

# **ENVIRONMENTAL IMPACT EVALUATION**

## **NATIONAL COAST GUARD MUSEUM PEDESTRIAN OVERPASS NEW LONDON, CONNECTICUT**

MMI #2247-06

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Prepared for:

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## List of Acronyms

ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
CBD1	Central Business District
CCMA	Connecticut Coastal Management Act
CEPA	Connecticut Environmental Policy Act
CGS	Connecticut General Statutes
CL&P	Connecticut Light and Power
CO	Carbon monoxide
CTECO	Connecticut Environmental Conditions Online
CTDOT	Connecticut Department of Transportation
DECD	Connecticut Department of Economic and Community Development
DEEP	Connecticut Department of Energy and Environmental Protection
EA	Environmental Assessment
EB	Electric Boat
EIE	Environmental Impact Evaluation
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
HCM	Highway Capacity Manual
LEED	Leadership in Energy and Environmental Design
LMA	Local Market Area
LOS	Level of Service
MPO	Metropolitan Planning Organization
MPT	Maintenance and Protection of Traffic
NAAQS	National Ambient Air Quality Standards
NCGM	National Coast Guard Museum
NCGMA	National Coast Guard Museum Association, Inc.
NDDB	Natural Diversity Data Base
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NLL	New London Landmarks
NOAA	National Oceanic and Atmospheric Administration
NO <sub>2</sub>	Nitrogen dioxide
O <sub>3</sub>	Ozone
OPM	Office of Policy and Management
PA	Programmatic Agreement
Pb	Lead
Plan (State Plan)	Conservation and Development Policies Plan for Connecticut
PM <sub>10</sub>	Particulate matter smaller than 10 micrometers in diameter
PM <sub>2.5</sub>	Particulate matter smaller than 2.5 micrometers (μ) in size
POCD	Plan of Conservation and Development
RCRA	Federal Resource Conservation and Recovery Act

RCSA	Regulations of Connecticut State Agencies
Regional Plan	Regional Plan of Conservation and Development
RITC	Regional Intermodal Transportation Center
SCCOG	Southeastern Connecticut Council of Governments
SEAT	Southeast Area Transit
SeCTer	Southeastern Connecticut Enterprise Region
SFHA	Special Flood Hazard Area
SHPO	Connecticut State Historic Preservation Office
SO <sub>2</sub>	Sulfur dioxide
USCG	United States Coast Guard
USGS	United States Geological Survey
WCI-2	Waterfront Commercial Industrial District
WD	Waterfront Development District



# EXECUTIVE SUMMARY

## **Introduction and Background**

The State of Connecticut is committing up to \$20M in funding to support the planning, design, and construction of a pedestrian overpass and other ancillary improvements that would enable pedestrians to access the proposed National Coast Guard Museum (NCGM) on the waterfront of the Thames River in New London, Connecticut. Because the overpass project will receive state funding, it is subject to the Connecticut Environmental Policy Act (CEPA), the purpose of which is to determine if the proposed project may have a significant impact on the physical, biological, social, or economic environment. The subject Environmental Impact Evaluation (EIE) assesses the potential environmental impacts related to the construction and operation of the proposed pedestrian overpass.

In a separate but related action, the United States Coast Guard (USCG), through the National Coast Guard Museum Association (NCGMA), proposes to construct an approximately 50,000-square-foot, four- to five-story museum. In March 2014, the USCG published an Environmental Assessment (EA) and issued a Finding of No Significant Impact (FONSI) pursuant to the National Environmental Policy Act (NEPA). The EA evaluated the potential environmental impacts of acquiring the future NCGM site and the effects from construction and operation of the museum. Because critical details had not yet been developed for the NCGM, the EA evaluated the construction and operation of a NCGM on a programmatic level. Once the NCGMA has achieved the fundraising necessary to proceed with detailed design and engineering for the NCGM, the USCG will evaluate the need for additional review in accordance with NEPA as well as compliance with other applicable laws and regulations.

## **Proposed Action**

The proposed action includes the planning, design, and construction of a pedestrian overpass to access the proposed NCGM and to complement overall improvements to New London's Regional Intermodal Transportation Center. The overpass will provide access to the NCGM, the adjacent Cross Sound Ferry terminal to the north, and City Pier to the south. It will also provide access to and from inland areas including the Water Street Parking garage, Union Station, and area businesses located to the west of the railroad tracks. The pedestrian overpass will be integral to the overall design of the NCGM and will allow visitors to safely access the museum as well as nearby public transportation facilities and the surrounding waterfront. The overpass will be designed to comply with the guidelines set forth in the American with Disabilities Act (ADA).

## **Project Purpose and Need**

The overarching purpose of the pedestrian overpass is to provide a safe accessible connection between the proposed NCGM, adjacent multimodal transportation hubs, parking, and area attractions and businesses along New London's downtown waterfront area. It is expected that the

NCGM will draw an additional 200,000 visitors to the waterfront area on an annual basis. Many of these individuals are also expected to utilize one or more of the various intermodal transportation hubs within the downtown New London area. Existing obstacles to pedestrian safety include vehicular traffic (including passenger, bus, and taxi) and rail traffic. Given the concentration of people, activities, and moving train and roadway traffic, there is a need for an overpass that will allow pedestrians to safely access and navigate the downtown area.

Two at-grade railroad crossings at Ferry Street/Governor Winthrop Boulevard and at State Street block access to the ferry terminals and to the site of the future NCGM on the east side of the tracks when trains pass through or are stopped/loading. Southbound Amtrak trains that are stopped at Union Station also block access to the northbound Amtrak tracks and the Shoreline East tracks. A pedestrian overpass would overcome these issues for pedestrian access while providing improved connectivity. The proposed overpass will also meet the need for improved ADA-compliant access over the railroad tracks for pedestrians accessing public transportation facilities and other public spaces.

### **Alternatives Analysis**

In accordance with CEPA requirements, a number of alternatives have been analyzed for the proposed pedestrian overpass, including the "no action" alternative. The analysis initially considered five potential locations within close proximity to the proposed NCGM. During the planning process, a sixth action alternative was added. Alternatives were measured against the identified project purpose, need, and numerous locational and operational objectives. The alternatives analyzed were as follows:

- Alternative #1 – No Action
- Alternative #2 – City Pier Crossing
- Alternative #3 – Greyhound Bus Crossing
- Alternative #4 – Tunnel
- Alternative #5 – Water Street Crossing
- Alternative #5A – Parade Plaza Crossing
- Alternative #6 – Cross Sound Ferry Crossing

The initial no action and five action alternatives were presented to a comprehensive group of stakeholders, including representatives of the USCG, NCGMA, Cross Sound Ferry Services, Block Island Ferry Services, City of New London, Union Station, Greyhound Bus, New London Landmarks, Southeastern Connecticut Council of Governments, and the New London Chamber of Commerce. The general consensus was that Alternative #1 (No Action), #2 (City Pier Crossing), #4 (Tunnel), and #6 (Cross Sound Ferry Crossing) do not meet the basic project purpose and need by virtue of not providing direct connection to the NCGM or train platform.

Alternative #3 (Greyhound Bus Crossing) and Alternative #5 (Water Street Crossing) meet the basic project purpose and need, but both have drawbacks that were considered significant. The overwhelming stakeholder sentiment strongly supported the need for an overpass that extended

over Water Street in order to ensure pedestrian safety, efficient movement, and connection to downtown New London. Stakeholders stressed that traffic traveling on Water Street is at odds with high volumes of people trying to cross and that adding additional pedestrian traffic here would worsen an existing dangerous condition.

Stakeholders also advocated that an overpass that crosses Water Street, with a glass atrium on the south side of the Water Street Garage, could act as a gateway to the restaurants and shops along Bank Street and State Street in downtown New London, as well as a vista for visitors to see what is beyond the immediate area of Union Station and the Water Street Garage. As a result of stakeholder input, a new Alternative (#5A), referenced as the Parade Plaza Crossing, was developed to incorporate the desirable elements of Alternatives #3 and #5.

Alternative #5A was selected as the preferred alternative due to its ability to meet the project purpose, need, and locational/operational objectives. This alternative is shown graphically in Figure ES-1. Recognizing that funding may not allow for construction of the entire project at one time, this alternative will be designed such that it can be constructed in two phases if necessary. The first phase would include the portion that spans the railroad tracks; the second phase would extend over Water Street. For purposes of the subject EIE, the full buildout was analyzed as it represents a conservatively larger footprint.

### **Evaluation of Existing Environment and Potential Impacts**

Existing conditions in the downtown waterfront area were evaluated as were potential impacts that could occur as a result of the proposed action. A summary of the analysis follows.


*Land Use* – The proposed action is consistent with the *Conservation and Development Policies Plan for Connecticut*, the Coastal Zone Management Act, regional and local land use plans and policies, and local zoning regulations. It is also compatible with existing land uses in the downtown waterfront area.

*Relocation* – Relocation of the Greyhound bus operations will be necessary in order to construct and operate the proposed overpass. The vacant space in front of the Water Street Garage has been selected as the optimal location for future operations. This site is of sufficient size to accommodate the Greyhound bus operations without relocating Water Street. Relocation will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. With or without the proposed pedestrian overpass, this is anticipated to be a positive direct impact. Representatives of Greyhound have expressed a need for a new location. The current terminal building is deteriorated and in need of repair and the location of the pick-up/drop-off area presents challenges with respect to parking, traffic and pedestrian movement.


*Socioeconomics* – The pedestrian overpass is not expected to create a significant amount of new employment in the city, nor will it affect population within New London. It will, however, complement the efforts to provide economic stimulus to the region, through the construction and operation of the proposed NCGM.



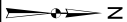
**Legend**

 Stairs / Elevator / Ramp

**Alternative Locations - Pedestrian Overpass**

 Alternative #5a - Parade Plaza

**SOURCE(S):**  
 City of New London GIS,  
 CT Ortho 2012



**Preferred Alternative**

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Figure ES-1.mxd

**Figure ES-1**

**LOCATION: New London CT**

**Map By:** JDW  
**MMI#:** 2247-06  
**Original:** 1/9/2014  
**Revision:** 7/2/2014  
**Scale:** 1 in = 100 ft

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Community Facilities and Services – No significant adverse direct, indirect, or cumulative impacts to community facilities and services are expected to occur as a result of the proposed action. Positive benefits are expected relative to public safety, recreational opportunities, and access to public transit services.

Aesthetic and Visual Resources – The aesthetic character of the downtown New London waterfront area is predominantly centered on the architecture and significance of the buildings located within the historic district, including most notably Union Station, which serves as an anchor within the district. The pedestrian overpass will incorporate the aesthetic highlights of the surrounding area. In order to ensure that the pedestrian overpass does not detract from the historic significance of the New London landscape, recommendations and approvals will be sought from the State Historic Preservation Office and the City of New London Planning and Zoning Commission throughout the design phase.

Public Utilities and Services – Overall, the existing public utilities and services in the downtown waterfront area are believed to be adequate to serve the proposed overpass with no adverse impacts. Potential physical utility conflicts will be addressed during the design phase of this project; however, no major utility relocations are anticipated.

Cultural Resources – The proposed action may have a direct impact on the building that currently houses the Greyhound Bus terminal, potentially requiring its demolition in order to accommodate the pedestrian overpass and connection points. The building is considered to be a contributing resource to the Downtown New London Historic District; thus, mitigation measures have been identified. No direct impact to the Union Station building is anticipated.

Traffic and Transportation – The pedestrian overpass is a component of the transportation network and not a destination in and of itself. Since the overpass on its own will not generate any vehicular or pedestrian traffic, with the exception of construction impacts, all traffic related impact analysis is based on the cumulative impacts of the overpass with other planned projects, most notably the NCGM. Future traffic conditions and intersection level of service were evaluated. Without the NCGM, future Level of Service at the intersection of Governor Winthrop Boulevard and Water Street is projected to be F. While the new traffic generated by the NCGM is not projected to further decrease overall level of service at any of the study intersections, with or without the pedestrian overpass, further study of traffic in the downtown waterfront area is warranted.

Parking – Similar to traffic impact analysis, since the overpass on its own will not generate any vehicular or pedestrian traffic, parking related impact analysis is based on the cumulative impacts of the overpass with other planned projects. Based on data published in 2010 updated to current conditions, approximately 69 percent of off-street parking is currently utilized under peak demand summer Saturday conditions. Even under the low-end 2030 projected scenario, a downtown parking shortage is expected during peak summer weekends unless additional parking is added. As such, further study and planning for additional parking in the downtown waterfront area is warranted.

Water Resources – No work is proposed in the Thames River or in any wetlands and therefore, no direct impacts are projected to occur. Additionally, no wastewater discharges to the river will be generated as a result of the pedestrian overpass.

Flood Hazard Potential – The majority of the downtown waterfront area is located within the FEMA one percent annual chance floodplain (Zone AE). As such, the proposed pedestrian overpass will be designed in conformance with state floodplain policies and FEMA planning considerations as defined in part 60.22 of the National Flood Insurance Program regulations.

Biological Environment – The limited biological resources within the footprint of the pedestrian overpass and in the surrounding area will be unaffected by the proposed action.

Physical Environment – No significant adverse impacts are anticipated to the physical environment as a result of the proposed pedestrian overpass. Localized impacts will occur as a result of the placement of footings and access points. However, extreme modifications to area topography are not expected.

Air Quality – The intended use of the project area is not anticipated to significantly impact air quality. The future use of the proposed overpass is to serve pedestrian traffic. No long term impacts to air quality are anticipated.

Noise Quality – The primary noise concerns associated with the proposed action are short term construction activities that have the potential to generate noise from construction vehicles and equipment. Construction activities will be limited to daylight hours when traffic noise is typically a higher level when the additional construction related noise is expected to be minimal. No significant construction related noise impacts are anticipated to occur.

Solid Waste and Hazardous Materials – The proposed pedestrian overpass is not expected to generate hazardous waste, nor is it expected to have a measurable impact on solid waste generation.

Cumulative Impacts – A positive cumulative economic impact is anticipated as a result of the NCGM and pedestrian overpass. Cumulative impacts to aesthetic/visual resources are expected as a result of the proposed action and surrounding planned projects. However, efforts will be made through the design process to minimize visual obstructions to Union Station and the Downtown New London Historic District. The overpass will be designed in a manner that honors the heritage of the waterfront and that is sympathetic with the historic appearance of the adjacent Union Station.

## **Mitigation**

Mitigation is proposed to address relocation impacts, cultural resource impacts, pedestrian safety along Water Street, development in a coastal floodplain, and short-term construction-phase impacts related to air emissions, stormwater management, and demolition.

## 1.0 PURPOSE AND NEED

### 1.1 Introduction

#### 1.1.1 Project Background

The City of New London is located in southeastern Connecticut, approximately 45 miles southeast of Hartford and 60 miles southwest of Providence, Rhode Island. It is a waterfront community along the Thames River. According to the U.S. Census Bureau, the City of New London had a year 2010 population of 27,620.

The New London Waterfront has long been the hub of many activities in the city of New London, including the Multi-Modal Transportation Center. The historic Train Station, Greyhound Bus Station, Cross Sound Ferry Services, Fisher's Island Ferry, Waterfront Park, and the City Promenade are but a few of the land uses in a hub of vehicular and pedestrian movement into and out of the waterfront area. The National Coast Guard Museum Association, Inc. (NCGMA) in conjunction with the City of New London has identified a site in the midst of these complementary waterfront uses for the construction of a National Coast Guard Museum (NCGM).

In a separate but related action, the United States Coast Guard (USCG), through the NCGMA, proposes to construct an approximately 50,000-square-foot, four- to five-story museum. The NCGMA is a 501(c)3 nonprofit, charitable organization established for the sole purpose of raising funds for the establishment of a NCGM. Following completion of the NCGM, the Coast Guard may accept the donation of the museum from the NCGMA and operate it in perpetuity.

In March 2014, the USCG published an Environmental Assessment (EA) and issued a Finding of No Significant Impact (FONSI) pursuant to the National Environmental Policy Act (NEPA). The EA evaluated the potential environmental impacts of acquiring the future NCGM site and the effects from construction and operation of the museum. Because critical details had not yet been developed for the NCGM, the EA evaluated the construction and operation of a NCGM on a programmatic level. Once the NCGMA has achieved the fundraising necessary to proceed with detailed design and engineering for the NCGM, the USCG will evaluate the need for additional review in accordance with NEPA as well as compliance with other applicable laws and regulations. An electronic copy of the EA can be found at the following website:

<http://www.uscga.edu/campus.aspx?id=679>.

Figure 1-1 is a map of the proposed NCGM site and surrounding waterfront area.



SOURCE(S):  
CT Ortho, 2012

**Figure 1-1: Project Location**

LOCATION:  
New London, CT



**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Project Location.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 7/2/2014  
Scale: 1 inch = 250 feet

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The State of Connecticut is committing up to \$20M in funding to support the planning, design, and construction of a pedestrian overpass and other ancillary improvements that would enable pedestrians to access the NCGM and the adjacent ferry terminal to the north. Because the overpass project will receive state funding, it is subject to the Connecticut Environmental Policy Act (CEPA), the purpose of which is to determine if the proposed project may have a significant impact on the physical, biological, social, or economic environment. The subject Environmental Impact Evaluation (EIE) assesses the potential environmental impacts related to the construction and operation of the proposed pedestrian overpass.

