from Jonathan Coit, a wealthy shipbuilder, and erected five small houses which were sold to successful freemen at well below market value. Other African American families soon built homes in the area; trades represented by them included mariner, rigger, blacksmith, butcher, stone mason, and machinist. Among the locally important social institutions which had their early roots in this neighborhood were the Shiloh Baptist Church, the United Society, a division of the International Order of Odd Fellows, the Jephtha Masonic Lodge, and the Negro Welfare Council.

### **Neo-Classical and Romantic Architecture**

The vogue in American building between 1780 and 1830 was the Federal style; structures retained the rectangular form and symmetry of Georgian architecture, but exhibited delicately scaled ornamentation derived from Roman and Grecian antiquities. The style, also known as Adamesque, was inspired by the work of British architects Robert and James Adam, who actually visited and recorded surviving examples of classical architecture. American buildings in the Federal style often shared Georgian features such as shallow pedimented entrance pavilions, Palladian windows, corner pilasters or quoins, and denticulated cornices with or without modillions. They were also distinguished by their refined detailing, most notably elliptical fanlights with intricate tracery, slender sidelights, and attenuated columns. Windows, composed of relatively large lights with thin muntins, were sometimes capped by splayed lintels designed with or without keystone or by entablatures with a simple or decorative frieze. Cornice detailing could be quite elaborate as well, and exterior louvered shutters were in use. Among Federal elements popularized by the Adam brothers were swags, garlands, sheaves of wheat, urns, and various stylized geometric motifs, all of which were selectively applied to exterior and interior finishes. In vernacular examples, ornamentation was often limited to a pedimented or flat door surround with or without a glazed fanlight; open porticos and window crowns might also be in evidence. In addition, balustrades and cupolas were occasionally constructed on rooftops of houses, particularly in coastal villages, thus enabling their occupants to view incoming ships.

Whaling, shipbuilding, and mercantile trade gradually revived the economy of the Eastern Coastal Slope after the Revolution. As wealthy local merchants and farmers became aware that Neo-classical and Romantic architectural styles were gaining in popularity along the New England seaboard, expectations for their own domestic and public architecture became more sophisticated. A number of important Federal-style houses and public buildings were built in ports of the Eastern Coastal Slope.



The Jonathan Warner House (1798) in Chester (Photograph 4) and the New London County Courthouse (1784) in New London illustrate the influence of the Georgian style in buildings constructed after the Revolution and show how Georgian and Federal details were combined in designs of the period. Some of the region's outstanding Federal buildings were erected by itinerant builder-architects such as Samuel Belcher (1779-1849) and Abraham Coan (1774-1863). Before developing designs for their clients, these artisans probably consulted pattern books, including *The American Builder's Companion* by Asher Benjamin (1806) and *The Young Carpenter's Assistant* by Owen Biddle (1815), or studied early examples of the style throughout New England. The well-known William Noyes House (1817, Florence Griswold Museum), and the John Sill House (1818), both in Old Lyme, in addition to the Dr. Ambrose Pratt House (1820) in Chester, were built by Belcher, who worked out of Hartford. Coan practiced in the Guilford area and is credited with the notable Federal-style North Guilford Congregational Church (1814, Meeting House Hill Historic District), as well as the Abel Chittenden House (1804), his own house (c.1808) on Broad Street, and numerous other residences in the Guilford Town Center Historic District. The design of the Killingworth Congregational Church (1820, Photograph 6), another important example of the period, bears a striking similarity to that of the Congregational Church in North Guilford; the builder-architect of the former, however, has long been thought to be Ithiel Town (1784-1844) of New Haven.

The Greek Revival style became fashionable in Connecticut's coastal villages between 1820 and 1850, a period of great prosperity in maritime commerce and shipbuilding. Its appearance on the shoreline reflected national interest in the style. Americans identified with Greece's quest for independence from Turkey, and the Greek Revival style in architecture symbolically embodied the growth and aspirations of the newly established American democracy. Applying details from the Doric, Ionic, or Corinthian orders, high-style Greek Revival buildings were characterized by a classic temple front with columns supporting a full entablature and a low-pitched pediment. Simpler versions of the style eliminated the columned portico, but often oriented gable-end-to-street and three bays wide with an off-center doorway, they could still recall the temple form by employing features such as pilasters, frieze boards, and cornice trim. Other houses continued to be built in the traditional, rectangular Colonial form, yet managed to incorporate similar Greek Revival stylistic elements. Transoms over doorways with sidelights and shouldered architrave trim were common, and one-story columned porticos were evident on many vernacular examples. Rectangular, triangular, and elliptical gable windows were popular as well. A cubic form of Greek Revival architecture, selectively characterized by shallow hip roofs, frieze-band windows, balustrades, and lanterns, was built with great frequency along the shore.

While the most monumental Greek Revival examples in the Eastern Coastal Slope were in the region's major ports (New London, Old Lyme, and Stonington), modest variants appeared in more rural environs (Chester and Guilford). The style found expression in many religious, commercial, and residential buildings, including Old Saybrook's Congregational Church (1840, Old Saybrook South Green Historic District), the Arcade in Stonington (c.1830, Stonington Borough Historic District), and the Daniel Chadwick House in Old Lyme (c.1835, Old Lyme Historic District). The Greek Revival was particularly well represented in the region's ecclesiastical architecture. Two distinguished churches are located in Madison, each well-suited to its environment. The First Congregational Church (1838, altered 1867) is the centerpiece of

the Madison Green Historic District and the smaller North Madison Congregational Church (1837) is the focal point of its rural setting. Also noteworthy were several stone-built examples of the style such as the U.S. Custom House in New London (1833) designed by Robert Mills (1781-1855) for the federal government and the Stone Store (1809) built in the center of Chester by William Buck, a local merchant involved in the West Indian trade.

During the Neo-Classical period, Egyptian Revival forms and motifs were occasionally applied to domestic architecture and public buildings for variety in design. Battered walls echoed by flat-arched doorways and windows with inclined jambs, gorge-and-roll cornices, and decorative use of vulture-and-sun disks (symbols of protection) were the most recognizable elements of this style. Although altered, the First Baptist Church (1845) in the village of Essex is a noteworthy example of Egyptian Revival architecture. It was built by Jeremiah Gladwin, whose work was influenced by the New York City builder-architect Minard Lafever (1798-1854), credited with the similar-looking First Presbyterian Church (Whalers' Church, 1844) at Sag Harbor, Long Island. New London's massive yet well-proportioned Fort Trumbull (1839-1852), built of granite from Waterford's Millstone Quarry, features battered walls and a distinctive Egyptian Revival entranceway.

Interest in the Gothic Revival style also became evident in homes and churches built along the shore in the mid-nineteenth century. Architects and builders began to reject the formality and spatial constraints imposed by the Greek Revival and to create instead buildings with irregular floor plans and Gothic Revival features, including steeply pitched roofs, multiple gables, decorative vergeboards, board-and-batten siding, and an extensive array of porch, door, and window treatments highlighted by use of the pointed arch. Architect Alexander Jackson Davis (1803-1892) first promulgated the style for domestic use in his 1837 publication *Rural Residences*. His friend, landscape designer Andrew Jackson Downing (1815-1852), espoused the style's compatibility with nature and successfully popularized Davis' Gothic Revival ideals in two widely used pattern books. The first, *Cottage Residences* (1842), contained the design for the Dr. John Bartlett House in Old Lyme (1844, Old Lyme Historic District), for which Davis prepared the actual specifications and architectural drawings. Downing's second publication, *The Architecture of Country Houses* (1850), influenced later examples of the style such as the James Monroe House (1865) in Guilford (Guilford Town Center Historic District), the work of William E. Weld, a local builder.

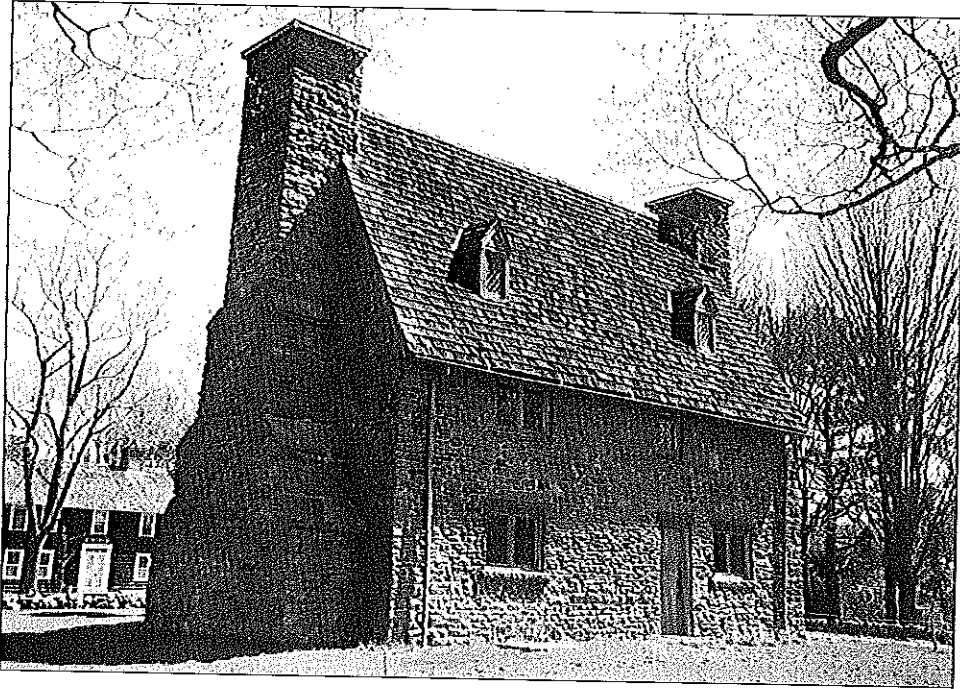
In the 1840s and 1850s the Gothic Revival became the dominant mode for Episcopal churches in Connecticut. An early use of the style in the Eastern Coastal Slope is found in Guilford's Christ Episcopal Church (1838, Guilford Town Center Historic District). Constructed of stone, it foreshadowed in its monumental square tower, tall lancet windows, and soaring interior volume the designs of later Gothic Revival churches in the region. Most significant among these were two designed by English-born architect Richard Upjohn (1802-1878): Calvary Episcopal Church in Stonington (1847, Stonington Borough Historic District) and St. James' Episcopal Church (1850) in New London. Both epitomize Upjohn's work, which relied heavily on English precedents in the choice of form, materials, and detailing. It is not surprising that prosperous congregations in the region's most cosmopolitan communities turned to this influential Boston architect, who had just supervised completion of Trinity Church in New York City, a design

which attracted national attention. Gothic Revival churches were also constructed of wood; Trinity Episcopal Church in Branford (1852, Branford Center Historic District) is an excellent example of "Carpenter Gothic." Its design is attributed to New Haven architect Henry Austin (1804-1891), whose works in the region encompassed several nineteenth-century building styles.

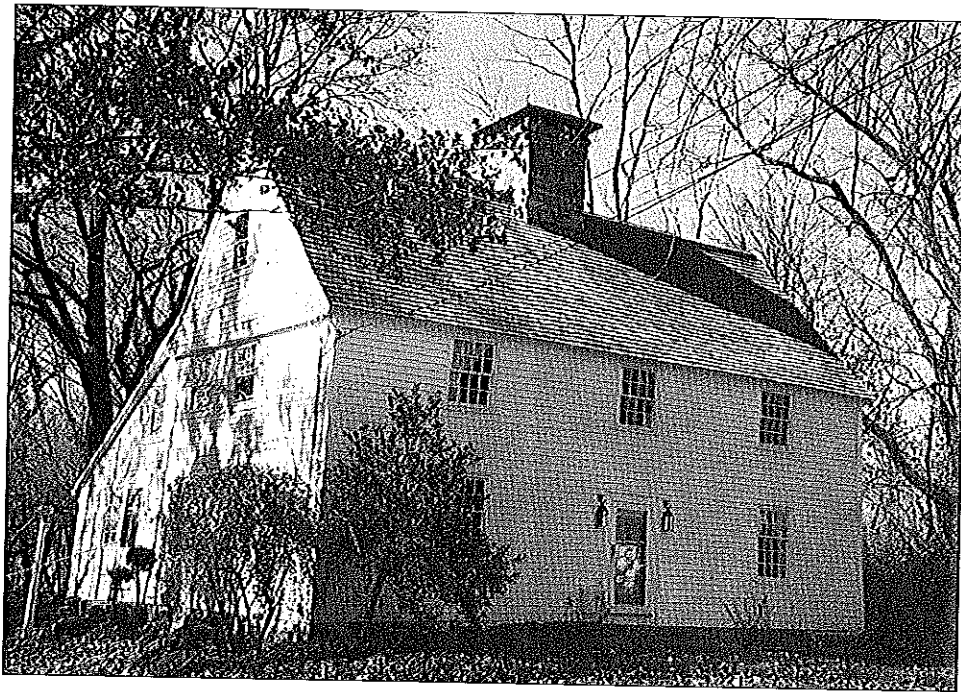
Contemporaneous with the Gothic Revival was the picturesque Italianate style, another reaction to classical ideals embodied by formal Greek Revival architecture. Downing and other proponents of the Italianate were inspired by vernacular farmhouses which dotted the countryside of Italy. Although the typical high-style villa form of the style, characterized by asymmetrical massing and a romantic campanile-like tower, is rare in the Eastern Coastal Slope, the square or rectangular form featuring large window openings (sometimes paired), bay windows, verandas or porticos, overhanging eaves, and shallow hipped roofs (with or without cupolas) appears frequently. Italianate houses of this variety could be relatively plain (John Noyes House, 1858, Old Lyme Historic District) or quite ornate (Captain Nathaniel B. Palmer House, 1852-1853, Stonington, Photograph 8). In the latter instance, application of classically inspired columns, symmetrical window groupings, bracketed surrounds and cornices, and an octagonal cupola helps distinguish the house's otherwise basic cubic design.

Ordinary Greek Revival dwellings were often adapted to the Italianate mode by the addition of verandas supported by chamfered posts, round-headed windows, and cornice brackets. The Italianate style appeared in some institutional buildings of the period as well; the Guilford Institute (1855, Guilford Town Center Historic District), privately sponsored to succeed the Guilford Academy, was constructed to plans prepared by New Haven architect Sidney Mason Stone (1803-1882). Italianate elements were also evident in mid-nineteenth-century commercial blocks commonly found in village centers such as Chester and Mystic; the style's regional popularity extended through the 1870s.

In 1848 Orson Squire Fowler published *A Home for All or the Gravel Wall and Octagon Mode of Building*, a book which espoused the spatial and living advantages of octagonal houses. Fowler claimed that the eight-sided form, with rooms arranged around a central hall, provided 20 percent more interior space than a conventional square or rectangular house. In addition, the Octagon-style house was warmer in winter and cooler in summer. Of the approximately dozen examples which survive in Connecticut, the stuccoed Albert G. Stark House in Stonington (c.1850, Mystic Bridge Historic District) and the frame Edwin A. Leete House in Guilford (1856, Guilford Town Center Historic District) are believed to be the only extant Octagons in the Eastern Coastal Slope.



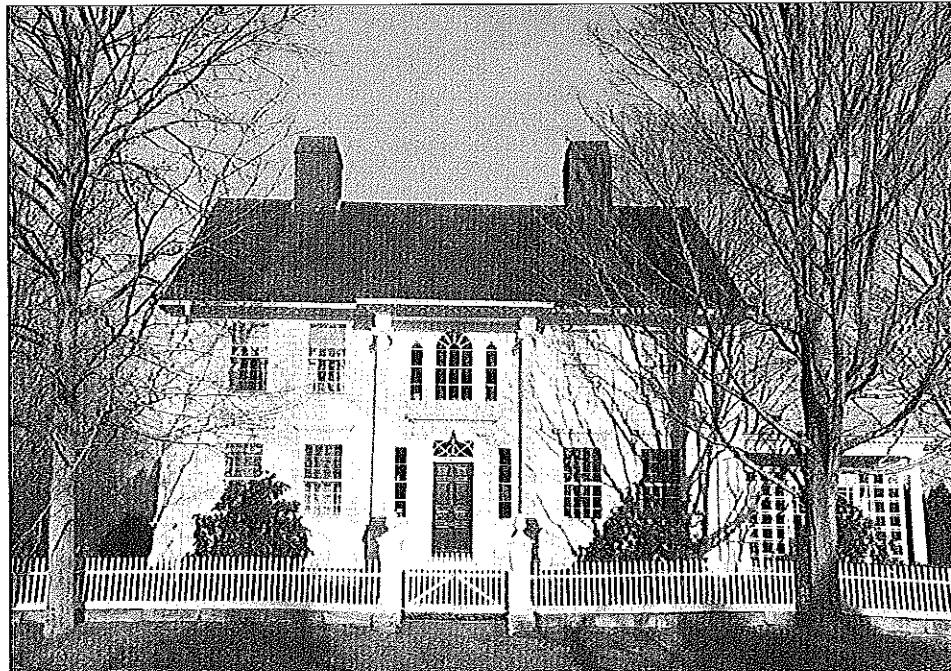
1. Reverend Henry Whitfield House, Guilford. Post-medieval style, c.1639. View southeast.



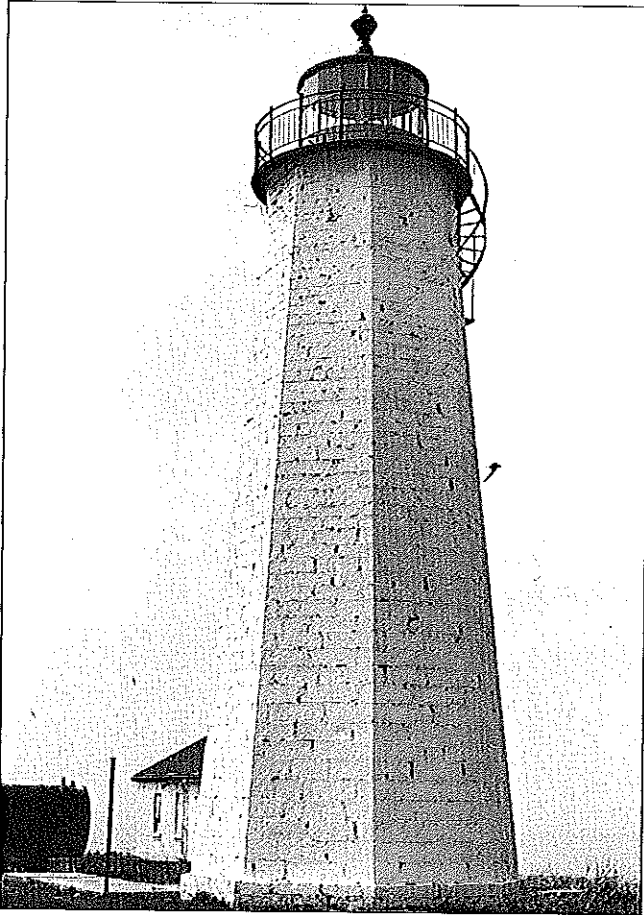
2. Comfort Starr House, Guilford Town Center Historic District, Guilford. Post-Medieval style, c.1695. View northwest.



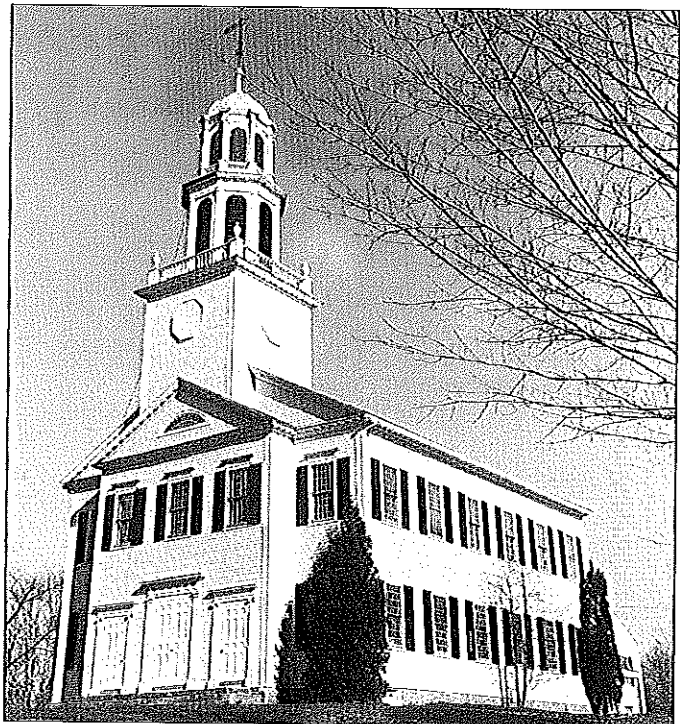
3. General William Hart House, Old Saybrook. Colonial style, 1767.  
View east.



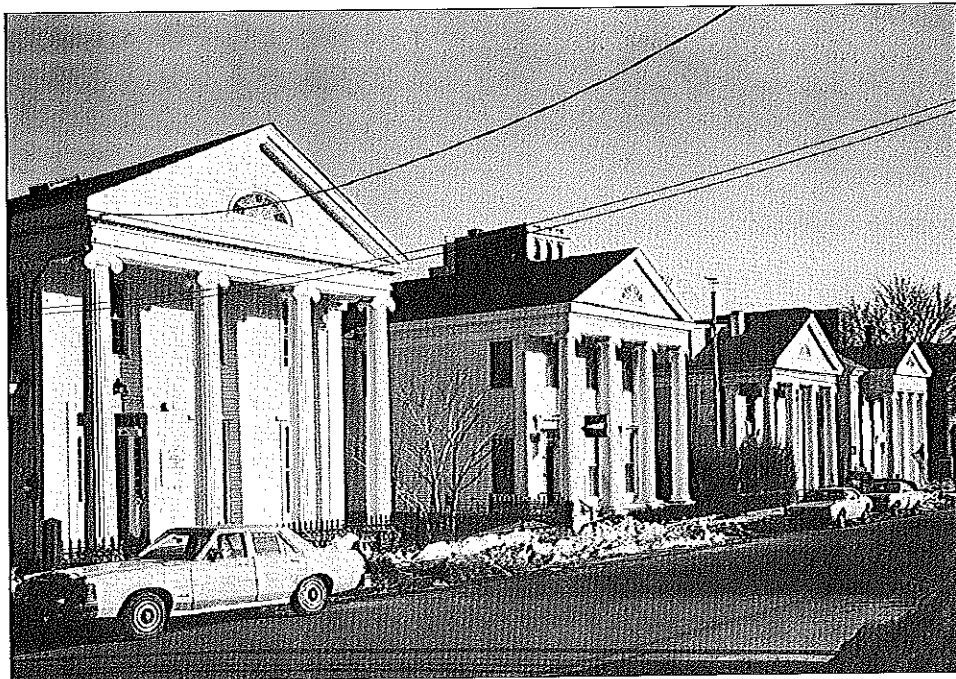
4. Jonathan Warner House, Chester. Georgian style, 1798. View north.



5. Falkner's Island Light, Guilford, 1802.  
View southeast.



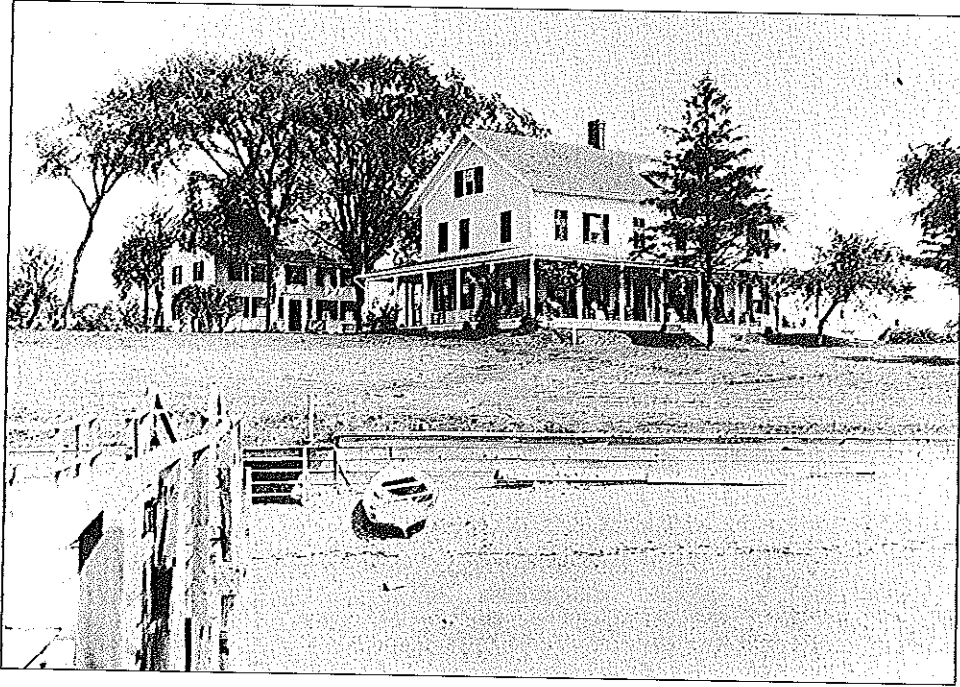
6. Killingworth Congregational Church,  
Killingworth. Federal style, 1820  
View northeast.



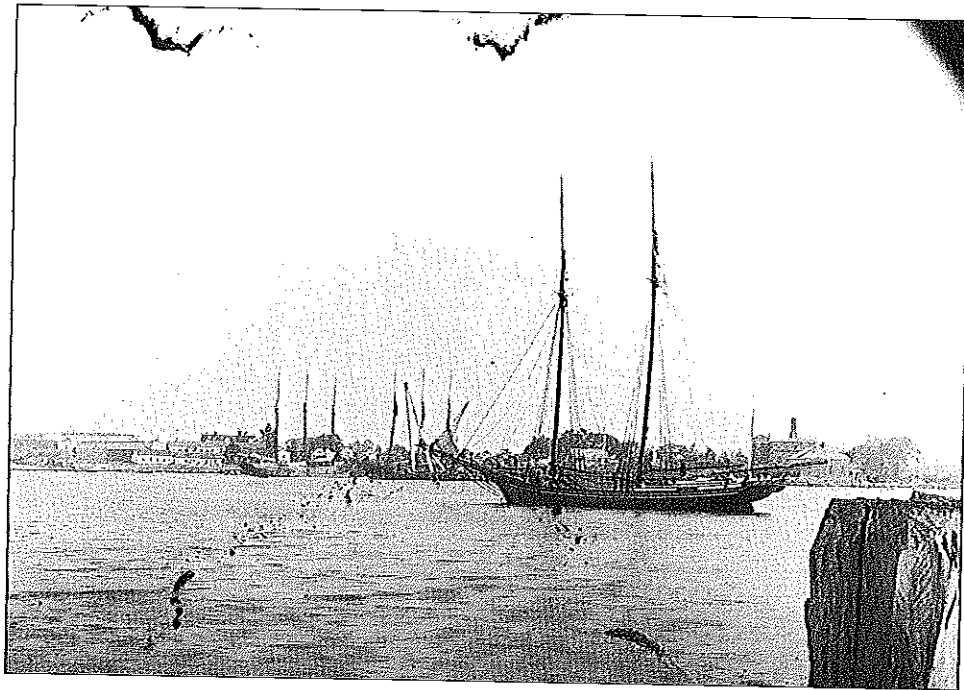
7. Whale Oil Row, New London. Greek Revival style, c.1840.  
View southwest.