### 1.1.2 Project Stakeholders

The diversity of the land uses in the downtown waterfront area results in many project stakeholders, including the following agencies and organizations:

*State of Connecticut, Department of Economic and Community Development* – The Department of Economic and Community Development (DECD) is the state's lead agency responsible for strengthening Connecticut's competitive position in the new high-tech, knowledge-based global economy. The agency takes a comprehensive approach to economic development that incorporates community development, as well as culture and tourism ([www.ct.gov/ecd](http://www.ct.gov/ecd)). DECD's State Historic Preservation Office (SHPO) is responsible for overseeing the governmental program of historic preservation for Connecticut's citizens. DECD is the sponsoring agency for the pedestrian overpass.

*State of Connecticut Department of Transportation (CTDOT)* – The mission of the CTDOT is to provide a safe and efficient intermodal transportation network that improves the quality of life and promotes economic vitality for the state and the region. The agency has played a central role in the city of New London's Multi-Modal Transportation Center. It is a participating state agency for the pedestrian overpass. The CTDOT will take the lead coordinating the NCGM project with Amtrak and other rail users.

*Connecticut Department of Energy & Environmental Protection (DEEP)* – The Connecticut DEEP is charged with conserving, improving, and protecting the natural resources and the environment of the state of Connecticut as well as making cheaper, cleaner, and more reliable energy available for the people and businesses of the state. The agency is also committed to playing a positive role in rebuilding Connecticut's economy and creating jobs – and to fostering a sustainable and prosperous economic future for the state ([www.ct.gov/deep](http://www.ct.gov/deep)). DEEP, along with numerous other state agencies, provides critical review and input to the CEPA process.

*National Coast Guard Museum Association, Inc.* – The NCGMA is a nonprofit charitable organization that was formed in 2001 to raise funds and apply for and administer federal and state grants for the sole purpose of acquiring land, designing, constructing, and developing exhibits for a national Coast Guard museum in the city of New London,

Connecticut ([www.coastguardmuseum.org](http://www.coastguardmuseum.org)). The pedestrian overpass will provide a critical physical link to the NCGM.

*United States Coast Guard* – The USCG is one of the five armed forces of the United States and the only military organization within the Department of Homeland Security. Since 1790, the Coast Guard has safeguarded our nation's maritime interests and environment around the world. The USCG is a responsive military force of maritime professionals whose broad legal authorities, capable assets, geographic diversity, and expansive partnerships provide a presence along rivers, ports, littoral regions, and on the high seas. The USCG will provide valuable input during the planning, design, construction, and operation of the NCGM.

*The City of New London* – The City of New London has significant land holdings along the waterfront, including City Pier, Waterfront Park, the Water Street Parking Garage, and the Parade Plaza. City Pier is located immediately south of the proposed NCGM within the downtown waterfront park. This facility was recently renovated as part of ongoing waterfront improvements. Renovations included a newly constructed pier to accommodate the mooring for larger vessels, the installation of floating docks, and upgrades to the existing utilities. Upon construction of the overpass, the City of New London will assume ownership and may subsequently enter into a management agreement with Cross Sound Ferry Services, the NCGM, and Union Station.

*Cross Sound Ferry Services* – The Cross Sound Ferry terminal is located to the north of the proposed NCGM, offering passenger and vehicle ferry service between Orient Point, Long Island, New York and New London, Connecticut. The pedestrian overpass will provide a critical link to the Cross Sound Ferry terminal. It is anticipated that many of the ferry patrons will utilize the pedestrian overpass following its construction, particularly those using the parking facilities along Water Street and points beyond and those traveling by train.

*Block Island Express* – The Block Island Express offers seasonal high-speed ferry service to Block Island. The docking location, ticket office, and passenger queuing area for the Block Island service is located at the southern end of the Cross Sound Ferry terminal property and is directly adjacent to the proposed pedestrian overpass and museum site.

*New London Union Station, Amtrak, and Shoreline East* – Union Station is located east of Water Street and due west of the proposed NCGM. The station was constructed in 1887 and is listed on the National Register of Historic Places. Union Station is the primary railroad station in southeastern Connecticut and is a station stop for most of Amtrak's northeast regional trains. Union Station is also a station stop for Shoreline East Commuter Rail service, with a recent expansion in service to include weekend service stops. The proposed pedestrian overpass is likely to serve as a critical link for at least some of the train patrons.

*Southeast Area Transit District (SEAT)* – SEAT provides local bus service to eight towns and two cities in southeast Connecticut. Union Station is a major transfer point for SEAT

passengers. SEAT buses serving the station stop at a covered shelter located north of the station along Water Street.

Greyhound Bus – The Greyhound bus station is located immediately adjacent to Union Station and west of the proposed NCGM, providing intercity bus transportation.

Fisher's Island Ferry – The Fisher's Island Ferry terminal is located to the south of the proposed NCGM, offering passenger ferry service between Fisher's Island, New York and New London, Connecticut.

Southeastern Connecticut Enterprise Region (SeCTer) – SeCTer is a public-private regional economic development agency serving the towns within New London County. Its mission is to promote and preserve the region's attractiveness, to encourage new businesses, and to assist and nurture existing and expanding local enterprises (<http://secter.org>). Given the nexus between pedestrian movement, waterfront attractions, and multimodal transportation, SeCTer is an important stakeholder.

Southeastern Connecticut Council of Governments (SCCOG) – SCCOG is a public agency that provides a basis for intergovernmental cooperation in southeastern Connecticut. SCCOG is responsible for developing a plan of conservation and development for the region; assisting municipalities within the region, as well as state and other public and private agencies; and performing a variety of advisory review functions. Under federal transportation law, SCCOG functions as the region's Metropolitan Planning Organization (MPO), responsible for coordinating transportation planning in southeastern Connecticut.

New London Landmarks – New London Landmarks (NLL) is a 501(c)3 nonprofit corporation run by a volunteer board of directors and three part-time employees. The mission of NLL is to promote the preservation and development of the urban environment of New London, Connecticut, including significant individual structures, streetscapes, neighborhoods, and open spaces.

Eastern Connecticut Chamber of Commerce – The Eastern Connecticut Chamber of Commerce is a collaboration of business and community leaders dedicated to securing the economic vitality of eastern Connecticut. ([www.chamberect.com](http://www.chamberect.com)). The construction and operation of the pedestrian overpass has a critical nexus with area businesses.

## **1.2 Proposed Action and Justification**

### **1.2.1 Proposed Action**

The proposed action includes the planning, design, and construction of a pedestrian overpass to access the proposed NCGM and to complement overall improvements to New London's Regional Intermodal Transportation Center. The overpass will provide access to the NCGM, the adjacent ferry terminal to the north, and City Pier to the south.

It will also provide access to and from inland areas including the Water Street Parking garage, Union Station, and area businesses located to the west of the railroad tracks. The pedestrian overpass will be integral to the overall design of the NCGM and will allow visitors to safely access the museum as well as nearby public transportation facilities and the surrounding waterfront. The overpass will be designed to comply with the guidelines set forth in the American with Disabilities Act (ADA).

### 1.2.2 Project Purpose

The overarching purpose of the pedestrian overpass is to provide a safe accessible connection between the proposed NCGM, adjacent multimodal transportation hubs, parking, and area attractions and businesses along New London's downtown waterfront area. The specific project purpose is to provide:

1. Safe pedestrian access to the NCGM, Union Station, the ferry terminal, the waterfront promenade, recreational boating docks, and City Pier
2. Pedestrian movement in a manner that complements overall improvements to New London's Regional Intermodal Transportation Center
3. A link from Union Station and parking on the western side of the railroad tracks to ferry terminals and the proposed NCGM on the east side of the railroad tracks
4. Safe access to Amtrak trains traveling in northbound and southbound directions

The primary locational objectives of the project are that the pedestrian overpass must:

1. Be located in close proximity to the NCGM and the Cross Sound Ferry terminal
2. Be located in close proximity to rail passenger loading platforms
3. Be constructed and operate in a manner that will not negatively impact vehicular transportation
4. Provide for public/pedestrian safety
5. Not divert pedestrian traffic away from local businesses
6. Be sited and designed in a manner that incorporates the historic appearance of the adjacent Union Station and Public Square and complements the historic district as a whole
7. Provide a crossover point to the train platform to provide ADA rail passengers with access to trains

The primary operational objectives are that the pedestrian overpass must:

1. Have the capacity to accommodate reasonable peak pedestrian occurrences, taking into consideration the usage of the various transportation hubs such as rail, bus, car, and ferry
2. Be handicap accessible

### 1.2.3 Project Need

The driving force behind construction of a pedestrian overpass is the overall desire to construct a NCGM along New London's waterfront. The vision for the proposed

museum incorporates the construction of a pedestrian overpass that will allow pedestrians to safely transit the area.

The NCGMA has indicated that "*the Coast Guard is the only branch of the armed services that does not have a national museum to celebrate its role in the life of our nation and to honor the men and women who serve.*" The construction of the museum will allow the public to experience the past, present, and future significance of the USCG and the services it has provided to our nation.

It is expected that the NCGM will draw an additional 200,000 visitors to the waterfront area on an annual basis. Many of these individuals are also expected to utilize one or more of the various intermodal transportation hubs within the downtown New London area. Obstacles to pedestrian safety include vehicular traffic (including passenger, bus, and taxi) and rail traffic. Given the concentration of people, activities, and moving train and roadway traffic, there is a need for an overpass that will allow pedestrians to safely access and navigate the downtown area.

Two at-grade railroad crossings at Ferry Street/Governor Winthrop Boulevard and at State Street block access to the ferry terminals and to the site of the future NCGM on the east side of the tracks when trains pass through or are stopped/loading. Southbound Amtrak trains that are stopped at Union Station also block access to the northbound Amtrak tracks and the Shoreline East tracks. A pedestrian overpass would overcome these issues for pedestrian access while providing connectivity.

The March 2010 Regional Intermodal Transportation Center Master Plan and Efficiency Study prepared for SCCOG identifies a need for better wayfinding between the different modes of transportation in the downtown New London transportation hub. The proposed pedestrian overpass will meet this need by providing safe, efficient access, not only to the NCGM but also to the adjacent multimodal transportation hubs, parking, and area attractions and businesses surrounding the NCGM.

The proposed overpass will also meet the need for improved ADA-compliant access over the railroad tracks for pedestrians accessing public transportation facilities and other public spaces.

#### 1.2.4 Relationship to Other Projects and Planning Documents

Several planning documents have been evaluated in the context of this EIE, including: (1) the Conservation and Development Policies Plan for Connecticut; (2) Regional Plan of Conservation and Development; (3) Municipal Plan of Conservation and Development; (4) Intermodal Connections Study Southeast (Project No. 0103-0253); (5) Regional Intermodal Transportation Center Master Plan and Efficiency Study; and (6) USCG NEPA EA. Each is described below.

### **Conservation and Development Policies Plan for Connecticut**

The *Conservation and Development Policies Plan for Connecticut (2013–2018)* (the Plan) provides the policy and planning framework for administrative and programmatic actions and capital and operational investment decisions of state government. The objective of the Plan is to guide a balanced response to the current and future human, economic, and environmental needs of the state. The Plan has been consulted extensively to evaluate the consistency of the proposed pedestrian overpass with the goals and policies relative to land use, traffic and transportation, sensitive environmental resources, the economy, energy, and so on. The pertinent guidelines and policies set forth in the Plan are presented throughout the subject EIE.

### **Regional Plan of Conservation and Development**

The City of New London is located within the regional planning area associated with the SCCOG. The 2007 *Regional Plan of Conservation and Development* (Regional Plan) was prepared under the authority of Section 8-35a of the Connecticut General Statutes and is intended to promote consistency and coordination within the region. It is a general guide for the future conservation and development of the region. The Regional Plan provides an overview of the factors that influence regional development as well as recommendations for future land use decisions.

### **Municipal Plan of Conservation and Development**

New London's 2007 Plan of Conservation and Development was adopted in accordance with the provisions of Section 8-23 of the Connecticut General Statutes, as amended. The plan documents the community's goals and policies related to overall development, discusses land use characteristics, and identifies an efficient land use and planning framework for managing the city's future growth.

### **Intermodal Connections Study Southeast (Project No. 0103-0253)**

In June 2003, SCCOG initiated a study to prepare an operational and fiscal plan for an expanded regional transit system. This study, funded by a grant from the CTDOT, was undertaken to determine the viability of creating a system to better serve visitors, employees, and residents within the region and examined service, facilities, and financial and marketing issues in the southeast Connecticut region.

The objective of the Intermodal Connections Study Southeast project was to complete an operational and fiscal plan to study the viability of creating a public-private partnership to address transit from the perspective of the growing tourism market in southeastern Connecticut in order to better serve visitors, employees, and residents. The stakeholder steering committee included representation from all of the major transportation providers (rail, transit, livery, and ferry), municipalities, both tribal nations, the Transportation Strategy Board, SCCOG, and the CTDOT.

The intent of the Intermodal Connections Study was to provide a plan to direct the development of a high-quality, dependable, seamless transportation system linking the region's three major non-auto-related modes of public transportation – rail, ferry, and bus – and the existing and potential private transit services to the region's major tourist destinations. The public transit system must also serve the major employment centers in the region and be available to the inhabitants of the region. The plan addressed governance; routes and schedules; marketing; customer amenities and mobility design; and implementation strategy. Plan elements include the following:

- ❑ Development of a plan for a high-quality, dependable, seamless transportation system linking rail, ferry, transit bus, and private bus to the region's major tourist centers for the use of visitors, residents, and employees
- ❑ A system of routes and schedules that is viable from the perspective of revenue versus cost
- ❑ Development of a comprehensive customer service amenities manual (detailing, for example, vehicle types, signage, schedule design, shelter locations, and passenger information technologies)
- ❑ Exploration of the viability of the market for the system
- ❑ Development of marketing strategies that package transit services with tourism
- ❑ Examination and recommendation of management models
- ❑ Financial planning, including estimation of capital and operating costs and identification of a source of funding that involves little or no public subsidy
- ❑ Identification of how a public-private partnership can be developed (including who the key partners would be and the nature of their financial and operational responsibilities)
- ❑ Evaluation of the benefits (including but not limited to reduced traffic congestion, emissions, and fuel consumption, and increased mobility)
- ❑ Identification of critical implementation elements and a time frame for implementation

Circulation in the region focused on travel within the region among major attraction and hotel sites, as well as access to the region via connections with ferry and rail terminals. The service model that was evaluated provided nonstop, express service for connections from New London to the two casinos; between the two casinos, with an optional future stop at the Norwich State Hospital site; and to and from Mystic, with future feeders north to Norwich, south and southeast into New London, and east toward Rhode Island.

The analysis and results of this study were considered in evaluating alternatives, benefits, and potential impacts of the proposed pedestrian overpass and its linkage to and interaction with surrounding transportation modes.

### **Regional Intermodal Transportation Center Master Plan and Efficiency Study**

A March 2010 study sponsored by the SCCOG was developed in coordination with a number of additional stakeholders. *"The purpose of the Master Plan and Efficiency Study*

*has been to develop a seamless regional transportation hub to meet regional transportation needs that also supports the revitalization of downtown New London."*

The study specifically contained the following objectives:

- Determine if the Regional Intermodal Transportation Center (RITC) should remain at this site or be relocated to an alternate site
- Conduct a physical inventory of RITC component facilities
- Evaluate existing and future operational needs for each mode at the RITC
- Analyze market potential for transit-oriented development at or near the RITC
- Identify and evaluate potential improvements for the short and long term
- Evaluate costs and economic impacts
- Evaluate environmental conditions and implications
- Develop a master plan including recommended actions

Ultimately, the study identified a short-term preferred alternative that included several elements including the construction of a pedestrian bridge that would allow passengers to safely cross the railroad tracks.

### **Environmental Assessment; National Coast Guard Museum**

URS Corporation prepared an EA pursuant to NEPA for the disposition of property from the City of New London and the construction and operation of the NCGM. Upon completion of the EA, the USCG determined that its proposed action will have no significant effect on the human environment. Since the pedestrian overpass will provide a critical physical link to the proposed NCGM, the EA is relevant to the pedestrian overpass.

## **1.3 The CEPA Process**

### **1.3.1 Overview of Regulation**

The CEPA, established in Sections 22a-1 through 22a-1h of the Connecticut General Statutes, recognizes the complex relationship between the natural environment and human actions, including population growth, high-density urbanization, industrial expansion, natural and cultural resources, and technological advances. The Regulations of Connecticut State Agencies (Sections 22a-1 through 22a-1a-12) outline a process whereby, through coordination with other state, local, regional, and federal governments, as well as public and private entities, a sponsoring state agency can evaluate and minimize the projected impacts of a project to the resources of the state.

State funds will be utilized for the pedestrian overpass, thus triggering the CEPA process. The sponsoring state agency is the Connecticut DECD. The NCGMA is the implementing agency.



### 1.3.2 Determination of Significant Environmental Impacts

A major function of the CEPA process is the determination of whether a project will have a significant effect, defined as substantial adverse impact on the environment. Agencies preparing such CEPA documents must consider the following two factors: (1) direct and indirect effects; and (2) cumulative impacts.

The EIE is a document that is prepared for proposed state actions that may have significant environmental impacts. The EIE is intended to provide full and fair discussions of environmental impacts, inform decision makers and the public of all reasonable alternatives, and compare the impacts of the alternatives on the environment. Significant issues are identified and analyzed in detail, allowing participation of interested and/or affected agencies and persons.