8. Captain Nathaniel B. Palmer House, Stonington. Italianate style,  
1852-1853. View north.



9. The Owenego, Indian Neck, Branford. Historic Photograph, c.1915.  
View north.



10. New London Harbor showing Fort Trumbull, New London. Historic  
Photograph, 1880s. View southwest.

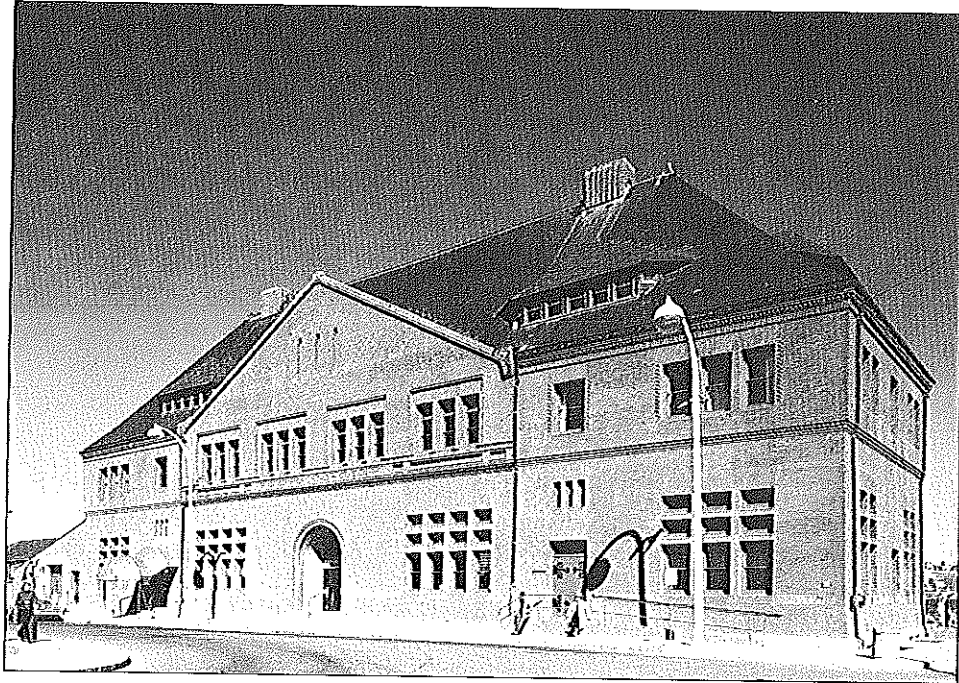




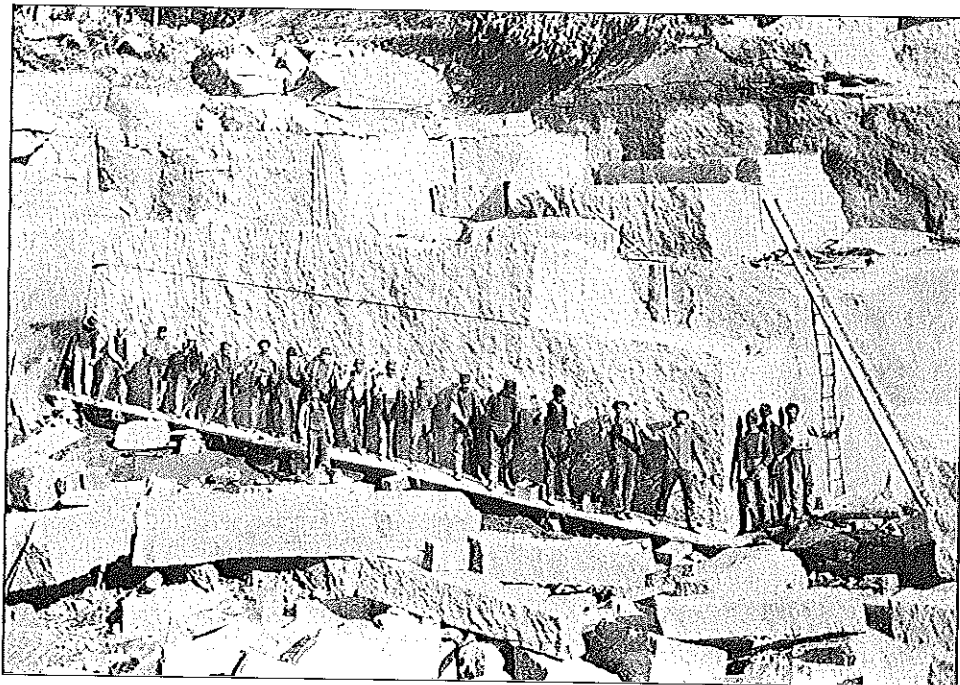
11. Isaac C. Lewis Cottage, Stony Creek-Thimble Islands Historic District, Branford. Stick style, 1882. View south.



12. William Patton Cottage, Fenwick Historic District, Old Saybrook. Shingle style, c.1887.



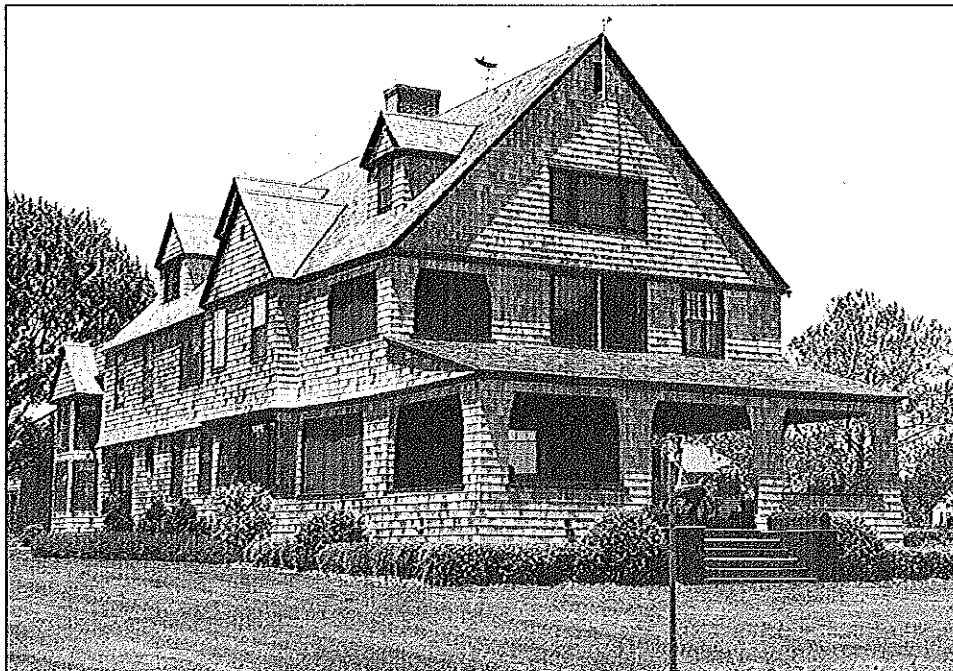
13. New London Railroad Station, New London. Richardsonian Romanesque style, 1887. View southeast.



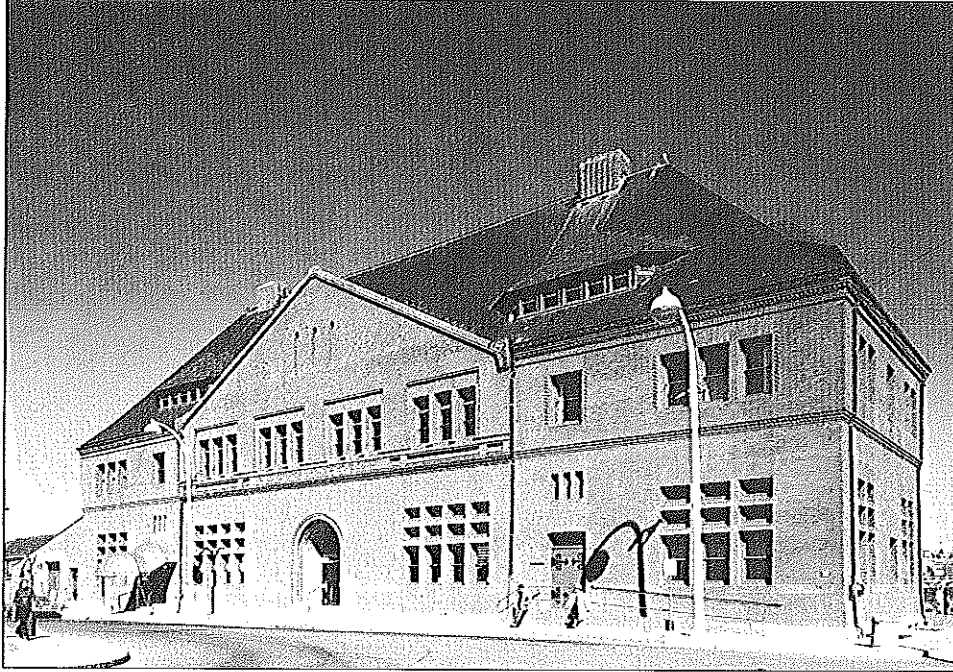
14. Norcross Brothers Quarry, Stony Creek, Branford. Historic Photograph, 1895.



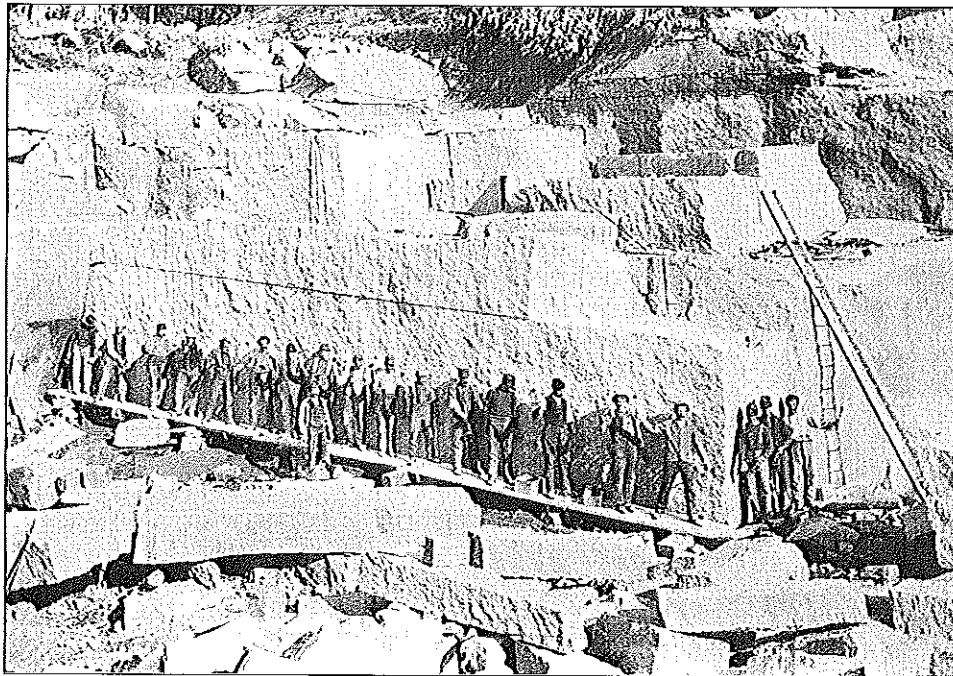
11. Isaac C. Lewis Cottage, Stony Creek-Thimble Islands Historic District, Branford. Stick style, 1882. View south.



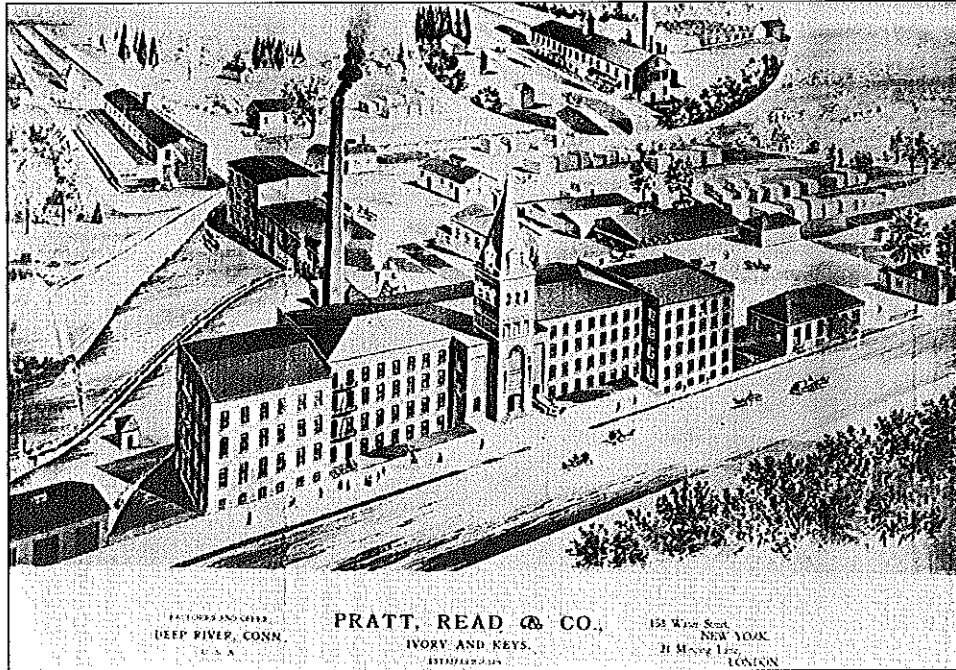
12. William Patton Cottage, Fenwick Historic District, Old Saybrook. Shingle style, c.1887.



13. New London Railroad Station, New London. Richardsonian Romanesque style, 1887. View southeast.



14. Norcross Brothers Quarry, Stony Creek, Branford. Historic Photograph, 1895.



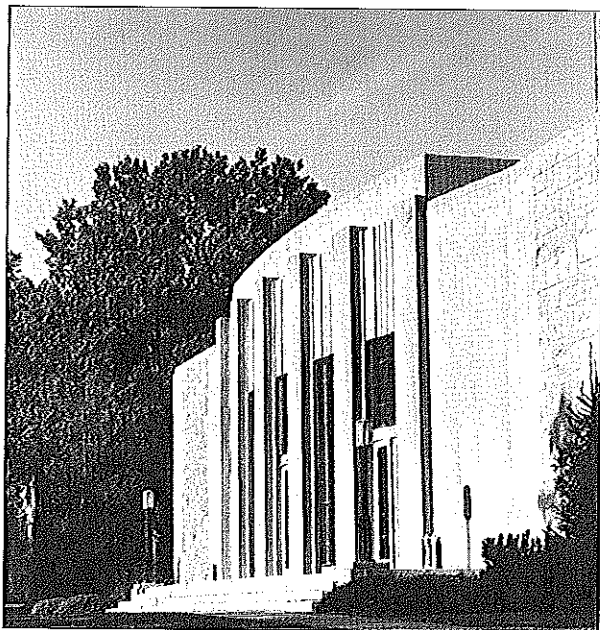
15. Pratt, Read and Company, Deep River. Historic Engraving, Birdseye View, c.1905. View northwest.



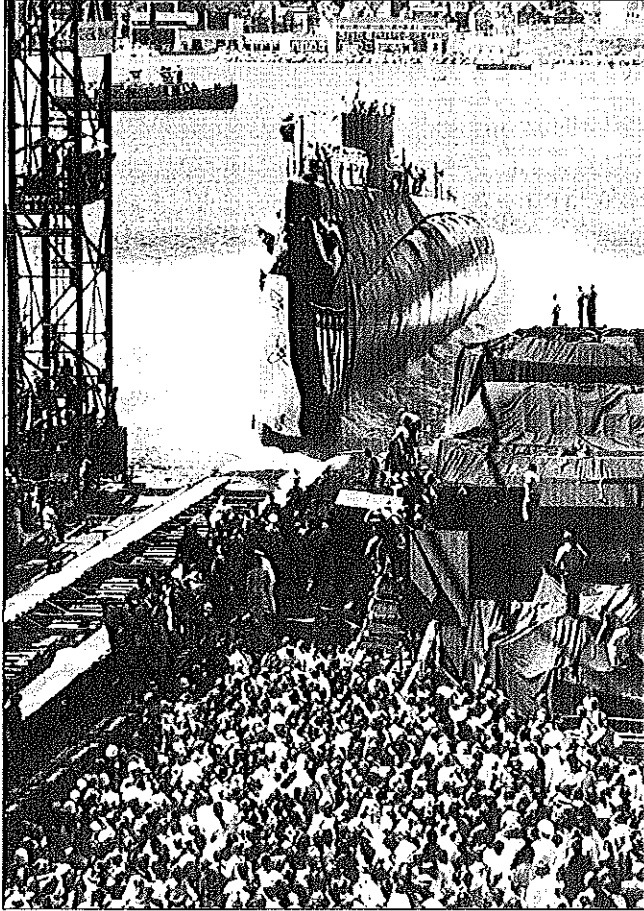
16. Erastus Clark Scranton Memorial Library, Madison. Neo-Classical Revival style, 1899. View northeast.



17. Hamilton Hall, United States Coast Guard Academy, New London.  
Colonial Revival style, 1932. View east.



18. Frank Loomis Palmer  
Auditorium, Connecticut  
College, New London. Art Deco  
style, 1939. View northeast.



19. Launching of *U.S.S. Nautilus* (SSN-571), Groton. Historic Photograph, January 21, 1954. View west.



20. Foxwoods Resort Casino, Mashantucket Pequot Reservation, Ledyard. Post-Modern style, 1992. Aerial view, northeast.

## IV. INDUSTRIAL AND URBAN GROWTH PERIOD 1850-1930

Among the most dramatic manifestations of the machine age in the Eastern Coastal Slope was the evolution of its urban centers and shoreline villages. Three new towns (each part of the original Saybrook Colony) were established during this period: Essex in 1852, Old Saybrook in 1854, and Old Lyme in 1855. From the 1850s through the post-Civil War era, innovative technologies played an important role in development of transportation networks, shipyards, manufacturing interests, and coastal industries. Hundreds of native-born and immigrant workers found employment, and by 1930 the region's population had doubled. As leisure time became a predictable part of every person's life, residents from Connecticut and elsewhere increasingly appreciated the natural beauty of Long Island Sound. Numerous parks, public beaches, hotels, and summer resort communities were developed along the shore to provide all socioeconomic groups with a wide range of recreational opportunities. In less populous rural areas small-scale industries such as the Ledyard Sawmill (c.1869) and Clyde's Cider Mill (1898) in Stonington continued to flourish; however, in order for local farms to survive Western competition, the practice of mixed agriculture was supplemented by dairying and market gardening.

### Civil War

As was true elsewhere in Connecticut, Eastern Coastal Slope communities supported the Union and responded readily to President Abraham Lincoln's call for enlistments in the "War of the Rebellion." Names of men from almost every town in the region are found in detailed listings of infantry and artillery companies compiled in 1889 by the Connecticut Adjutant General's Office. Also impressive is the large number of local African Americans who volunteered for service in the Sixteenth, Twenty-Ninth, and Thirtieth Regiments. Area businesses supplied the United States Navy and Army with ships, metal parts, and woolens for uniforms throughout the war.

Shortly after the Confederate attack on federal Fort Sumter in South Carolina on April 12, 1861, New London's mayor, Jonathan Newton Harris, was asked by the Secretary of War to garrison Fort Trumbull, located on the Thames River (Photograph 10). By January 1862 the fort had reached a state of readiness in terms of both men and supplies. It became headquarters for the Fourteenth Infantry Regiment and Third Artillery Regiment and served as a recruiting center for troops leaving Connecticut.

Following the declaration of war, New London's flag was prominently raised, accompanied by a display of flags throughout the city and on board ships moored in the harbor. On April 19, 1861, a large and enthusiastic gathering took place in and around New London County Courthouse. Proposed resolutions advocating political unity and preservation of the Republic were unanimously passed. There was a call for volunteers and a subscription list was begun for arms and military equipment. In Mystic a similar meeting at Floral Hall identified 24 young men who became the nucleus of a small company which joined the Fourth Infantry Regiment. Among the major local financial contributors were two prominent shipbuilding firms, George Greeman and



Company and Charles Mallory and Sons. The Mallorys also offered the government free use of a 100-ton yacht.

During the Civil War important posts were held by New London residents, and another 270 men served in the rank-and-file. Men with maritime experience were sought for appointments in the Union Navy, and by 1862 approximately 20 New London sea captains served as volunteer officers. Three prominent Army leaders also came from New London. Major General Joseph A. Mower, an officer cited for his "bravery and ability," received several promotions during his various commands. Born in New London in 1788, Major General Joseph G. Totten served on engineering details during the War of 1812 and the Mexican War (1846-1848), and supervised Fort Trumbull's third reconstruction between 1839 and 1852. He became Commander of the Army Corps of Engineers in 1838, a post he held until his death on April 21, 1864; Fort Totten on Long Island was named after him. Brigadier General James A. Perry headed the Washington, D.C., Bureau of Clothing and Equipage from June 18, 1861, until the end of the war.

Demand for warships accelerated after President Lincoln proclaimed a blockade of the Southern coast, and business boomed in numerous shipyards. Even before government contracts could be completed, there was immediate need for existing ships to serve as cruisers, gunboats, and transports. Several New London vessels were leased by the Union Navy to carry troops and supplies.

The Civil War was a period of rapid development in naval design. The Groton firm of Maxon and Fish was selected to build *Galena*, an ironclad fighting ship, for the Union Navy. However, when it was launched in February 1862, it was already obsolete. *Monitor*, built at the Continental Ironworks in Green Point, New York, featured heavier armor and a revolving gun turret. It had succeeded in defending the Union squadron from attack by the Confederate ironclad *Merrimac* on the James River, near Newport News, Virginia. *Galena* was not "shot proof," and 13 of her crew were killed and 11 wounded in May 1862; the Navy had her inadequate cladding removed in 1864, and the wooden vessel remained in service until 1890.

At the war's outset builders quickly recognized that sailing ships were no longer adequate for first-line action and that steam-powered vessels were far more efficient. Prominent East Mystic shipbuilders Charles Mallory and Sons were successful in negotiating several contracts with the Union Navy as well as private companies because of the ability to install and purchase machinery for steam power as needed. The firm also managed its own ropewalks, sail lofts, and sawmills. From 1861 until the close of war in 1865, 56 steamers were launched from Mystic yards. Six schooners, three brigs, two barks, and three vessels of at least 300 tons each were also constructed.

Other war-related industries flourished during this period. The Albertson and Douglas Machine Works in New London outfitted many ships with boilers and machinery. Businesses such as the New London Horse Nail Company instituted day and night work shifts. The Wilson Manufacturing Company, also in New London, made pikes for the Union Navy and copper wheels for gun carriages. Colonel Francis B. Loomis converted the New London Machine Works into a mill to meet government contracts for shoddy, an inferior woolen cloth woven from fibers

taken from used fabrics. The war also took its toll on the local economy. With the temporary end of Southern trade in 1862, numerous vessels lay idle along the coast and many fishermen, sailors, and merchantmen were unemployed.

Shortly after the return of peace in 1865, attention focused on commemorating men who had bravely served their country during the Civil War. In 1866 the Grand Army of the Republic (G.A.R.) was established. A veterans organization, the G.A.R. provided a statewide framework of posts which advocated and raised funds for construction of local Civil War memorials and also planned for their dedication. Monuments in Ledyard (1873), Branford (1885), and New London (c.1900) were erected by the G.A.R. Town governments sponsored memorials such as Soldier's Monument (1887) in Guilford and Soldiers' Memorial Hall (1897) in Madison. Soldiers' Monument (1883) in Stonington and the Robert A. Gray Monument (1916) in Groton were privately funded, the former by the East Mystic shipbuilder Charles H. Mallory. Of special note is the Smith Gateway (c.1923) to Union Cemetery in East Lyme. The monument lists local men who served in the Union Army and Navy and includes the names of five African Americans, one of whom died in service.

## **Transportation**

Growth of industry, tourism, and agriculture during this period could not have occurred without major transportation improvements. By 1852 trains operated daily between New Haven and New London, with stops in most coastal towns, and ferries across the Thames River ensured continuous rail service to Groton, Stonington, Providence, and Boston. In addition the Connecticut Valley Railroad began to operate between Hartford and Old Saybrook in 1871, stopping at towns along the Connecticut River; from its Saybrook Point docks, passengers and freight could travel by steamship on Long Island Sound to New York City.

Improved and expanded railroad facilities and freight yards greatly assisted development of industry and business along the coast. By 1864 the Shore Line Railroad had stations in Branford, Stony Creek, Guilford, Madison, Clinton, Westbrook, Old Saybrook, Lyme (now Old Lyme), East Lyme, Waterford, and New London. In 1870 a new railroad bridge was built across the Connecticut River, replacing train ferries. Similarly, in 1889 another bridge was constructed across the Thames River, thereby making possible continuous train transportation between New York, Providence, and Boston. By 1871 the Connecticut Valley Railroad had also begun to offer passenger and freight service between Hartford and the lower Connecticut River towns of Chester, Deep River, Essex, and Old Saybrook, with stops at Saybrook Junction, Saybrook Point, and Fenwick. Although cargo continued to be barged on the Connecticut River and Long Island Sound, shipment of manufactured goods and raw materials was more practical by rail.

To handle ever-increasing traffic, the New York, New Haven and Hartford Railroad (which by 1872 had acquired the entire shoreline route) began to upgrade in the 1890s. Among many improvements implemented then were doubling of railroad lines east of New Haven, elevation and re-alignment of tracks, and construction of new moveable steel railroad bridges across the Connecticut, Niantic, and Thames Rivers (built in 1907, 1907, and 1919, respectively).

Technological advancements in fixed-span bridges were also realized in this period; examples include steel-truss bridge No. 1607 in New London (1889, State Route 437 over railroad) and steel-truss trolley bridge No. 4182 in Stonington (1906, White Rock Road over Pawcatuck River). Particularly innovative was the Mystic River Bridge (1922, U.S. Route 1 between Groton and Stonington) with its exposed electrically driven mechanical parts designed to lift its span for marine traffic. This bridge was part of a major Route 1 improvement program initiated by the Highway Department after World War I.

Trolley transportation came to shoreline villages later than to urban centers such as New Haven and New London; by the late 1890s horse-drawn trolleys had either been electrified or replaced and trolley lines had been constructed in rural areas. The Shore Line Electric Railway (established 1905) was the fifth largest enterprise of its type in Connecticut. In 1910 the line provided service between Old Saybrook and Guilford; shortly thereafter it was extended east to Stony Creek and north to Deep River and Chester. Several deadly trolley collisions, a new network of interurban highways, and introduction of bus transportation led to the electric railway's eventual demise. In 1928 buses replaced trolleys between Old Saybrook and Guilford, and by 1930 service between Guilford and New Haven had ceased completely. Connecticut's only extant trolley line was built by the Branford Electric Railway (established 1900) for commuters between Branford Center, Short Beach, and the East Haven green. It is currently used for educational purposes by East Haven's Shoreline Trolley Museum.

Following abandonment of Connecticut's privately managed toll road system, public demand for more and better roadways prompted the General Assembly to establish a Highway Department in 1895. Originally the department provided towns with financial and supervisory assistance for road improvements; in the early twentieth century it also initiated and implemented a state system of Trunk-Line highways between major population centers (U.S. Route 1 was the region's premier example). Important through routes between Trunk Lines and municipalities were designated State Aid roads and were eligible for state funding for improvements and maintenance; along the shore State Routes 146, 153, and 156 benefited from this program. After 1923 the Highway Department assumed full responsibility for all State Aid roads.

## **Industry**

Although many smaller boat-building yards disappeared between the Civil War and World War I, shipbuilding became a prosperous business for a few major shipyards in the Eastern Coastal Slope. New tonnage more than doubled in the early 1860s in response to the United States Navy's pressing need for ships. The industry not only stimulated development of larger municipalities such as New London, Groton, and Stonington, but also growth of small towns such as Deep River, Essex, Guilford, Lyme, and Madison. The region's shipbuilding tradition was longstanding and its craftspeople were experienced, producing vessels of all types—sloops, schooners, brigs, barks, clipper ships, fishing and whaling boats, steamers, freighters, and submarines. In addition to shipbuilding yards, boat shops, marine railways, and engine companies, related maritime work included towing, lighting, dredging, and pile driving, as well as wharf, bridge, and foundation building, submarine work, wrecking, and salvage.

New London boasted the greatest number of shipyards along the coast (Photograph 10). One of the most active between 1850 and 1871 was the Beckwith Shipyard, which built 100 to 400-ton vessels for fishing and freighting in the African and coastal trade as well as for whaling. In the economic depression which followed the Panic of 1857, Beckwith was still able to secure contracts for several schooners and keep a large workforce employed; the yard also built a number of substantial fishing vessels during the Civil War and in the difficult postwar years. One of its finest vessels was *Julia*, launched in 1861. The William Miller Shipyard, known for building large wooden ships between 1848 and 1873, launched the 310-ton bark *N.S. Perkins* in 1852. While some firms such as Crocker and Davidson (c.1840-c.1890) built vessels ranging from fishing smacks to 800-ton ships, others such as McDonald and Anderson (1892-1896) and the Rogers Boat Shop (1832-1894) produced specialized craft, the former large three-masted schooners and the latter small whale boats used by crews on whaling ships.

Marine railways for repairs on wooden and iron vessels became common during the second half of the nineteenth century; by 1906 the New London Marine Iron Works had three such facilities. John Forsythe's first shipyard built tugs, barges, and steamers in the 1890s. Fitch and Brainerd (1873-1877) built steamboats known for their speed. The Thames Tow Boat Company of Norwich was founded in 1865; in 1879 the business was acquired by the Chappell Company and moved to New London. In 1903 Frank H. Chappell built a shipyard and marine railway for construction and repair of barges and ships used in his coal-wholesaling business. Now known as the Thames Shipyard, it is still involved in ship repair and the operation of ferries and ocean-going tugboats. From 1878 to 1922 the Thomas A. Scott Company became particularly well known for marine work such as pile driving, dredging, and bridge and wharf construction. Its major effort in New London was the Connecticut State Pier (1914) and associated warehouse (1915).

Groton has a distinguished shipbuilding heritage as well; its West Mystic shipyards produced large high-speed clipper ships in the 1850s. These sleek vessels were built to withstand rugged 17,000-mile journeys around Cape Horn; *Elizabeth S. Willets* (1854) accomplished her 1859 journey in 111 days. After the Civil War, West Mystic yards continued to build seaworthy cargo ships such as *Seminole* (1865), which was used repeatedly for trade with California.

In 1860 the company of R. and J. Palmer in Noank (formed as a successor to their 1850 partnership that year by brothers Robert and John) installed Groton's first marine railway for ship repairs. In operation until 1913, this large business built all types of wooden vessels from fishing smacks to luxurious Long Island Sound steamers. In 1902, at the West Mystic site of *Galena's* construction, the Holmes Shipbuilding Company launched *Jennie B. Dubois*, a 249-foot five-masted schooner built for the coastal coal trade. By 1900, however, "iron" ships were beginning to replace such wooden vessels; that year the Eastern Shipbuilding Company opened a shipyard at what is now General Dynamic's North Yard. There it built what were then the largest steel freighters in the world, *Minnesota* (1903) and *Dakota* (1904), both of which proved too massive for regular business and were in service only a short time. By 1910 the New London Ship and Engine Company had purchased its yard; in 1911 it began the first production of marine diesel engines in the United States and eventually became a subsidiary of Groton's Electric Boat Company, producing submarine engines and parts. Founded by John P. Holland, developer of the

submarine for the United States Navy, the Electric Boat Company became majority shareholder of the New London Ship and Engine Company in 1924 and later that year contracted to build four submarines for the Peruvian government. On November 10, 1933, nearly ten years later, Electric Boat launched *Cuttlefish*, first of 17 welded-hull submarines built for the United States Navy prior to World War II.

In 1916 Charles W. Morse of the United States Steamship Company acquired a 30-acre site at Eastern Point (formerly the Henry C. Rowe Estate) to build steamships, for which there was a great demand during World War I. The shipyard became known as the Groton Iron Works; in 1917 and 1918 several large steel cargo vessels were constructed there under contract with the United States Shipping Board. Only *Tolland* was launched before the Armistice was signed on November 11, 1918. When the bottom fell out of the shipping market during the Great Depression, these huge freighters were laid up at wharves and later scrapped, never having been placed in service. After the war the United States Steamship Company went into bankruptcy and in 1946 the Groton Iron Works site was acquired by Pfizer Incorporated for a pharmaceuticals plant.

Between 1851 and 1859 Stonington's East Mystic yards also built many fine wooden vessels; at least eight shipbuilding companies were established in response to the demand for larger and faster clipper ships. The George Greenman and Company Shipyard (1838-1878) launched nearly 100 vessels, including *David Crockett*, which accomplished 25 voyages around Cape Horn to San Francisco. Connecticut shipbuilders, including the Mallorys and the Greenman brothers, adapted to steam-powered vessels at an early date; shipbuilding remained a major industry on the Mystic River through the early 1870s.

The distinctive mid-nineteenth century homes of prosperous shipbuilders, captains, and merchants may still be seen in the Mystic Bridge Historic District. Randall's Wharf, now the site of the Mystic Marine Railway at 31 Water Street, provided docking and outfitting services to whalers and mercantile vessels through the 1850s. Steamboat Wharf was located behind what is now Main Block on West Main Street; between 1820 and 1870 whaling barks, steamboats, and other commercial vessels landed and departed from this wood and stone pier. Although largely filled in, portions of its original stone bulkhead are still visible. With the exception of D.O. Richmond's shipyard, which produced several yachts of innovative design for Charles H. Mallory and other members of the New York Yacht Club, shipbuilding in Mystic gradually declined in the late nineteenth century.

In the 1920s historian and Mystic resident Carl C. Cutler became concerned about ill-use and destruction of the state's valuable maritime artifacts. With his friends Edward E. Bradley and Dr. Charles K. Stillman, Cutler formed the Marine Historical Association on Christmas Day in 1929. While one of the association's goals was to acquire historic vessels, its founders also envisioned a place where the skills and traditions of nineteenth-century seafaring life could be preserved and observed. In 1931 Mary S. Harkness deeded the organization the Mystic Manufacturing Company property (formerly the George Greenman and Company Shipyard) and in the course of the next 50 years, Mystic Seaport Museum (as it was named in 1979) became a 17-acre living museum and research center for the study of maritime history and crafts.

Although it has been estimated that over 4000 vessels were built by Connecticut River shipyards during the nineteenth century, shipbuilding in the lower Connecticut River Valley began to dwindle after railroads took over traditional shipping markets.<sup>10</sup> Construction of fixed bridges across the Connecticut River also prevented passage of tall sailing cargo carriers. Essex alone had eight shipyards, a ropewalk, two block and spar shops, two sail lofts, ship chandleries, and warehouses such as the one still standing at Steamboat Dock (1878, now Connecticut River Museum). The Hayden, Scovill, Williams, and Starkey shipyards in Essex collectively produced over 500 vessels, the largest being the 1426-ton *Middlesex* (1851). The yards built many schooners for the revived coastal trade in the 1860s, in addition to several cargo vessels made to transport quarried brownstone and known as "brownstoners." The shipbuilding era ended in Essex with the launching of *James Phelps* at David Mack's Middle Cove yard in 1870.

Deep River shipbuilders remained active on a smaller scale throughout the Civil War; Eli Denison's yard built two 500-ton barks, but launching *William Vail* in 1866 was that port's last major effort. Shipbuilding in Lyme lasted until 1888, the year its largest ship, *Grace Seymour*, was completed in Henry T. Comstock's shipyard; Lyme builders produced approximately 300 wooden vessels during their heyday. While yards in Chester and Old Saybrook had built a variety of craft in the early nineteenth century, production ceased long before the Civil War; in other coastal towns, however, shipbuilding activity continued to thrive. In Madison, for example, over 75 ships were built at East Wharf by Charles M. Minor and Son. One of the company's ships, *Restless* (1854), was later used as a blockade runner by the Union Navy. The last ship built at the Minor yard, *Annie G. Mitchell* (1889), reputedly sailed until 1935.

Between 1850 and 1930 several hardware and machine industries established themselves in the Eastern Coastal Slope, stimulating growth in population and community development. The metals industry in Branford is a dramatic case in point. When the Malleable Iron Fittings Company (MIF) opened in 1864, the town's population was approximately 2,200; by 1920, the number of local residents had tripled. MIF alone employed 1,400, who annually produced 23,500 tons of malleable iron, brass, and wrought-iron goods. At the Branford Lock Works 500 others found employment, and 240 more worked for the Atlantic Wire Company, which manufactured carbon wire rods. Residential neighborhoods in the vicinity of factory complexes saw marked growth in the late nineteenth century as Irish and Italian immigrants came to town in search of livelihoods.

Smaller factories also existed in the region. In 1851 Isaac S. Spencer acquired a foundry in Guilford on Fair Street and by 1860 had five men in his employ for production of agricultural implements and other metal products. In 1869 his sons built a long brick-walled foundry to accommodate the company's growing business and by 1870 employed 36 men; the building was enlarged again in 1880 and the workforce nearly doubled. Among products made at the foundry were legs for school desks, lamp pedestals, scales, bicycle parts, and, after 1883, cast-brass items such as doorknobs and nameplates. The Spencers continued to operate their business until 1945. Hardware industries also flourished in the lower Connecticut River Valley, manufacturing bits, augers, wood screws and wood-screw eyes, crochet hooks, collar studs, and cufflinks. From 1859 to 1963 the Gladding Brush Company (originally Calvin B. Rogers Brush Shop) in Chester manufactured carpet sweepers and various kinds of brushes. The Nieland Cut Glass Company

moved in 1896 into a portion of an existing ivory and bone products factory in Deep River (also owned by Calvin B. Rogers) and with a very small workforce began to create fancy stemware, bowls, carafes, and tumblers from rough stock shipped to the site from various New England glassworks. A complete assortment of the company's popular designs was displayed at its New York City showroom. By 1904 the business had become so successful that it was forced to secure larger quarters in Buffalo, New York.

Although the center of Connecticut's textile industry was in the Eastern Uplands, a number of related business operations were located in the Eastern Coastal Slope. Mills in Groton, New London, and Stonington produced thread, silk, velvet, and wool, and wool was bleached and dyed in Waterford factories. In 1865 the Palmer Brothers Company Mills were established in New London and by 1872 were producing large numbers of quilted bed comforters with Palmer quilting machines. War conditions and a decreased labor force resulted in that company's closing in 1918. Between approximately 1867 and 1895, the New London Steam Woolen Mill was also active in textile manufacturing, including "repellents, ladies cloth, and cashmeres."

Extant in Pawcatuck, Stonington's mill village, the Mechanic Street Historic District includes industrial buildings which housed two former textile firms, the Stillmanville Woolen Mill (1848) and the Clark Thread Mill Company (1891, expanded 1899). Both enterprises were important to the local economy and necessitated construction of related workers' housing and company stores. In 1898 Mystic's Rossie Velvet Mill opened, specializing in high-quality crush-resistant "transparent velvet" once in demand for women's winter party dresses. In its heyday the mill employed over 200 workers using 150 looms; its operations ceased just before World War II.

Textile machinery was made within the region as well. In 1848 Groton's Reliance Machine Company was established to manufacture cotton gins and related supplies. Stonington's Trumbull Iron Works opened on Water Street in 1849 and by 1860 employed ten men for production of cotton gins and steam engines. In 1876 John T. Atwood bought these buildings for his thread-making machine company and shortly thereafter widened the foundry and added a low narrow monitor. In the 1880s Atwood machines were in great demand because of their self-centering spindles, which made thread-making faster. The company expanded its complex in 1896, enlarged it again during World War I, and continued to produce machinery until after World War II.

In 1855 Cottrell and Babcock began another textile machine industry on River Road in the Pawcatuck section of Stonington. By 1860 the company produced 20 different machines, including some for woodworking and printing, and employed 50 men. Over the next decade a specialization in printing presses emerged, and in 1880 Cottrell purchased his partner's interest and renamed the firm C.B. Cottrell and Sons. As the printing press business prospered, many additional employees were hired and the company's industrial complex expanded; the most recent surviving mills date from the early 1920s. New London's Brown Cotton Gin Company erected one of the region's largest manufactories of its kind between 1880 and 1884. Located along the Thames River, it provided many jobs for skilled and unskilled laborers and enabled some workers to build nearby residences such as some of the frame cottages located on Willetts Avenue.

Two other operations, the E.E. Dickinson Company of Essex and the Pond's Extract Company of Clinton, played important roles in the economies of their respective communities during this period. In 1846 witch hazel began to be manufactured in Essex; the extract was made by putting the young growth of the witch hazel shrub, *Hamamelis virginiana*, through a steam-based distilling process after its bright yellow flowers had bloomed. In 1840 a missionary named Hawes working with Native Americans in central New York discovered the healing properties of witch hazel and shortly thereafter developed his own formula for its distillation. Alvin F. Whittemore, an Essex manufacturer of soaps and patent medicines, bought the formula and produced witch hazel locally for about 20 years. In 1866 Thomas N. Dickinson, a Baptist minister and supplier of uniforms and equipment to the Union Army during the Civil War, recognized the medicinal value and sales potential of witch hazel and purchased all rights to the original product from Whittemore. With his sons Thomas Newton and Edward Everett, Dickinson opened his own witch hazel company. Originally witch hazel twigs were distilled by small factories throughout southeastern Connecticut and the extract was brought to Essex for distribution. In 1890, after Edward E. Dickinson, Jr., had acquired the company from his father, he built a small distillation plant in Essex and sold witch hazel in bulk to private retailers. In 1920 the company built its own packaging plant and began distribution under the name "E.E. Dickinson"; over the years it developed a wide range of personal care products such as soap and cream using witch hazel extract. In 1997 the E.E. Dickinson Company in Essex merged with the American Distilling and Manufacturing Company in East Hampton, now the sole supplier of witch hazel in America.

After a fire destroyed its Chester distilling plant in 1888, the Pond's Extract Company moved to Clinton where the company's owner, Leonidas H. Hurtt, had purchased the buildings, land, and formulas of the former Clinton Manufacturing Company (Whittemore Soap Company) to operate his witch hazel factory. After the extract was blended with alcohol, it was barreled and stored for three to five years before bottling. The company's Brooklyn, New York, plant had simultaneously been developing the forerunner to "cold cream" and in 1906 that operation was moved to Clinton where from 1907 until 1928, Pond's Cold Cream was produced in a newly renovated plant. In 1929 and 1935 new concrete buildings were constructed in response to the Pond's Extract Company's continuous growth. In 1955 the Chesebrough Manufacturing Company (makers of the petroleum jelly Vaseline) merged with the Pond's Extract Company and remained in Clinton. Today Chesebrough-Pond's Incorporated is part of Unilever, a large British-Dutch consumer products company.

Granite operations at Millstone Point in Waterford were greatly expanded after the quarry was taken over by Henry Gardiner in 1888. This growth was largely due to increasing demand for monumental public buildings constructed of granite which occurred along the eastern seaboard during the late nineteenth and early twentieth centuries. Millstone granite was particularly popular because it came in three distinct varieties: pink, blue, and gray. At the industry's peak 400 men were employed by the quarry; many lived in company residences or boarding houses in Graniteville, a workers' community on Rope Ferry Road. As the village's population grew, a schoolhouse for local children was built and in 1894 a post office and a passenger railroad station were added. Railway tracks were put in place to help move heavy blocks of granite from the quarry to deepwater docks nearby for shipment. Despite damage from the 1938 hurricane,



Millstone Quarry remained in business until 1963, after which it became unprofitable to continue shipping granite.

Another major quarrying industry in the Eastern Coastal Slope was in the Stony Creek area of Branford. While not much is known about the innumerable small operations which proliferated there at the turn of the century, Stony Creek quarrying had started by 1858 in the vicinity of Hall's Point Road. In 1887 the largest quarry in the area was owned and actively used by Norcross Brothers of Worcester, Massachusetts, a well-established construction company whose projects included the work of many nationally prominent architects, most notably Henry Hobson Richardson and his successor firm, Shepley, Rutan and Coolidge. Stony Creek granite, characterized by a distinctive pinkish-gray hue, was a favored construction material for many turn-of-the-century buildings, monuments, and structures. Examples include New London's Williams Memorial Institute (1891), the West Point Monument (1897) at West Point, New York, and Hartford's Bulkeley Bridge (1926). The quarry also provided rough stone for ripraps such as the Hammonasset Beach breakwater in Madison, stone chips for road surfaces, and paving blocks for sidewalks and terraces. During the quarry's industrial heyday between 1880 and 1900, as many as 1800 men were employed, including Italian, Irish, Swedish, Finnish, Scottish, and Spanish (Photograph 14). American and foreign-born workers lived in local rooming houses or commuted to town by trolley or train; some were able to afford small houses, such as those built on Watrous Avenue. For workers' children who lived in Stony Creek, a large new schoolhouse was built in 1893; other services included a general store, a physician, a druggist, a barber, a tailor, a blacksmith, nine bars, and even a small movie theater.

In 1891 quarry workers formed a chapter of the National Stonecutter's Union; bylaws were issued in both English and Italian. Work contracts referenced numerous job classifications, including unskilled, such as laborers, and skilled, such as master mechanics and engineers. When in 1900 the stonecutters' bid for an eight-hour workday at 33 cents an hour was rejected, Norcross Brothers employees decided to strike. Although the dispute was eventually settled, the strike and the unavailability of black blasting powder during World War I severely handicapped business in the early twentieth century. The quarry's last major contract during this period was for the Department of Commerce Building (1929) in Washington, D.C. In 1956 Castellucci and Sons Incorporated, of North Kingston, Rhode Island, acquired the property and revived its operations. After construction of architect Philip Johnson's American Telephone and Telegraph Company Building (1979) in New York City popularized use of Stony Creek granite by contemporary architects, many new stone-faced buildings, such as the Branford headquarters of Echlin, Incorporated (1981), have been built.

## **Immigration and Urbanization**

Industrial growth in the Eastern Coastal Slope drew thousands of immigrants from Europe between the Civil War and World War I. The Irish were the first major group to arrive; victims of the potato famines in the late 1840s, they were coolly received and initially found only such work as construction labor for the Shore Line Railroad or domestic service in hotels and private homes. Later in the century many were hired as skilled laborers at local factories and shipyards,

and subsequent generations became more established, operating their own retail shops and taverns. As the Irish became upwardly mobile, they were able to build homes in fashionable residential districts, thereby allowing successive immigrant groups to move into their former neighborhoods.

During the late nineteenth century other nationalities in search of employment, new homes, freedom of religion, and a healthier environment emigrated to the region from Europe, the Middle East, Scandinavia, and the United Kingdom, as well as Canada, and the Republic of Cape Verde. The largest group to arrive was from Italy. They came in the late 1890s to help with major railroad improvements being implemented then; others worked on construction of public improvement projects such as trolley lines and water supply systems. Many Italians who were highly skilled carpenters, masons, and stoneworkers were tapped for constructing bridges, piers, civic buildings, churches, and commercial blocks, while others found employment in farming, market gardening, landscaping, baking, and shoemaking.

Whatever their country of origin, immigrants who settled in Connecticut loyally maintained Old World customs, languages, and religious practices. While census records indicate that foreign-born populations were dispersed throughout the Eastern Coastal Slope, the largest concentrations occurred in New Haven and New London Counties. Ethnic communities tended to be situated in industrialized centers such as Stonington, New London, Groton, and Branford and were originally located in proximity to places of employment. The Portuguese came to Stonington in the 1850s, settling in the borough not far from their fishing fleets. The Irish tended to live near the neighborhood Catholic church or in the vicinity of a local industry such as the Branford Lock Works or the Malleable Iron Fittings Company. "Swedesville," in the Stony Creek-Thimble Islands Historic District, was named for Scandinavian quarry workers and their families, while New London had the most populous Italian and Polish neighborhoods in the region. Italians from Fano in the Marchi Province of Italy lived near railroad tracks in the Fort Trumbull area and worked as skilled and unskilled construction laborers. Sicilians, on the other hand, moved to the Shaw's Cove section of New London. Talents of both groups are still evident in masonry work which characterized their homes, including a distinctive local construction feature consisting of raised mortar joints. The Polish community of New London settled in the Winthrop Cove area, arriving in the late nineteenth century to work at the Brainard and Armstrong Silk Mill, the C.D. Boss Biscuit Company, and the State Pier.

Ethnic and benevolent organizations as well as social clubs were formed under the sponsorship of churches and synagogues. While the Irish and the Italians of New London usually attended the same Catholic churches, Polish immigrants erected their own Saints Peter and Paul Polish National Catholic Church at 730 State Pier Road; its design recalls the simple wood-frame village churches of their homeland. A relatively small Jewish population in New London formed the Ohev Sholem Sick Benefit Society in 1916, and by 1921 its membership had grown sufficiently to support a Jewish house of worship, Ohev Sholem Synagogue. <sup>11</sup> Although Jewish education in New London began as early as 1898, the first local Hebrew School to conduct daily classes after public school hours was established in 1912 at the corner of Bank and Pearl Streets; schools associated with specific synagogues opened during the following decade. Irish, Scandinavians, and Italians also settled in rural areas such as East Lyme, Guilford, Madison, and

Waterford, where they worked in railroad construction initially or at nearby quarries, foundries, and other small industries. Some immigrants became market gardeners or fruit growers, purchasing marginal farms at reasonable prices from native-born families who chose to move West or relocate to urban centers. Between 1891 and 1929 Jewish farmers in East Lyme received mortgage assistance from the Baron de Hirsch Fund and the Jewish Agricultural and Industrial Aid Society for the acquisition of their farmsteads.

Improved railroad services, extensive manufacturing interests, and sizable population growth spurred the urbanization of communities throughout the Eastern Coastal Slope. Census data gathered in 1850 and 1930 illustrates the dramatic shifts in population which occurred in the region. New London's numbers jumped from approximately 9,000 to 30,000; Groton grew from 3,700 to nearly 11,000; Branford expanded from 1,400 to 7,000; and populations in Stonington, Essex, and East Lyme doubled. In towns where the local economy remained agricultural, population figures either dropped or were relatively stable. The most notable consequences of industrialization were development of new residential areas, evolution of central business districts, construction of stately public buildings, and improvement of civic and social services.

In order to meet growing housing needs of various socioeconomic groups, new subdivisions, neighborhoods, and streetcar suburbs were planned. Simple single-family houses, duplexes, and triple-decker tenements were constructed for workers' housing near industrial areas. The advent of horse-drawn and electric trolleys in the late nineteenth century encouraged laying out of new streets and building lots, thereby enabling additional homes to be built for the working and middle classes. Choicest sites in neighborhoods were usually reserved for industrialists, businessowners, and community leaders, and side streets were occupied by the working classes. The Montauk Avenue Historic District, located south of New London's downtown, is representative of many late nineteenth-century streetcar suburbs. The area was laid out by a prominent group of investors, one of whom was a major stockholder in the New London Horse Car Railroad, and electrification of the Montauk Avenue trolley line in 1892 signaled the neighborhood's development. Prior to its subdivision and the sale of lots, developers installed water lines, graded roads, and planted trees, as well as imposing deed restrictions which stipulated minimum lot size and setback. In order to preserve the suburb's rural residential character, no commercial uses were allowed.

Since merchants, professionals, and bankers were attracted to the beauty and convenience of Ocean and Montauk Avenues, many substantial single-family houses, some architect-designed, were built on these streets in contemporary styles, including Queen Anne, Colonial Revival, and Neo-Classical Revival. Less elaborate single-family houses located on the neighborhood's side streets were occupied by a diverse range of middle management employees involved in marine-related work, manufacturing, and transportation. By the 1920s a few duplexes and triple-decker tenements had also been constructed, some built on speculation and others owner-occupied. Two local manufacturers, the T.J. Palmer and Brown Gin Companies, built rental cottages for workers on Alger Place and Riverside Avenue. An occupational study of 120 homeowners in the neighborhood indicated a broad cross-section of society: 8 percent were upper middle class (factory owners, architects, lawyers, etc.), 60 percent were middle class (supervisory positions in

industry or business), and 32 percent were lower middle class or blue-collar workers (skilled and unskilled factory workers, building tradesmen, etc.).<sup>12</sup>

Another manifestation of urbanization in the early twentieth century was growth of the central business district. The present-day architectural character of downtown New London and the region's town centers was fashioned by proliferation of multi-story commercial, financial, and civic buildings erected at the turn of the century. Municipal Main Streets evolved, consisting of small shops, general stores, combined residential and commercial blocks, office buildings, banks, hotels, social clubs, fraternal halls, and vaudeville and movie houses, as well as various public institutions. Because nearly all central business districts were made accessible by streetcar lines, they flourished. Construction of new libraries, schools, town halls, and parks was frequently funded by philanthropists as memorials to family members. For example, Mary Eliza Scranton planned and built Madison's Erastus Clark Scranton Memorial Library (Photograph 16) in memory of her father, and Harriet Peck Williams bequeathed a trust fund which established New London's Williams Memorial Institute (a high school for girls) as a memorial to her son. Other examples include Clinton's town hall, the William Stanton Andrews Memorial, and East Lyme's Liberty Green park, given to the town in 1918 by summer resident and New York City stockbroker Stephen N. Bond in memory of his sister.

Urbanization of New London and its neighboring coastal towns necessitated new municipal services, including expansion of police and volunteer fire departments and construction of new public water lines and sewers. By 1873 the New London Water Company had begun supplying water from Lake Konomoc to homes and fire pumpers throughout the city, and by 1898 the system's defective clay pipes had been replaced by cast-iron ones. To meet the growing demand for water, the city acquired four additional reservoirs between 1894 and 1920. Sewers had been authorized by the New London City Council as early as 1885; however, it took over 50 years for installation throughout the city and until 1929 to place the first sewage disposal plant in service.

Use of gas and electricity became widespread in the late nineteenth century. The New London Gas Light Company provided gas for street lights as early as 1853, and by 1885 the Oneco Company had begun to furnish the city with electricity. Through a series of mergers both businesses were eventually absorbed by the Connecticut Power Company in 1913. By 1920 the latter had gained control of all gas, electric, and power business in New London and was providing utilities to ten nearby towns as well.

Telegraph and telephone lines also became common in the late nineteenth century. In 1847 telegraph service was established between New London and Norwich, and by 1859 the Union Telegraph Company had run another line from New London to New Haven. Telephones for business use were installed in the early 1880s. The first telephone call in Branford was made in 1879 by Thorvald Hammer, co-owner of the Malleable Iron Fittings Company, to Thomas Kennedy at the Branford Lock Works. In 1895 Branford's first switchboard was in place, servicing 77 telephones throughout town; that number grew to 513 in 1910 and exceeded 73,000 by 1948.

Other important sources of communication were local newspapers, dozens of which appeared throughout the region in the 1870s, 1880s, and 1890s. While most publications of this type were short-lived, having been begun for specific political or advertising purposes, a few are still being published. They include *New Era* (Deep River), *Shoreline Times*, *New London Day*, and *Recorder* (Clinton), founded in 1874, 1877, 1881, and 1895, respectively.

While district schools continued to provide education for children in rural communities, urban population growth and progressive legislation necessitated construction of new elementary, trade, and high school buildings in the late nineteenth and early twentieth centuries. Religious schools also appeared during this period, having been created to assist poor and foreign-born youth learn English and good citizenship; as Roman Catholic populations grew, parochial grade and high schools were opened as well. As early as 1899 higher educational needs of young people were addressed by the New London University Association Center, at which trained specialists from different colleges presented information. Connecticut College was chartered in 1911 in direct response to a vote by trustees of Wesleyan University in Middletown to admit men only, and it remained a women's liberal arts institution until men were allowed to enroll in 1969. The General Assembly supported special educational needs, as when state aid was granted to the Whipple Home School for the Deaf in Ledyard, which pioneered the oral method of teaching. In 1874 the school relocated to Stonington, where in 1895 it became known as the Mystic Oral School for the Deaf; in 1921 the State of Connecticut bought the property and continued its original use.

Among the consequences of urbanization were overcrowding, substandard housing, disease, and crime. Social reforms which followed the Civil War engendered various public and private welfare initiatives to combat these problems: orphanages, almshouses, and homes for the disabled and elderly were established. Several small hospitals were set up in private homes, and treatment of sick and disabled seamen by the United States Marine Hospital Service also occurred in temporary facilities. Between 1870 and 1882, outbreaks of smallpox, diphtheria, and yellow fever in New London necessitated isolation of patients in a municipal pest house. It was not until 1893 that Memorial Hospital opened its doors and not until 1912 that the Joseph Lawrence Free Public Hospital was completed. The institutions merged in 1918, becoming the Lawrence and Memorial Hospitals, and later appended the Mitchell Isolation Hospital (established 1914) and the Manwaring Hospital for Children (established 1929) to their complex.

In 1918 the General Assembly founded the State Farm for Women and the State Prison for Women in the Niantic section of East Lyme as a detention center for women who had violated the law. It housed several functions, including a maternity hospital, a nursery, a sanitarium for invalids, and separate treatment clinics for infectious diseases and drug addiction. Patients underwent mental and physical rehabilitation and presumably acquired useful skills which would enable them to lead independent lives. In 1918 Connecticut's Tuberculosis Commission purchased the former White Beach Hotel in Niantic for care of children afflicted with non-pulmonary tuberculosis. Its shoreline location was ideal for heliotherapy, a treatment of continuous sunbaths then believed to be the only cure for glandular and bone tuberculosis. By 1930 the facility had become overcrowded and that year the State of Connecticut purchased a beautiful 28-acre waterfront site in Waterford where in 1934 it built a much larger sanitarium known as Seaside.

## Coastal and Rural Development

### Recreation

As the concept of leisure time took hold among all classes of society in the late nineteenth and early twentieth centuries, large numbers of summer vacationers from within Connecticut and elsewhere discovered the natural beauty and recreational opportunities of Long Island Sound and the Connecticut River. Entrepreneurs quickly recognized the region's potential for tourism and resort development after new train, steamship, and trolley lines were in place and the automobile had appeared. Hotels, guesthouses, and summer cottage colonies proliferated along the shoreline, as did bathing, golf, tennis, croquet, and yacht clubs, casinos, amusement parks, restaurants, campgrounds, and public beaches. Seasonal employment was plentiful and businesses such as livery stables and general stores prospered.