Public input and participation is a significant component of the CEPA process. Early scoping and information exchange is essential. Section 6.0 of the subject document contains a detailed accounting of the scoping, consultation, and coordination process that has taken place to date. The overall process for public participation is summarized as follows:

- ❑ A period of no less than 45 days must be provided for notice, distribution, and review of the EIE by any interested parties.
- ❑ Upon receiving comment, the sponsoring agency must review comments, perform any additional environmental study and analysis, or amend the evaluation as appropriate. It is the sponsoring agency's responsibility to respond to all substantive comments received.
- ❑ A public hearing may be held, if requested in accordance with state statutes, regulations, and Section 22a-1a-11 of the regulations. A period of no less than 30 days following the date of availability of the EIE must be provided before such public hearings.
- ❑ The sponsoring agency (in this case the DECD) must forward the following information to the Office of Policy and Management (OPM) for determination of the adequacy of the evaluation: (1) all public notice documentation; (2) a brief summary of the public hearing, if one is held; (3) comments received from all interested parties; (4) the agency decision relative to proceeding with the proposed action; and (5) a discussion of the intentions for initiation of actions for minimizing impacts. This constitutes the Record of Decision (final EIE document and the measures for mitigation identified therein).
- ❑ The CEPA process concludes with the review of the EIE and Record of Decision by OPM and its determination of whether or not regulatory requirements have been satisfied. The final EIE is the basis for the implementation of the project.

## **2.0 ALTERNATIVES CONSIDERED**

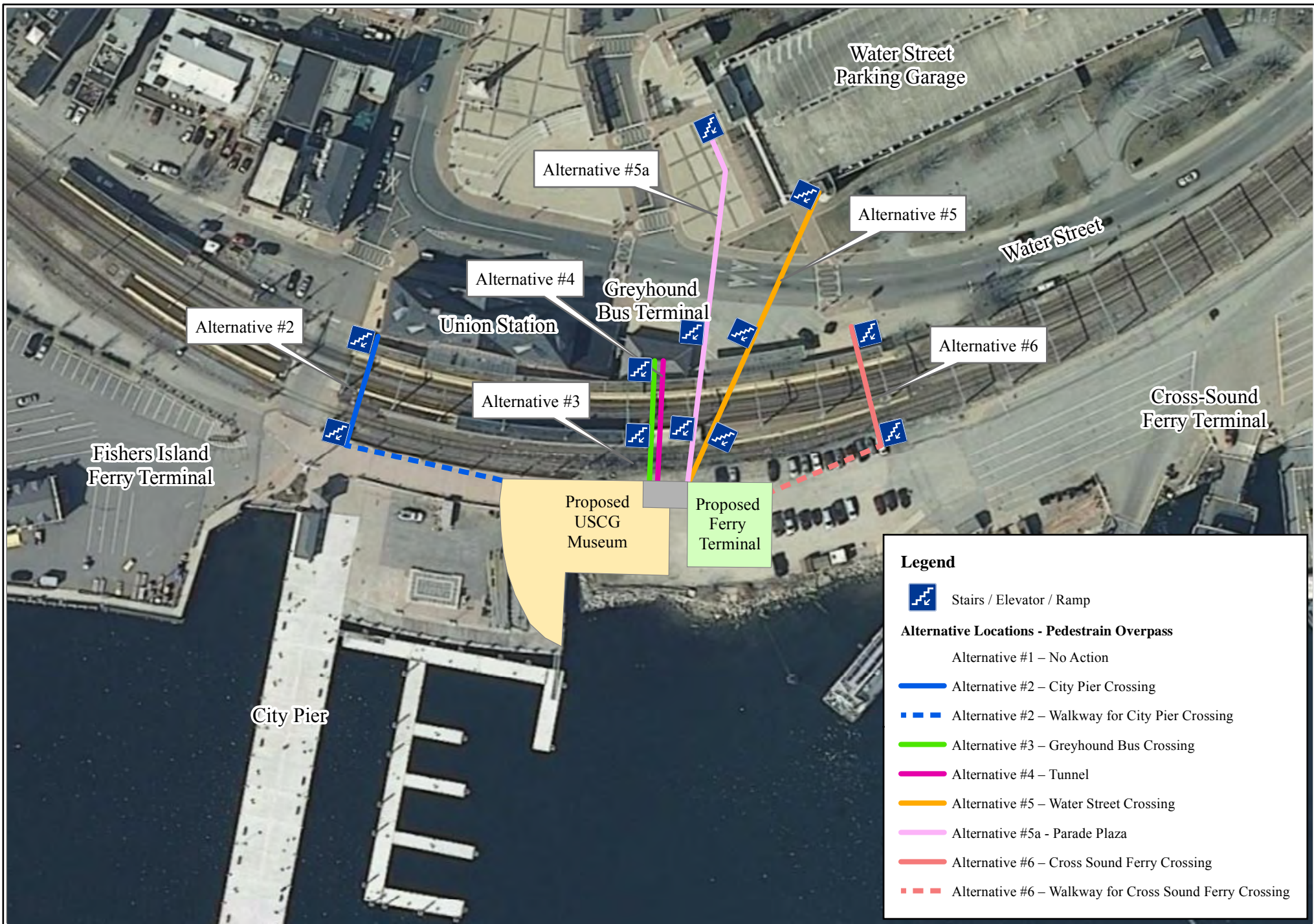
### **2.1 Overview**

In accordance with CEPA requirements, a number of alternatives have been analyzed for the proposed pedestrian overpass, including the "no action" alternative. The analysis initially considered five potential locations within close proximity to the proposed NCGM. During the planning process, a sixth action alternative was added. Alternatives were measured against the identified project purpose, need, and objectives. The following locational and operational objectives have been carried through the development and evaluation of alternatives. The objectives are as follows:

1. The pedestrian overpass must be located in close proximity to the proposed NCGM and the Cross Sound Ferry terminal.
2. The pedestrian overpass must provide access to rail passenger loading platforms.
3. The pedestrian overpass must be constructed and operated in a manner that will not negatively impact vehicular transportation.
4. The pedestrian overpass must provide for public/pedestrian safety.
5. The pedestrian overpass must not divert pedestrian traffic away from local businesses.
6. The aesthetics of the overpass must be sympathetic with the historic appearance of the adjacent Union Station and Public Square and complement the historic district as a whole.
7. The pedestrian overpass must provide a crossover point to the train platform to provide ADA access for rail passengers.
8. The pedestrian overpass must have the capacity to accommodate reasonable peak pedestrian occurrences, taking into consideration the usage of the various transportation modes such as rail, bus, car, and ferry.
9. The pedestrian bridge must be handicap accessible.

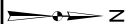
### **2.2 Overview of Alternatives**

Seven alternatives were analyzed, including the No Action alternative. The action alternatives only included those that would be feasible when considering the location of the proposed NCGM. A summary of the alternative overpass locations is provided below. A graphic representation of the proposed alternatives, including the various access points that may consist of stairs, ramps, elevators, escalators, or a combination thereof, is shown on Figure 2-1. The alternatives are numbered chronologically from south to north as follows:



SOURCE(S):  
City of New London GIS,  
CT Ortho 2012

**Alternative Locations**



MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial ALT with USCG and Ferry Connect.mxd

**Figure 2-1: Proposed Pedestrian Overpass**

LOCATION: New London CT

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2014  
Revision: 4/3/2014  
Scale: 1 in = 100 ft

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- Alternative #1 – No Action
- Alternative #2 – City Pier Crossing
- Alternative #3 – Greyhound Bus Crossing
- Alternative #4 – Tunnel
- Alternative #5 – Water Street Crossing
- Alternative #5A – Parade Plaza Crossing
- Alternative #6 – Cross Sound Ferry Crossing

Each of the alternatives is described in detail in the sections that follow.

### **2.3 Common Attributes Associated with Alternatives 2 Through 6**

Due to the close proximity of the action alternatives, they have numerous common attributes as summarized below:

- Each alternative is located in close proximity to the proposed NCGM, the Cross Sound Ferry terminal, Union Station, and downtown New London.
- Vehicular transportation impacts will be similar for all alternatives.
- All of the action alternatives are anticipated to complement the overall improvements to the RITC by improving pedestrian movement and safety, facilitating access between several transportation modes, and encouraging ridership at Union Station and ferry services.
- Each proposed alternative would need to be designed in a manner that complies with the guidelines set forth in the ADA.
- Each alternative will need to be designed in a manner that maintains the aesthetics of the surrounding areas and does not detract from the historical appearance of the district.
- The pedestrian overpass, regardless of the proposed location, will need to be designed in a manner that provides for the capacity necessary to safely move pedestrians throughout the area.

## 2.4 **Alternative #1 – No Action or No Build Alternative**

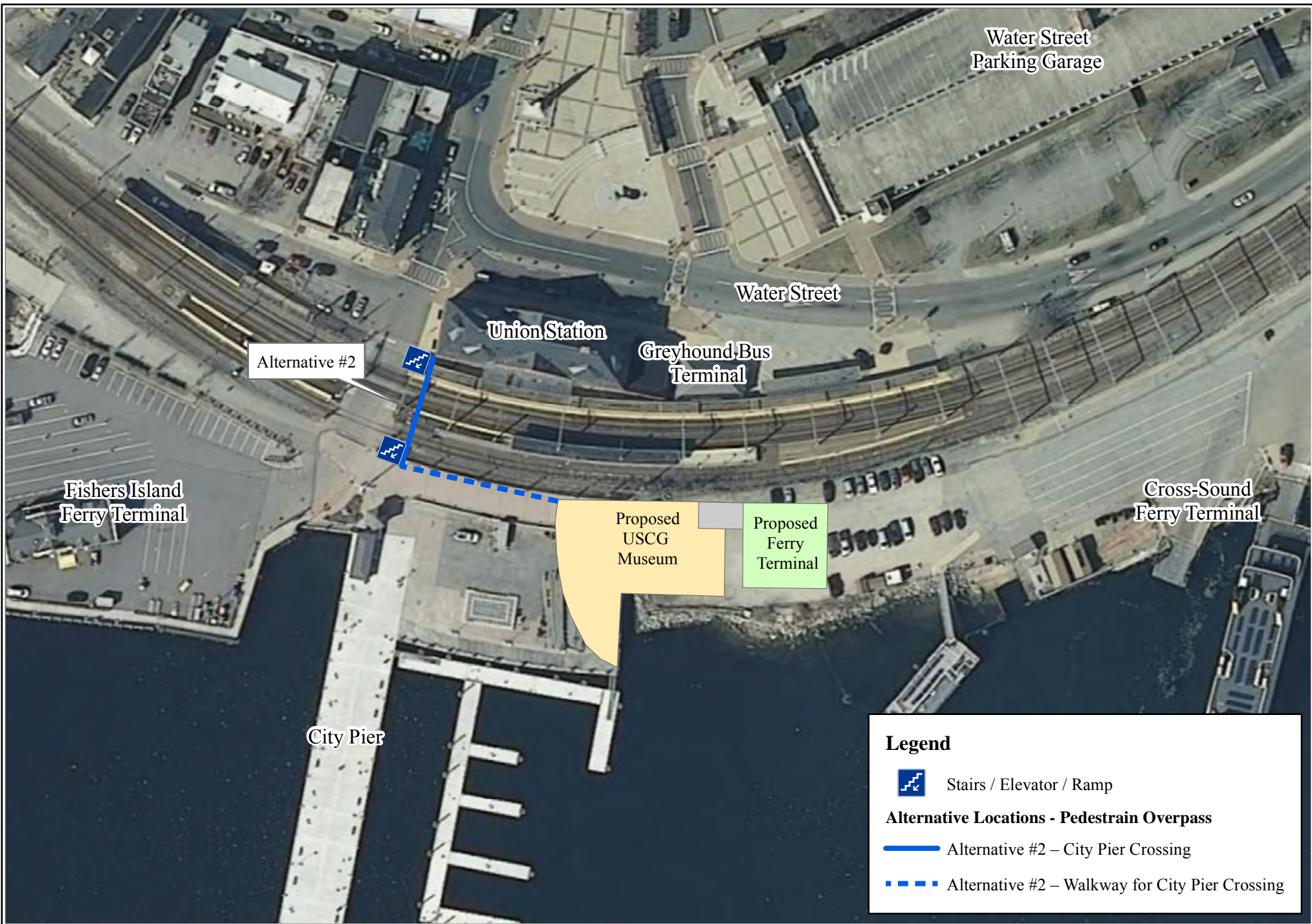
Under the No Action alternative, a pedestrian overpass would not be constructed, and the only connection to the proposed NCGM would be via the existing at-grade railroad crossing at the southern end of Union Station. Safe accommodation of the additional pedestrian traffic that will be generated by the proposed museum would be challenging at the existing at-grade crossing. This alternative provides no new connectivity (ADA or otherwise) among the various transportation modes.

The No Action alternative fails to meet the project purpose and need and would hinder the ongoing efforts to provide a safe accessible connection between the proposed NCGM, nearby parking, downtown, and the multimodal transportation hubs in the downtown waterfront area. It is not a viable option.

## 2.5 **Alternative #2 – City Pier Crossing**

Figure 2-2 graphically depicts the City Pier crossing option. Under this alternative, the pedestrian overpass would span the width of the existing railroad tracks near the southeast corner of Union Station. Entry and exit points would be located east and west of the railroad tracks. Improvements would need to be made to the Water Street crosswalk to address the increased volume of pedestrian movement across Water Street to and from public parking and downtown New London. The approximate length of the overpass would be 90 feet. Evaluation of this alternative yielded the following:

- This alternative would not provide direct access to the NCGM. Rather, it would cross the railroad tracks to the south of Union Station (east and west of the railroad tracks) where pedestrians would be able to walk at ground level to the museum. The overpass would allow pedestrians to either walk downtown or to waterfront businesses once they exit the museum or ferry.
- This alternative would not provide improved access to the northbound trains. Access to the train platform would continue to occur via the existing ramp/stairs.
- This alternative would not provide substantially improved access from downtown to the waterside although pedestrians would be able to cross the tracks when trains are arriving and departing, which is not possible under existing conditions. Otherwise, there would be no added benefit to using the overpass as compared to the at-grade crossing located immediately adjacent to it.
- This alternative would provide an alternate access point from Water Street to the Cross Sound Ferry terminal; however, it would require visitors to access the terminal through the museum. This would be a somewhat inefficient and nonapparent route.



SOURCE(S):  
City of New London GIS,  
CT Ortho 2012



**Alternative Locations**

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #2 ALT with USCG and Ferry Connect.mxd

**Figure 2-2: City Pier Crossing**

LOCATION: New London CT

**Legend**



Stairs / Elevator / Ramp

**Alternative Locations - Pedestrian Overpass**

— Alternative #2 – City Pier Crossing

- - - Alternative #2 – Walkway for City Pier Crossing

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2013  
Revision: 2/25/2014  
Scale: 1 in = 100 ft

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- This alternative would have a direct impact on the historic Union Station building given the proximity of the landing on the Water Street side of the railway.

This alternative does not meet the overall project purpose. It does not provide direct connections to the proposed NCGM or the ferry terminal. It does not substantially improve pedestrian access, nor does it improve access from downtown to the waterside.

## 2.6 **Alternative #3 – Greyhound Bus Crossing**

Figure 2-3 graphically depicts the Greyhound Bus crossing option. Under this alternative, the pedestrian overpass would extend from the site of the existing Greyhound Bus terminal building on Water Street to the north of Union Station and then cross over the railroad tracks to connect to the NCGM entryway on the waterside. A midway access point to the train platform is provided under this alternative. The small brick Greyhound Bus terminal building would be demolished under this alternative, and the terminal would be relocated either on the same site or another site. Improvements would need to be made to the Water Street crosswalk to address the increased volume of pedestrian movement to and from public parking and downtown New London. The approximate length of an overpass at this location would be 95 feet. Evaluation of this alternative yielded the following:

- This alternative would provide direct access to the NCGM via the overpass that would connect to the NCGM entryway on the water side.
- This alternative would provide improved access to the Cross Sound Ferry terminal through the utilization of the overpass and entrance at the museum that would allow connection to the proposed ferry terminal. An overpass at this location would also improve the timeliness of ferry passengers by allowing them to cross the railroad tracks when trains are in the station.
- This alternative would provide direct access to the train platform via an access point located on northbound train platform.
- This alternative would provide improved access from downtown to the waterside via the at-grade entrance on the east side of Water Street. Visitors could access the overpass from points downtown and easily access the downtown area upon departing the museum or ferry terminal.
- Based on discussions with the SHPO, the Greyhound Bus building is considered to be a contributing resource to the Downtown New London Historic District although demolition of this building is considered by SHPO to be a minor issue and less significant impact to the historic district than alternatives that would require extensive alterations to the streetscape and viewshed of Union Station. Mitigation measures would need to be identified prior to demolition.



**SOURCE(S):**  
 City of New London GIS,  
 CT Ortho 2012

**Alternative Locations**



MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #3 ALT with USCG and Ferry Connect.mxd

**Figure 2-3: Greyhound Bus Crossing**

**LOCATION:** New London CT

**Map By:** JDW  
**MMI#:** 2247-06  
**Original:** 1/9/2013  
**Revision:** 2/25/2014  
**Scale:** 1 in = 100 ft

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An overpass at this location would provide direct connections to the NCGM, the ferry terminal, and the train platforms. This alternative would require demolition of the Greyhound Bus terminal building and relocation of Greyhound's operations. The terminal building is located immediately adjacent to a National Register listed historic building on a parcel that is owned by the New London Railroad Company, LLC. Therefore, care would need to be taken to protect Union Station during construction.