Summer hotels appeared in the Eastern Coastal Slope prior to 1850; in its heyday Guilford's Sagem Head House (1832) was the largest hostelry between New York City and Newport, Rhode Island. Another early establishment was Branford's Double Beach House (c.1840), which offered patrons refreshments, a bowling alley, and baseball fields. Every town in the region attracted its share of tourists, and many hotels were built to accommodate a large and varied clientele whose vacations lasted from a day to an entire season. The Shore Line Railroad and the Shore Line Electric Railway spawned hotels in the vicinity of their depots, and steamboat lines transported visitors to numerous waterfront destinations as well. Public demand for summer accommodations increased through the late nineteenth and early twentieth centuries. By 1928 approximately 20 hotels had opened on the Branford coast alone, ranging in size from the 26-room Thimble Island House on Pot Island in the Stony Creek-Thimble Islands Historic District to the 142-room Montowese House, then known as "the Queen of the Sound," in Indian Neck. The Owenego (established 1847, expanded 1867) is the only summer hotel continuing to operate in Branford (Photograph 9).

Shoreline hotels and boarding houses aggressively competed for tourist dollars by upgrading facilities. The Madison Beach Hotel's 1913 brochure informed prospective guests that the hotel had just been expanded and that new rooms were "fitted with the most modern sanitary plumbing and ... electric lighted throughout." Several of the shoreline's grand hotels provided impetus for summer resort communities; such was the case with the Pequot House (1852) at the Pequot Colony in New London; Fenwick Hall (1871) in the borough of Fenwick, Old Saybrook; and the Griswold Inn (1906) at Eastern Point in Groton. These hotels served an upscale clientele, as did the resorts which grew up around them. The industrial revolution produced an affluent class which had the means to build mansions such as Branford House (1904) in Groton and Eolia (1908) in Waterford as well as numerous substantial summer "cottages."

The Pequot House, for example, had originally drawn visitors to the pleasant seaside environment of the New London coast; a number of its satisfied customers were sufficiently attracted to the area to return and build their own summer homes. The colony developed rapidly between the 1860s and 1890s, as evidenced by numerous Italianate, Second Empire, late Gothic

Revival, Stick, and Shingle-style cottages, and continued to grow in the early 1900s, producing distinctive Colonial Revival and Tudor Revival domestic architecture. A non-sectarian chapel for summer residents was built in 1872 in a late Gothic Revival design; the transepts are attributed to New York City architect James Renwick (1818-1895) and two stained-glass windows to Louis Comfort Tiffany (1848-1933). The social atmosphere of the colony was reinforced by formation of the private Pequot Casino Association in 1890 and construction of a small clubhouse for members of the New York Yacht Club. Although affordable vacations for working-class families could be had nearby at the Montauk Hotel, which opened in 1894 near the colony's Lower Boulevard stables after the Montauk Avenue trolley line had been put through, not every prestigious watering place in the region offered the public such an opportunity. The summer retreat of Fenwick was an exclusive community of socially prominent, politically powerful, and wealthy families from the Hartford and Middletown areas, and the Eastern Point enclave catered to successful industrialists and financiers from New York City. In addition to offering their privileged residents recreational diversions such as bathing, tennis, golf, and boating, these resort colonies produced some of Connecticut's best architect-designed Shingle-style buildings.

By the 1920s countless seaside subdivisions had been developed to meet the growing demand for summer cottages among Connecticut's middle and lower classes. Promotional pamphlets extolled the shoreline's physical attractions and leisure-time pursuits, persuasively urging city dwellers to buy their plots of land and build simple frame cottages near the water. For instance, a brochure for 170 seaside homes at Clinton Beach in Clinton described the variety of scenic building sites available, enticing prospective cottagers with ready opportunities for swimming, rowing, sailing, fishing, and off-season hunting. Buyers were also provided with practical advice on financing, designing, constructing, and furnishing their homes. While owning a cottage at Clinton Beach was possible for anyone capable of making the initial investment, the marketing literature for comparably modest houselots at Old Saybrook's Cornfield Point indicated that "plots will be sold to only genuine Americans." Social prejudice probably led to the creation of Irish and Italian summer neighborhoods in the 1920s and 1930s; densely built developments of small cottages in Old Lyme and East Lyme were planned for vacationing ethnic populations from Hartford County and elsewhere.

Options for recreation at the shore were abundant. Yacht clubs and marinas evolved for racing and cruising enthusiasts, and opportunities for shellfishing and sportfishing abounded. Hunting and fishing lodges such as Goat Hill Camp (1910) on Lake Quonnipaug in North Guilford were built by the well-to-do. Lawn tennis and croquet tournaments were held at prestigious resorts. Bicycling became very popular, prompting bicycle parades, repair shops, and clubs dedicated to enjoyment of the sport. The clubhouse of the Ivoryton Wheel Club in Essex also offered its members use of a private bowling alley. The semi-professional Middlesex County Baseball League flourished for over 80 years, drawing hundreds of spectators to watch as many as five games over a weekend.

Sightseeing excursion boats explored Long Island Sound and the region's many rivers; boat and canoe rentals were readily available as well. Amusement parks such as Golden Spur in East Lyme provided the public with beaches, ice cream parlors, restaurants, dance halls, rollerskating rinks, and numerous visiting attractions. Madison's Airdrome (a roofless outdoor moving-picture

house), Old Lyme's Art Deco Strand Theater, and other shoreline movie theaters became popular, and summer stock theater companies such as the New York Players at the Ivoryton Playhouse in Essex enabled distinguished actors to perform live for local audiences.

Pioneering land conservation groups such as the Connecticut Forest Association (established in 1895) advocated and assisted in acquisition of forest lands and public recreational areas, including Rocky Neck State Park in East Lyme and Bluff Point State Park in Groton. The group also endorsed a state forester position in 1901, formation of a state park system in 1913, and appointment of a state park and forest commission by the General Assembly in 1921. Hammonasset State Park in Madison and Harkness Memorial State Park in Waterford demonstrate the state's long-standing commitment to holding land for recreational use along Long Island Sound. Between 1925 and 1932 the state also acquired Cockaponset State Forest, the largest public preserve of its type in Connecticut. Comprising parts of the towns of Haddam, Chester, Deep River, Killingworth, Madison, and Guilford, this 8,000-acre forest provided the public with opportunities for hiking, camping, swimming, boating, fishing, and hunting.

The region's coastal landscape also inspired a group of well-known American artists at the turn of the century; many of them boarded at the home of Florence Griswold in Old Lyme (now the Florence Griswold Museum). Henry Ward Ranger arrived in Old Lyme in 1899 following a trip to France, where he had studied painting in the French Barbizon School. Ranger and his contemporaries briefly attempted to establish an American Barbizon movement; however, upon Childe Hassam's arrival in Old Lyme in 1903, interest shifted to Impressionism. Several other painters made Old Lyme their home, and in 1914 they formed the Lyme Art Association and built an exhibition hall on land adjacent to the Florence Griswold House.

On a less worldly plane were two religious campgrounds established in East Lyme. In 1881 James E. Hayden of Willimantic, a member of the Connecticut Spiritualist Campmeeting Association, purchased an abandoned East Lyme farmstead and proceeded to subdivide the land into 150 campsites. Originally a tent community, the Pine Grove Colony eventually comprised an attractive grouping of small frame Stick-style cottages, a dance pavilion, and an amphitheater for religious services. In 1884 the Baptist Seaside Resort was laid out nearby at the western end of Crescent Beach; social centers of its community life were the tabernacle and the bathing pier.

### **Fishing and Agriculture**

The coastal industries of oystering, fishing, ice harvesting, and salt-marsh haying also contributed to the region's economy during this period. Miles of natural oyster beds in Long Island Sound led to development of numerous oyster companies along the shore. There they built wharves, erected processing plants, and employed specialized workforces, including boat captains, dredgers, cullers, shuckers, and packers. From 1890 to 1915 New Haven became a major center for oyster exporting in Connecticut, and the Stony Creek Oyster Company in Branford, which flourished between 1868 and 1924, was representative of small-scale oyster growing enterprises once common in the Eastern Coastal Slope. As growers worked farther and farther offshore, the need to eliminate poaching and protect underwater cultivation rights became



evident. In 1881 the General Assembly established the Connecticut Shell-Fish Commission to regulate harvesting of oysters and clams; at the turn of the century the state also opened a lobster hatchery in the Noank section of Groton.

Although in the late nineteenth century finfishing never achieved the same economic success that shellfishing had, it became profitable for a time. Mackerel, halibut, and cod fishing were pursued out of New London; by 1870 the local fleet consisted of 75 vessels, several of which were outfitted for halibut fishing off St. George's Bank, Newfoundland. By 1893 fish depletion, industrial pollution, and sewage had so reduced the variety of fish in Long Island Sound that the city's fleet had shrunk to 39 vessels; smaller fishing smacks were less expensive to operate and became increasingly popular at that time. Throughout the early twentieth century, finfishing continued to be an important industry in smaller coastal towns such as Clinton, Essex, Groton, Madison, Old Saybrook, Stonington, and Westbrook.

Mill ponds situated near the heads of tidal rivers provided many opportunities for winter harvesting of ice. During the ice industry's heyday between 1880 and 1930, area farmers were able to supplement their incomes by cutting ice into blocks, storing them in large wood-frame ice houses, and shipping them to New York and Hartford markets during the hot summer months. The shoreline's numerous inlets and salt marshes also yielded a superior livestock feed in late summer known as "black grass" (*Juncus Gerardi*), a variety of salt hay. Construction of tidal gates not only protected salt marsh fields from flooding, but also enabled farmers to cut and harvest salt hay for both their own use and as a cash crop.

Western competition in beef cattle, wheat, and corn production continued to undermine the mixed farming economy of the Eastern Coastal Slope during this period. Some farmsteads were abandoned as young people discovered that employment at good wages was readily available in other forms of commerce and industry. Fate of their family farms varied; some were purchased and revived by immigrants, others were sold for residential development, and still others were reclaimed by forest growth. However, for those farms that prevailed, the area's gradual industrial and population growth was a boon; dairies, fruit orchards, and vegetable-growing operations prospered. Guilford's two principal tomato canneries, the Knowles-Lombard and Sachem's Head Companies, distributed their goods widely along the eastern seaboard.

Organizations to assist farmers were established on both the state and local levels. In 1866 the General Assembly created a Board of Agriculture and in 1889 the Connecticut Dairymen's Association was formed. The Connecticut Grange was organized in 1875, followed by numerous local chapters, including those in Saybrook (1887), Killingworth (1887), Clinton (1888), and Guilford (1888). Popular interest in the region's agricultural and mechanical progress continued to be represented by local associations and societies devoted to promoting scientific knowledge among their members. The major event for such groups was the country fair; farmers could display agricultural produce, in addition to new breeds of cattle and poultry, at annual exhibitions such as the Guilford Fair (established 1859) and the Chester Fair (established 1877). Housewives could also enter their best efforts in preserving and baking foods, as well as in crafting domestic items.

As scientific knowledge of horticulture and animal husbandry expanded and mechanical inventions for agricultural production became commonplace, new problems emerged in growing, marketing, and distributing food. In 1925 the General Assembly created the Department of Agriculture to promote and plan for development of agriculture in Connecticut; among its many tasks were to gather facts and publish information on costs, prices, supply, and demand. In addition, the department enforced standards for seeds and established grades for many products. It also provided for inspections of fruit, vegetables, and poultry at shipping points. In its attempts to encourage modern farming, the department distributed grants to agricultural societies for exhibitions and demonstrations, and established regulations for agricultural fairs.

### **Victorian and Early Twentieth-Century Revival Architecture**

Connecticut's economic and social growth in the late nineteenth and early twentieth centuries impelled the region's cities and towns to expand their urban centers and develop new residential neighborhoods and summer colonies. Many distinctive buildings were erected for public and private use in a variety of high-style and vernacular modes. Technological advances in the mass-production of structural and decorative components made possible the easy assembly of increasingly complex building forms and styles. Characteristic of this period were an openness in room arrangement and a rich variety of architectural ornamentation. While builder-architects continued to produce much of the region's building stock, the work of professionally trained architects appeared in most communities as well. Young practitioners received formal architectural instruction as early as 1865 at the Massachusetts Institute of Technology; others attended the Ecole des Beaux Arts in Paris or studied at Columbia University in New York City. The period between 1850 and 1930 not only witnessed development of an architectural profession, but also a lively succession of building styles, including French Second Empire, Victorian Gothic, Stick, Queen Anne, Richardsonian Romanesque, and Shingle, followed in the early twentieth century by the eclectic Colonial, Tudor, Neo-Classical, Renaissance, Mission/Mediterranean revivals, and the Bungalow style. Sophisticated illustrations of each of these nationally prevailing architectural styles as well as more popularized adaptations are found in the Eastern Coastal Slope.

Among the many substantial residences built in the region during and after the Civil War, several were informed by the design vocabulary of seventeenth-century architect Francois Mansart (1598-1666), whose work influenced Parisian architecture during the reign of Napoleon III (1852-1870). French Second Empire-style buildings were distinguished by the presence of spacious double-pitched mansard roofs with a steep lower slope, although they often displayed bracketed cornices and arched doors, windows, and dormers similar to those found in Italianate architecture. Two noteworthy examples of the style in the coastal area are the Trumbull House (1860, Stonington Borough Historic District) and the Elisha Chapman Bishop House (1874, Guilford Town Center Historic District), the latter a design of New Haven architect Henry Austin (1804-1891). Mansard roofs appeared on nineteenth-century commercial blocks in downtown New London as well; their graceful forms provided additional marketable space.

During the mid-nineteenth century, a number of the region's churches, schools, and other public buildings were designed in the Victorian Gothic style. Typically constructed of brick or stone cut in various shapes, sizes, and colors, buildings in this mode were recognizable by their Gothic-arched windows, doors, and detailing set in richly textured masonry surfaces as well as by their decoratively patterned wood trim and polychromatic wall and roof treatments. An outstanding example is New London's Bulkeley School (1873), a privately financed institution for boys designed by Leopold Eidlitz (1823-1908), a distinguished Czech-born architect, theorist, and author who practiced in New York City. Among Eidlitz's other New London commissions are the Victorian Gothic First Church of Christ (1851, Downtown New London Historic District), the Italian Villa-style Jonathan Newton Harris House (1860), and the commercial Romanesque Revival Harris Building (1884, Downtown New London Historic District).

The Stick style of architecture was a popular choice for wood-frame summer cottages large or small built along the shoreline during the 1870s and 1880s. Its hallmark was the application of half-timbered elements which served to articulate the components of each design. While such "stick work" symbolized a building's structure, its actual function was ornamental. The Stick style took from the "Carpenter Gothic" elements of decorative detailing and massing such as use of arched forms, exposed gable trusses, and steeply pitched roofs; it also borrowed picturesque asymmetry from late Victorian styles such as the Queen Anne. Villa Vista (1880), the most famous example of the style in the Eastern Coastal Slope, was designed by Henry Austin. Built for William J. Clark, the house is situated on Prospect Hill overlooking the Thimble Islands in Branford's Stony Creek section; its tall gable-roofed tower is a familiar landmark on Long Island Sound. Also located in Stony Creek is the Isaac C. Lewis Cottage (1883, Photograph 11), an elaborate Stick-style summer residence designed by prominent Meriden architect Henry Martin Jones (1828-1908) for a former mayor of that city. More common in coastal resorts were simple examples of the style which featured framed open porches with overhanging gable roofs.

Starting in the 1880s, the Queen Anne style became the fashionable choice for substantial homes built in the region's residential neighborhoods. Originally inspired by the sprawling half-timbered English manor houses designed by Richard Norman Shaw (1831-1912), the style's adaptation to American domestic architecture consisted of asymmetrical massing, use of multiple building materials, and application of medieval or classical detailing. The hip or intersecting gable roof was customarily selected as a unifying device for various surface textures and design elements, including decorative porches, projecting gables, towers, oriels, and bay windows, in addition to many types of dormers. Complex multi-color schemes further enhanced the style's esthetic impact. The Olive B. Potter House in Stonington (1884, Stonington Borough Historic District) and the Hawkins-Brown House in New London (1903, Post Hill Historic District) are distinctive examples of the style. Less complex Queen Anne houses were built in nearly every town center along the shore.

The Richardsonian Romanesque style was commonly used for public and commercial buildings in the late nineteenth century; they were typically constructed of rough-faced random ashlar sometimes characterized by colored-stone patterning, and usually exhibited flat-headed or round-arched windows and doors, stair towers, and gabled dormers. Such asymmetrical elements were horizontally massed and visually unified by contrasting stone belt courses. The name of the style

recognized innovative designs of the famous Boston architect Henry Hobson Richardson (1838-1886), whose New London Railroad Station (1887, Photograph 13) was among his last commissions. Although this austere red-brick building simplified the style's language considerably, the work of Richardson's successor firm, Shepley, Rutan and Coolidge, continued to employ its representative features in buildings such as the Williams Memorial Institute (1891) in New London and the New London Public Library (1891). H.H. Richardson also influenced the work of his contemporaries; both the Bill Memorial Library in Groton Heights (1890, addition 1907, Groton Bank Historic District), designed by Stephen C. Earle (1839-1913) of Worcester, Massachusetts, and the Mystic and Noank Library in Groton (1894, Mystic River Historic District), designed by Bigelow and Higginson of New York City, are excellent examples of the Richardsonian Romanesque style.

Originating in New England, the Shingle style first appeared in domestic and public architecture in the 1880s. The style combined Queen Anne features such as verandas, bay windows, towers, and applied classical or medieval details with the bold, rounded, and horizontal forms characteristic of the Richardsonian Romanesque; each design was unified by the exterior use of natural shingles. Foundations and porch columns built of contrasting rough-faced random ashlar or fieldstone frequently complemented the style's smooth surface texture; the use of gambrel as well as gable roofs was common, sparked in part by a new interest in colonial architecture. Among the region's many outstanding examples of the style are the former First Baptist Church (1890, Stonington Borough Historic District) designed by Francis H. Kimball (1845-1919) of New York City, and the Frederick Newcomb House in New London (1897, Post Hill Historic District), designed by Ernest G. W. Dietrich (1857-1924), also of New York City. The William Patton Cottage (c.1887, Photograph 12) in Old Saybrook's Fenwick Historic District is illustrative of many Shingle-style summer cottages which were constructed near the shore.

Connecticut's richest concentrations of Shingle-style architecture are found in the fashionable late nineteenth-century and early twentieth-century summer colonies which developed in the Eastern Coastal Slope. These include Pine Orchard and the Thimble Islands in Branford, Sachem's Head in Guilford, Buffalo Bay in Madison, Fenwick in Old Saybrook, Old Black Point in East Lyme, Pequot Colony in New London, and Eastern Point in Groton. At its most successful, the Shingle style created harmony of building and environment. As Elizabeth Mills Brown states, "Nowhere is the romanticism [of the Shingle style] more lyrically expressed than in these seaside resorts where weathered turrets and dormers and rooflines melt into the rock seascape and become a piece of the coastline." <sup>13</sup> The Henry C. White House (1903) at White Point in Waterford was actually built at the water's edge on Long Island Sound; this predominately stone Shingle-style residence was designed by the noted Philadelphia architect Wilson Eyre (1858-1944).

The nation's Centennial of 1876 in Philadelphia awakened a strong interest in early American antiquities. Prominent architects and partners Charles F. McKim, William R. Mead, Stanford White, and William B. Bigelow toured the New England coast in 1877 in search of colonial buildings, and their sketches inspired the first Colonial Revival residences to be built in the late 1880s and early 1890s. Although these designs attempted to follow historical precedent, they were initially more freely interpreted in form, size, and detailing than their prototypes. Many

Colonial Revival buildings constructed after 1915, the year in which photographs and measured drawings of Georgian and Federal architecture began to be widely disseminated in publications such as the *White Pine Series of Architectural Monographs*, tended to reflect more accurately their models. The Colonial Revival appealed to the country's sense of patriotism, and many variations of the style appeared in domestic and public architecture through the mid-twentieth century.

The Charles H. Luddington House in Old Lyme (1893, Old Lyme Historic District) is an excellent example of a large-scale hip-roofed Colonial Revival house. More modest are the workers' dwellings (1919-1920) built by the United States Housing Corporation in New London (United States Housing Corporation Historic District) and designed by the New York City firm of Francis V. Hoppin and Terence A. Koen, each of whom trained in the office of McKim, Mead and White. Through variations in massing, roofline, and setback, these simple Colonial Revival cottages and their landscaped site succeed in creating a harmonious residential environment. Clinton's red-brick town hall (1938, Clinton Village Historic District), designed by H. Hilliard Smith and Roy D. Bassette of Hartford, illustrates how specific architectural elements (cupula, portico with arched openings, and flanking wings) were taken from venerable eighteenth-century landmarks such as the Governor's Palace (1706-1720) in Williamsburg, Virginia, and the Old State House (1796) in Hartford, and combined to form original Colonial Revival designs. The style was often selected for schools and collegiate buildings such as Hamilton Hall (1932, Photograph 17), built by the United States Coast Guard Academy in New London. Captain Quincy Bogardus Newman, then Chief Engineer with the Coast Guard, supervised the academy's design and construction.

The Tudor Revival style found its architectural vocabulary in late medieval English sources ranging from grand country houses to thatch-roofed cottages with rolled eaves. Usually constructed in a combination of stucco, brick, and stone, buildings of this type exhibited features such as multi-pane casements, bay windows, oriels, false half-timbering, steeply pitched roofs with front-facing gables, decorative vergeboards, and slate or terra-cotta tile roofing. Although the Tudor Revival style made less of a showing in the Eastern Coastal Slope than the contemporaneous Colonial Revival, examples found in the region are equally outstanding. The John J. Phelps House (1903) on Rogers Island in Branford (Stony Creek-Thimble Islands Historic District) and the George J. Beach House (1905, now the Castle) at Cornfield Point in Old Saybrook are large rustic Tudor Revival mansions attributed to the prolific New York City architect Alfredo S.G. Taylor (1872-1947), whose whimsical resort architecture in Norfolk, Connecticut, is well known. The Morton Freeman Plant House (1904), known as Branford House, at Avery Point in Groton is more formal in design than Taylor's work; its English-born architect, Robert Williams Gibson (1854-1927), practiced in New York City from 1888 until his death.

The Tudor Revival style occasionally appeared in institutional architecture as well; the centerpiece of the former Seaside sanitarium in Waterford is the Dr. Stephen J. Maher Infirmary (1934), a large brick and stone Tudor Revival building designed by Cass Gilbert (1858-1934), also of New York City. Erected by the State of Connecticut as an institution for treatment of children with non-pulmonary tuberculosis, the building has rooms which originally featured open

terraces for the then-recommended practice of heliotherapy. A vernacular expression of the style is evident in the red-brick Toole Building (1925) in Branford, a long two-story commercial block located in the Branford Center Historic District.

Renewed interest in the Neo-Classical style of architecture followed the World's Columbian Exposition of 1893 in Chicago. Its planners required participating architects to conform to a classical theme, and the exposition's widely photographed designs influenced architecture built in America between 1895 and 1930. The formality of Neo-Classicism was particularly well-suited to public buildings and large private estates, several examples of which are located in the Eastern Coastal Slope, including Branford's James Blackstone Memorial Library (1896, Branford Center Historic District). Designed by Chicago architect Solomon S. Beman (1853-1914), the building is of white marble and employs the Ionic order; contemporary sources claimed that the architectural detailing was taken from the Erechtheum temple on the Acropolis in Athens, Greece. A later example of the style is the granite-faced Lyman Allyn Art Museum (1932) in New London, designed by Charles Adams Platt (1861-1933) of New York City. Platt began his career as an American Impressionist landscape painter; he practiced architecture only after 1900, and his connections with the art colony in Old Lyme probably resulted in his commission for the Lyme Art Association Building (1921, Old Lyme Historic District), a shingled Neo-Classical Revival structure used for exhibitions.

A good example of Neo-Classical Revival domestic architecture is the Katherine Haley House in Stonington (1904, now the Inn at Mystic, Mystic Bridge Historic District). Overlooking Mystic Harbor, this clapboarded residence features a facade dominated by a two-story pedimented portico supported by Corinthian columns. On a larger scale is Eolia, former summer home of Edward S. and Mary S. Harkness in Waterford (now Harkness Memorial State Park). Constructed in 1908 of concrete block in imitation of stone, the mansion was designed by the Lord and Hewlett firm of New York City and recalls buildings of the Italian Renaissance in scale, symmetry, and style of fenestration and porch openings. Although more esthetically allied with Newport, Rhode Island's estate architecture than with local resort developments, Eolia illustrates the great attraction which Connecticut's coastline held for some of America's wealthiest families.

California was the birthplace of the Mission style in the 1890s, but by 1900 influential Eastern architects had begun to promote the style among their affluent clients. The Mission-style design of Boston architect William Ralph Emerson (1833-1917) for Meadow Court in New London (1901-1903, now the Lighthouse Inn) is a case in point. Located in the Pequot Colony and originally fronting Long Island Sound, the main house is symmetrical in form and constructed of painted stucco walls. Although the building is embellished by Mission-style parapets and dormers, and widely overhanging eaves, the typical terra-cotta tile roof covering is absent. On a smaller scale is the stuccoed Mission-style Norman Ruddy House (c.1905) in New London's Montauk Avenue Historic District. Also symmetrical, the residence features a compact facade dominated by an arcaded entry porch capped by a gracefully shaped parapet with quatrefoil inset and central dormer.

A subcategory of the Mission style which attained some popularity along the shore is the Mediterranean Revival, characterized by Spanish Colonial Revival elements. The Charles B. Prettyman House (1927) in Groton's Eastern Point Historic District is an excellent example. Rectangular in form with textured stucco walls and ornate rope-like porch columns, the house sports a brilliant blue terra-cotta-tiled hip roof. Two decoratively paneled blind-arched windows are prominently positioned on the second floor. The recessed entrance was formerly accented by a canvas awning supported by wrought-iron lances. Equally distinctive is Guilford's Villa Louise (1913) built in the Sachem's Head summer colony by Howard C. Noble, a prominent New Britain businessman. Successfully designed to accommodate a narrow 180-foot-long waterside lot, this stuccoed, hip-roofed, and terra cotta-tiled residential complex is interconnected by a linear wooden pergola.

The majority of the Eastern Coastal Slope's summering population lived in small cottages, many of which were Bungalow in style. Although the term originated with the nineteenth-century Anglo-Indian "bangla" house which was one story in height and surrounded by porches, its design origins also stemmed from California and the Arts and Crafts movement in domestic architecture. Bungalows often displayed a variety of natural elements such as cobblestone, wood shingles, and exposed rafters intended to emphasize craftsmanship. Roofs were usually in the form of low-pitched gables and extended over open front porches supported by thick, sometimes battered, columns. The Bungalow was a favored choice in shoreline subdivisions of the late 1910s and 1920s such as Groton Long Point; the boardwalk district there in particular contains a variety of well-preserved examples. On a somewhat larger scale was the Morton Freeman Plant Hunting Lodge (1908) in East Lyme, a Bungalow designed by the New London architect Dudley St. Clair Donnelly (1870-1937). The lodge's exterior, with its fieldstone foundations and porch posts, demonstrates the Craftsman influence on the Bungalow style; this impression is reinforced inside by the naturally finished boxed beams which are exposed on the living and dining-room ceilings. While homes such as these were constructed by local builders, the Bungalow style was also popularized in catalogs published by Sears Roebuck and Company, Montgomery Ward, and Alladin Home Company. From these, pre-cut houses could be ordered from the factory, shipped by rail, and easily assembled on site.

## V. MODERN PERIOD 1930-1995

Reduction in industrial production and accompanying layoffs characterized the Great Depression in Connecticut. In 1931 the General Assembly extended its help to communities by initiating a comprehensive Town Aid Program to fund road construction and maintenance projects.

Connecticut's defense-related ship, submarine, and boat-building industry grew rapidly after America's entry into World War II and continued to expand through the postwar period; other regional manufacturing interests, government institutions, and recreational concerns attracted large segments of the workforce as well. It was during the postwar era that the Eastern Coastal Slope's suburban identity evolved during the modern period.

After World War II the population boom and the popularity of automobile transportation led to the flowering of suburbia; rural and coastal properties were readily sold for new residential, commercial, and industrial developments. Highways and bridges of the Eastern Coastal Slope were routinely upgraded to accommodate increased traffic flow. For construction of the Groton-New London and Old Lyme-Old Saybrook Bridges, the General Assembly appointed special Bridge Commissions in 1943 and 1945, respectively, and in 1955 construction of the Connecticut Turnpike (Interstate 95) was begun, permanently dividing many coastal communities. Since World War II over 15,000 acres (50 percent) of Connecticut's wetlands have succumbed to residential, industrial, transportational, and recreational interests. By 1982 the demand for boating access to Long Island Sound generated 164 commercial marinas, 63 private yacht clubs, and eight public marinas, together supplying over 25,000 berths and slips; in addition, more than 100,000 registered boaters launch their crafts at some 23 public boat ramps along the coast.

The realization that tidal wetlands provide natural areas for fishing, shellfishing, bird-watching, and biological research as well as passive recreation has fostered a variety of conservation efforts in the Eastern Coastal Slope over the last 30 years. Many private land trusts were formed in the late 1960s and the 1970s to acquire land through donation or purchase. In 1976 the Connecticut River Gateway Commission was established to preserve and enhance the lower Connecticut River Valley through riverfront land acquisition, scenic easements, and regional zoning. In 1980 the General Assembly passed the Coastal Management Act, which set forth policies and standards for evaluating the effect of projects in Connecticut's tidal wetlands. Pursuant to the act, public access options are required for every development plan proposed within the coastal boundary.

Research centers located in the region focus on vegetation, ornithology, hazardous waste control, and marine life. They include the Connecticut Arboretum (part of Connecticut College in New London), Millstone Nuclear Power Station in Waterford, and the University of Connecticut's marine laboratories at Avery Point and Noank in Groton. Based in Essex, the Sounds Conservancy, Inc. is a nonprofit organization dedicated to conserving and restoring coastal waters of southern New England and New York State. The conservancy is particularly concerned with water pollution and its effect on fish and shellfish habitats; its advocacy work has been successful in banning lethal chemicals from the four-state target area. In 1992 the Long Island Sound Foundation was established to promote a greater awareness of Long Island Sound as a



natural resource; the foundation's Long Island Sound Resource Center in Old Saybrook serves as an information clearinghouse for a broad range of users. Local organizations are taking positive steps to preserve the environmental quality of the shoreline. In 1995 the Branford River Project was begun by the Branford Land Trust and the Branford Rotary Club to improve the health of the Branford River by involving community groups in litter control and hazardous waste management.

Recognizing that cultural resources enrich quality of life throughout the Eastern Coastal Slope, several local historic preservation groups have also formed to survey and protect their architectural landmarks and historic neighborhoods. New London Landmarks, Inc. is dealing with some of the most daunting preservation challenges in the Eastern Coastal Slope: retail life in its distinctive central business district has stagnated for many years and much of its urban housing stock in traditional ethnic neighborhoods has deteriorated in the wake of marginal employment opportunities for current residents. The City of New London is assisting the formation of new partnerships among property owners to encourage building rehabilitation and urban revitalization.

## **The Great Depression**

The stock market crash of October 1929 devastated Connecticut's economy for many years. During this period hundreds of businesses went into bankruptcy and many financial institutions failed as the result of multiple loan defaults and depositor withdrawals. By 1932 Connecticut's industrial production had severely declined and unemployment exceeded the national average. Initially municipalities assumed responsibility for establishing unemployment bureaus; in February 1930 New London's Board of Relief recorded 1,602 applicants. The private sector assisted families by forming charitable organizations to raise funds for food, clothes, and holiday festivities. Later the General Assembly established a Connecticut Unemployment Commission to manage claimants' benefits.

In response to the nation's unemployment crisis, President Franklin D. Roosevelt initiated a series of New Deal programs designed to create new jobs and enhance various aspects of community life. In 1933, during Roosevelt's first 100 days in office, the Civilian Conservation Corps (CCC) was established to improve public forest and park lands through both reforestation and vegetation disease control projects; the CCC also constructed ponds, roads, bridges, fire towers, and rustic park buildings. Between 1933 and 1942 over 30,000 Connecticut men were put to work by the CCC and subsequent federal agencies, including the Federal Emergency Relief Administration (FERA), the Civilian Works Administration (CWA), and the Works Progress Administration (WPA).

In the Eastern Coastal Slope the building complex which now comprises Hammonasset State Park's Supply Yard (1933-1935) in Madison, and Oak Lodge (1937) in Killingworth's Chatfield Hollow State Park were each built under the auspices of the CCC. In addition, construction of the cobblestone Rocky Neck State Park Pavilion (1934) in East Lyme, designed by Hartford architect Russell F. Barker (1873-1961), was co-funded by the FERA and the CWA; this

distinguished 356-foot-long building is a lasting tribute to federal work-relief programs in Connecticut. During the 1930s the WPA was also responsible for laying out and constructing the Gold Star Highway (State Route 184) in Groton. The reinforced-concrete highway bridge that crosses State Route 12 just north of Groton Bank displays distinctive Art Deco-style detailing typical of bridge work executed during the Depression era.

Among other kinds of projects undertaken by newly established federal programs were installation of modern sewer and water systems, construction of civic buildings, creation of public artworks, and documentation of historic properties. The CCC and the WPA also supplied workers to clean up Connecticut's shoreline after it was hit by the devastating and unexpected hurricane of September 21, 1938. Fallen trees and debris brought transportation to a halt, railroad tracks needed repair, electric power and telephone service failed, and countless household belongings had to be salvaged and protected. In New London, where the Ocean Beach area was completely destroyed and several Bank Street commercial buildings were leveled, local property damage caused by water, winds, and fire was assessed at over \$4 million. Nearby coastal communities also experienced the hurricane's violence; the storm had a catastrophic impact on the built and natural environment in Branford, Clinton, Guilford, Madison, Old Lyme, and Old Saybrook.

With the buildup of Connecticut's armaments industry just prior to World War II, need for federal work relief programs diminished. Workers found employment at Groton's Electric Boat plant and other war-related companies. Military and civilian jobs developed at the United States Coast Guard Academy in New London and at its Training Station complex at Groton's Avery Point. Work was also available at the Naval Submarine Base in Groton, which underwent considerable expansion during World War II, and by mid-1943 most of Connecticut's industrial workforce was defense-oriented. America's entry into World War II on December 8, 1941, served to generate many new jobs, bringing the Great Depression to a close and stimulating the region's economy for several decades to come.

### **Defense, Industry, and Commerce**

Southeastern Connecticut's strategic coastal location, excellent natural harbors, and strong shipbuilding heritage were key factors in the United States Navy's selection of the Thames River site for its new Submarine Base in 1915. Although only four submarines and a tender comprised the original fleet, by 1939, just prior to World War II, the Navy's submarine force had multiplied. The base itself, which had grown from 112 to 497 acres and from 80 to 497 buildings, also featured 16 new piers and, by 1942, the Submarine Medical Research Laboratory. During the war approximately 27,000 officers and enlistees were trained at the base's Submarine School. From 1930 to 1990 the base's landmark was a round 120-foot-tall water tank known as the Submarine Escape Training Tank; it had been constructed to provide submariners with simulated escape from a sunken vessel. Structural deterioration and advances in nuclear submarine technology necessitated the tower's removal.

Today the Submarine Base comprises nearly 1,000 acres, contains 300 buildings, and boasts 12 piers capable of accommodating 15 nuclear submarines. In 1992 personnel numbered over 15,000; when combined with approximately 20,000 dependents, nearly 35,000 individuals have been associated with naval operations at the base. The federal government also owns several residential subdivisions in Groton, located south and east of the Submarine Base, including Nautilus Park, Dolphin Gardens, and Conning Towers.

World War II galvanized the Eastern Coastal Slope's defense industry. Groton's Electric Boat Company became the preeminent supplier of submarines for the United States Navy, assembling and launching 105 fleet submarines between 1935 and 1946. Since 1925, the year Electric Boat completed its last World War I contract, the company had grown substantially and developed new construction techniques. In 1928 it acquired the New London Ship and Engine Company (Electric Boat's NELSECO Division), which had been its longtime supplier of submarine engines, and in 1929 the company pioneered the welding process in ship construction. In 1934 Electric Boat delivered *Cuttlefish*, the first partially welded submarine, to the Navy. At the onset of World War II the company expanded its shipbuilding yards: in 1940 five shipways were added to the North Yard's existing four; eight more were built a year later at the South Yard; and in 1942 a new Victory Yard opened with 10 shipways on the cleared site of the former Groton Iron Works. During peak years of war production, Electric Boat employed over 12,000 workers and launched an average of two submarines each month. In addition, the company supplied the Navy with hundreds of PT Boats, electric motors, smoke cylinders, and quadruple 20-millimeter gun turrets.

In 1950 Captain Hyman G. Rickover, head of the Nuclear Power Division of the United States Navy, challenged Electric Boat to build the world's first nuclear-powered submarine. Four years later *Nautilus (SSN-571)* was launched (Photograph 19) and by 1958 the vessel had completed a 2,114-mile journey to the North Pole under the polar ice cap. *Nautilus* is now permanently berthed at the Submarine Force Museum in Groton and open to the public. In 1952, in its efforts to keep abreast of fast-developing electronics technologies, Electric Boat became a division of General Dynamics, then engaged in every phase of engineering and manufacturing, and an integral part of America's military-industrial complex.

In 1958 the Navy launched *Seawolf (SSN-575)*, the world's second nuclear-powered submarine, which had successfully remained submerged for 60 days while traveling 13,761 miles in the Atlantic Ocean. About that time Electric Boat began to develop a new submarine and guided-missile weapon system known as Polaris. Fifteen additional nuclear submarine classes have been built for the naval fleet since 1958. The size of Electric Boat's workforce rose dramatically in the 1970s (28,273 in 1975) as the shipyard geared up for Trident and 688-Class submarine construction. These programs tapered off in the late 1980s and the workforce subsequently declined (12,169 in 1995).

Formerly located on the Thames River was the New London division of the Naval Undersea Warfare Center (NUWC). The New London facility traced its origins to two World War II research laboratories established in 1941 at Columbia and Harvard Universities by the National Defense Research Committee. In 1945 the Sonar Division of Harvard's Underwater Sound

Laboratory in Cambridge, Massachusetts, joined Columbia's Division of War Research in New London and became the Naval Underwater Sound Laboratory (NUSL), an identity it maintained for 25 years. In 1970 the NUSL merged with the Naval Underwater Research and Engineering Station in Newport, Rhode Island, thereby becoming New London's branch of the NUWC. The 27-acre complex was the Navy's driving force in development of submarine and surface ship sonar systems and submarine electromagnetic and electro-optical systems. Over 1,400 civilians were employed in New London by the NUWC. In 1997 the local division was decommissioned and relocated to Newport, Rhode Island.

Although in 1928 the State of Connecticut had begun to develop an airport on old farmlands west of the Pequonnock River in Groton, its completion was delayed by the Great Depression. It was not until the onset of World War II that the federal government actually built the existing runways at Trumbull Field for use by the Navy's Antisubmarine Patrol and the Army's Air Corps. After the war the airfield was unused until 1961, in which year the Army's 162nd Transportation Battalion (aircraft maintenance unit) located there, and a public passenger and freight terminal was established, servicing major cities in the Northeast. Shortly thereafter the facility was renamed the Groton-New London Airport in order to better identify its location and to avoid confusion with the airfield in Trumbull, Connecticut.

The United States Coast Guard Academy in New London evolved from the United States Revenue Cutter Service's training school established in 1876. Originally small classes of officers were trained on the schooner *Dobbin* and later on the 106-foot barque *Chase*, both of which operated out of New Bedford, Massachusetts. From 1900 to 1910 the academy was based in Arundel Cove, Maryland, after which it relocated to New London's Fort Trumbull, the Army's coastal defense installation; there officers trained on the cutter *Hamilton*. By 1931 the Coast Guard had purchased land along the Thames River from the City of New London and had begun to develop its current 113-acre Colonial Revival-style campus. Cadets now train aboard the barque *Eagle*, the only tall ship currently in service with the federal government.

In addition to assuming life-saving duties, the United States Coast Guard actively enforced Prohibition in New London waters. More lucrative than sword or tuna fishing, rumrunning became a popular pursuit in the late 1920s, as evidenced by large quantities of illegal alcohol and captured vessels routinely stored at the New London Customs House through 1933, the year Prohibition ended. In 1939, when the United States Lighthouse Service merged with the Coast Guard, a small training station was established on the grounds of the Morton Freeman Plant Estate at Avery Point in Groton. During World War II the Tudor Revival mansion became the facility's administrative headquarters, and as enrollment increased to meet wartime demands, supplemental classrooms and barracks were built on the grounds. Most of these buildings are now part of the University of Connecticut's Avery Point campus.

The Connecticut Army National Guard training facilities are also located in the Eastern Coastal Slope. Camp Rowland, on the west bank of the Niantic River in East Lyme, consists of 88 acres, most of which were acquired by the General Assembly in 1882. Perpetually renamed in honor of the incumbent governor, the post was used as a mobilization site during the Spanish-American War of 1898 and World War I. In the early twentieth century the camp also became the training

ground for Connecticut's Coastal Artillery Units, and today the "Niantic Grounds" play an important role in training Guardsmen to respond to national defense and civil emergencies. In 1931 the Guard also acquired Stone's Ranch, a tactical training area consisting of nearly 2,000 acres in East Lyme, Lyme, and Old Lyme.

While only a few new major industries located in the Eastern Coastal Slope during the late twentieth century, the ones that did are particularly important. Among these is Pfizer, Incorporated in Groton, a pharmaceuticals manufacturer that in 1946 purchased Electric Boat's wartime submarine-construction facility, the Victory Yard, and developed a large fermentation plant there for production of antibiotics and citric acid. Although Pfizer is now headquartered in New York City and has global operations, the company's largest single location for high-technology research and pharmaceuticals manufacturing is its 137-acre, 75-building Groton complex which employs approximately 3,520 people. In 1994 Pfizer reported approximately \$8.3 billion in sales worldwide.

In 1939 Echlin, Incorporated, moved its automobile ignition parts business to New Haven from San Francisco in order to be closer to the vehicle population. By 1957 the company had relocated its office and manufacturing plant to Route 1 in Branford. Since World War II Echlin has grown into a conglomerate of 85 parts manufacturers with approximately 40 divisions and 100 operations on six continents. Echlin moved in 1981 into its new headquarters in Branford on the site of Double Beach House, a Victorian hotel destroyed by fire in 1958. In 1995 Echlin was listed among Connecticut's top 20 companies in shareholder equity and corporate profits.

In spite of the fact that large-scale companies such as Electric Boat, Pfizer, and Echlin have been exceptionally successful, the Eastern Coastal Slope's sub-contract businesses have suffered greatly from the defense industry's gradual decline in manufacturing over the last 20 years. The economic recession of the late 1980s has caused many small companies to close down or leave Connecticut. Nevertheless, the region has retained a stable number of small-scale businesses. Mystic Color Lab in Stonington, for example, has grown to be the third largest mail photofinisher in the United States. Founded in 1969 as a wholly owned subsidiary of Fotolabo SA, the largest direct mail photofinisher in Switzerland, the company boasts 1.5 million customers in the United States, mostly in the Northeast.

Throughout the twentieth century the Eastern Coastal Slope's economic mainstay has been tourism, and even during World War II the Connecticut Development Commission actively enticed vacationers to visit. In a booklet entitled *Convenient Connecticut*, the commission offered free information on roads and travel, parks and forests, hotels and inns, vacation camps and campsites, hiking trails and bicycle trips. Throughout the text inviting words beckoned prospective travelers:

In this year of supreme effort for victory, there is still a place for travel and recreation .... Under these wartime conditions, compact and convenient Connecticut offers opportunities for vacations and short trips in the modern manner, providing a maximum of change and refreshments with a minimum use of travel facilities, whether travel is by road, rail or air. <sup>14</sup>

The brochure extensively depicted the shoreline's local attractions, including hotels, inns, restaurants, beaches, marinas, and historic landmarks, and the addresses of each town's Chamber of Commerce were given for "complete" information.

According to a recent legislative task force, tourism has become Connecticut's fastest growing industry; between 1992 and 1994 the state's economy has grown 22 percent.<sup>15</sup> While much of this growth is attributed to the Mashantucket Pequot Nation's Foxwoods Resort Casino in Ledyard (Photograph 20), four of Connecticut's top ten tourist attractions are also located in the Eastern Coastal Slope. Listed in order of highest annual attendance, they are Mystic Marinelife Aquarium (established 1973, 700,000 visitors) and Mystic Seaport Museum (established 1929, 450,000 visitors) both in Stonington; *Nautilus* Submarine Force Museum (established 1986, 300,000 visitors) in Groton; and the Valley Railroad Company (established 1971, 130,000 visitors) in Essex.

With attendance as high as 70,000 a day on holiday weekends, Foxwoods has in its relatively short lifespan become extremely important to Connecticut's economy, and approximately 10,000 individuals work for the resort. Plans are in place for additional gaming rooms, hotels, restaurants, shops, and golf courses, as well as a Native American heritage museum and potential theme park, all to be connected by monorail. It is predicted that Foxwoods will eclipse Electric Boat as New London County's largest employer. Tourism officials acknowledge the Mashantucket Pequots for supporting efforts to promote tourism in the region and for attracting people from the Boston area and northern New England who traditionally have not vacationed in Connecticut.

Although by 1935 only 7 percent of Connecticut's farmland was under cultivation, agriculture continued to play a secondary role in the economic life of the shoreline; between 1933 and 1953 ten local chapters of the Grange were incorporated in the Eastern Coastal Slope. In the Chamber of Commerce's 1938 guide to Connecticut, agriculture continued to appear as a principal industry in each of the region's 18 municipalities, with fishing noted in only eight instances. By World War II rising operational costs and development pressures forced many of the region's commercial farms to close. At the time of the American Revolution Bicentennial in 1976, only four farms in the Eastern Coastal Slope were identified by the Connecticut Agricultural Information Council as being in continuous operation for 100 years or more. Among these "Century Farms," B.W. Bishop and Sons in Guilford continues to thrive largely because its marketing orientation has shifted from wholesale to retail, with fruits and vegetables constituting the bulk of native produce.

### **Suburbanization and Urban Change**

The factors most responsible for suburbanization of the Eastern Coastal Slope were unprecedented demand for housing during the mid-twentieth century and widespread use of the automobile. Rise of defense-related industries, establishment of numerous businesses, population shifts from New London and Norwich, and formation of new family units after World War II all contributed to the region's suburban growth in the 1950s, 1960s, and 1970s. Opening of the

Connecticut Turnpike (Interstate 95) as well as secondary road upgrades and new mass-transit options further enabled commuters to visit or live near the shore and work elsewhere. Roadside cabins, motels, diners, drive-in restaurants, service stations, and shopping centers, as well as apartment and condominium complexes, were developed along portions of U.S. Route 1 and other major thoroughfares.

The Eastern Coastal Slope's overall population nearly tripled (85,169 to 236,136) between 1930 and 1981. The greatest surges occurred in the Groton-Ledyard-Waterford and Branford-Guilford-Madison areas. The populations of Clinton, East Lyme, and Old Saybrook also rose dramatically, and even towns with relatively low 1930 census figures grew proportionately high by 1981. By 1964 Groton's population had reached 35,000, surpassing the City of New London as the region's most populous municipality. Its rapid growth was attributable to new employment opportunities available at the United States Submarine Base and Electric Boat's submarine shipyard.

When commercial agriculture became less profitable, the region's farmland grew increasingly vulnerable to residential and retail development pressures. After World War II land values soared and suburbia evolved as veterans took advantage of the G.I. Bill of 1944 and state programs to secure low-interest rate mortgages. Improved mobility sparked new single-family subdivisions, schools, and commercial strips as well as apartment and condominium complexes.

Although the amenities of coastal life were readily evident, promotional literature such as *Residential Connecticut* provided practical advice to prospective home seekers. Privately published in 1966, the booklet touted each county's and town's special character, highlighting local educational, cultural, medical, and shopping resources as well as the local transportation network. Scenic photographs of the Connecticut River, Long Island Sound, and local historic properties were interspersed with pictures of moderately priced to expensive homes and advertisements for new residential subdivisions, such as "Homestead" and "Sunrise" in Guilford. Additional branch post offices, libraries, churches, and synagogues followed, as well as new marinas, beach clubs, resorts, golf courses, and parks. Congested commercial strips developed along coastal highways, replete with asphalt parking lots, shopping centers, malls, cinema complexes, gasoline stations, convenience stores, drive-through restaurants, and branch banks. Surprisingly, suburban growth did not permanently dampen the vitality of existing small-scale central business districts scattered throughout the region, for although some stores did close, new residential development also enabled other existing retail and service establishments to continue.

Downtown New London, a thriving center for southeastern Connecticut's industrial, retail, and entertainment life in the 1940s and 1950s, was not as fortunate as the region's smaller town centers in the 1960s, 1970s, and 1980s. Although the city's office space experienced rapid development and market saturation following the success of local defense-related industries, retail space remained underutilized. New London's population steadily declined from 1950 (30,540) to 1990 (28,540) and changes in demographics, commerce, and industry contributed further to the city's already diminished tax base. The economic viability of the aging though architecturally distinguished central business district also suffered from competition with new

automobile-oriented commercial areas readily accessible to suburbia, such as the New London Shopping Center on Interstate 95 and the Crystal Mall in Waterford.

New London took part in federally funded urban renewal programs conceived in the 1950s to redevelop the nation's central business districts and urban neighborhoods by demolishing deteriorated buildings. Fringes of the downtown disappeared to permit a few modern buildings to be built. Fortunately the core of New London's historic downtown area was spared. A pedestrian mall on State Street known as Captain's Walk was attempted in 1973 in order to encourage downtown retail activity, while a commercial facade improvement program was also implemented on Bank Street in 1982. Starr Street's row of Greek Revival houses was rehabilitated in 1979 and shortly thereafter designated a local historic district.

The historic railroad stations in New London and Old Saybrook were renovated for modern use in the late 1970s. At that time the Northeast Corridor Railroad Improvement Program was implemented by the Federal Railroad Administration to upgrade the former New York, New Haven and Hartford Railroad by means of track, roadbed, and bridge improvements.

In 1984 the City of New London appointed an Economic Development Advisory Group to analyze the status of the downtown and waterfront areas and to prepare a broad-ranging development plan. Although few aspects of the plan were realized due to the city's unfortunate economic climate, it served as a rallying point for revitalization efforts. In 1989 the central business district underwent a streetscape and traffic flow study by the American Institute of Architects' Research and Urban Design Assistance Team, which led to major city-funded improvements in the early 1990s. The Captain's Walk pedestrian mall was deemed a failure and eliminated, and the street was reopened to vehicular traffic; brick sidewalk pavement, new streetlights, and landscaping followed, thereby encouraging new stores to open. Since 1991, the transformation of the former Garde Theatre (1926, Downtown New London Historic District) into a performing arts center has been financially assisted by federal and state grants as well as private foundations.

Buoyed by a positive economic response to the foregoing changes, New London's downtown-area property owners formed a City Center Special Service Tax District to privately sponsor promotional events and marketing tools from local taxes dedicated to such activities. New London also received a Main Street Program grant in 1995, one of the first to be awarded by the program's sponsor in Connecticut, Northeast Utilities, and the only one funded so far in the Eastern Coastal Slope.

## **Modern Architecture**

Although revival styles in building continued to be popular in the 1930s and 1940s, modernistic trends from Europe also influenced American architects and designers during this period. The seminal event in development of the Art Deco and Art Moderne architectural styles was the Exposition Internationale des Arts Decoratifs and Industriels Modernes, held in Paris in 1925. The exposition showcased works of "new inspiration and real originality" and prohibited



imitation of the past. Designs for Art Deco buildings tended to have smooth masonry surfaces and vertically oriented facades consisting of projecting piers and graduated setbacks. Applied ornamentation commonly included zigzags, chevrons, and stylized symbols of the modern age. For example, the former Connecticut Light and Power Company Building in Branford (1932, Branford Center Historic District) displays images of electricity, including telephone lines, flatirons, and light bulbs in precast concrete panels used in lieu of capitals.

Art Deco was in vogue for theaters as well as commercial architecture. In the Eastern Coastal Slope the elaborate wooden design for the Strand Theater (1931) in Old Lyme was created by Hartford architect George L. Dunkelberger (1891-1960), who later designed the distinctive series of Art Deco bridges that cross Fairfield County's Merritt Parkway. The Frank Loomis Palmer Auditorium (1939) at Connecticut College in New London (Photograph 18) is a graceful interpretation of the style by Shreve, Lamb and Harmon, architects of the Empire State Building (1931) in New York City.

Streamlined Art Moderne architecture took its cues from contemporary industrial design. Inspired by ships, airplanes, and automobiles, such designs are sleek, horizontal in form, and smooth-surfaced; common characteristics are flat roofs, rounded corners, glass-block wall finishes, narrow bands of windows, and aluminum or stainless steel trim. Although denatured in terms of its stylistically identifying features, New London's Ocean Beach Park Pavilion (1940), designed by the local architectural firm of Morris B. Payne and Edward R. Keefe, is the region's best example of Art Moderne.

In 1932 architect Philip Johnson (1906- ) and architectural historian Henry-Russell Hitchcock co-authored *The International Style: Architecture Since 1922* in conjunction with an innovative exhibition of photographs and drawings of modern architecture in 15 countries presented by the Museum of Modern Art in New York City. The show, which featured works by prominent European architects, including Le Corbusier (Charles Edouard Jenneret, 1887-1966), Walter Gropius (1883-1969), and Ludwig Mies van der Rohe (1886-1969), was a major influence on contemporary architecture in America. The International style extolled a building vocabulary of concrete, glass, and steel, strictly devoid of historical precedent and applied ornamentation, for both domestic and commercial design. Rectangular or cubic in form, International style-buildings incorporate identifying features such as flat roofs (often without coping) and metal casement windows set flush to smooth masonry walls (usually painted white).

The International style, first appearing in the 1920s, has maintained its hold on architects through the late twentieth century. Robert W. McLaughlin, Jr. (1900-1989), founder of American Houses, Inc. of New York City, saw the International style as an appropriate choice for affordable prefabricated homes sold by his company. The futuristic flat-roofed Winslow Ames House (1933) in New London is a typical McLaughlin-designed "Moto Home" built of pre-finished modular panels hung on a welded steel frame. Douglas W. Orr (1892-1966), a well-known New Haven architect, also selected the International style for his "modern" home (1941) in Branford's Stony Creek-Thimble Islands Historic District. Variations continued to appear along the coast; examples include the Spencer Berger House (1969) in Guilford's Old Quarry neighborhood,

designed by the former New Haven firm of Davis, Cochran and Miller, and the Dr. Alan Gans House (1973) in Guilford, designed by Vincent C. Amore (1931- ) of West Haven.

Although the International style esthetic was more frequently applied to banal glass curtain-wall commercial blocks than residential architecture, the style's dictum of order and functional expression also shaped some of the region's best institutional architecture. Among these works are the Joanne and Nathan Cummings Art Center (1969) at Connecticut College in New London, designed by Skidmore, Owings and Merrill of New York City; the Groton Senior Center (1980), designed by Tai Soo Kim Partners, Architects, of Hartford; and the building housing the historic submarine *Nautilus* and the Submarine Force Museum (1986) in Groton, designed by Cambridge Seven Associates, Inc. of Cambridge, Massachusetts.

During the 1970s and 1980s the belief that the design of new buildings could be sensitive to context and historical environment prompted strong reaction against the rationalism underlying the International style. Known as the Post-Modern movement, the trend had proponents who freely reinterpreted past architectural styles by altering traditional proportions and simplifying classical details, including columns, pediments, and circular window forms. For example, Graham Gund Architects' Horizon Admissions Building (1989) at Connecticut College in New London combines references to several early twentieth-century revival styles. Similarly, the numerous pediments which characterize Centerbrook's design for the East Lyme Library and Community Center (1990) are exaggerated reflections of the Greek Revival Thomas Avery (Smith-Harris) House (1845) in nearby Niantic. Unquestionably, the most imposing Post-Modern building in the Eastern Coastal Slope is the Foxwoods Resort Casino in Ledyard (1992, Photograph 20), which exhibits design motifs and color selections symbolic of Native American culture. The casino's striking decorative treatments were developed by Kevin Tubridy and Paul Frishman of New England Design, Inc. of Mansfield, Connecticut.

In recalling styles, Post-Modern architects can be ironic as well. Nowhere is this more evident than in the shingled Izenour Bungalow in Branford (1984, Stony Creek-Thimble Islands Historic District) designed by the Philadelphia firm of Venturi, Rauch and Scott Brown. The home's signature, a large two-story circular window framed in the ubiquitous form of a captain's wheel, is clearly tongue-in-cheek. More typical Post-Modern domestic architecture draws upon the Shingle and Colonial Revival styles, and some of the new houses built in this mode at Guilford's Vineyard Point reflect the late nineteenth-century Shingle-style designs of the original summer enclave.