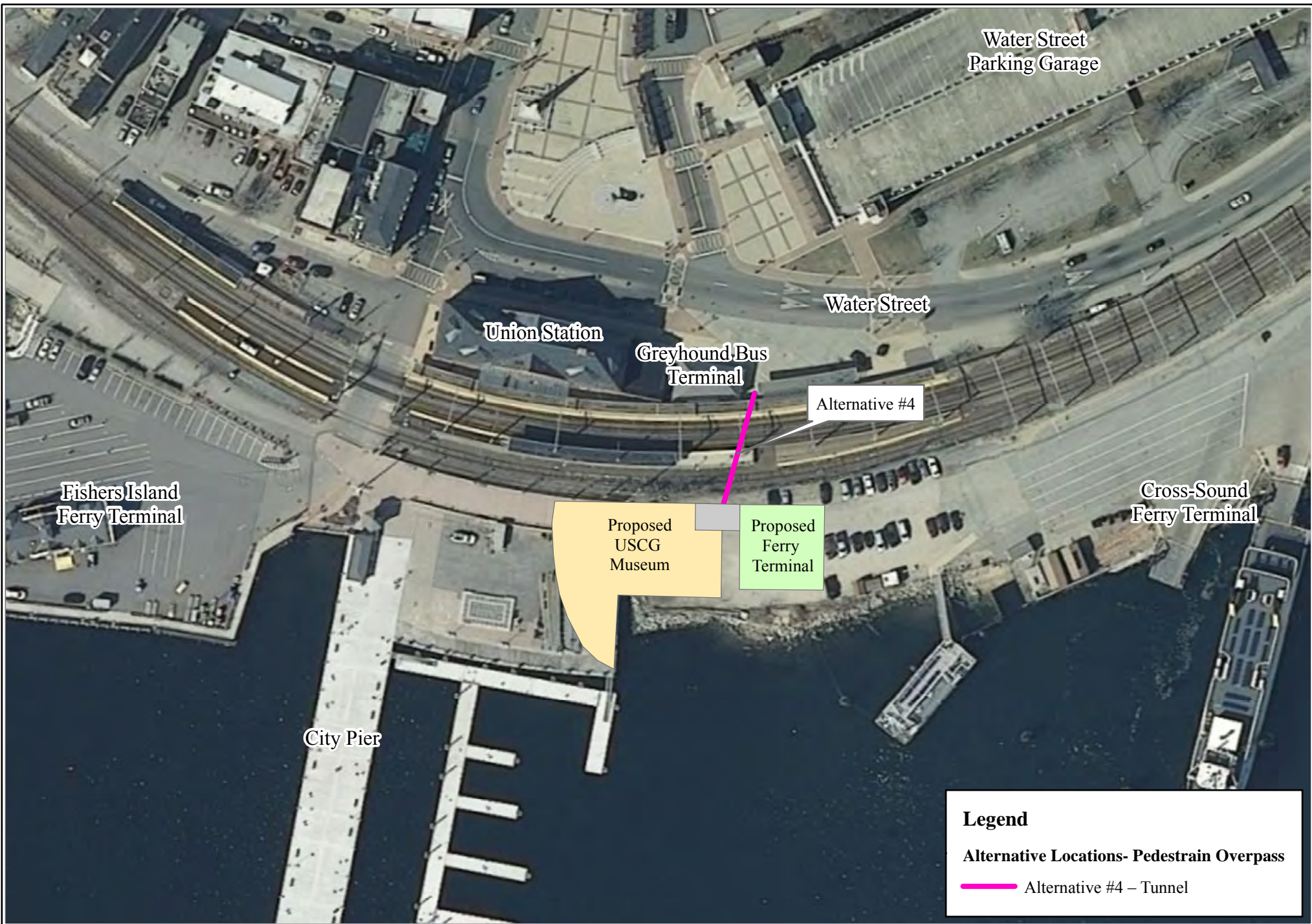
The Greyhound terminal building is in need of repair and maintenance. Representatives of the bus terminal report that the existing site is logistically challenging, including conflicts with taxi parking and pedestrian movement in concert with incoming and outgoing bus traffic. Demolition of the small terminal building may provide an opportunity to separate out these multiple, sometimes conflicting functions, remove a deteriorating structure, and provide an alternate location that is better suited for bus operations.

## **2.7 Alternative #4 – Tunnel**

Figure 2-4 graphically depicts the tunnel crossing option. Under this alternative, a pedestrian tunnel would be constructed under the railroad right-of-way, with access on the inland side just north of the Greyhound Bus terminal building and on the water side at the entrance to the NCGM and adjacent ferry terminal. The approximate length of the tunnel would be 90 feet. Evaluation of this alternative yielded the following:

- This alternative would provide direct access to the NCGM entryway.
- This alternative would provide improved access to the Cross Sound Ferry terminal via the underground tunnel.
- This alternative would not provide improved access to the northbound trains. Unlike the overpass options, there is limited ability to provide a midway access point.
- This alternative would provide improved access from downtown to the waterside via the at-grade entrance on the east side of Water Street.
- Due to its proximity to the Greyhound Bus terminal, this alternative has the potential to impact the building that houses the offices of the Greyhound Bus operations to the extent that it could potentially require relocation of operations and/or demolition of the building.
- This alternative would minimize the potential direct and indirect (visual) effects of the action to the historic Union Station building.

A tunnel would provide a connection to the NCGM and to the adjacent ferry terminal; however, connection to the train platforms would be challenging, if feasible at all.



**Legend**

Alternative Locations- Pedestrian Overpass

— Alternative #4 – Tunnel

SOURCE(S):  
City of New London GIS,  
CT Ortho 2012

**Alternative Locations**

— N

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #4 ALT with USCG and Ferry Connect.mxd

**Figure 2-4: Tunnel**

LOCATION: New London CT

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2013  
Revision: 2/25/2014  
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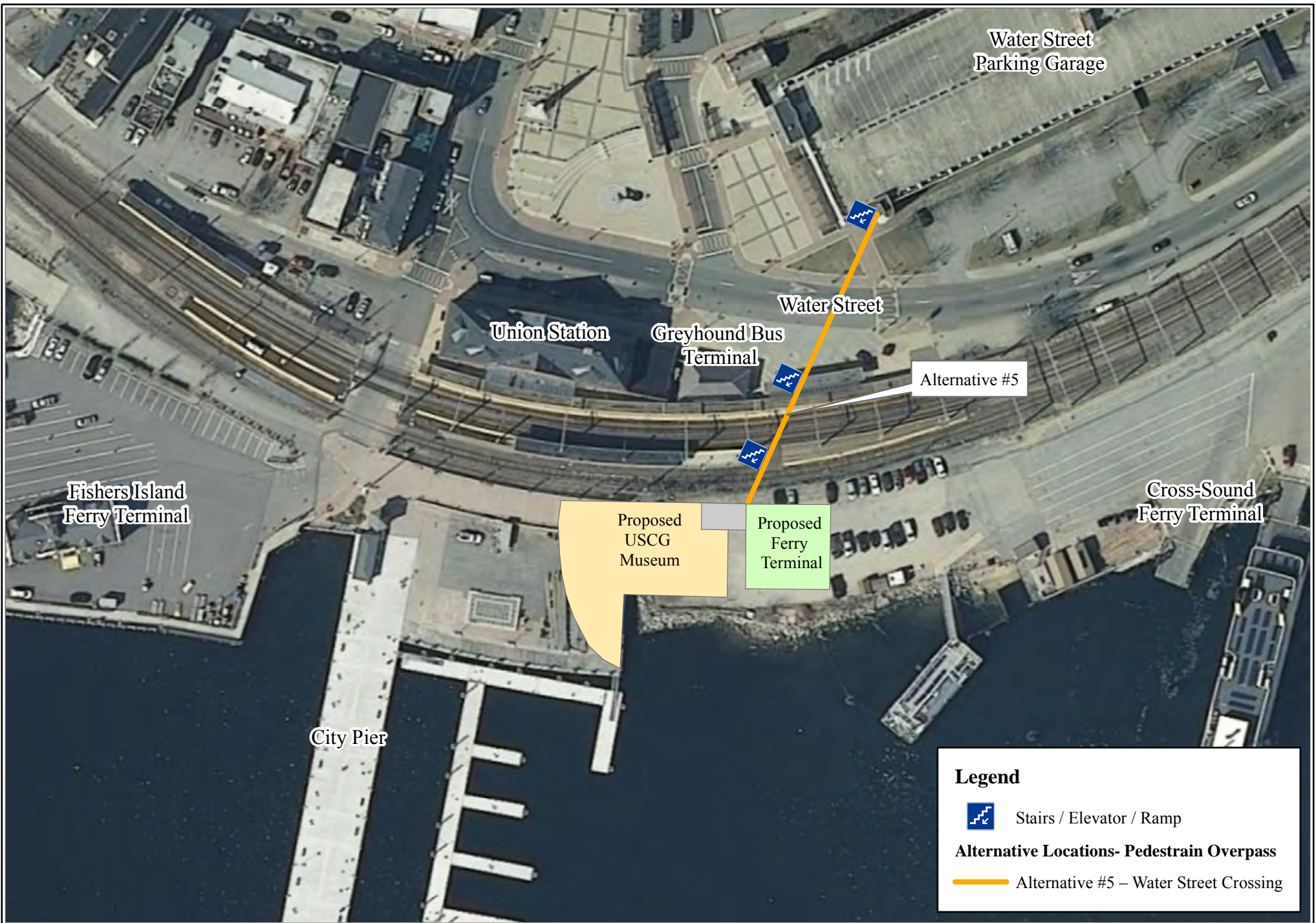
This alternative was discussed in the Regional Intermodal Transportation Center Master Plan Efficiency Study, and it was determined that *"a tunnel would cause more disruption to rail traffic during construction, would generate ongoing dewatering, would be impractical to extend to the Water Street garage and would have greater security issues than a pedestrian bridge."* This alternative would also likely have greater conflicts with underground utilities.

## 2.8 Alternative #5 – Water Street Crossing

Figure 2-5 graphically depicts the Water Street Garage crossing option. Under this alternative, the pedestrian overpass would extend from the Water Street Garage on the western side of Water Street to the NCGM entrance and adjacent ferry terminal on the water side of the railroad tracks. The overpass would continue to cross Water Street and provide a direct connection to the Water Street Garage. A midway access point to the train platform would be provided under this alternative. The approximate length of the overpass would be 230 feet. Evaluation of this alternative yielded the following:

- This alternative would provide direct access to the NCGM via the overpass that would connect to the NCGM entryway on the water side.
- This alternative would provide improved access to the Cross Sound Ferry terminal through the utilization of the overpass to cross Water Street and the railroad tracks. The overpass would improve the timeliness of ferry passengers by allowing them to cross the railroad tracks when trains are in the station.
- This alternative would provide direct access to the train platforms via a midway access point.
- This alternative would provide improved access to public parking by directly connecting to the parking garage.
- While this alternative would provide an east-to-west connection, it would not provide easy access from downtown to the waterside for those visitors not using the parking garage, who would need to enter the garage to utilize the overpass, which may be more time consuming and inefficient.
- This alternative would provide greater physical visual separation of the new construction from the historic Union Station building.

This alternative would provide a safe accessible connection between the NCGM, the multimodal transportation hubs, and the ferry terminals though it does not provide ideal access to or from downtown to the waterside for those visitors not otherwise using the garage.



SOURCE(S):  
City of New London GIS,  
CT Ortho 2012



**Alternative Locations**

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #5 ALT with USCG and Ferry Connect.mxd

**Figure 2-5: Water Street Crossing**

LOCATION: New London CT

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2013  
Revision: 2/25/2014  
Scale: 1 in = 100 ft


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**Legend**



Stairs / Elevator / Ramp

**Alternative Locations- Pedestrian Overpass**

 Alternative #5 – Water Street Crossing

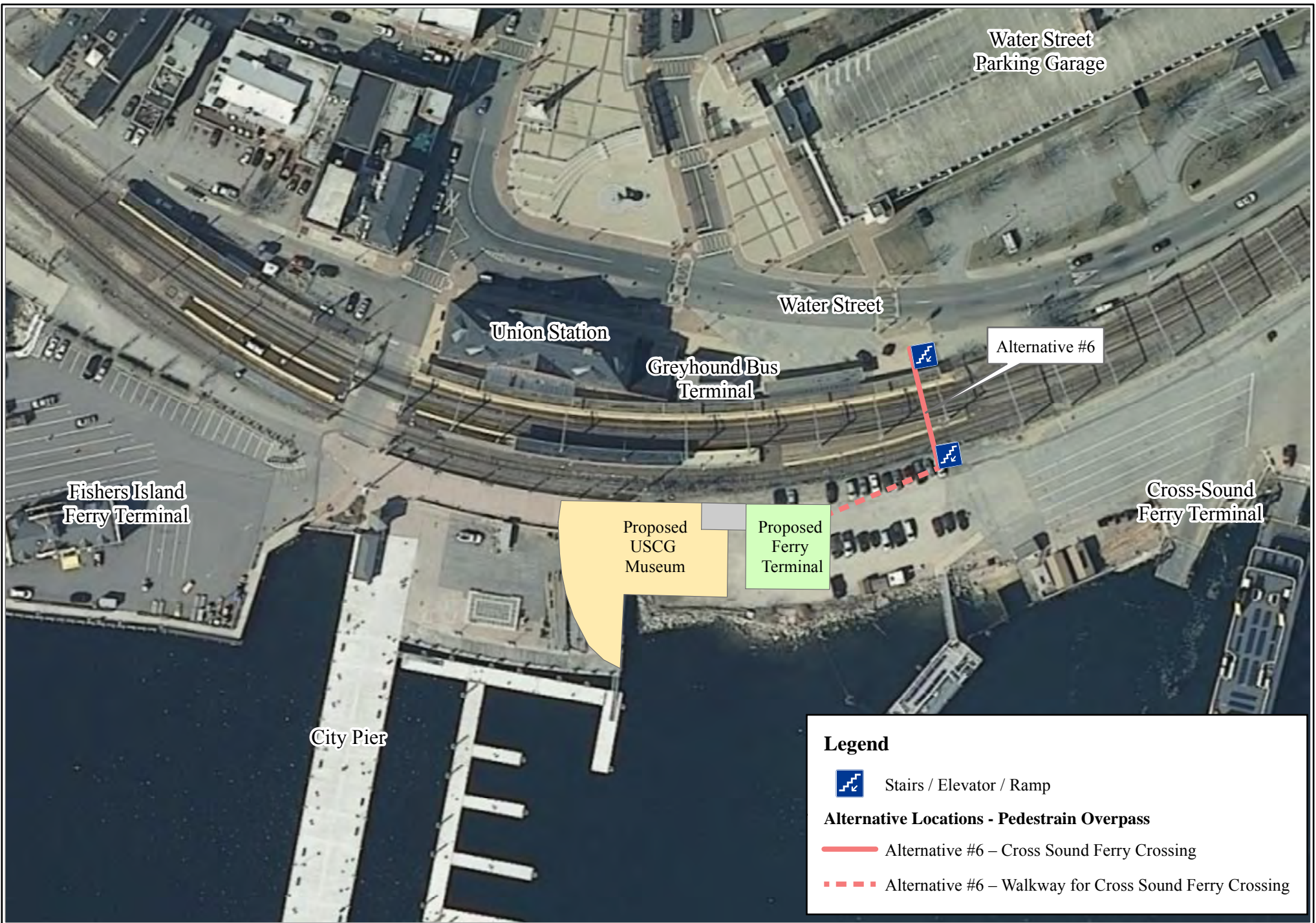
The option to connect a pedestrian overpass to the parking garage was discussed in the Regional Intermodal Transportation Center Master Plan Efficiency Study, and it was determined that *"the optional extension to the Water Street Garage would not require new vertical circulation at the western (garage) end but could instead rely on the stairs and new elevator at the south side of the garage. Optionally, the existing unused elevator shaft located in the southeast corner of the garage could be rehabilitated. The pedestrian overpass would connect to the top floor of the garage."* Impacts associated with the overpass connection to the garage could likely be minimized due to the availability of existing infrastructure.

## **2.9 Alternative #6 – Cross Sound Ferry Crossing**


Figure 2-6 graphically depicts the Cross Sound Ferry crossing option. Under this alternative, the pedestrian overpass would span the width of the existing railroad tracks to the north of all other alternatives, closer to the Cross Sound Ferry terminal. Entry and exit points would be located east and west of the railroad tracks. Improvements would need to be made to the Water Street crosswalk to address the increased volume of pedestrian movement across Water Street to and from public parking and downtown New London. The approximate length of the overpass would be 140 feet. Evaluation of this alternative yielded the following:

- This alternative would not provide direct access to the NCGM. Rather, it would access the east (waterward) side of the railroad tracks, where pedestrians could then walk to the museum. However, such access would be awkward in that one would need to traverse through the ferry terminal to reach the museum.
- This alternative would provide improved access to the Cross Sound Ferry terminal through the utilization of the overpass to cross the railroad tracks. The overpass would improve the timeliness of ferry passengers by allowing them to cross the railroad tracks when trains are in the station.
- This alternative would provide access points on the east and west sides of the railroad tracks but does not provide new access to the train platform.
- This alternative would provide improved access from downtown to the waterside via the at-grade entrance on the east side of Water Street.
- This alternative would avoid alterations or demolition of the historic building used as the Greyhound terminal and would provide visual separation between the new construction and the historic Union Station building.

This alternative would provide safer access across the railroad tracks but would not provide direct access to the NCGM, which is a critical component of the project purpose. This alternative would provide an at-grade connection between the downtown area and the waterfront though farther away from the train station and downtown commercial businesses as compared to all other alternatives.