In the period after World War II, domestic building flourished in the Eastern Coastal Slope. Colonial and Tudor-inspired styles proliferated in new residential subdivisions, and by the early 1950s one-story Ranch and Split-level styles appeared with increasing frequency alongside traditional forms. In addition, contemporary architect-designed homes (some prefabricated) were built with wide eave overhangs and either flat or low pitched roofs. Also found in the region are modern vernacular house types intended to provide economical shelter using new or experimental building technologies. Examples include A-frame cottages, geodesic domes, and houses with solar energy-collecting systems.

## VI. CONCLUSION

This overview of the Eastern Coastal Slope has depicted major historical forces which shaped the region's built environment during the last 350 years. For thousands of years prior to that time, access to natural resources of Long Island Sound drew indigenous peoples to the Connecticut shoreline where they obtained nourishment from shellfish found in estuaries and from migrating fish caught offshore and along rivers. After European settlement, farmers and merchants recognized the economic potential of ocean commerce, and as the world of trade expanded, large ports developed at Mystic, New London, and Stonington, as well as smaller ones in Branford, Clinton, Old Saybrook, and other villages.

By the eighteenth century Connecticut's hinterland was able to supply merchants with enough surplus lumber, produce, and livestock to enable them to engage in foreign trade for exotic items such as rum and sugar. The Eastern Coastal Slope's agrarian heritage is still apparent in its uplands where stone walls crisscross rolling fields, and where village churches, schools, working farmsteads, and former sites of waterpowered gristmills and sawmills are scattered across the countryside.

In the early nineteenth century whaling and sealing were profitable pursuits and seaports became places where people, goods, and news converged and dispersed. Evidence of Connecticut's active maritime past is found in the narrow streets, wharf and shipyard sites, chandleries, warehouses, merchant homes, and public and commercial buildings which survive in the region's coastal communities.

As the nineteenth century progressed, small factories, textile mills, quarries, manufacturing plants, and shipbuilding yards appeared. Because such endeavors required many workers, town populations grew dramatically, new housing went up, and public services improved. In particular, significant changes occurred in transportation; new roads and bridges were constructed and steamboat routes and railroad lines were established, thereby making coastal towns accessible to everyone.

Contemporary tourist guides attest to the scenic and historical attractions of the Eastern Coastal Slope which enabled many communities to support hotels and guesthouses. As visitors returned on a regular basis, distinctive summer colonies evolved, each providing recreational activities such as swimming, tennis, golf, and yacht racing. Soon the undulating shoreline was defined by seasonal residences ranging from grand estates to shingled cottages to modest bungalows. In addition, several state parks provided the public with opportunities to swim, boat, fish, and camp.

Southeastern Connecticut's longstanding shipbuilding tradition has been kept alive by General Dynamics' Electric Boat division in Groton, producer of sophisticated naval submarines for over 70 years. The popularity of Mystic Seaport Museum, Mystic Marinelife Aquarium, the *U.S.S. Nautilus* Submarine Museum, and Foxwoods Resort Casino illustrates the vitality of the region's tourism industry. New residential subdivisions and commercial developments have proliferated,

but the Eastern Coastal Slope's historic, cultural, and maritime resources continue to evoke its rich and varied history, especially the everchanging yet enduring relationship with the sea.

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## ENDNOTES

1. Michael Bell, *The Face of Connecticut: People, Geology and the Land*. Bulletin 110, State Geological and Natural History Survey of Connecticut (Hartford, Department of Environmental Protection, 1985), pp. 73-94.
2. Bernard Christian Steiner, *History of Guilford and Madison, Connecticut* (Guilford, Connecticut: The Guilford Free Library, The 1897 Edition Reissued, 1975), p. 29.
3. Quoted in *As We Were on the Valley Shore: An Informal Pictorial History of Sixteen Connecticut Towns* (Guilford, Connecticut: Shore Line Times Company, 1976), p. 21.
4. D. Hamilton Hurd, *History of New London County, Connecticut with Biographical Sketches of Many of Its Pioneers and Prominent Men* (Philadelphia: J.W. Lewis & Company, 1882), p. 137.
5. Bruce C. Daniels, *The Connecticut Town: Growth and Development, 1635-1790* (Middletown, Connecticut: Wesleyan University Press, 1979), p. 50.
6. Albert E. Van Dusen, *Puritans Against the Wilderness: Connecticut History to 1763* (Chester, Connecticut: Pequot Press, 1975), p. 88.
7. Bruce C. Daniels, "Economic Developments in Colonial and Revolutionary Connecticut: An Overview," *William and Mary Quarterly*, Third Series, Volume 38, Number 1, January, 1980, p. 440.
8. Quoted in *As We Were on the Valley Shore: An Informal Pictorial History of Sixteen Connecticut Towns* (Guilford, Connecticut: Shore Line Times Company, 1976), p. 138.
9. Also extant are Morgan Point Light in Groton (1868), Saybrook Breakwater Light in Old Saybrook (1886), and New London Ledge Light in New London Harbor (1909).
10. John V. Goff, "Traces of the Shipyard Workers: Shipbuilding in the Connecticut River Valley, 1800-1850." *Connecticut Historical Society Bulletin*, Volume 46, Number 1 (January, 1981), p. 1.
11. Although Jewish Congregations had formed in New London as early as 1878, Ohev Sholem Synagogue is believed to be the earliest extant synagogue in the city.
12. Janice P. Cunningham, National Register of Historic Places Registration Form, Montauk Avenue Historic District, New London, Connecticut (Connecticut Historical Commission, 1990), Section 8, pp. 2-3.
13. Elizabeth Mills Brown, *Survey of the Historic Architecture of Guilford, Connecticut* (Connecticut Historical Commission and Guilford Preservation Alliance, 1982), p. 13.

14. H.F. Morse, Associates, *Convenient Connecticut* (New Haven, Connecticut, 1942), p. 13.
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14. H.F. Morse, Associates, *Convenient Connecticut* (New Haven, Connecticut, 1942), p. 13.
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## BIBLIOGRAPHY

### Bibliographical Note

Basic sources for tracing the development of the Eastern Coastal Slope are its local histories. *Connecticut: A Bibliography of Its History*, Volume VI in the series *Bibliographies of New England*, is an indispensable compilation of town-oriented studies. Municipal historians were consulted to assess the historical reliability, usefulness, and relevance of local publications for purposes of this report, and their recommendations are reflected below. Among the best local histories published in the late nineteenth century are *History of Guilford and Madison, Connecticut* by Bernard Christian Steiner and *History of New London* by Frances M. Caulkins. During the American Bicentennial celebration, numerous local historical studies appeared, such as Bruce P. Stark's *Lyme Connecticut: From Founding to Independence*, and Robert O. Decker's *The Whaling City: A History of New London*. A useful introduction to the region is the *Shore Line Times* Company's *As We Were on the Valley Shore: An Informal Pictorial History of Sixteen Connecticut Towns* (also published for the Bicentennial). *A History of Connecticut's Coast*, prepared by the Coastal Area Management Program of the Department of Environmental Protection, and *The Connecticut River: New England's Historic Waterway* by Edmund Delaney are also very effective in conveying regional identity.

General histories of Connecticut, its counties, and specific subjects such as oystering, shipbuilding, and American Impressionism are helpful in understanding the broad patterns of historical development within the region. *Connecticut* by Albert E. Van Dusen, *History of Connecticut* by Harold J. Bingham, and the five-volume series on Connecticut history published by the Center for Connecticut Studies at Eastern Connecticut State University all help to provide a statewide context for assessing the growth of the Eastern Coastal Slope. Bruce C. Daniel's *The Connecticut Town* and Robert J. Taylor's *Colonial Connecticut* are informative studies of the colonial period. *The Literature of Connecticut History* by Christopher and Bonnie B. Collier is an excellent reference for identifying works on historical topics pertinent to the region.

The Eastern Coastal Slope is relatively well represented in the Connecticut Historical Commission's Statewide Historic Resource Inventory. Of the 18 towns in the region, seven communities have been surveyed at the intensive level: Branford, East Lyme, Groton, Guilford, Ledyard, Madison, New London, Stonington, and Waterford. Chester, Clinton, Deep River, Essex, Killingworth, Lyme, Old Lyme, Old Saybrook, and Westbrook have been inventoried at a reconnaissance level. Since most of these studies are over ten years old, their data needs to be updated in order to identify buildings that have been restored, substantially modified, or lost since the initial survey and to include buildings constructed after 1940 that have acquired historical and architectural significance. Several thematic surveys have also been helpful in identifying historic resources within the region; their subjects include theaters, bridges, town greens, synagogues, armories, municipal parks, and Jewish resorts and farmsteads.

## Books and Articles

- Adjutant General's Office. *Record of Service of Connecticut Men in the Army and Navy of the United States during the War of the Rebellion*. Hartford, Connecticut: Press of The Case, Lockwood, and Brainard Company, 1889.
- Albion, Robert G., William A. Baker, and Benjamin W. Labaree. *New England and the Sea*. Middletown, Connecticut: Wesleyan University Press for Mystic Seaport, Inc., 1972.
- Anderson, Ruth O.M. *From Yankee to American: Connecticut 1865 to 1914*. Chester, Connecticut: Pequot Press, 1975.
- Armstead, George B. *The State Services of Connecticut*. The State of Connecticut, 1946.
- As We Were on the Valley Shore: An Informal Pictorial History of Sixteen Connecticut Towns*. Guilford, Connecticut: Shore Line Times Company, 1976.
- Bachman, Robert L. *An Illustrated History of the Town of Waterford, Connecticut*. Waterford, Connecticut: Morningside Press, 1967.
- \_\_\_\_\_, ed. *Waterford and Independence 1776-1976*. Waterford, Connecticut: American Revolution Bicentennial Committee, 1975.
- Bailyn, Bernard. *The New England Merchants in the Seventeenth Century*. New York: Harper & Row, 1955.
- Barber, John W. *Connecticut Historical Collections*. New Haven: Durrie & Peck and J.W. Barber, 1836.
- Baxter, Linda Trowbridge. *The Newcomers, A Study of Immigrants to Guilford, Connecticut 1850-1930*. Dexter, Michigan: Thomson-Shore Inc., 1985.
- Bell, Michael. *The Face of Connecticut: People, Geology, and the Land*. Bulletin 110, State Geological and Natural History Survey of Connecticut. Hartford, Connecticut: Department of Environmental Protection, 1985.
- Bickford, Christopher P., and J. Bard McNulty. *John Warner Barber's Views of Connecticut Towns 1834-36*. Hartford, Connecticut: The Connecticut Historical Society, 1990.
- Bingham, Harold J. *History of Connecticut*. New York: Lewis Historical Publishing Company, 1962. Volumes I, II, III, and IV.
- Buel, Richard, Jr. *Dear Liberty: Connecticut's Mobilization for the Revolutionary War*. Middletown, Connecticut: Wesleyan University Press, 1980.

- Bushman, Richard L. *From Puritan to Yankee: Character and the Social Order in Connecticut, 1690-1765*. New York: W.W. Norton & Company, Inc., 1970.
- Carr, John C., comp. *Branford*. Compiled for the Branford Tercentenary, 1935. Reprint. Branford Historical Society, 1985.
- Caulkins, Frances M. *History of New London, Connecticut*. New London, Connecticut: H.D. Utley, 1895.
- Chendali, Olive Tubbs. *East Lyme: Our Town and How It Grew*. Mystic, Connecticut: Mystic Publications, 1989.
- Chesebrough-Pond's Inc. *100th Anniversary, 1888-1988*. Clinton, Connecticut: 1988.
- Clark, Thelma, ed. *Kate Silliman's Chester Scrapbook*. Chester, Connecticut: Chester Historical Society, 1986.
- Clayton, Laurelee, and Warner P. Lord. *Madison: Three Hundred Years By the Sea*. Madison, Connecticut: Madison Bicentennial Committee, 1975.
- Clinton: Its Old Houses and Legends*. Clinton, Connecticut: The Ladies' Society of the First Church of Christ, 1951.
- Clouette, Bruce Alan, and Matthew Roth. *Connecticut's Historic Bridges*. Connecticut Department of Transportation in cooperation with the Federal Highway Administration, 1991.
- Collier, Christopher, and Bonnie B. Collier. *The Literature of Connecticut History*. Middletown, Connecticut, 1983.
- Conkey, Laura E., Ethel Boissevain, and Ives Goddard. "Indians of Southern New England and Long Island: Late Period." In Bruce G. Trigger, ed. *Handbook of North American Indians, Volume 15, Northeast*. Washington, D.C.: Smithsonian Institution, 1978.
- Connecticut and American Impressionism*. Storrs, Connecticut: The William Benton Museum of Art, 1984.
- Connecticut Chamber of Commerce. *Connecticut Historical Points of Interest*. Hartford, Connecticut: The Connecticut Chamber of Commerce, 1938.
- Connecticut Civil War Centennial Commission. *Connecticut Military and Naval Leaders in the Civil War*. Hartford, Connecticut, 1961.
- Connecticut Department of Economic Development. *Connecticut Market Data 1990-1991*. Hartford, 1991.

- \_\_\_\_\_. *Connecticut's Marine Heritage Landscape*. Hartford, 1977.
- Connecticut Department of Environmental Protection. *Coastal Management in Connecticut Beyond the First Decade*. Hartford, 1988.
- Connecticut Department of Transportation with the Federal Highway Administration. *Managing Travel in Connecticut: 100 Years of Progress*. Newington, Connecticut, 1995.
- Connecticut Development Commission. *Use of Land: A Report in the Connecticut Land Use Project*. Hartford, 1962.
- Connecticut Interregional Planning Program. *Connecticut: choices for action. The Economy*. Hartford, 1966.
- \_\_\_\_\_. *Connecticut: choices for action. The Green Land*. Hartford, 1966.
- \_\_\_\_\_. *Connecticut: choices for action. Transportation*. Hartford, 1966.
- Connecticut Port Survey Commission. *An Economic and Engineering Survey of all Navigable Waters in the State*. New York: Parsons, Brinkerhoff, Hogan and MacDonald, Engineers, 1946.
- Connors, D.B., and D.J. Connors. *Saybrook and The American Revolution*. Deep River, Connecticut: Deep River Historical Society, 1976.
- Connors, Daniel J. *Deep River*. Stonington, Connecticut: The Pequot Press, Inc., 1966.
- County Atlas of Middlesex, Connecticut*. New York: F.W. Beers & Co., 1874.
- Croffut, W.A., and John M. Morris. *The Military and Civil History of Connecticut during the War of 1861-65*. New York: Published by Ledyard Bill, 1868.
- Croft, Florence S. Marcy. *Guide to the History and Historic Sites of Connecticut*. New Haven, 1937.
- Cronon, William. *Changes in the Land: Indians, Colonists, and the Ecology of New England*. New York: Hill and Wang, 1983.
- Crosbie, Michael J. *Centerbrook, Reinventing American Architecture*. Washington, D.C.: AIA Press, 1993.
- Cummings, Abbott Lowell. *The Framed Houses of Massachusetts Bay, 1625-1725*. Cambridge, Massachusetts: Harvard University Press, 1979.

- Bushman, Richard L. *From Puritan to Yankee: Character and the Social Order in Connecticut, 1690-1765*. New York: W.W. Norton & Company, Inc., 1970.
- Carr, John C., comp. *Branford*. Compiled for the Branford Tercentenary, 1935. Reprint. Branford Historical Society, 1985.
- Caulkins, Frances M. *History of New London, Connecticut*. New London, Connecticut: H.D. Utley, 1895.
- Chendali, Olive Tubbs. *East Lyme: Our Town and How It Grew*. Mystic, Connecticut: Mystic Publications, 1989.
- Chesebrough-Pond's Inc. *100th Anniversary, 1888-1988*. Clinton, Connecticut: 1988.
- Clark, Thelma, ed. *Kate Silliman's Chester Scrapbook*. Chester, Connecticut: Chester Historical Society, 1986.
- Clayton, Laurelee, and Warner P. Lord. *Madison: Three Hundred Years By the Sea*. Madison, Connecticut: Madison Bicentennial Committee, 1975.
- Clinton: Its Old Houses and Legends*. Clinton, Connecticut: The Ladies' Society of the First Church of Christ, 1951.
- Clouette, Bruce Alan, and Matthew Roth. *Connecticut's Historic Bridges*. Connecticut Department of Transportation in cooperation with the Federal Highway Administration, 1991.
- Collier, Christopher, and Bonnie B. Collier. *The Literature of Connecticut History*. Middletown, Connecticut, 1983.
- Conkey, Laura E., Ethel Boissevain, and Ives Goddard. "Indians of Southern New England and Long Island: Late Period." In Bruce G. Trigger, ed. *Handbook of North American Indians, Volume 15, Northeast*. Washington, D.C.: Smithsonian Institution, 1978.
- Connecticut and American Impressionism*. Storrs, Connecticut: The William Benton Museum of Art, 1984.
- Connecticut Chamber of Commerce. *Connecticut Historical Points of Interest*. Hartford, Connecticut: The Connecticut Chamber of Commerce, 1938.
- Connecticut Civil War Centennial Commission. *Connecticut Military and Naval Leaders in the Civil War*. Hartford, Connecticut, 1961.
- Connecticut Department of Economic Development. *Connecticut Market Data 1990-1991*. Hartford, 1991.

- \_\_\_\_\_. *Connecticut's Marine Heritage Landscape*. Hartford, 1977.
- Connecticut Department of Environmental Protection. *Coastal Management in Connecticut Beyond the First Decade*. Hartford, 1988.
- Connecticut Department of Transportation with the Federal Highway Administration. *Managing Travel in Connecticut: 100 Years of Progress*. Newington, Connecticut, 1995.
- Connecticut Development Commission. *Use of Land: A Report in the Connecticut Land Use Project*. Hartford, 1962.
- Connecticut Interregional Planning Program. *Connecticut: choices for action. The Economy*. Hartford, 1966.
- \_\_\_\_\_. *Connecticut: choices for action. The Green Land*. Hartford, 1966.
- \_\_\_\_\_. *Connecticut: choices for action. Transportation*. Hartford, 1966.
- Connecticut Port Survey Commission. *An Economic and Engineering Survey of all Navigable Waters in the State*. New York: Parsons, Brinkerhoff, Hogan and MacDonald, Engineers, 1946.
- Connors, D.B., and D.J. Connors. *Saybrook and The American Revolution*. Deep River, Connecticut: Deep River Historical Society, 1976.
- Connors, Daniel J. *Deep River*. Stonington, Connecticut: The Pequot Press, Inc., 1966.
- County Atlas of Middlesex, Connecticut*. New York: F.W. Beers & Co., 1874.
- Croffut, W.A., and John M. Morris. *The Military and Civil History of Connecticut during the War of 1861-65*. New York: Published by Ledyard Bill, 1868.
- Croft, Florence S. Marcy. *Guide to the History and Historic Sites of Connecticut*. New Haven, 1937.
- Cronon, William. *Changes in the Land: Indians, Colonists, and the Ecology of New England*. New York: Hill and Wang, 1983.
- Crosbie, Michael J. *Centerbrook, Reinventing American Architecture*. Washington, D.C.: AIA Press, 1993.
- Cummings, Abbott Lowell. *The Framed Houses of Massachusetts Bay, 1625-1725*. Cambridge, Massachusetts: Harvard University Press, 1979.



Daniels, Bruce C. *The Connecticut Town: Growth and Development, 1635-1790*. Middletown, Connecticut: Wesleyan University Press, 1979.

\_\_\_\_\_. "Economic Developments in Colonial and Revolutionary Connecticut: An Overview." *William and Mary Quarterly*. Third Series. Volume XXXVIII, Number 1. January, 1980.

Decker, Robert O. *The Whaling City: A History of New London*. Chester, Connecticut: The Pequot Press, 1976.

Delaney, Edmund. *The Connecticut River: New England's Historic Waterway*. Chester, Connecticut: Pequot Press, 1983.

\_\_\_\_\_. "The Industrial Evolution of the Lower Connecticut River Valley." *Tydings*, July 1987.

\_\_\_\_\_. *St. Joseph's Parish, More Than a Century of Faith*. Chester, Connecticut: St. Joseph's Church, 1991.

Destler, Chester M. *Connecticut: The Provision State*. Chester, Connecticut: Pequot Press, 1973.

Donnelly, Marion Card. *The New England Meetinghouses of the Seventeenth Century*. Middletown, Connecticut: Wesleyan University Press, 1968.

Elliott, Rev. Robert H. *Our Town*. Clinton, Connecticut, 1928.

Ely, Susan H., and Elizabeth B. Plimpton. *The Lieutenant River*. Old Lyme, Connecticut: Lyme Historical Society, 1991.

Field, David D., D.D. *A Statistical Account of the County of Middlesex, in Connecticut*. Middletown, Connecticut: Clark and Lyman, 1819.

Foley, Mary Mix. *The American House*. New York: Harper and Row, Publishers, 1980.

Fraser, Bruce. *The Land of Steady Habits: A Brief History of Connecticut*. Hartford: Connecticut Historical Commission, 1988.

Garvan, Anthony. *Architecture and Town Planning in Colonial Connecticut*. New Haven: Yale University Press, 1951.

Gates, Gilman C. *Saybrook at the Mouth of the Connecticut River*. Orange and New Haven, Connecticut: The Wilson H. Lee Company, 1935.

- Goff, John V. "Traces of the Shipyard Workers: Shipbuilding in the Connecticut River Valley, 1800-1850." *The Connecticut Historical Society Bulletin*, January, 1981, Volume 46, Number 1.
- Gowans, Alan. *The Comfortable House: North American Suburban Architecture 1890-1930*. Cambridge, Massachusetts: MIT Press, 1989.
- Grant, Marion Hepburn. *The Fenwick Story*. Hartford, Connecticut: The Connecticut Historical Society, 1974.
- Greenhalgh, Kathleen. *A History of West Mystic 1600-1985*. Groton, Connecticut: The Groton Public Library, 1986.
- Guilford Bicentennial Pages*. Guilford, Connecticut: Shore Line Times Company, 1976.
- Harding, James Ely. *Lyme As It Was And Is*. Lyme, Connecticut: Lyme Bicentennial Commission, 1975.
- \_\_\_\_\_. *Lyme Yesterdays*. Stonington, Connecticut: Pequot Press, 1967.
- Hartford Courant*. June 4 and 5, 1995.
- Hill, Everett G. *New Haven and Eastern New Haven County*. Volume I. New York and Chicago: The S.J. Clarke Pub. Co., 1918.
- The History of Middlesex County, Connecticut with Biographical Sketches of Its Prominent Men*. New York: J.B. Beers & Company, 1884.
- Hull, Cary S., ed. *The Houses and History of Chester*. Revised edition. Chester, Connecticut: Chester Historical Society, 1984.
- Hurd, D. Hamilton. *History of New London County, Connecticut with Biographical Sketches of Many of Its Pioneers and Prominent Men*. Philadelphia: J.W. Lewis & Company, 1882.
- Ives, Lida Skilton. *The Grange in Connecticut*. Winsted, Connecticut: The Dowd Printing Company, 1953.
- Jacob, Eva. *New Architecture in New England*. Lincoln, Massachusetts: DeCordova Museum, 1974.
- Jacobus, Melancthon W. *The Connecticut River Steamboat Story*. Hartford, Connecticut: Connecticut Historical Society, 1956.
- Janick, Herbert F., Jr. *A Diverse People: Connecticut 1914 to the Present*. Chester, Connecticut: Pequot Press, 1975.

- Kanzler, Carmelina Como, ed. *New London: A History of Its People*. New London, Connecticut: City of New London 350th Anniversary Celebration, 1996.
- Kelly, J. Frederick. *Early Connecticut Meetinghouses*. New York: Columbia Press, 1948. 2 volumes.
- Kimball, Carol W. *The Groton Story, Revised Edition*. Groton, Connecticut: The Groton Public Library, 1991.
- Kochiss, John M. *Oystering from New York to Boston*. Middletown, Connecticut: Wesleyan University Press for Mystic Seaport, Inc., 1974.
- Lentz, Thomas L. *A Pictorial History of Killingworth*. Killingworth, Connecticut: Killingworth Historical Society, 1976.
- Lewis, Thomas R., and John E. Harmon. *Connecticut, A Geography*. Boulder, Colorado: Westview Press, 1986.
- Main, Jackson Turner. *Connecticut Society in the Era of the American Revolution*. Hartford, Connecticut: The American Revolution Bicentennial Commission, 1977.
- Maynard, Mary. *Houses With Stories*. Yankee Publishing, Inc., 1994.
- McAlester, Virginia and Lee. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1984.
- McCain, Walter C. "The Connecticut Turnpike: Ribbon of Hope." *Storrs Agricultural Experiment Station Bulletin*. Number 387.
- McCulloch, Sarah Brown. *Guilford: A Walking Guide, The Green & Neighboring Streets*. Guilford, Connecticut: Published by the Author, 1989.
- Mitchell, Isabel S. *Roads and Road-Making in Colonial Connecticut*. Tercentenary Commission of the State of Connecticut, 1933. Pamphlet XIV.
- Morse, H.F., Associates. *Convenient Connecticut*. New Haven, Connecticut, 1942.
- Morse, Jarvis Means. *A Neglected Period of Connecticut's History 1818-1850*. New Haven, Connecticut: Yale University Press, 1933.
- Neill, Peter, ed. *A Stony Creek Miscellany*. Stony Creek, Connecticut: Rescue Fire Company Number 5, 1975.
- Niven, John. *Connecticut for the Union: The Role of the State in the Civil War*. New Haven, Connecticut: Yale University Press, 1965.

- The North American Tourist*. New York: A.T. Goodrich and D. Fanshaw, Printer, 1839.
- Noyes, Gertrude E. *A History of Connecticut College*. Westford, Massachusetts: The Murray Printing Company, 1982.
- O'Gorman, James F. "O.W. Norcross, Richardson's 'Master Builder': A Preliminary Report." *Journal of the Society of Architectural Historians*, May, 1973, Volume 32, Number 2.
- Orton-Jones, Gwendolen. *Att a Socioty Meeting, The Records of the Fourth Ecclesiastical Society of Saybrook 1741-1808, Now Chester, Connecticut*. Chester, Connecticut: Chester Historical Society, 1980.
- \_\_\_\_\_. *Search Under the Eaves*. Chester, Connecticut: Chester Historical Society, 1984.
- Parks, Roger, ed. *Connecticut: A Bibliography of Its History*. Hanover, New Hampshire: University Press of New England, 1986.
- Peterson, William N., and Peter M. Coope. *Historic Buildings at Mystic Seaport Museum*. Mystic, Connecticut: Mystic Seaport Museum, Inc., 1985.
- Peterson, William N. "Mystic Built" *Ships and Shipyards of the Mystic River, Connecticut, 1784-1919*. Mystic, Connecticut: Mystic Seaport Museum, 1989.
- Pierce, Henry. *Colonial Killingworth: A History of Clinton and Killingworth*. Clinton: Clinton Historical Society, 1976.
- Pierson, William H., Jr. *American Buildings and Their Architects: The Colonial and Neo-Classical Styles*. Garden City: Anchor Press/Doubleday, 1976.
- \_\_\_\_\_. *American Buildings and Their Architects: Technology and the Picturesque; The Corporate and Early Gothic Styles*. Garden City: Anchor Press/Doubleday, 1978.
- Platt, Philip S., ed. *Madison's Heritage*. Madison, Connecticut: Madison Historical Society, 1964.
- Poppeliers, John S., Allen Chambers, and Nancy B. Schwartz. *What Style Is It?* Washington, D.C.: Preservation Press, 1977.
- Potapoug Quarter*. Essex, Connecticut: The Connecticut River Foundation at Steamboat Dock, 1984.
- Purcell, Richard J. *Connecticut in Transition: 1775-1818. American Historical Association, 1918*. New edition by Wesleyan University Press, Middletown, Connecticut, 1963.

Ransom, David F. "Connecticut's Monumental Epoch: A Survey of Civil War Memorials." *The Connecticut Historical Society Bulletin*, 1993, Volume 58, Numbers 1-4.

\_\_\_\_\_. "Connecticut's Monumental Epoch: A Survey of Civil War Memorials." *The Connecticut Historical Society Bulletin*, 1994, Volume 59, Numbers 1-4.

*Residential Connecticut*. Clinton, Connecticut: Venture Press, Inc., 1966.

Rifkind, Carole. *A Field Guide to American Architecture*. New York: Bonanza Books, 1980.