**Legend**

 Stairs / Elevator / Ramp

**Alternative Locations - Pedestrain Overpass**

 Alternative #6 – Cross Sound Ferry Crossing

 Alternative #6 – Walkway for Cross Sound Ferry Crossing

SOURCE(S):  
City of New London GIS,  
CT Ortho 2012



**Alternative Locations**

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #6 ALT with USCG and Ferry Connect.mxd

**Figure 2-6: Cross Sound Ferry Crossing**

LOCATION: New London CT

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2014  
Revision: 2/25/2014  
Scale: 1 in = 100 ft

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## **2.10 Stakeholder Outreach and Input**

The above alternatives were presented to a comprehensive group of stakeholders, including representatives of the USCG, NCGMA, Cross Sound Ferry Services, Block Island Ferry Services, City of New London, Union Station, Greyhound Bus, NLL, SCCOG, and the New London Chamber of Commerce. The general consensus was that Alternative #1 (No Action), #2 (City Pier Crossing), #4 (Tunnel), and #6 (Cross Sound Ferry Crossing) do not meet the basic project purpose and need by virtue of not providing direct connection to the NCGM or train platform.

Alternative #3 (Greyhound Bus Crossing) and Alternative #5 (Water Street Crossing) meet the basic project purpose and need, but both have drawbacks that were considered significant. The overwhelming stakeholder sentiment strongly supported the need for an overpass that extended over Water Street in order to ensure pedestrian safety, efficient movement, and connection to downtown New London. Stakeholders stressed that traffic traveling on Water Street is at odds with high volumes of people trying to cross and that adding additional pedestrian traffic here would worsen an existing dangerous condition.

Stakeholders also advocated that an overpass that crosses Water Street, with a glass atrium on the south side of the Water Street Garage, could act as a gateway to the restaurants and shops along Bank Street and State Street in downtown New London, as well as a vista for visitors to see what is beyond the immediate area of Union Station and the Water Street Garage.

As a result of stakeholder input, a new Alternative (#5A), referenced as the Parade Plaza Crossing, was developed to incorporate the desirable elements of Alternatives #3 and #5.


## **2.11 Alternative #5A – Parade Plaza Crossing**

Figure 2-7 graphically depicts the Parade Plaza crossing option. Under this alternative, the pedestrian overpass would extend from the south side of the Water Street Garage on the northern side of Parade Plaza and then extend over Water Street to the NCGM entrance and adjacent ferry terminal. Two midway access points would be provided under this alternative, one at Union Station and one at the train platform. The approximate length of the overpass would be 250 feet. Evaluation of this alternative yielded the following:


- This alternative would provide direct access to the NCGM via the overpass that connects to the NCGM entryway on the water side.
- This alternative would provide improved access to the Cross Sound Ferry terminal through the utilization of the overpass to cross Water Street and the railroad tracks. The overpass would improve the timeliness of ferry passengers by allowing them to cross the railroad tracks when trains are in the station.



**Legend**

 Stairs / Elevator / Ramp

**Alternative Locations - Pedestrian Overpass**

 Alternative #5a - Parade Plaza

SOURCE(S):  
City of New London GIS,  
CT Ortho 2012



**Alternative Locations**

MXD: W:\Design\2247-06-DE\GIS\Maps\Alternative Aerials\Aerial #5a.ALT.mxd

**Figure 2-7: Parade Plaza**

LOCATION: New London CT

Map By: JDW  
MMI#: 2247-06  
Original: 1/9/2014  
Revision: 4/11/2014  
Scale: 1 in = 100 ft

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- This alternative would provide direct access to the train platforms via a midway access point.
- This alternative would provide improved access from downtown to the waterside through the utilization of the pedestrian overpass to cross Water Street and the railroad tracks.
- This alternative would provide improved access to public parking by providing an entry/exit point at Parade Plaza, immediately adjacent to the Water Street Parking Garage. However, unlike Alternative #5, this alternative would not require users of the pedestrian overpass to enter the garage in order to access the overpass.
- This alternative would provide physical and visual separation of the new construction from the historic Union Station building, reducing the impacts of the action on the integrity of the historic district.

This alternative provides a safe accessible connection between the NCGM, the ferry terminal, and the surrounding multimodal transportation hubs; it provides a crossover point to the train platform; and it provides for public/pedestrian safety over the active rail line tracks and Water Street.

## **2.12 Selection of the Preferred Alternative**

Alternative #5A has been selected as the preferred alternative due to its ability to meet the project purpose, need, and operational objectives. Recognizing that funding may not allow for construction of the entire project at one time, this alternative will be designed such that it can be constructed in two phases if necessary. The first phase would include the portion that spans the railroad tracks; the second phase would extend over Water Street. For purposes of the subject EIE, the full buildout was analyzed as it represents a conservatively larger footprint.

SHPO has indicated that appearance, viewshed, and location of the overpass relative to Union Station will be paramount. As such, any overpass will need to be designed to complement and not detract from the adjacent Union Station, the Public Square, and the historic district as a whole. Additionally, the proximity of the overpass to Union Station and the specific design details will be important as Union Station is the anchor of the historic district. In keeping with SHPO guidance, the angles of the overpass will be, to the extent possible, congruent with those of Union Station and the Water Street Garage.

The impact analysis assumes a worst case scenario relative to the potential for impact to the Greyhound Bus terminal building and the need for relocation of bus terminal operations.

## 3.0 AFFECTED ENVIRONMENT

### 3.1 Land Use and Zoning

An understanding of land use plans and policies at the local, regional, and state levels is essential to the analysis of potential alterations of land uses. The following discussion sets the framework of land use policies that apply to the study area. Consistency of the proposed action with these plans, policies, statutes, and regulations is evaluated in Section 4.1 of this document.

#### 3.1.1 Statewide Land Use Conservation and Development

The following discussion presents portions of the *Conservation and Development Policies Plan for Connecticut (2013-2018)* (the Plan, C&D Plan) as they relate to the proposed action. Italicized sections are direct excerpts from the Plan. Not all Plan policies are included in this discussion as they may not directly apply. For an expanded review of the Plan, the reader is directed to the full document on file with the Connecticut OPM.

The Plan is a statement of the state's growth, resource management, and public investment policies. It provides a policy and planning framework for the administrative and programmatic actions and capital and operational investment decisions of state government, which in turn influence the future growth and development of Connecticut.

The Connecticut General Assembly, in accordance with Sections 16a-24 through 16a-33 of the Connecticut General Statutes (CGS), establishes the Plan. The policies of the Plan are intended to guide the planning and decision-making process of state government relative to: (1) addressing human resource needs and development; (2) balancing economic growth with environmental protection and resource conservation concerns; and (3) coordinating the functional planning activities of state agencies so as to accomplish long-term effectiveness and economies in the expenditure of public funds.

The Plan embodies six statewide growth management principles as follows:

1. *Redevelop and revitalize regional centers and areas with existing or currently planned physical infrastructure.*
2. *Expand housing opportunities and design choices to accommodate a variety of household types and needs.*
3. *Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options.*
4. *Conserve and restore the natural environment, cultural and historical resources, and traditional rural lands.*

5. *Protect and ensure the integrity of environmental assets critical to the public health and safety.*
6. *Promote integrated planning across all levels of government to address issues on a statewide, regional, and local basis.*

CGS Section 16a-31(a) requires state agencies to determine the consistency of their proposed actions with the state C&D Plan. In making this determination, the agency must first determine if a proposed project is considered a "growth related project" pursuant to CGS Section 16a-35c(a)(2).

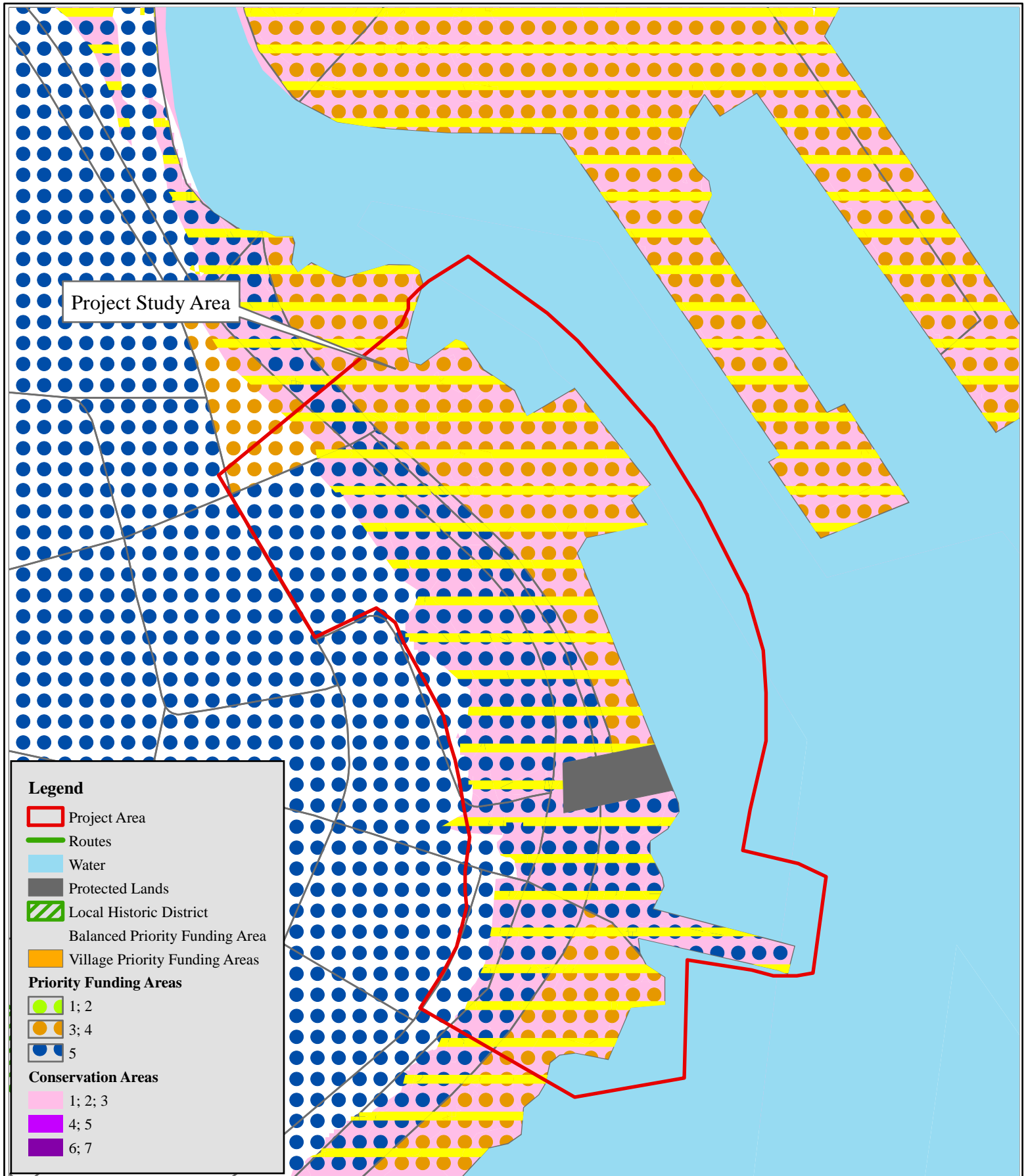
Section 16a-35c(2) defines a growth-related project as any project that includes:

- (A) the acquisition of real property when the acquisition costs are in excess of one hundred thousand dollars, except the acquisition of open space for the purposes of conservation or preservation;
- (B) the development or improvement of real property when the development costs are in excess of one hundred thousand dollars;
- (C) the acquisition of public transportation equipment or facilities when the acquisition costs are in excess of one hundred thousand dollars; or
- (D) the authorization of each state grant, any application for which is not pending on July 1, 2006, for an amount in excess of one hundred thousand dollars, for the acquisition or development or improvement of real property or for the acquisition of public transportation equipment or facilities (with certain defined exceptions).

The contemplated pedestrian overpass is believed to be a growth-related project as it includes the development or improvement of real property where the development costs are in excess of one hundred thousand dollars.

A Locational Guide Map is a component of the state C&D Plan and is used to determine if an area is located within a priority funding area as no state agency, department, or institution may provide funding for a growth-related project unless it is located in a priority funding area or the project meets certain criteria. Figure 3-1 is an excerpt of the Locational Guide Map within the study area.

The study area is classified on the associated Locational Guide Map as Balanced Priority Funding Area. The state Plan defines Balanced Priority Funding Areas as areas that *meet the criteria of both Priority Funding Areas and Conservation Areas. State agencies that propose certain actions in these areas must provide balanced consideration of all factors in determining the extent to which it is consistent with the policies of the State C&D Plan.* Priority funding areas and conservation areas are defined below.



**SOURCE(S):**  
CT Locational Guide

**Figure 3-1: CT Locational Guide Map:  
Land Use and Funding Areas**

**LOCATION:**  
New London, CT

**Project Study Area  
Proposed Pedestrian Overpass**

Map By: JDW  
MMI#: 2247-06  
Original: 10/02/2013  
Revision: 4/10/2014  
Scale: 1 inch = 300 feet

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MXD: W:\Design\2247-06-DE\GIS\Maps\Funding Land Use.mxd

Priority Funding Areas – Priority funding areas are delineated based on conditions that exist at the census block level, which is the smallest geographical unit delineated by the U.S. Census Bureau. Priority funding areas are classified by census blocks that include: (1) designation as an urban area or urban cluster in the 2010 census; (2) boundaries that intersect a ½-mile buffer surrounding existing or planned mass-transit stations; (3) existing or planned sewer service from an adapted wastewater facility plan; (4) existing or planned water service from an adapted public drinking water supply plan; and (5) local bus service provided 7 days per week.

Conservation Areas – Conservation areas are delineated based on the presence of factors that reflect environmental or natural resource values. In contrast to priority funding areas, which are based on man-made census blocks, conservation areas are based on existing environmental conditions, such as soils or elevation, which often have no visible boundaries. Conservation Areas include any one or more of the following factors: core forest areas greater than 250 acres based on the 2006 land cover data set; existing or potential drinking water supply watersheds; aquifer protection areas; wetland soils greater than 25 acres; undeveloped prime, statewide important and locally important agricultural soils greater than 25 acres; category 1, 2, or 3 hurricane inundation zones; 100-year flood zones; critical habitats; and locally important conservation areas. The study area is located within a hurricane inundation zone and is also within a 100-year flood zone.

The inland area that comprises the heart of downtown New London is classified in the state Plan as a growth area.

### 3.1.2 Regional Land Use

The southeastern Connecticut region consists mostly of the suburban municipalities of Colchester, East Lyme, Griswold, Ledyard, Lisbon, Montville, Preston, Sprague, Stonington, and Waterford surrounded by the rural towns of Salem, Bozrah, Franklin, Voluntown, and North Stonington. Norwich, Groton, and New London are the urban centers, making up approximately 11.3 percent of the 559.2 square miles of the southeastern Connecticut region.

Approximately 21 percent of the region is occupied by intensive land uses, leaving a rather large portion (61 percent) of undeveloped lands. Several factors limit the ability to intensively develop areas in the southeastern Connecticut region, including poorly drained soils, shallow depth to bedrock, steep slopes, flood hazard areas, availability of utilities, ownership, zoning, financing, and regulatory jurisdictions of state and federal governments.

The major type of development contributing to regional growth has occurred at low densities, more in the rural and suburban towns rather than in the three urban municipalities. However, urban growth continues along the Thames River corridor and the coast of Long Island Sound, and more recently along Interstate 95.

The region has had a historic dependence on defense-related industries. The end of the Cold War significantly altered regional land use patterns, with the reduction of defense-related industries and manufacturing. It is further expected that dramatic changes will continue to occur with the increase in gaming facilities and associated development.

It is the goal of the SCCOG that diversified and balanced development is sought in the region and opportunities be created in an effort to minimize dependence on a single industry for employment, thereby reducing the strain of high unemployment rates on the region's economic health.

### 3.1.3 Land Uses in the Downtown Waterfront Area

The downtown waterfront area, which encompasses the location of all alternatives, is heavily developed. The area is bordered by the Thames River to the east; City Pier, Fisher's Island Ferry, and the Waterfront Park to the southeast; and Cross Sound Ferry Services and Block Island Ferry Services to the north. Land use to the west and south of the downtown waterfront area is mixed-use downtown development, primarily commercial and municipal uses interspersed with residential land uses. Immediately adjacent uses to the west include the Water Street Garage and Parade Plaza.

Table 3-1 presents a summary of land uses and property ownership for the parcels in the immediate vicinity of the proposed pedestrian overpass. Figure 3-2 is a parcel map of the project study area. Parcel configurations shown on Figure 3-2 have been taken from GIS and may have discrepancies when compared with surveyed mapping of land parcels. Land use is described in greater detail in the ensuing narrative.

#### **Land Uses to the West of Water Street, North of State Street**

G11-203-1.01 – This 1.31-acre parcel is located on the west side of Water Street. It consists of a professional building known as Mariner's Square and is owned by Ballina Properties, LLC.

G11-203-1.02 – This 1.02-acre parcel is a paved parking lot located on the west side of Water Street. The parcel is owned by Ballina Properties, LLC and appears to be used in conjunction with the professional building at G11-203.01.

G11-203-3.01 – This 0.30-acre parcel is located on the east side of the Water Street Parking Garage. The parcel is currently occupied by a drive-through banking facility and is owned by the City of New London.