Rockey, J.L., ed. *History of New Haven County, Connecticut. Volume 2*. New York: W.W. Preston and Co., 1892.

Rodengen, Jeffrey L. *Serving the Silent Service: The Legend of Electric Boat*. Fort Lauderdale, Florida: Write Stuff Syndicate, 1994.

Rose, James M., and Barbara W. Brown. *Tapestry: A Living History of the Black Family in Connecticut*. New London, Connecticut: New London County Historical Society, 1979.

Roth, David M., and Freeman Meyer. *From Revolution to Constitution: Connecticut 1763 to 1818*. Chester, Connecticut: Pequot Press, 1975.

Roth, Matthew. *Connecticut: An Inventory of Historic Engineering and Industrial Sites*. Washington, D.C.: Society for Industrial Archeology, 1981.

Russell, Howard S. *A Long, Deep Furrow: Three Centuries of Farming in New England*. Hanover, New Hampshire: University Press of New England, 1976.

\_\_\_\_\_. *Indian New England Before the Mayflower*. Hanover, New Hampshire: University Press of New England, 1980.

Schuler, Stanley, ed. *Hamburg Cove*. Old Lyme, Connecticut: Lyme Historical Society, 1993.

Sherer, Thomas E., Jr. *The Connecticut Atlas: A Graphic Guide to the Land, People & History of Connecticut*. West Hartford, Connecticut: Kilderatlas Publishing Company, 1990.

Southeastern Connecticut Regional Planning Agency. *Opportunities For Historic Preservation Southeastern Connecticut Region*. Norwich, Connecticut: Southeastern Connecticut Regional Planning Agency, 1968.

Staff of the State Highway Department. *Forty Years of Highway Development in Connecticut, 1895-1935*. Tercentenary Commission of the State of Connecticut, 1935. Pamphlet XLVI.

Stark, Bruce P. *Lyme, Connecticut: From Founding to Independence*. Privately printed, 1976.

- \_\_\_\_\_. "Slavery in Connecticut: A Re-examination." *Connecticut Review* 9 (November 1975), 75-81.
- State of Connecticut Register and Manual*. 1890, 1900, 1931, 1990.
- Steahr, Thomas E. *Ethnic Atlas of Connecticut*. Hartford, Connecticut: American Revolution Bicentennial Commission, 1976.
- Steiner, Bernard Christian. *History of Guilford and Madison, Connecticut*. Baltimore, Md.: The Friedenwald Company, 1897. Reissued by Guilford Free Library, 1975.
- Stevens, Thomas A. *Along The Waterfront At Deep River On The Connecticut*. Deep River, Connecticut: Deep River Historical Society, 1979.
- \_\_\_\_\_. *Old Lyme: A Town Inexorably Linked With the Sea*. Essex, Connecticut: Connecticut River Foundation at Steamboat Dock, 1972.
- Stevenson, Beverly F. *The Golden Rule Days of Essex*. Essex, Connecticut: Essex Historical Society, 1987.
- Stilgoe, John R. *Alongshore*. New Haven, Connecticut: Yale University Press, 1994.
- \_\_\_\_\_. *Common Landscape of America, 1580-1845*. New Haven, Connecticut: Yale University Press, 1982.
- Taylor, Robert J. *Colonial Connecticut: A History*. Millwood, New York: KTO Press, 1979.
- Tedone, David. *A History of Connecticut's Coast: 400 Years of Coastal Industry and Development*. Hartford, Connecticut: Department of Environmental Protection, 1982.
- Trecker, Janice Law. *Preachers, Rebels and Traders: Connecticut 1818 to 1865*. Chester, Connecticut: Pequot Press, 1975.
- Turner, Gregg M., and Melancthon W. Jacobus. *Connecticut Railroads: An Illustrated History*. Hartford, Connecticut: Connecticut Historical Society, 1986.
- United States Census*. 1880, 1900, 1920, 1930, 1970.
- Van Dusen, Albert E. *Connecticut*. New York: Random House, 1961.
- \_\_\_\_\_. *Puritans Against the Wilderness: Connecticut History to 1763*. Chester, Connecticut: Pequot Press, 1975.
- Walsh, James P. *Connecticut Industry and the Revolution*. Hartford, Connecticut: The American Revolution Bicentennial Commission, 1978.

Westbrook, Crawford, Associates. *New London Downtown and Waterfront Development Program*. New London, Connecticut: Economic Development Advisory Group, 1985.

Whiffen, Marcus. *American Architecture Since 1780: A Guide to the Styles*. Cambridge, Massachusetts: MIT Press, 1969.

White, David O. *Connecticut's Black Soldiers 1775-1783*. Chester, Connecticut: Pequot Press, 1973.

Wickstrand, Norman M. "Notes and Sketches of Connecticut Blast Furnaces." *The Connecticut Historical Society Bulletin*. Volume 51, Number 3, 1986.

Willauer, George J., Jr., ed. *A Lyme Miscellany 1776-1976*. Middletown, Connecticut: Wesleyan University Press, 1977.

Wood, Frederic James. *The Turnpikes of New England*. Boston, Massachusetts: Marshall Jones Co., 1919.

Works Progress Administration. *Connecticut: A Guide to its Roads, Lore, and People*. Boston, Massachusetts: Houghton Mifflin Company, 1938.

## **Historical and Architectural Surveys**

The survey reports listed below are part of the Statewide Historic Resource Inventory maintained by the Connecticut Historical Commission. The survey reports contain detailed information on individual properties. The archival copies of the reports may be found at the Special Collections Department of the Thomas J. Dodd Research Center at the Homer D. Babbidge Library, University of Connecticut at Storrs. Microfiche copies may be used at the Connecticut Historical Commission, the Connecticut Historical Society, and the Connecticut State Library in Hartford, and the Connecticut Trust for Historic Preservation in Hamden.

### **BRANFORD**

*Phase 1*. Central Branford. Intensive-level, 297 properties. Architectural Preservation Trust of Branford and Connecticut Historical Commission, 1985.

*Phase 2*. Shoreline Communities. Intensive-level, 455 properties. Architectural Preservation Trust of Branford and Connecticut Historical Commission, 1986.

### **CHESTER**

*Townwide*. Reconnaissance-level, 271 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## CLINTON

*Townwide.* Reconnaissance-level, 118 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## DEEP RIVER

*Townwide.* Reconnaissance-level, 123 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

## EAST LYME

*Southern East Lyme.* Intensive-level, 86 properties. Connecticut Historical Commission, 1997.

## ESSEX

*Townwide.* Reconnaissance-level, 494 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## GROTON

*Phase 1. Townwide.* Intensive-level, 120 properties. Town of Groton and Connecticut Historical Commission, 1992.

*Phase 2. Townwide.* Intensive-level, 175 properties. Town of Groton and Connecticut Historical Commission, 1994.

*Phase 3. Mystic Historic District.* Reconnaissance-level, 491 properties. Town of Groton and Connecticut Historical Commission, 1994.

*Phase 4. City of Groton.* Intensive-level, 85 properties. Town of Groton and Connecticut Historical Commission, 1996.

## GUILFORD

*Townwide.* Intensive-level, 450 properties. Guilford Preservation Alliance and Connecticut Historical Commission, 1981.

## KILLINGWORTH

*Townwide.* Reconnaissance-level, 163 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## LEDYARD

*Townwide.* Intensive-level, 140 properties. Town of Ledyard and Connecticut Historical Commission, 1992.



- Westbrook, Crawford, Associates. *New London Downtown and Waterfront Development Program*. New London, Connecticut: Economic Development Advisory Group, 1985.
- Whiffen, Marcus. *American Architecture Since 1780: A Guide to the Styles*. Cambridge, Massachusetts: MIT Press, 1969.
- White, David O. *Connecticut's Black Soldiers 1775-1783*. Chester, Connecticut: Pequot Press, 1973.
- Wickstrand, Norman M. "Notes and Sketches of Connecticut Blast Furnaces." *The Connecticut Historical Society Bulletin*. Volume 51, Number 3, 1986.
- Willauer, George J., Jr., ed. *A Lyme Miscellany 1776-1976*. Middletown, Connecticut: Wesleyan University Press, 1977.
- Wood, Frederic James. *The Turnpikes of New England*. Boston, Massachusetts: Marshall Jones Co., 1919.
- Works Progress Administration. *Connecticut: A Guide to its Roads, Lore, and People*. Boston, Massachusetts: Houghton Mifflin Company, 1938.

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### BRANFORD

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*Phase 2*. Shoreline Communities. Intensive-level, 455 properties. Architectural Preservation Trust of Branford and Connecticut Historical Commission, 1986.

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*Townwide*. Reconnaissance-level, 271 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## CLINTON

*Townwide.* Reconnaissance-level, 118 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## DEEP RIVER

*Townwide.* Reconnaissance-level, 123 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

## EAST LYME

*Southern East Lyme.* Intensive-level, 86 properties. Connecticut Historical Commission, 1997.

## ESSEX

*Townwide.* Reconnaissance-level, 494 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## GROTON

*Phase 1. Townwide.* Intensive-level, 120 properties. Town of Groton and Connecticut Historical Commission, 1992.

*Phase 2. Townwide.* Intensive-level, 175 properties. Town of Groton and Connecticut Historical Commission, 1994.

*Phase 3. Mystic Historic District.* Reconnaissance-level, 491 properties. Town of Groton and Connecticut Historical Commission, 1994.

*Phase 4. City of Groton.* Intensive-level, 85 properties. Town of Groton and Connecticut Historical Commission, 1996.

## GUILFORD

*Townwide.* Intensive-level, 450 properties. Guilford Preservation Alliance and Connecticut Historical Commission, 1981.

## KILLINGWORTH

*Townwide.* Reconnaissance-level, 163 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## LEDYARD

*Townwide.* Intensive-level, 140 properties. Town of Ledyard and Connecticut Historical Commission, 1992.

## LYME

*Townwide.* Reconnaissance-level, 113 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## MADISON

*Townwide.* Intensive-level, 250 properties. Madison Survey Committee and Connecticut Historical Commission, 1980.

## NEW LONDON

*Central Business District and Post Hill Street.* Reconnaissance-level, 872 properties. City of New London and Connecticut Historical Commission, 1980.

*City Completion Survey.* Intensive-level, 445 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1985.

*East New London, Fort Trumbull Area.* Intensive-level, 297 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1981.

## NEW LONDON

*Green Harbor.* Intensive-level, 285 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1984.

*Pequot Colony.* Intensive-level, 74 properties. New London Landmarks-Union Railroad Station Trust, 1984.

*Shaw's Cove-Montauk Avenue.* Intensive-level, 167 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1983.

*Townwide.* Reconnaissance-level, 287 properties. New London Landmarks-Union Railroad Station Trust, 1985.

## OLD LYME

*Townwide.* Reconnaissance-level, 81 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

## OLD SAYBROOK

*Townwide.* Reconnaissance-level, 171 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1979.

## STONINGTON

*Phase 1, Pawcatuck, and Phase 2, Rural Stonington.* Intensive-level, 599 properties. Town of Stonington and Connecticut Historical Commission, 1981.

## WATERFORD

*Jordan Village.* Intensive-level, 50 properties. Jordan Village Study Committee and Connecticut Historical Commission, 1990.

*Northern Waterford.* Intensive-level, 236 properties. Town of Waterford and Connecticut Historical Commission, 1997.

*Southern Waterford.* Intensive-level, 298 properties. Town of Waterford and Connecticut Historical Commission, 1996.

## WESTBROOK

*Townwide.* Reconnaissance-level, 178 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

## LYME

*Townwide.* Reconnaissance-level, 113 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1980.

## MADISON

*Townwide.* Intensive-level, 250 properties. Madison Survey Committee and Connecticut Historical Commission, 1980.

## NEW LONDON

*Central Business District and Post Hill Street.* Reconnaissance-level, 872 properties. City of New London and Connecticut Historical Commission, 1980.

*City Completion Survey.* Intensive-level, 445 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1985.

*East New London, Fort Trumbull Area.* Intensive-level, 297 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1981.

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*Shaw's Cove-Montauk Avenue.* Intensive-level, 167 properties. New London Landmarks-Union Railroad Station Trust and Connecticut Historical Commission, 1983.

*Townwide.* Reconnaissance-level, 287 properties. New London Landmarks-Union Railroad Station Trust, 1985.

## OLD LYME

*Townwide.* Reconnaissance-level, 81 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

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*Townwide.* Reconnaissance-level, 171 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1979.

## STONINGTON

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*Jordan Village.* Intensive-level, 50 properties. Jordan Village Study Committee and Connecticut Historical Commission, 1990.

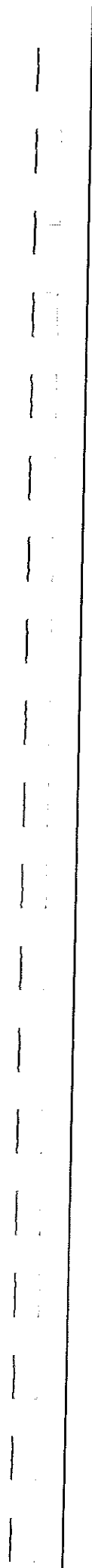
*Northern Waterford.* Intensive-level, 236 properties. Town of Waterford and Connecticut Historical Commission, 1997.

*Southern Waterford.* Intensive-level, 298 properties. Town of Waterford and Connecticut Historical Commission, 1996.

## WESTBROOK

*Townwide.* Reconnaissance-level, 178 properties. Connecticut River Estuary Regional Planning Agency and Connecticut Historical Commission, 1978.

**Part 2**  
**Management Guide**





## VII. EASTERN COASTAL SLOPE PROPERTY TYPE MATRIX

	COLONIAL PERIOD 1614-1780	AGRICULTURAL AND EARLY INDUSTRIAL PERIOD 1780-1850	INDUSTRIAL AND URBAN GROWTH PERIOD 1850-1930	MODERN PERIOD 1930-1995
AGRICULTURE/ SUBSISTENCE	farmsteads / farmhouses / livestock farms / Native American planting fields	farmsteads / farmhouses / dairy farms / livestock farms	farmsteads / farmhouses / dairy farms / livestock farms / poultry farms / fruit farms / greenhouses	poultry farms / dairy farms / vegetable and fruit farms / nurseries / greenhouses / oyster farms
COMMERCE	marine vessels / shipyards / wharves / docks / jetties / ropewalks / warehouses / chandleries / merchant houses / farm market buildings / trading posts / artisans shops / apothecaries / inns / taverns	marine vessels / shipyards / wharves / docks / jetties / ropewalks / warehouses / chandleries / customs houses / merchant houses / farm market buildings / banks / general stores / grain and feed stores / artisans shops / apothecaries / inns / taverns / hotels	marine vessels / shipyards / boatyards / wharves / docks / jetties / breakwaters / ropewalks / warehouses / lumber yards / company stores / general stores / grain and feed stores / retail stores / department stores / national chain stores / apothecaries / banks / commercial buildings / newspaper plants / telephone buildings / radio stations / inns / taverns / hotels / tourist courts / diners / bars / gas stations / garages / auto dealerships	marine vessels / shipyards / boatyards / marinas / warehouses / lumber yards / retail stores / department stores / national chain stores / supermarkets / drug stores / shopping centers / shopping malls / banks / commercial buildings / newspaper plants / telephone buildings / radio stations / television stations / inns / hotels / motels / restaurants / diners / bars / fast food chains / gas stations / garages / auto dealerships / casinos
EDUCATION	schoolhouses / colleges	schoolhouses / academies / high schools	schoolhouses / academies / parochial schools / elementary schools / high schools / normal schools / private day schools / boarding schools / private colleges / arboretums	schoolhouses / academies / parochial schools / elementary schools / high schools / private day schools / boarding schools / private junior colleges / private colleges / military academies / arboretums

**COLONIAL PERIOD  
1614-1780**

**IMMIGRATION/  
ETHNIC HISTORY**

cemeteries

**INDUSTRY**

carriagemakers and wagonmakers  
shops / wheelwrights shops /  
blacksmiths shops / printers shops /  
coopers shops / joiners shops /  
clockmakers shops / tinware shops /  
pewterers shops / silversmiths shops /  
shoemakers shops / shipyards /  
boatyards / fishing wharves / fishing  
shaeks / oyster shaeks / ropewalks /  
ironworks / naileries / quarries /  
potteries / sawmills / gristmills /  
fulling mills / oil mills / cider mills /  
distilleries / tanneries

**AGRICULTURAL AND  
EARLY INDUSTRIAL  
PERIOD 1780-1850**

cemeteries / abolition-related  
buildings / safehouses / workers  
housing / Catholic churches

carriagemakers and wagonmakers  
shops / wheelwrights shops /  
blacksmiths shops / coopers shops /  
joiners shops / clockmakers shops /  
tinware shops / pewterers shops /  
silversmiths shops / shoemakers  
shops / clothiers shops / shipyards /  
boatyards / fishing wharves / fishing  
shaeks / oyster shaeks / ropewalks /  
ironworks / machine shops / marine  
hardware factories / quarries /  
potteries / glass factories / sawmills /  
gristmills / cider mills / distilleries /  
oil mills / tanneries / fulling mills /  
spinning mills / carding mills /  
weaving mills / textile mills / ivory  
key factories / bleachery and dye  
works

**MILITARY**

privateer vessels / forts / military  
posts / parade grounds / powder  
mills / magazines / supply depots /  
encampments

**INDUSTRIAL AND URBAN  
GROWTH PERIOD  
1850-1930**

cemeteries / safehouses / workers  
housing / ethnic churches /  
synagogues / fraternal organization  
buildings / ethnic social halls / ethnic  
benevolent society halls / parochial  
schools

carriagemakers and wagonmakers  
shops / wheelwrights shops /  
blacksmiths shops / coopers shops /  
joiners shops / clockmakers shops /  
shoemakers shops / clothiers shops /  
shipyards / boatyards / ropewalks /  
fishing wharves / fishing shaeks /  
oyster processing plants / lobster  
hatcheries / foundries / machine  
shops / tool makers shops /  
lockworks / brassworks / metal  
fabrication factories / quarries /  
sawmills / gristmills / cider mills /  
tanneries / creameries / textile mills /  
ivory key factories / witch hazel  
factories / bleachery and dye works /  
paper and box factories / glass  
factories / fertilizer factories / gas  
manufacturing facilities / electricity  
generating plants / petroleum storage  
tanks

**MODERN PERIOD  
1930-1995**

cemeteries / ethnic churches /  
synagogues / temples / fraternal  
organization buildings / ethnic social  
halls / ethnic benevolent society halls /  
parochial schools

submarine yards / shipyards /  
boatyards / fishing wharves / fishing  
shaeks / oyster processing plants /  
lobster hatcheries / lockworks / metal  
fabrication factories / foundries /  
marine hardware factories / machine  
shops / engine factories / textile mills /  
ivory key factories / witch hazel  
factories / bleachery and dye works /  
paper factories / pharmaceutical  
plants / automobile parts plants /  
electricity generating plants /  
petroleum storage tanks / chemical  
storage tanks

Naval vessels / Coast Guard  
academies and training stations /  
undersea warfare research  
laboratories / National Guard training  
facilities / state armories / war  
monuments and memorials

**MODERN PERIOD**  
1930-1995

**INDUSTRIAL AND URBAN**  
**GROWTH PERIOD** 1850-1930

**AGRICULTURAL AND**  
**EARLY INDUSTRIAL**  
**PERIOD** 1780-1850

**COLONIAL PERIOD**  
1614-1780

post offices / courthouses / customs  
houses / municipal buildings / jails /  
state correctional institutions / police  
stations / firehouses / mental  
institutions / schools for deaf /  
hospitals / nursing homes / reservoirs /  
water pumping stations / sewage  
treatment plants / water filtration  
plants / CCC camps / WPA and PWA  
projects / cities / boroughs

post offices / courthouses / customs  
houses / municipal buildings / jails /  
police stations / firehouses / union  
halls / widows' homes / orphanages /  
hospitals / sanitariums / schools for  
deaf / reservoirs / water pumping  
stations / sewage treatment plants /  
cities / boroughs / greens

post offices / meetinghouses /  
courthouses / customs houses / town  
halls / jails / almshouses / poor  
farms / schools for deaf / cities /  
boroughs

meetinghouses / courthouses /  
customs houses / jails / pest houses /  
animal pounds

**POLITICS / REFORM /**  
**WELFARE**

cemeteries / Catholic churches /  
Protestant churches / synagogues /  
temples / parsonages / rectories /  
parish houses / chapels / seminaries /  
religious campgrounds

cemeteries / Catholic churches /  
Protestant churches / synagogues /  
parsonages / rectories / parish  
houses / chapels / parochial schools /  
religious campgrounds

cemeteries / meetinghouses / Catholic  
churches / Protestant churches /  
Sunday Schools / parsonages /  
rectories

cemeteries / burying grounds /  
meetinghouses / churches /  
Sabbathday houses / parsonages

**RELIGION**

towns / detached single-family  
housing neighborhoods / multi-family  
housing neighborhoods / apartment  
complexes / public housing projects /  
central business districts / war-related  
housing / suburban tract  
developments / congregate housing /  
condominiums / summer colonies /  
estates / strip development / shopping  
centers / shopping malls / suburban  
office parks / industrial parks

towns / detached single-family  
neighborhoods / multi-family  
housing neighborhoods /  
tenements / boarding houses /  
war-related emergency housing /  
ethnic neighborhoods / central  
business districts / streetcar  
suburbs / railroad suburbs /  
summer colonies / estates /  
shopping centers

towns / commons / crossroads  
villages / linear villages / isolated  
farmsteads

towns / commons / nucleated  
villages / isolated farmsteads /  
Native American villages

**SETTLEMENT TYPE**

## VIII. PROTECTION PROGRAM/ACTIVITY NARRATIVE

by the  
Connecticut Historical Commission

### Federal Protection Programs

**Historic Resource Survey:** The historic resource survey is the process of identifying and gathering information on a town or city's historic buildings or sites. It identifies historic, architectural, archaeological, and historic engineering resources. Surveys conducted in accordance with the standards of the Connecticut Historical Commission are the cornerstone of preservation in Connecticut because they serve as the framework on which local government officials and planners, citizen boards, preservationists, and developers can base sound development decisions.

**Certified Local Government Status:** The Certified Local Government program was authorized by the National Historic Preservation Act of 1966, as amended in 1980, to recognize local preservation planning expertise and to provide communities with a way to participate more fully in federal and state historic preservation programs. At least ten percent of the annual Historic Preservation Fund grant administered by the Connecticut Historical Commission under the National Historic Preservation Act and in accordance with 36 CFR Part 61 must be distributed among Certified Local Governments in the state. Note: only municipalities which have at least one local historic district or property established pursuant to Connecticut General Statutes Section 7-147 et seq. are eligible for participation in this program.

**National Register Listing:** The National Register of Historic Places was established by the National Historic Preservation Act of 1966. Administered by the Connecticut Historical Commission under 36 CFR Part 60, the listing recognizes properties that have significance in American history, architecture, archaeology, and culture at the local, state, or national level. Districts, sites, buildings, structures, and objects may be nominated. Listing results in consideration in planning for federal, federally licensed, or federally assisted projects in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and 36 CFR Part 800. Federal agencies are required to assess what impact an agency's proposed undertaking will have on properties listed on the National Register of Historic Places. The process includes review and comment by the State Historic Preservation Office and may involve the Advisory Council on Historic Preservation. This protection is also afforded to properties eligible for listing. In addition, owners of listed properties may be eligible for: (1) federal tax benefits for the rehabilitation of historic properties under 36 CFR Part 67, and (2) federal historic preservation matching grants-in-aid when funds are available. In Connecticut, listing also results in the application of Connecticut General Statutes Section 22a-19a of the Connecticut Environmental Protection Act. This law permits legal recourse for the proposed unreasonable destruction of properties under consideration for listing or listed on the National Register of Historic Places.

**National Historic Landmark Listing:** Administered by the National Park Service under 36 CFR Part 65, National Historic Landmarks are identified, designated, recognized, and monitored directly by the federal government. To qualify for landmark status, a property must possess exceptional historical significance to the nation.

## **State and Local Protection Activities**

**State Register Listing:** Connecticut General Statutes Section 10-321a established the State Register of Historic Places in 1975. Historic properties significant to the development of the state may be nominated by the State Historic Preservation Office and designated by the members of the Connecticut Historical Commission, who are appointed by the Governor. The criteria for selection are similar to those of the National Register of Historic Places. Since 1977, all properties approved for nomination to the National Register of Historic Places and all local historic districts and local historic properties favorably recommended by the Connecticut Historical Commission pursuant to Connecticut General Statutes Section 7-147 et seq. are automatically entered on the State Register of Historic Places.

**Preservation Plan:** Connecticut General Statutes Section 8-23 requires municipalities to adopt development plans which may include an independent historic preservation plan or a historic preservation component. A preservation plan identifies goals for the protection and enhancement of historic properties and is typically based on a comprehensive and intensive-level historic resource survey.

**Cultural Resource Planning Map:** Usually compiled as a component of preservation plans, historic resource surveys, or nominations for National Register of Historic Places and National Historic Landmark listings, a cultural resource planning map locates and identifies significant or potentially significant cultural resources.

**Overlay Zoning:** Connecticut General Statutes Section 8-2 authorizes municipalities to establish zoning regulations that may provide for reasonable consideration for the protection of historic factors. Overlay zoning is an additional layer of regulations superimposed on the base zoning regulations for a particular area in a community. The purpose of historic overlay zoning is to maintain the architectural character of historic buildings that might be adversely affected in the absence of such special zoning provisions. Regulations may provide for an additional preservation review process with reference to those aspects of architectural design governed by zoning, such as density, height, and use.

**Demolition Delay Ordinance:** Connecticut General Statutes Section 29-406a and b identifies the terms under which a permit for the demolition of a particular structure may be granted. Section 29-406b authorizes any town, city, or borough, by ordinance, to impose a waiting period of not more than 90 days before granting any permit for the demolition of any building or structure or any part thereof. The 90-day waiting period allows time for exploring alternatives to demolition.

The ordinance establishes the criteria for determining which properties are subject to a delay of demolition. Such criteria may include historic factors and a definition of historic properties.

**State Scenic Roads Designation:** Connecticut General Statutes Section 13b-31b through Section 18b-81e defines a state scenic road as any state highway or portion thereof that (1) passes through agricultural land or abuts land where a National Register or State Register property is located; or (2) affords vistas of marshes, shorelines, forests with mature trees, or notable geologic or other natural features. It authorizes the commissioner of transportation in consultation with the commissioners of environmental protection and economic development to designate state highways or portions thereof as scenic roads. The purpose of the state scenic road designation is to ensure that any alteration to such a road maintains the character of the road. Towards this end, the commissioner of transportation, in consultation with the commissioners of environmental protection and economic development, is required to adopt regulations which set forth special maintenance and improvement standards that take into consideration the protection of the historic and natural features of scenic roads.

**Municipal Scenic Roads Designation:** Connecticut General Statutes Section 7-149a authorizes towns, cities, or boroughs to designate, by ordinance, locally owned roads as scenic roads for the purpose of regulating future alterations or improvements, including, but not limited to, widening of the right-of-way or traveled portion of the road, paving, changes of grade, straightening, and removal of stone walls or mature trees. To qualify, a road must meet at least one of the following criteria: (1) it is unpaved; (2) it is bordered by mature trees or stone walls; (3) the traveled portion is no more than 20 feet in width; (4) it offers scenic views; (5) it blends naturally into the surrounding terrain; or (6) it parallels or crosses over brooks, streams, lakes, or ponds. Designation requires that a majority of the owners of lot frontage abutting the road agree by filing a written statement of approval with the town clerk.

**National Register Land Record Citation:** Connecticut General Statutes Section 47-18a requires the record owner of any property under consideration for listing or listed on the National Register of Historic Places to record that information on the land records of the town in which the property is located. The purpose of such action is to inform subsequent owners of the property that the property is subject to the consequences of listing on the National Register of Historic Places.

**Design Review Board:** Municipalities can establish a design review board, composed of qualified professionals and other community representatives, to review and provide advisory comments on exterior changes to historic buildings or structures and on new construction which might have an impact on historic properties.

**Municipal Preservation Board:** Connecticut General Statutes Section 10-321q authorizes municipalities to appoint Municipal Preservation Boards to review National Register of Historic Places nomination forms and submit comments to the State Historic Preservation Board.

**Local Historic District/Property Study Committee:** Connecticut General Statutes Section 7-147 et seq. authorizes municipalities to establish local historic districts and/or properties. The first step in the process is the appointment of a citizens' study committee.