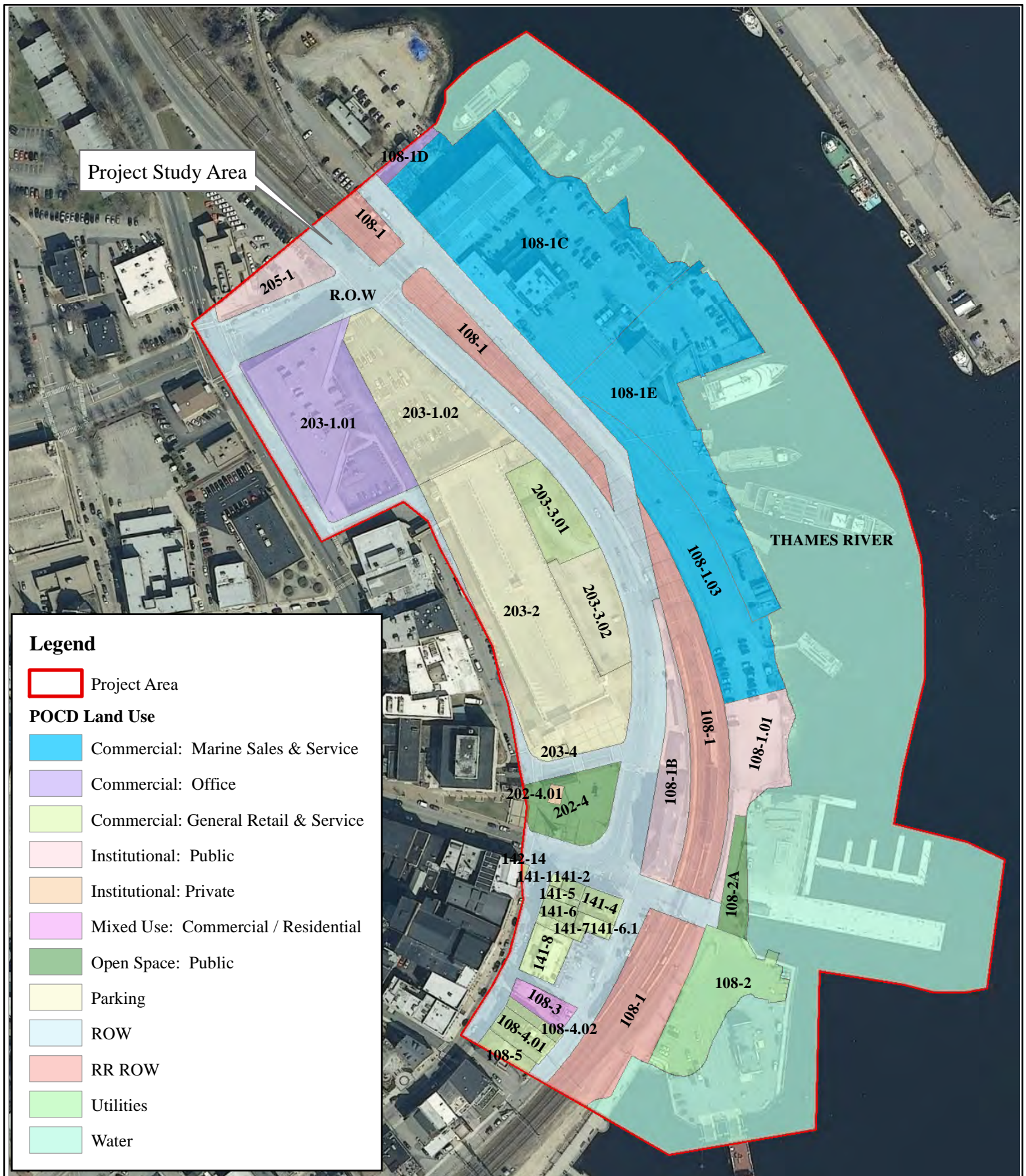
G11-203-3.02 – The City of New London ATC owns this 0.39-acre parcel that is located due east of the Water Street Parking Garage. The site is currently an asphalt parking lot.

G12-203-2 – The City of New London owns this 2.19-acre parcel, which is the location of the Water Street Public Parking Garage.

**TABLE 3-1  
Land Uses in the Vicinity of the Study Area**

<i>GIS ID</i>	<i>Street Address</i>	<i>Owner of Record</i>	<i>Parcel Size</i>	<i>Land Use(s)</i>	<i>Zoning</i>
G11-203-1.01	125 Eugene O'Neil Drive	Ballina Properties, LLC	1.31 acres	Professional Building	CBD1
G11-203-1.02	Water Street	Ballina Properties, LLC	1.02 acres	Vacant (asphalt)	CBD1
G11-203-3.01	140 Water Street	City of New London	0.30 acres	Commercial	CBD1
G11-203-3.02	Water Street	City of New London ATC	0.39 acres	Vacant	CBD1
G12-203-2	160 Water Street	City of New London	2.19 acres	Public Parking	CBD1
G12-202-4	State Street	City of New London CAP	0.41 acres	Vacant	CBD1
G12-141-1	2 Bank Street	2 Bank Street, LLC	0.01 acres	Retail/Apt Com	CBD1
G12-141-2	20 State Street	Robinson Realty, LLC	0.02 acres	Restaurant	CBD1
G12-141-5	8 Bank Street	Robinson Realty, Inc.	0.02 acres	Ret/Apt Com	CBD1
G12-141-4	2 State Street	Alexander Bochain	0.08 acres	Ret/Apt Com	CBD1
G12-141-6	12 Bank Street	Janice Rolfe	0.06 acres	Ret/Off/Com	CBD1
G12-141-6.1	3 South Water Street	HOE HUA Oversea, LLC	0.03 acres	Ret/Off/Com	CBD1
G12-141-7	18 Bank Street	1820 Brewery, LLC	0.03 acres	Ret/Off/Com	CBD1
G12-141-8	24 Bank Street	Bank Street Roadhouse LLC	0.16 acres	Strip Retail	CBD1
G12-108-3	42 Bank Street	Neistat Barry	0.13 acres	Ret/Apt Com	CBD1
G12-108-4.02	52 Bank Street	Ale Properties, LLC	0.14 acres	Bar Tavern	CBD1
G12-108-4.01	46 Bank Street	Marogar Development, LLC	0.05 acres	Retail	CBD1
G12-108-5	60 Bank Street	Marogar Development, LLC	0.15 acres	Ret/Off Com	CBD1
G12-108-2	5 Waterfront Park	Town of Southold	0.78 acres	Bus/Train/Ferry	WD
G12-108-2A	City Pier	City of New London	0.58 acres	Commercial	WD
G12-108-1.01	Water Street	City of New London	0.49 acres	Vacant Land*	WD
G12-108-1.03	Water Street	Cross Sound Ferry Services, Inc.	1.16 acres	Asphalt Parking	WD
G11-108-1E	Water Street	Thames Realty	1.49 acres	Office Building	WD
G11-108-1C	Ferry Street	Thames Shipyard and Repair Co.	2.78 acres	Mill	WC12
G12-108-1B	35 Water Street	New London RR Co. LLC	0.54 acres	Bus/Train/Ferry	CBD1
G12-108-1	Railroad Right of Way	Penn Central Transportation Co.	33.68 acres	Railroad ROW	ROW/MDL-00

\*Location of the proposed museum  
Source: SCCOG GIS Database



**Legend**

- Project Area
- POCD Land Use**
- Commercial: Marine Sales & Service
- Commercial: Office
- Commercial: General Retail & Service
- Institutional: Public
- Institutional: Private
- Mixed Use: Commercial / Residential
- Open Space: Public
- Parking
- ROW
- RR ROW
- Utilities
- Water

**SOURCE(S):**  
 CT Ortho, 2012  
 City of New London Parcel Data

**Figure 3-2: Parcel Map and Zoning**

**LOCATION:**  
 New London, CT



**Project Study Area  
 Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Parcel Map.mxd

Map By: JDW  
 MMI#: 2247-06  
 Original: 12/11/2013  
 Revision: 4/10/2014  
 Scale: 1 inch = 225 feet

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G12-202-4 – This 0.41-acre parcel is owned by the City of New London CAP. The site is an open space public area.

**Land Uses to the West of Water Street, South of State Street**

G12-141-1 – This 0.01-acre parcel is owned by 2 Bank Street. The site is occupied by a four-story building that includes commercial uses.

G12-141-2 – Robinson Realty owns this 0.02-acre parcel. The site is currently occupied by a one-story building that is currently being used as a restaurant.

G12-141-5 – This 0.02-acre parcel is owned by Robinson Realty LLC and includes a three-story building that is used for commercial purposes.

G12-141-4 – Alexander Bodian owns this 0.08-acre parcel. The site is occupied by a four-story building that includes office and residential uses.

G12-141-6 – Janice Rolfe owns this 0.06-acre parcel, which is occupied by a four-story building. The building houses commercial and residential uses.

G12-141-6.1 – This 0.03-acre parcel is owned by HOE HUA Oversea, LLC and consists of a four-story building used for commercial and residential purposes.

G12-141-7 – 1820 Brewery LLC owns this 0.03-acre parcel, which includes a three-story building that is used for commercial purposes.

G12-141-8 – This 0.16-acre parcel consists of a two-story strip retail building that is owned by Bank Street Roadhouse.

G12-108.3 – This 0.13-acre parcel consists of a two-and-a-half-story building that is occupied by the Muddy Waters Cafe. The parcel is owned by Neistat Barry.

G12-108-4.02 – A one-story bar/tavern is located on this 0.14-acre parcel that is owned by Ale Properties LLC.

G12-108-4.01 – This 0.05-acre parcel is owned by Marogar Development LLC and includes a two-story building used for retail purposes.

G12-108-5 – Marogar Development LLC owns this 0.15-acre parcel. The property consists of a two-story building that is used for retail/commercial purposes.

**Land Uses to the East of Water Street, South of State Street**

G12-108-2 – This 0.78-acre parcel is owned by the Town of Southold. The property consists of the Fisher's Island Ferry Building.

### **Land Uses to the East of Water Street, North of State Street**

G12-108-2A – The City of New London owns this 0.58-acre parcel. The property is located at City Pier and consists of boat mooring areas, a commercial dock, restroom facilities, and patio space.

G12-108-1.01 – The City of New London owns this 0.49-acre parcel. The site is currently a vacant, unpaved lot that is used for parking. This property is also the location of the proposed NCGM.

G12-108-1.03 – Cross Sound Ferry Services, Inc. owns this 1.16-acre parcel, consisting of paved and unpaved areas.

G11-108-1E – This 1.49-acre parcel is owned by Thames Realty. The site consists of a small office building, asphalt parking areas, ship mooring, and commercial docking facilities.

G11-108-1C – The Thames Shipyard and Repair Company owns this 2.78-acre parcel that is used as a commercial ship building and repair facility. The property consists of a building and associated parking, and paved areas.

G12-108-1B – This 0.54-acre parcel is owned by the New London Railroad Company LLC. The property contains the 2.75-story Union Station building, as well as the one-story Greyhound Bus terminal building. Union Station is listed on the National Register of Historic Places.

#### 3.1.4 History of Development

Aerial photographs of the downtown waterfront area dating back to 1934 were examined to qualitatively document changes that have occurred over the last seven decades. Copies of the aerial photographs from the State of Connecticut Library Archives are provided as Figures 3-3 through 3-9. The current parcel boundaries were used for comparison. A discussion of this review follows.

1934 Aerial Photograph – In the 1934 photograph, the area is heavily developed. To the west of Water Street and north of State Street, several buildings are visible. The Water Street Garage and Mariner's Square professional building are not visible; however, several smaller buildings and a vacant lot can be seen within the footprints of the current structures.

The area to the west of Water Street and south of State Street is essentially the same as it is today.

The Union Station and Greyhound Bus buildings are visible, immediately west of the railroad tracks. To the east of Water Street, several large piers and docking structures are located along the parcel that currently contains the Fisher's Island Ferry terminal building. In addition, an open water basin used for the mooring of vessels is located immediately north of this parcel.

The area to the north, currently occupied by Cross Sound Ferry Services and Thames Shipyard and Repair Company, is developed, with several large aboveground storage tanks visible as well as large moored vessels.

*1951 Aerial Photograph* – Between 1934 and 1951, no significant changes are visible in the area to the west of Water Street. The most noticeable change is the expansion of City Pier and the removal of several piers and structures located along the parcel. In addition, a portion of the open water basin referenced in the 1934 aerial was filled in.

*1965 Aerial Photograph* – Between the 1951 photo and the 1965 photo, a pier that had been located adjacent to City Pier was removed. Several of the large tanks were removed from the Cross Sound Ferry property. The remainder of the study area remained relatively similar to the 1951 aerial.

*1970 Aerial Photograph* – The most significant changes between 1965 and 1970 occurred to the west of Water Street. Several buildings, including those within the existing Water Street Garage and Mariner's Square professional building footprint were removed. Only one large building remained within this portion of the project study area.

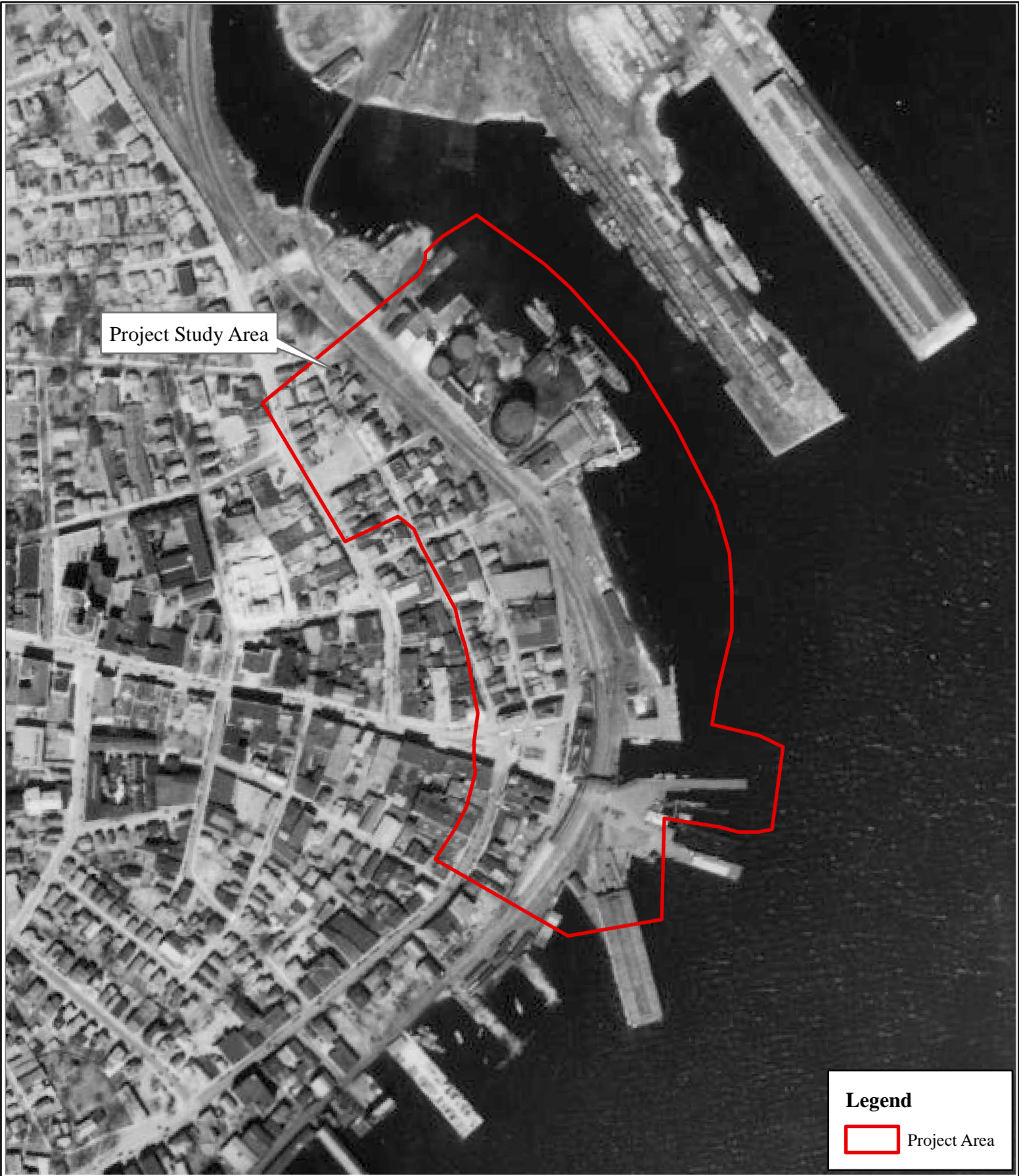
*1986 Aerial Photograph* – Between 1970 and 1986, the Water Street Garage and Mariner's Square professional buildings were constructed. Construction activities appear to be occurring in the vicinity of the Cross Sound Ferry property.

*1990 Aerial Photograph* – No significant changes are evident in the 1990 photo other than the completion of construction activities at the Cross Sound Ferry property.

*1996 Aerial Photograph* – No significant changes were noted in the 1996 aerial.

### 3.1.5 Zoning

Zoning in the western portion of the downtown waterfront area is designated Central Business District (CBD1). Permitted uses in the CBD1 include: (1) retail stores; (2) service businesses; (3) restaurants; (4) reserved; (5) business or professional offices not located on the street level floor; (6) banks, excluding drive-thru windows; (7) art galleries; (8) facilities for training in the martial arts, dancing, gymnastics, music, fashion, design, or teaching the performing arts; (9) tattoo parlors/tattoo facilities (subject to requirements); and (10) home-based businesses. Activities referenced in (1) through (9) above must be conducted between the hours of 6:00 a.m. and 11:00 p.m.