**Local Historic District/Property Commission:** Connecticut General Statutes Section 7-147 et seq. authorizes the establishment of permanent commissions appointed by municipalities to govern local historic districts/properties established by the procedures of the enabling statute. Duties of the commissions are to implement design review procedures and to regulate exterior architectural changes to historic properties within local historic districts or to individual historic properties if those changes are visible from a public right-of-way. Note: districts listed on the National Register of Historic Places are not subject to these restrictions, although in some cases local districts may also be listed on the National Register of Historic Places.

**Local Historic Preservation Trust:** Citizens have established privately funded nonprofit historic preservation organizations throughout Connecticut. These groups serve as local advocates for the preservation of historic properties within the community or region. Activities can include sponsoring cultural resource surveys to identify historic properties, offering educational programs, and providing technical assistance. In some cases the local historical society carries out a preservation role. Connecticut General Statutes Special Act 75-93 established the Connecticut Trust for Historic Preservation, a statewide nonprofit organization.

**Municipal Preservation Planner:** Towns and cities may include a paid professional position in their planning departments to prepare and implement a preservation plan, assist local historic district/property commissions, evaluate the environmental impact of certain municipal activities, act as liaison between the municipality and the State Historic Preservation Office, and administer the Certified Local Government program, if applicable.

**Municipal Historian:** Connecticut General Statutes Section 7-148 (c) (5) (D) authorizes towns and cities to appoint a municipal historian whose responsibilities are locally defined. The municipal historian can provide information about a community's history which can assist in local decisionmaking and preservation planning.

**Tax Abatement:** Connecticut General Statutes Section 12-127a allows municipalities, by ordinance, to abate all or part of the real property taxes on structures of historical or architectural merit, provided it can be shown that the current level of taxation is a factor which threatens the continued existence of the structure, necessitating its demolition or remodeling in a form which destroys its integrity.

**Assessment Deferral:** Connecticut General Statutes Section 12-65c through 12-65f authorizes municipalities to adopt a resolution designating one or more rehabilitation areas and establishing the criteria for determining which properties within the area so designated are eligible for a deferral of a tax assessment increase resulting from rehabilitation of the property.

**Connecticut Environmental Protection Act:** Connecticut General Statutes Section 22a-19a directs that the provisions of sections 22a-15 through 22a-19 of the Connecticut Environmental

Protection Act, which permit legal recourse for the unreasonable destruction of the state's resources, shall also be applicable to historic structures and landmarks of the state. Such structures and landmarks are defined as those properties (1) which are individually listed or under consideration for individual listing on the National Register of Historic Places or (2) which are part of a district listed or under consideration for listing on the National Register and which have been determined by the State Historic Preservation Board to contribute to the historic significance of such a district. If the plaintiff in a resulting legal action cannot make a prima facie showing that the conduct of the defendant, acting alone or in combination with others, has unreasonably destroyed or is likely unreasonably to destroy the public trust in such historic structures or landmarks, the court shall tax all costs for the action to the plaintiff.

**Connecticut State Building Code:** Section 513 ("Special Historic Structures and Districts") and Connecticut General Statutes Section 29-259(a) recognize the special nature of historic structures and allow for certain alternatives to the life safety code so long as safe design, use, and construction are not affected. The Connecticut Historical Commission, under Section 513 of the State Building Code, reviews applications for designation of historic structure status and for preservation and rehabilitation work in compliance with established standards. A Preservation and Rehabilitation Certificate is issued by the Connecticut Historical Commission for applications meeting the established standards.



**IX. EASTERN COASTAL SLOPE PROTECTION PROGRAM/ACTIVITY TABLE**

PROGRAM/ACTIVITY		Branford	Chester	Clinton	Deep River	East Lyme	Essex	Groton	Guilford	Killingworth
<b>FEDERAL PROTECTION PROGRAMS</b>	Historic Resource Survey	X	X	X	X	X	X	X	X	X
	Certified Local Government Status							X	X	
	National Register Listing	X	X	X	X	X	X	X	X	X
	National Historic Landmark Listing						X	X	X	
<b>STATE AND LOCAL PROTECTION ACTIVITIES</b>	State Register Listing	X	X	X	X	X	X	X	X	X
	Preservation Plan							X	X	
	Cultural Resource Planning Map		X						X	
	Overlay Zoning	X	X						X	
	Demolition Delay Ordinance	X								
	State Scenic Roads Designation	X							X	
	Municipal Scenic Roads Designation						X	X	X	X
	National Register Land Record Citation									
	Design Review Board	X								
	Municipal Preservation Board									
	Local Historic District/Property Study Committee									
	Local Historic District/Property Commission			X				X	X	
	Local Historic Preservation Trust	X							X	
	Municipal Preservation Planner							X		
	Municipal Historian	X	X	X	X	X	X	X	X	X
	Tax Abatement									
Assessment Deferral										

PROGRAM/ACTIVITY		Ledyard	Lyme	Madison	New London	Old Lyme	Old Saybrook	Stonington	Waterford	Westbrook
FEDERAL PROTECTION PROGRAMS	Historic Resource Survey	X	X	X	X	X	X	X	X	X
	Certified Local Government Status	X			X					
	National Register Listing	X	X	X	X	X	X	X	X	X
	National Historic Landmark Listing	X			X	X		X		
STATE AND LOCAL PROTECTION ACTIVITIES	State Register Listing	X	X	X	X	X	X	X	X	X
	Preservation Plan	X								
	Cultural Resource Planning Map	X		X	X					X
	Overlay Zoning				X					
	Demolition Delay Ordinance				X				X	
	State Scenic Roads Designation							X		
	Municipal Scenic Roads Designation	X						X		
	National Register Land Record Citation									
	Design Review Board			X	X					
	Municipal Preservation Board			X						
	Local Historic District/Property Study Committee									
	Local Historic District/Property Commission	X	X		X	X	X			
	Local Historic Preservation Trust				X					
	Municipal Preservation Planner			X						
	Municipal Historian	X	X	X	X		X	X	X	X
	Tax Abatement									
Assessment Deferral										

## X. NATIONAL REGISTER OF HISTORIC PLACES CRITERIA

The following criteria are designed to guide the states, federal agencies, local governments, the public, and the Secretary of the Interior in evaluating potential entries (other than areas of the National Park System and National Historic Landmarks) for the National Register of Historic Places.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his/her productive life; or
- D. a cemetery that derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

- E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of restoration master plan, and when no other building or structure with the same association has survived; or
- F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- G. a property achieving significance within the past 50 years if it is of exceptional importance.

**XI. EASTERN COASTAL SLOPE RESOURCES  
LISTED ON  
NATIONAL REGISTER OF HISTORIC PLACES**

The listings below are alphabetized by resource name within the 18 towns of the Eastern Coastal Slope, which appear in alphabetical order. Organization of the listings is as follows: name of resource, address of resource (for some historic districts, peripheral streets indicate general boundaries), and date of entry on the National Register of Historic Places. The list is current through December, 1997.

**KEY**

- NHL - National Historic Landmark
- HABS - Historic American Buildings Survey
- HAER - Historic American Engineering Record
- LHD - Local Historic District
- MPS - Multiple Property Submission
- MRA - Multiple Resource Area
- TR - Thematic Resource

**BRANFORD**

- BALDWIN, TIMOTHY, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 186  
Damascus Rd., 12/01/88**
- BALDWIN, ZACCHEUS, HOUSE (COLONIAL HOUSES OF BRANFORD TR),  
154 Damascus Rd., 12/01/88**
- BEACH, SAMUEL, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 94 E.  
Main St., 12/01/88**
- BLACKSTONE HOUSE (COLONIAL HOUSES OF BRANFORD TR), 37 First  
Ave., 12/01/88**
- BRADLEY, TIMOTHY, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 12  
Bradley St., 12/01/88**
- BRANFORD CENTER HISTORIC DISTRICT, Roughly bounded by U.S. 1,  
Branford River on E. and S., Monroe and Kirkham Sts., 05/06/87**
- BRANFORD ELECTRIC RAILWAY HISTORIC DISTRICT (also in East Haven),  
17 River St. to Court St., 06/03/83**
- BRANFORD POINT HISTORIC DISTRICT, Roughly along Harbor St. N. from  
Curve St. to Branford Point, also Maple St. E. from Reynolds St. to Harbor St., 09/15/88**
- COLONIAL HOUSES OF BRANFORD TR, Townwide, 12/01/88**
- FRISBIE, EDWARD, HOMESTEAD, 240 Stony Creek Rd., 05/16/85**
- FRISBIE, EDWARD, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 699 E.  
Main St., 12/01/88**
- HARRISON-SWAIN HOUSE, 124 W. Main St., 10/10/75, HABS**

**HOADLEY, ISAAC, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 9**  
Totoket Rd., 12/01/88

**HOADLEY, JOHN, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 213**  
Leete's Island Rd., 12/01/88

**HOADLEY, ORRIN, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 15**  
Sunset Hill Rd., 12/01/88

**HOUSE AT 161 DAMASCUS ROAD (COLONIAL HOUSES OF BRANFORD TR),**  
161 Damascus Rd., 12/01/88

**HOUSE AT 29 FLAT ROCK ROAD (COLONIAL HOUSES OF BRANFORD TR),**  
29 Flat Rock Rd., 12/01/88

**HOWD, ELIPHALET, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 675**  
E. Main St., 12/01/88

**LEWIS, ISAAC C., COTTAGE, 255 Thimble Islands Rd., 07/25/97**

**NORTON HOUSE (COLONIAL HOUSES OF BRANFORD TR), 200 Pine Orchard**  
Rd., 12/01/88

**PALMER, HEZEKIAH, HOUSE (COLONIAL HOUSES OF BRANFORD TR),**  
340-408 Leete's Island Rd., 12/01/88

**PALMER, ISAAC, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 736-756**  
Main St., 12/01/88

**ROGERS, JOHN, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 690**  
Leete's Island Rd., 12/01/88

**ROUTE 146 HISTORIC DISTRICT (also in Guilford), Rt. 146 between Flat Rock**  
Rd. and West River Bridge, 04/05/90

**STICK STYLE HOUSE AT STONY CREEK, 34 Prospect Hill, 12/27/72**

**STONY CREEK-THIMBLE ISLANDS HISTORIC DISTRICT, Roughly Thimble**  
Islands Rd., between Rt. 146 and Long Island Sound and Thimble Islands, 12/16/88

**TYLER, JOHN, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 242-250 E.**  
Main St., 12/01/88

**TYLER, SOLOMON, HOUSE (COLONIAL HOUSES OF BRANFORD TR), 260-**  
268 E. Main St., 12/01/88

## **CHESTER**

**DANIELS, CHARLES, HOUSE, 43 Liberty St., 02/19/88**

**THE OLD TOWN HALL (Second Congregational Meetinghouse), On the Green**  
between Liberty St. and Goose Hill Rd., 02/23/72

**PRATT, DR. (AMBROSE), HOUSE, Pratt St., 11/09/72**

**WARNER, JONATHAN, HOUSE (Warner-Brooks House), 47 Kings Hwy., 12/19/78**

## **CLINTON**

**CLINTON VILLAGE HISTORIC DISTRICT, Along Cemetery Rd., Church, E.Main,**  
and Liberty Sts., Old Post Rd., and Waterside Ln., 07/29/94, LHD, HABS

**STEVENS, WILLIAM, HOUSE, 131 Cow Hill Rd., 05/30/85**

## DEEP RIVER

**DEEP RIVER FREIGHT STATION**, 152 River St., Deep River, 12/30/94  
**DEEP RIVER TOWN HALL**, CT 80 and CT 9A, 01/01/76, HABS  
**DORIS (Sailing Yacht)**, Connecticut River off River Rd., 05/31/84  
**PRATT, READ AND COMPANY FACTORY COMPLEX**, Main St. between Bridge and Spring Sts., and 5 Bridge St., 08/30/84

## EAST LYME

**AVERY, THOMAS, HOUSE (Smith-Harris House)**, Society Rd., 08/22/79  
**GORTON, WILLIAM, FARM**, 14 West Ln., 04/05/84  
**LEE, THOMAS, HOUSE**, CT 156 and Giant's Neck Rd., 10/06/70  
**PLANT, MORTON FREEMAN, HUNTING LODGE**, 56 Stone Ranch Rd., 12/12/88  
**ROCKY NECK PAVILION (CONNECTICUT STATE PARK AND FOREST DEPRESSION-ERA FEDERAL WORK RELIEF PROGRAMS STRUCTURES TR)**, Lands End Point in Rocky Neck State Park, 09/04/86  
**SMITH, SAMUEL, HOUSE (Hurlburt House)**, 82 Plants Dam Rd., 06/04/79

## ESSEX

**BUSHNELL, BENJAMIN, FARM**, 52 Ingham Hill Rd., 05/10/90  
**CENTERBROOK CONGREGATIONAL CHURCH**, Main St., 02/12/87  
**CHRISTEEN (Oyster Sloop)**, Connecticut River Museum, 12/04/91, NHL  
**COMSTOCK-CHENEY HALL (Ivoryton Playhouse)**, Main and Summit Sts., 04/15/82  
**ESSEX FREIGHT STATION**, 1 Railroad Ave., 04/19/94  
**HILL'S ACADEMY**, 22 Prospect St., 08/23/85  
**PRATT HOUSE**, 19 West Ave., 08/23/85  
**STEAMBOAT DOCK SITE (Steamboat Dock)**, Main St., 04/01/82

## GROTON

**BRANFORD HOUSE**, Shennecosset and Eastern Point Rds., 01/23/84  
**BURNETT'S CORNER HISTORIC DISTRICT**, Along Packer Rd., S. of CT 184, 12/04/97, LHD  
**COGSWELL, EDWARD, HOUSE**, 1429 Hopeville Rd., 12/15/93  
**EASTERN POINT HISTORIC DISTRICT**, Roughly bounded by Beach Pond Ave., Tyler Point Dr., Shore Ave., Hillside Ave, and Eastern Point Rd., 10/04/79, LHD  
**FORT GRISWOLD**, Bounded by Baker Ave., Smith St., Park Ave., Monument Ave., and Thames River, 10/06/70  
**GROTON BANK HISTORIC DISTRICT (Groton Bank, Groton Heights)**, Roughly bounded by Monument, School, Thames, and Broad Sts., 03/24/83  
**MYSTIC RIVER HISTORIC DISTRICT**, W. side of Mystic River, 08/24/79, LHD  
**NOANK HISTORIC DISTRICT**, Noank Peninsula, CT 215, 08/10/79

**PEQUOT FORT**, Groton vicinity, 01/19/90  
**SMITH, JABEZ, HOUSE (Smith Homestead)**, 1 North Rd., 05/15/81  
**U.S.S. NAUTILUS (Submarine - SSN-571)**, 1 Naval Submarine Base, 05/16/79, NHL  
**YEOMANS, EDWARD, HOUSE (Cove Nook Farm)**; 1 Brook St. at Palmer Cove,  
12/22/78

## **GUILFORD**

**ACADIAN HOUSE**, Union St., 09/05/75, HABS  
**DUDLEYTOWN HISTORIC DISTRICT**, Roughly, Clapboard Hill Rd. from Tanner  
Marsh Rd. to Murray Ln., East River Rd. SE to Trailwood Dr., and Duck Hole Rd.,  
08/09/91  
**ELIOT, JARED, HOUSE**, 88 Old Chaffinch Island Rd., 11/14/85  
**FALKNER'S ISLAND LIGHTHOUSE (OPERATING LIGHTHOUSES IN  
CONNECTICUT MPS)**, Long Island Sound, 5 mi. S. of Guilford, 05/29/90  
**GRISWOLD HOUSE**, Boston St., 10/10/75  
**GUILFORD HISTORIC TOWN CENTER (District)**, Bounded by West River, I-95,  
East Creek, and Long Island Sound, 07/06/76, HABS, LHD  
**HYLAND-WILDMAN HOUSE**, Boston St., 03/26/76  
**LEETE, PELATIAH, HOUSE (Leete Family Homestead)**, Leete's Island Rd.,  
10/01/74  
**MEETING HOUSE HILL HISTORIC DISTRICT**, Roughly bounded by Long Hill,  
Great Hill, and Ledge Hill Rds., 12/14/87  
**PITKIN, ELISHA, HOUSE**, 173 High Woods Dr., 04/06/79, HABS  
**ROUTE 146 HISTORIC DISTRICT (also in Branford)**, Rt. 146 between Flat Rock  
Rd. and West River Bridge, 04/05/90  
**SABBATH DAY HOUSE (Daniel Bowen House)**, 19 Union St., 10/10/75, HABS  
**WHITFIELD, HENRY, HOUSE**, Old Whitfield St., 11/27/72, NHL

## **KILLINGWORTH**

**OAK LODGE (CONNECTICUT STATE PARK AND FOREST DEPRESSION-  
ERA FEDERAL WORK RELIEF PROGRAMS STRUCTURES TR)**, W. side of  
Schreeder Pond in Chatfield Hollow State Park, 09/04/86

## **LEDYARD**

**APPLEWOOD FARM**, 528 Colonel Ledyard Hwy., 10/15/87  
**AVERY HOMESTEAD (LEDYARD MPS)**, 20 Avery Hill Rd., 12/14/92  
**CHAPMAN, DAVID, FARMSTEAD (LEDYARD MPS)**, 128 Stoddards Wharf Rd.,  
12/14/92  
**FANNING, CAPTAIN THOMAS, FARMSTEAD (LEDYARD MPS)**, 1004 Shewville  
Rd., 12/14/92  
**GALES FERRY HISTORIC DISTRICT NO. 1 (LEDYARD MPS)**, Jct. of Hurlbutt  
Rd. and Riverside Pl., 12/14/92



**GURDON BILL STORE**, 15 Church Hill Rd., 04/12/82  
**LAMB HOMESTEAD**, 47 Lambtown Rd., 09/03/91  
**LESTER, NATHAN, HOUSE**, Vinegar Hill Rd., 06/30/72, LHD  
**MAIN SAWMILL**, Iron St., 04/26/72, LHD  
**MASHANTUCKET PEQUOT RESERVATION**, address restricted, 06/11/86, NHL  
**NOYES, WILLIAM, FARMSTEAD (LEDYARD MPS)**, 340 Gallup Hill Rd., 12/14/92  
**SMITH, SHUBEL, HOUSE**, 515 Pumpkin Hill Rd., 12/20/96  
**STODDARD, CAPTAIN MARK, FARMSTEAD (LEDYARD MPS)**, 24 Vinegar Hill Rd., 12/14/92

## **LYME**

**HADLYME FERRY HISTORIC DISTRICT**, 150,151,158,162—1,162—2 Ferry Rd. and ferry slip, 12/30/94, LHD  
**HAMBURG BRIDGE HISTORIC DISTRICT**, Joshuatown Rd. and Old Hamburg Rd., 03/10/83

## **MADISON**

**ALLIS-BUSHNELL HOUSE**, 853 Boston Post Rd., 02/25/82  
**MADISON GREEN HISTORIC DISTRICT**, 446-589 Boston Post Rd. and buildings surrounding green, 06/28/82  
**MEIGS-BISHOP HOUSE**, 45 Wall St., 06/16/88  
**MURRAY, JONATHAN, HOUSE**, 76 Scotland Rd., 04/12/82  
**SHELLEY HOUSE**, 248 Boston Post Rd., 02/09/89  
**STATE PARK SUPPLY YARD (CONNECTICUT STATE PARK AND FOREST DEPRESSION-ERA FEDERAL WORK RELIEF PROGRAMS STRUCTURES TR)**, 51 Mill Rd., 09/04/86

## **NEW LONDON**

**AMES, WINSLOW, HOUSE**, 132 Mohegan Ave., 03/23/95  
**BARNS, ACORS, HOUSE (Law Offices of Francis McGuire)**, 68 Federal St., 4/22/76  
**BULKELEY SCHOOL**, Huntington St., 08/13/81  
**CIVIC INSTITUTIONS HISTORIC DISTRICT**, 156-158, 171, 173-175 Garfield Ave., 179 Coleman St., 32 Walden Ave., 04/16/90  
**COIT STREET HISTORIC DISTRICT**, Roughly bounded by Coit, Washington, Tilley, Bank, and Reed Sts., 02/19/88  
**DESHON-ALLYN HOUSE**, 613 Williams St., 10/28/70  
**DOWNTOWN NEW LONDON HISTORIC DISTRICT**, Roughly bounded by Captain's Walk and Bank, Tilley, and Washington Sts., 04/13/79  
**DOWNTOWN NEW LONDON HISTORIC DISTRICT (BOUNDARY INCREASE)**, Along Huntington, Washington, and Jay Sts.; S.W. corner of Meriden and Gov. Winthrop Blvd.; along Bank and Sparyard Sts., 02/18/88  
**FORT TRUMBULL (Underwater Sound Laboratory)**, Fort Neck, 09/22/72

**HARRIS, JONATHAN NEWTON, HOUSE (Palmer Hall, St. Albert's Hall),** 130 Broad St., 04/27/82

**HEMPSTEAD, JOSHUA, HOUSE,** 11 Hempstead St., 10/15/70

**HEMPSTEAD, NATHANIEL, HOUSE (Old Huguenot House),** Corner of Jay, Hempstead, Coit, and Truman Sts., 12/02/70

**HEMPSTEAD HISTORIC DISTRICT,** Roughly bounded by Franklin and Jay Sts., and Mountain Ave., 07/31/86

**HUNTINGTON STREET BAPTIST CHURCH (First Universalist Meetinghouse),** 29 Hunting St., 04/12/82

**LIGHTHOUSE INN,** 6 Guthrie Pl., 08/02/96

**MONTAUK AVENUE HISTORIC DISTRICT,** Roughly bounded by Ocean, Willets, and Riverview Aves. and Faire Harbor, 12/18/90

**MONTE CRISTO COTTAGE (Eugene O'Neill House),** 325 Pequot Ave., 07/17/77, NHL

**NEW LONDON COUNTY COURTHOUSE,** 70 Huntington St., 10/15/70, HABS

**NEW LONDON CUSTOM HOUSE,** 150 Bank St., 10/15/70

**NEW LONDON HARBOR LIGHTHOUSE (OPERATING LIGHTHOUSES IN CONNECTICUT MPS),** Lower Pequot Ave., 05/29/90

**NEW LONDON LEDGE LIGHTHOUSE (OPERATING LIGHTHOUSES IN CONNECTICUT MPS),** Entrance to New London Harbor, E. side of Main Channel, 05/29/90

**NEW LONDON PUBLIC LIBRARY,** 63 Huntington St., 10/15/70

**NEW LONDON RAILROAD STATION (New York, New Haven and Hartford Railroad Station),** State St., 06/28/71

**OHEV SHOLEM SYNAGOGUE (HISTORIC SYNAGOGUES OF CONNECTICUT MPS),** 109 Blinman St., 05/11/95

**PEQUOT COLONY HISTORIC DISTRICT,** Roughly bounded by Gardner, Pequot, Glenwood, and Montauk Aves., 12/01/88

**POST HILL HISTORIC DISTRICT,** Roughly bounded by Broad, Center, Vauxhall, Berkeley, Fremont, and Walker Sts., 08/05/93

**PROSPECT STREET HISTORIC DISTRICT,** Roughly bounded by Bulkeley Pl., Huntington, Federal, and Hempstead Sts., 07/31/86

**SHAW MANSION,** 11 Blinman St., 12/29/70, HABS

**THAMES SHIPYARD (Thames River Shipyards),** Farnsworth St., 04/17/75, HAER

**UNITED STATES HOUSING CORPORATION HISTORIC DISTRICT,** Roughly bounded by Coleman, Fuller, and W. Pleasant Sts., and Jefferson Ave., 04/16/90

**U.S. POST OFFICE-NEW LONDON MAIN,** 27 Masonic St., 01/21/86

**WHALE OIL ROW (District),** 105-119 Huntington St., 12/29/70

**WILLIAMS MEMORIAL INSTITUTE,** 110 Broad St., 01/30/78

**WILLIAMS MEMORIAL PARK HISTORIC DISTRICT,** Roughly bounded by Hempstead and Broad Sts., Williams Memorial Pkwy., and Mercer St., 12/03/87

**WINTHROP MILL (Old Town Mill),** Mill St., 11/30/82

**WOODWORTH, NATHAN A., HOUSE (John B. Leahy House),** 28 Channing St., 06/01/82

## OLD LYME

**GRISWOLD, FLORENCE, HOUSE**, 96 Lyme St., 04/19/93, NHL  
**OLD LYME HISTORIC DISTRICT**, Lyme St. from Shore Rd. to Sill Ln. to Rose Ln.,  
10/14/71, LHD  
**PECK TAVERN**, 1 Sill Ln., 04/12/82

## OLD SAYBROOK

**BLACK HORSE TAVERN**, 175 N. Cove Rd., 12/01/78  
**BUSHNELL, ELISHA, HOUSE (Older Bushnell House)**, 1445 Boston Post Rd.,  
11/29/78  
**CONNECTICUT VALLEY RAILROAD ROUNDHOUSE AND TURNTABLE  
SITE**, Off Main St. in Ft. Saybrook Monument Park in Saybrook Point, 04/28/94  
**DUDLEY, JEDIDIAH, HOUSE (John Whittlesey, Jr., House)**, Springbrook Rd.,  
04/12/82  
**ELIOT, SAMUEL, HOUSE**, 500 Main St., 11/09/72  
**FENWICK HISTORIC DISTRICT**, Roughly along Agawam, Neponset, and Pettipaug  
Aves., 04/13/95, LHD  
**HART, GENERAL WILLIAM, HOUSE**, 350 Main St., 11/09/72, HABS  
**JAMES PHARMACY**, 2 Pennywise Ln., 08/05/94  
**LYNDE POINT LIGHTHOUSE (OPERATING LIGHTHOUSES IN  
CONNECTICUT MPS)**, SE terminus of Sequassen Ave., 05/29/90  
**NORTH COVE HISTORIC DISTRICT**, Roughly N. Cove Rd. from Church St. to  
Connecticut River and adjacent properties on Cromwell Pl., 07/22/94, LHD  
**OLD SAYBROOK SOUTH GREEN (District)**, Old Boston Post Rd., Pennywise Ln.,  
and Main St., 09/03/76  
**PARKER HOUSE**, 680 Middlesex Tpke., 11/29/78  
**PRATT, HUMPHREY, TAVERN**, 287 Main St., 11/07/72, HABS  
**SAYBROOK BREAKWATER LIGHTHOUSE (OPERATING LIGHTHOUSES IN  
CONNECTICUT MPS)**, S. terminus of Saybrook Jetty at mouth of Connecticut River,  
05/29/90  
**TULLY, WILLIAM, HOUSE (Heartsease)**, 135 North Cove St., 03/15/82  
**WHITTLESEY, AMBROSE, HOUSE**, 14 Main St., 08/23/85  
**WHITTLESEY, JOHN, JR., HOUSE**, 40 Ferry Rd., 10/26/84

## STONINGTON

**EMMA C. BERRY (Fishing Smack)**, Mystic Seaport Museum, 10/12/94, NHL  
**L.A. DUNTON (Fishing Schooner)**, Mystic Seaport Museum, 11/04/93, NHL  
**MECHANIC STREET HISTORIC DISTRICT**, Roughly bounded by W. Broad St.,  
Pawcatuck River, Cedar St., and Courtland St., 06/07/88  
**CHARLES W. MORGAN (Whaler)**, Mystic Seaport Museum, 11/13/66, NHL  
**MYSTIC BRIDGE HISTORIC DISTRICT**, US 1 and CT 27, 08/31/79  
**PALMER, CAPTAIN NATHANIEL B., HOUSE**, 40 Palmer St., 06/19/96, NHL

**PEQUOTSEPOS MANOR (Dennison Homestead)**, Pequotsepos Rd., 06/15/79  
**SABINO (Excursion Steamer)**, Mystic Seaport Museum, 10/05/92, NHL  
**STANTON, ROBERT, HOUSE (Davis Homestead)**, Green Haven Rd., 06/04/79  
**STONINGTON BOROUGH HISTORIC DISTRICT**, Stonington Borough, 10/02/79  
**STONINGTON HARBOR LIGHTHOUSE**, 7 Water St., 01/01/76  
**STONINGTON HIGH SCHOOL**, Church St., 08/17/78  
**WHITEHALL MANSION**, Off CT 27, 04/12/79

#### **WATERFORD**

**EOLIA-HARKNESS ESTATE**, Great Neck Rd., 11/20/86  
**JORDAN VILLAGE HISTORIC DISTRICT**, Jct. of North Rd. and Avery Ln. with  
Rope Ferry Rd., 08/23/90  
**THE SEASIDE**, 36 Shore Rd., 05/15/95

#### **WESTBROOK**

**LAY-PRITCHETT HOUSE**, Stevenstown Rd. (CT 145), 10/11/78