**Legend**

Project Area

**SOURCE(S):**  
CT State Library


**Figure 3-3: 1934 Historical Imagery**

**LOCATION:**  
New London, CT

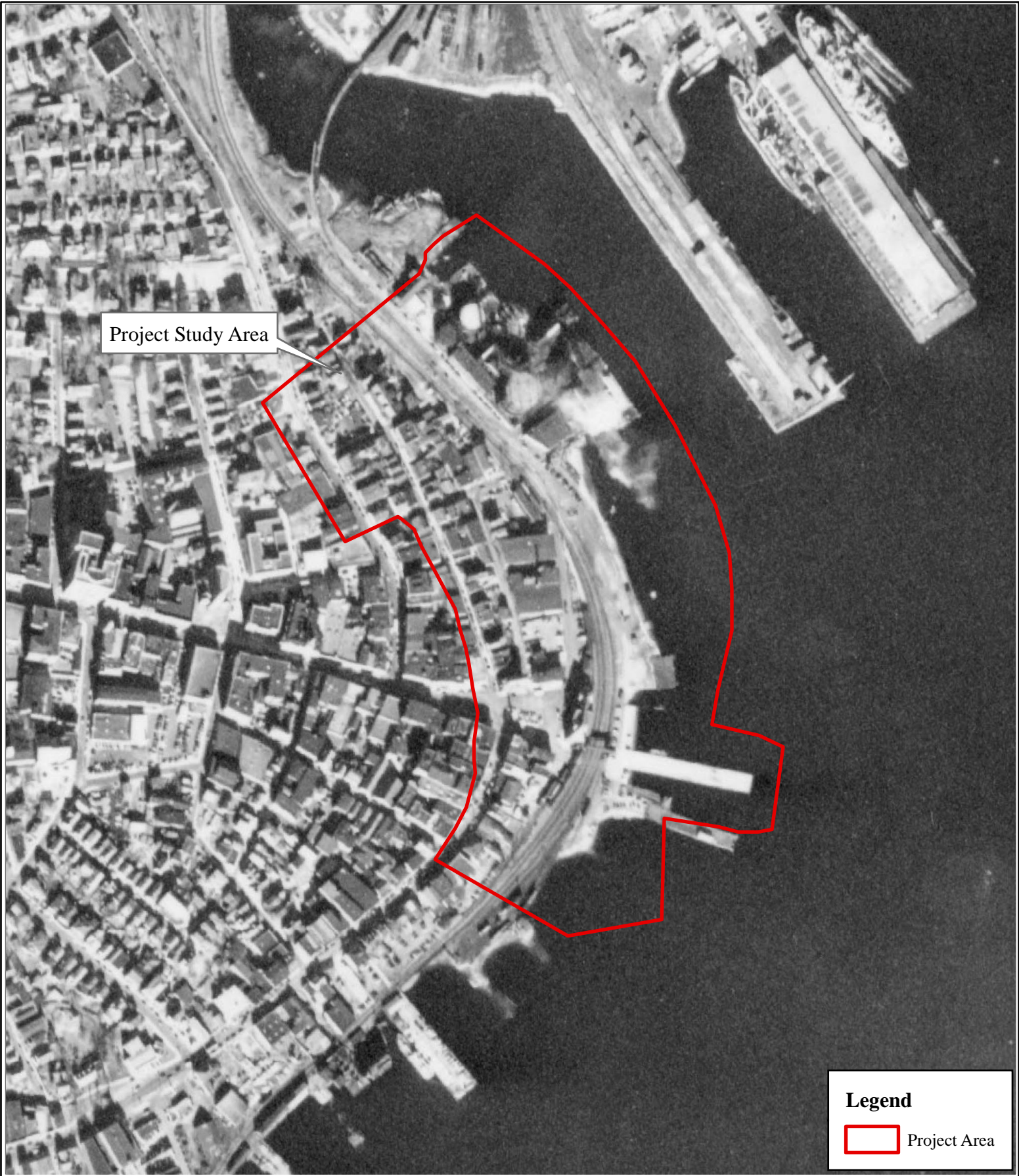


**Project Study Area  
Proposed Pedestrian Overpass**

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet


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MXD: W:\Design\2247-06-DE\GIS\Maps\1934 Historical Imagery.mxd



Project Study Area

**Legend**

 Project Area

**SOURCE(S):**  
CT State Library

**Figure 3-4: 1951 Historical Imagery**

**LOCATION:**  
New London, CT

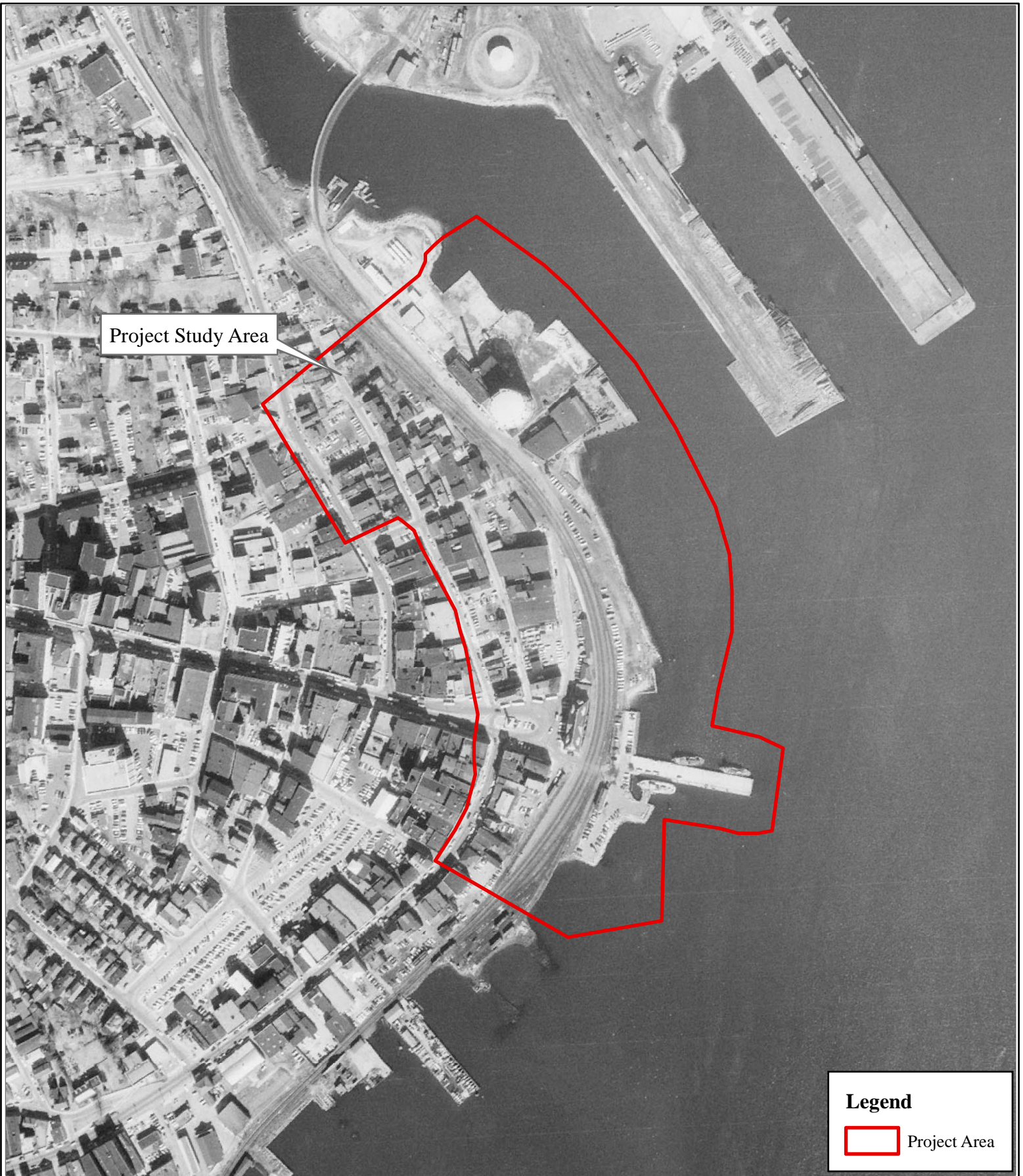


**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\1951 Historical Imagery.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet

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**Legend**

Project Area

**SOURCE(S):**  
CT State Library

**Figure 3-5: 1965 Historical Imagery**

**LOCATION:**  
New London, CT

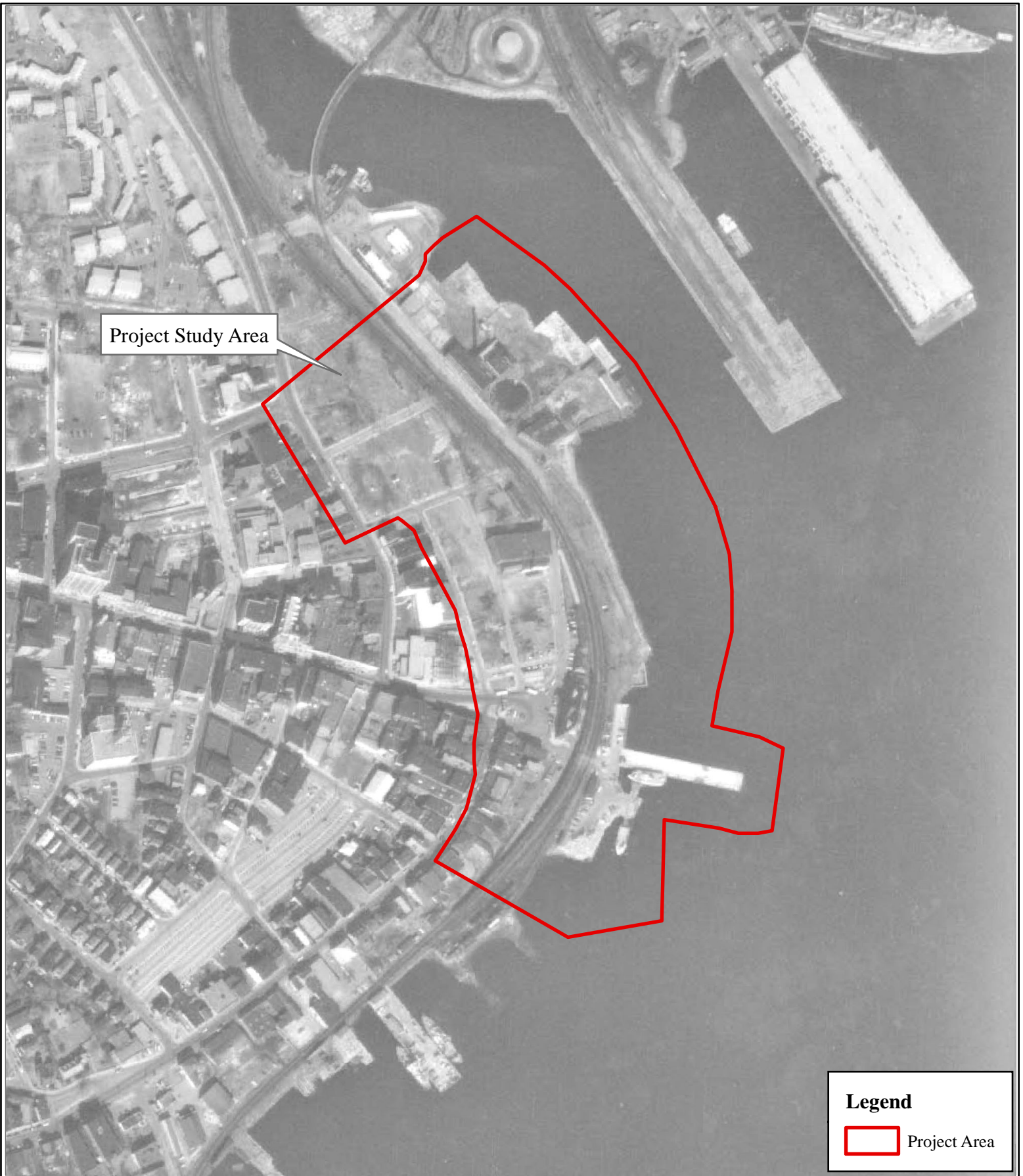


**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\1965 Historical Imagery.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
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**SOURCE(S):**  
CT State Library

**Figure 3-6: 1970 Historical Imagery**

**LOCATION:**  
New London, CT

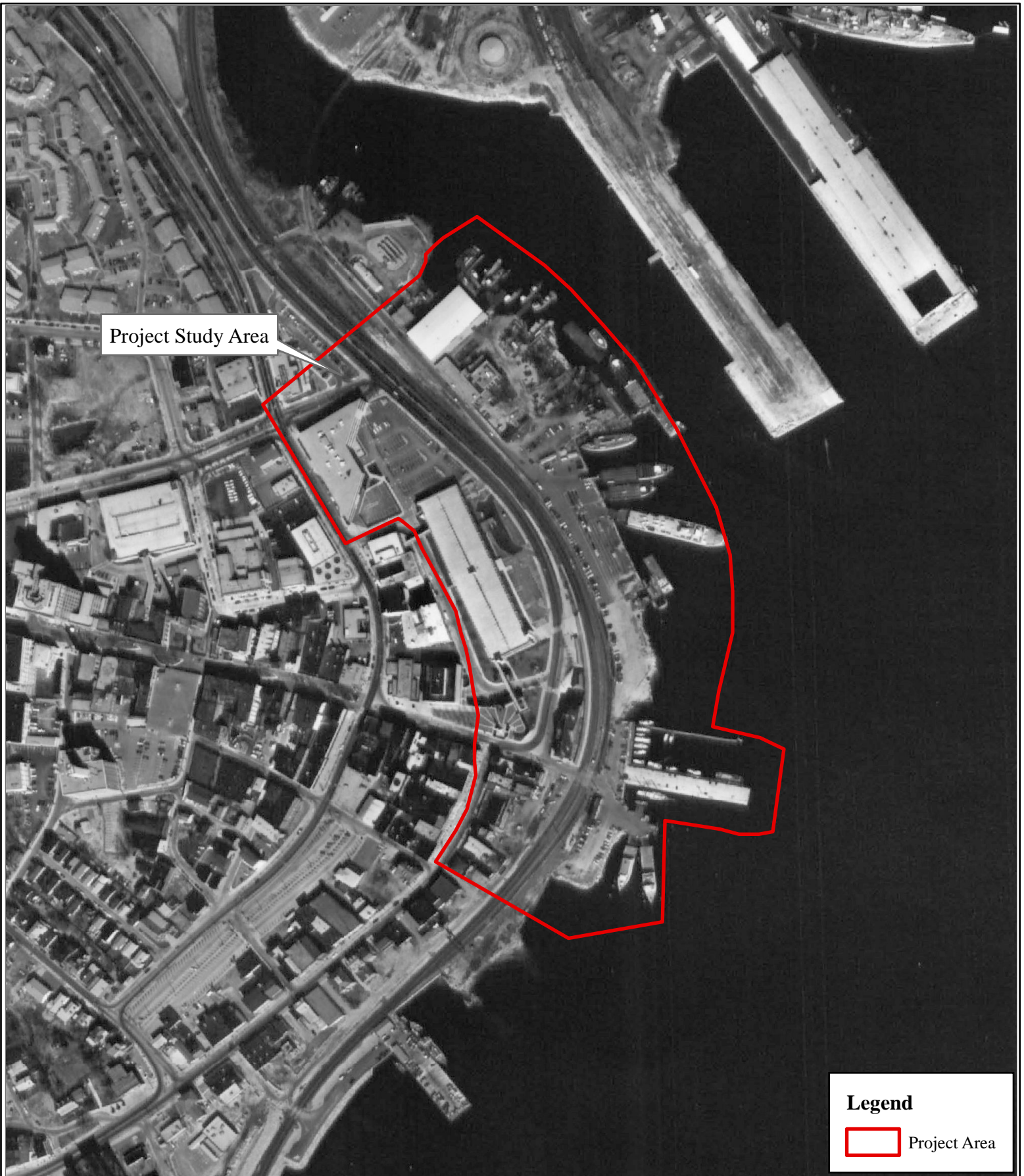


**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\1970 Historical Imagery.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet

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**Legend**

Project Area

**SOURCE(S):**  
CT State Library

**Figure 3-7: 1986 Historical Imagery**

**LOCATION:**  
New London, CT



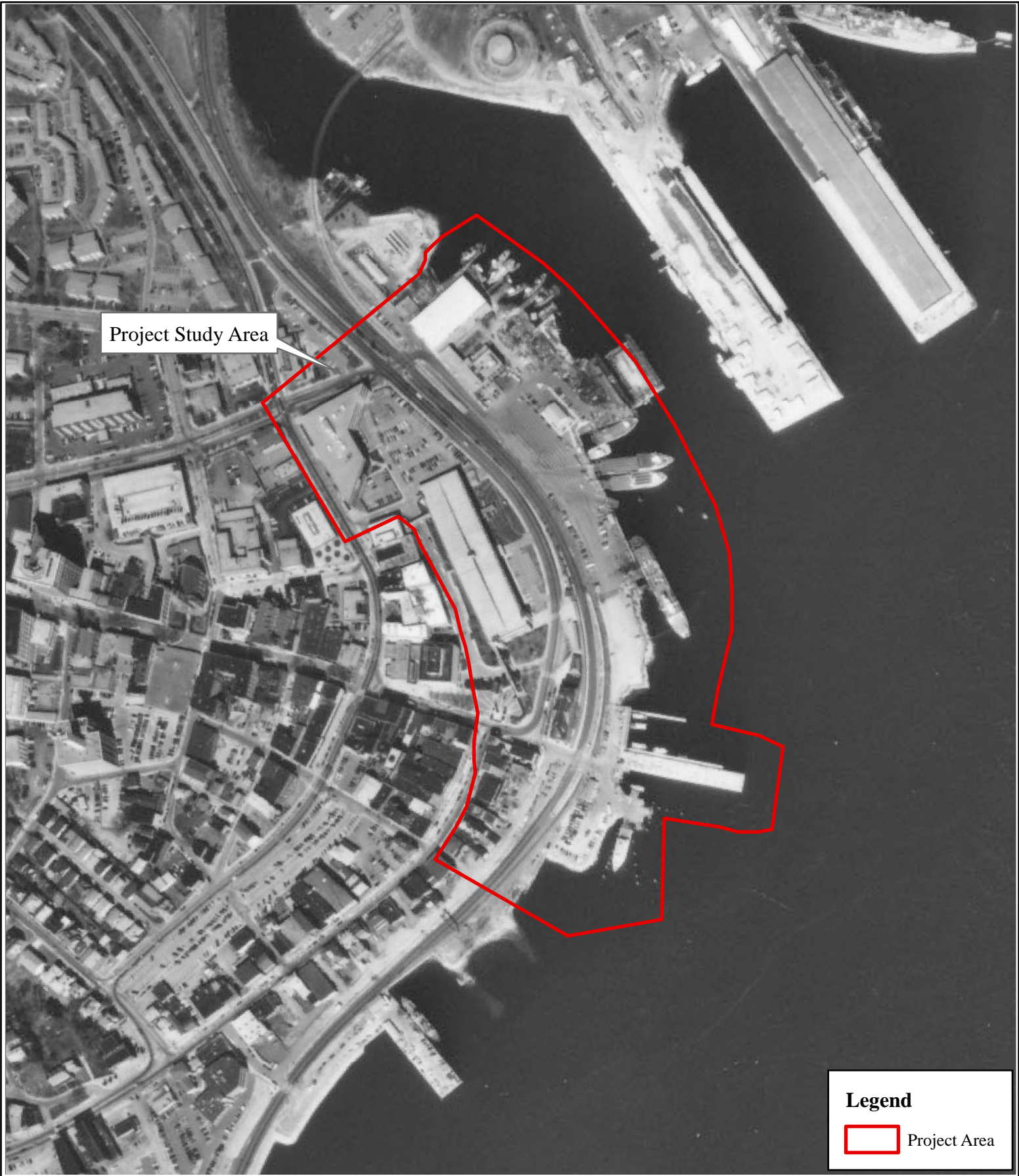
**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\1986 Historical Imagery.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet

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**Legend**

Project Area

**SOURCE(S):**  
CT State Library

**Figure 3-8: 1990 Historical Imagery**

**LOCATION:**  
New London, CT

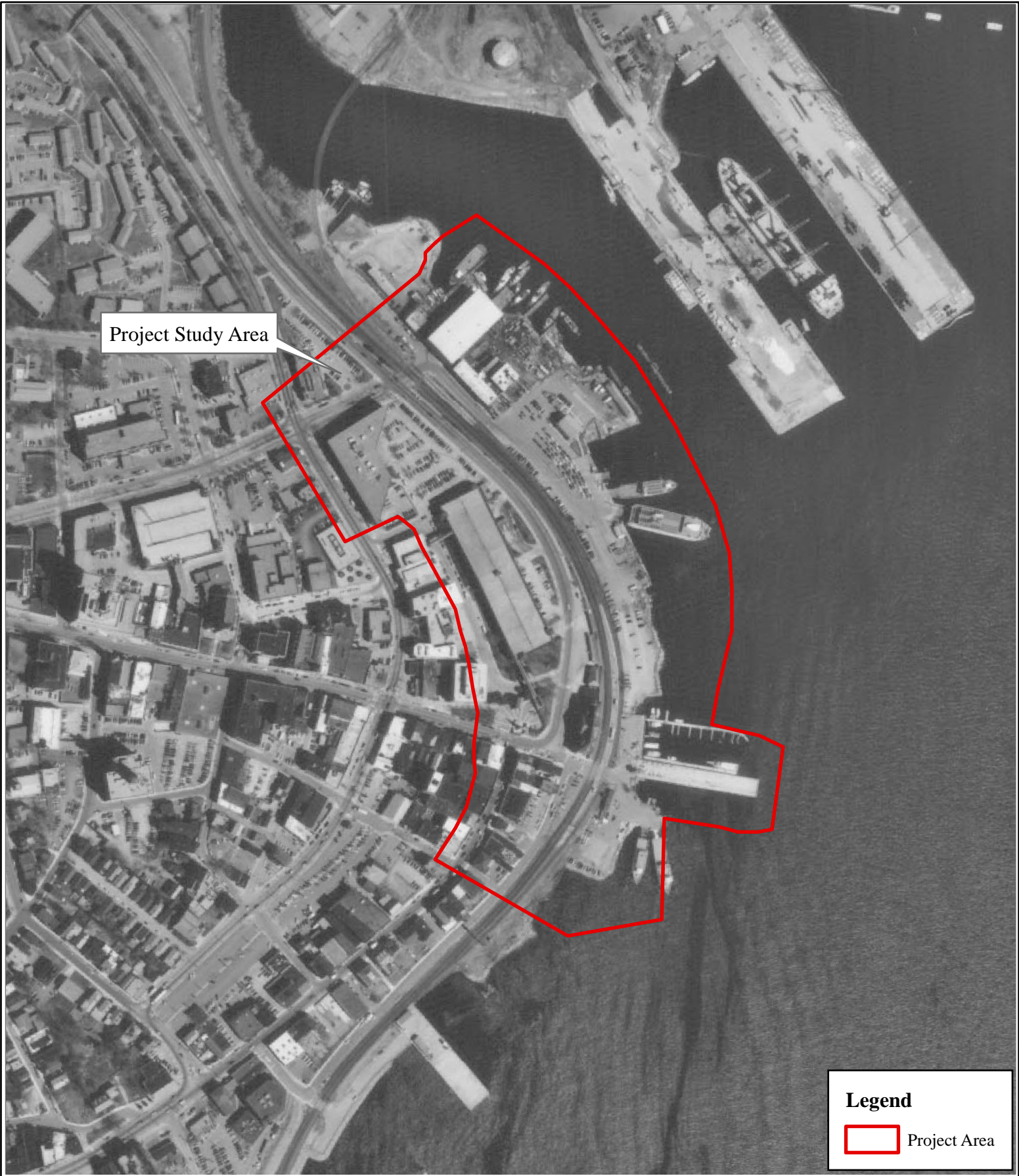


**Project Study Area  
Proposed Pedestrian Overpass**

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet


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MXD: W:\Design\2247-06-DE\GIS\Maps\1990 Historical Imagery.mxd



Project Study Area

**Legend**

 Project Area

**SOURCE(S):**  
CT State Library

**Figure 3-9: 1996 Historical Imagery**

**LOCATION:**  
New London, CT



**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\1996 Historical Imagery.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 12/18/2013  
Scale: 1 inch = 350 feet

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Zoning in the eastern portion of the downtown waterfront area is designated Waterfront Development District (WD) and Waterfront Commercial Industrial (WCI-2). Allowable uses in the WD include: (1) Institutions for higher learning, business, vocational, and training schools, including colleges, universities, junior colleges, business, banking, business management, secretarial and office schools, art and drafting schools, school for training in the martial arts, dancing, gymnastics, and music, schools for fashion design; and (2) Home Based Businesses in accordance with Article IV, Section 400.2 (2) and Article V, Section 500.2 (7).

In addition, the following uses are permitted in WD districts subject to the issuance of a Special Permit: (1) public and private parks and playgrounds; (2) yacht clubs and marinas; (3) boat docks, slips, piers and wharves for yachts and pleasure boats, or boats for hire carrying passengers on excursions, pleasure, or fishing trips, or vessels engaged in fishery or shell fishery; (4) yards for building, storing, repairing, selling, or servicing boats; (5) boat and marine engine sales and display; (6) yacht, broker, marine insurance broker; (7) rental of boats; (8) retail sale or rental of boating, fishing, diving, and bathing supplies and equipment; (9) sale loft or ship's chandlery; (10) museums with nautical themes; (11) manufacturing; (12) petroleum and related fuel storage and distribution facilities; (13) parking facilities; (14) base operations for fishing and lobstering business; (15) retail stores and service establishments; (16) restaurants; (17) business and professional offices; (18) multi-family residential uses up to a maximum density as provided for in the R-3 zone; (19) hotels and motels; (20) public utility installations; (21) radio and television antennas, flagpoles, towers, chimneys, watertanks, or standpipes; (22) arts and crafts studios and shops; (23) structural additions to existing manufacturing facilities and fuel storage and distribution facilities; (24) commercial entertainment establishments; (25) child day care and (26) institutions of higher learning.

The eastern portion of the downtown waterfront area is located in a portion of the WCI-2. The following uses are permitted in WCI-2 districts subject to the issuance of a Special Permit: (1) public and private parks and playgrounds; (2) yacht clubs and marinas; (3) boat docks, slips, piers, and wharves for yachts and pleasure boats, or boats for hire carrying passengers on excursions, pleasure, or fishing trips, or vessels engaged in fishery or shell fishery; (4) boat and marine engine sales and display; (5) yacht broker, marine insurance broker; (6) rental of boats; (7) retail sale or rental of boating, fishing, diving, bathing supplies and rentals; (8) base operations for fishing and lobstering business; (9) ferry boat piers and terminals; (10) water-related museums and/or educational facilities; (11) restaurants; (12) business and professional offices; (13) hotels, motels, and conference facilities; (14) retail stores; (15) amusement centers; (16) commercial recreation; (17) buildings with mixed uses; (18) port facilities for bulk shipping and storage facilities; (19) manufacturing; (20) railroad yards, storage, service, and repair; (21) a yard of building, storing, repairing, selling, or servicing boats; (22) parking facilities and structures; (23) museum and/or educational facilities; (24) drinking establishments/cafes; (25) laboratories and (26) child day care centers.

Accessory uses in this district include but are not limited to uses that provide general public access to the waterfront. Access may be provided by any approved means including but not limited to easements, boardwalks, decks, or other similar means.

### 3.1.6 Coastal Zone Management

The downtown waterfront area is located within Connecticut's coastal boundary as defined by Section 22a-94 of the CGS and is subject to the provisions of the Connecticut Coastal Management Act (CCMA) (CGS Sections 22a-90 through 22a-112). In accordance with CGS Section 22a-100, state actions and state-funded actions within the coastal boundary that may significantly affect the environment must be consistent with the goals and policies of the CCMA.

The coastal boundary is determined as follows: (1) a continuous line on the landward side by the interior contour elevation of the 100-year frequency coastal flood zone, as defined and determined by the National Flood Insurance Act; or (2) a 1,000 foot setback measured from the mean high water mark in coastal waters; or a 1,000 foot linear setback measured from the inland boundary of tidal wetlands mapped under CGS Section 22a-20, whichever is farthest inland.

Coastal waters are defined as those waters of Long Island Sound and its harbors, embayments, tidal rivers, streams, and creeks that contain a salinity concentration of at least 500 parts per million (0.5 parts per thousand, ppt) under the low flow stream conditions as established by the Commissioner of the Department of Environmental Protection (CGS Section 22a-93(5)). The project study area is surrounded by coastal waters.

The CCMA coastal resource mapping indicates the project study is characterized as highly engineered areas with minimal natural features. The entire area has been designated as a "developed shoreline." No coastal resources (per statutory definition) are located in or adjacent to the area of the proposed pedestrian overpass.

## 3.2 Socioeconomics

The following information regarding demographics, employment, and tax base has been obtained from the City of New London Plan of Conservation and Development, regional documents, census information and statistics, as well as data obtained from the City of New London Assessor's Office and field investigations. This discussion is intended to provide an overall background of the demographic makeup of the City of New London and the downtown waterfront area.

### 3.2.1 Demographics

The City of New London experienced a period of decline from 1970 to 2000, with an 18.8 percent drop in population from 31,630 to 25,671. From 2000 to 2010, the city's population increased by 7.5 percent, with the addition of 1,949 people in the last 10

years. In the decade between 2000 and 2010, the population increased from 25,671 to 27,620. Consequently, the number of total households increased by 2.4 percent from 11,560 to 11,838. Tables 3-2 through 3-4 present demographic data for the city.

**TABLE 3-2  
Historic Population in New London (1900 – 1950)**

<i>Year</i>	<i>Population</i>	<i>% Change</i>	<i>Year</i>	<i>Population</i>	<i>% Change</i>
1900	17,548		1960	34,182	+11.9%
1910	19,659	+12%	1970	31,630	-8.1%
1920	25,688	+ 30.6%	1980	28,842	-8.8%
1930	26,640	+ 3.7%	1990	28,540	-1.0%
1940	30,456	+14.3%	2000	25,671	-10.1%
1950	30,551	+3%	2010	27,620	+7.5%

Source: City of New London, 2007 Plan of Conservation and Development, U.S. Census

**TABLE 3-3  
New London Demographics**

<i>Universe</i>	<i>2000 Census</i>	<i>2010 Census</i>	<i>%Change</i>
Population	25,671	27,620	+7.5%
Households	10,181	10,373	+1.8%
Household Size	2.26	2.30	+1.7%

Source: 2000, 2010 U.S. Census

**TABLE 3-4  
Demographic and Socio-Economic Characteristics – City of New London**

<i>Parameter</i>	<i>2000</i>	<i>2010</i>
Population	25,671	27,617
Household Units	11,560	11,838
Renter-Occupied Housing Units	6,320	6,466
Owner-Occupied Housing Units	3,861	3,907
Average Household Size	2.26	2.3

Source: 2000, 2010 U.S. Census

### 3.2.2 Employment

New London is an important employment center in the region. Of the civilian labor force in the Norwich-New London local market area, New London has the third largest labor force and the third highest number of people employed (Table 3-5). Employment in the city of New London has remained fairly steady since 1998 with minor increases and decreases during that time. The most significant increases occurred in 2002 and 2010 with a 3 percent increase in employment each year (Table 3-6).

**TABLE 3-5**  
**Employment by Civilian Labor Force for the Norwich-New London**  
**Local Market Area - 2012 Annual Average**

<i>Town - Local Market Area (LMA)</i>	<i>Labor Force</i>	<i>Employment</i>	<i>Percent</i>
Norwich-New London, LMA (CT only)	136,904	125,167	
Norwich	22,177	20,092	16%
Groton	18,741	17,092	13%
New London	14,210	12,585	10%
Montville	10,526	9,626	8%
Waterford	10,454	9,605	8%
Stonington	10,152	9,530	7%
East Lyme	9,637	8,898	7%
Ledyard	8,222	7,588	6%
Griswold	7,297	6,662	5%
Old Lyme	4,129	3,859	3%
North Stonington	3,200	2,968	2%
Canterbury	3,111	2,851	2%
Preston	2,681	2,457	2%
Lisbon	2,556	2,351	2%
Salem	2,556	2,360	2%
Sprague	1,761	1,573	1%
Voluntown	1,568	1,416	1%
Bozrah	1,531	1,405	1%
Franklin	1,141	1,065	1%
Lyme	1,255	1,185	1%

Source: Connecticut Department of Labor

**TABLE 3-6**  
**Employment Trends by Labor Force for the City of New London – Annual Average**

	<i>Labor Force</i>	<i>Employed</i>	<i>Change</i>	<i>%Change</i>
1998	13,035	12,326		
1999	12,981	12,387	+61	+0.49%
2000	12,395	12,017	-370	-3%
2001	12,736	12,259	+242	+2%
2002	13,293	12,592	+333	+3%
2003	13,456	12,609	+17	+0.1%
2004	13,370	12,549	-60	-0.4%
2005	13,472	12,664	+115	+1%
2006	13,513	12,779	+115	+1%
2007	13,452	12,682	-97	-1%
2008	13,814	12,861	+179	+1.4%
2009	14,016	12,668	-193	-1.5%
2010	14,680	13,049	+381	+3%
2011	14,592	12,957	-92	-1%
2012	14,210	12,585	-372	-3%

Source: Connecticut Department of Labor

According to New London's Plan of Conservation and Development, the largest employers in New London are Lawrence and Memorial Hospital, Pfizer, the USCG, the City of New London, and Connecticut College. However, since the plan was updated, Pfizer has moved out of New London, and Electric Boat has moved into the space that Pfizer occupied. Pfizer began relocating approximately 2,500 staff from the Pequot Avenue campus in 2009. Electric Boat purchased the office complex in June 2010 and by the end of 2011 had staffing levels within the facility similar to the earlier Pfizer levels.

### **3.3 Community Facilities and Services**

The following information relative to education, health care, public safety, emergency services, and parks and recreation has been taken in part from the City of New London's Plan of Conservation and Development as well as numerous city-sponsored websites.

#### **3.3.1 Education**

The City of New London Public School District provides a full range of educational services to its residents. Three public elementary schools located throughout the city provide educational services for children in grades K through 5. These schools include Winthrop, Jennings, and Nathan Hale Elementary Schools. Services for grades 6 through 8 are provided at the Bennie Dover Jackson Middle School. High school education in New London is provided by two schools – New London High School and the Science and Technology Magnet High School.

New London is also home to Mitchell College, Connecticut College, the United States Coast Guard Academy, a satellite campus of the University of New Haven, and Ridley Lowell Business and Technical Institute.

Numerous religious and private educational facilities operate in New London, including Saint Mary's, Saint Joseph's, the Solomon Schechter Academy, ISAAC Interdistrict School for Arts and Communication, and the Williams School.

#### **3.3.2 Public Safety and Emergency Services**

The City of New London provides a variety of police, fire, and emergency services in an effort to reduce the loss of life and property and protect the public's safety. The New London Police Department headquarters is located on Governor Winthrop Boulevard. Fire service in the City of New London is provided at the headquarters station, the south station, and the north station located on Bank Street, Lower Boulevard, and Broad Street, respectively.

The Fire Department also provides emergency medical services at the R2 level (ambulance transport). The City of New London Ambulance Division is staffed by 16 firefighters/EMTs and provides emergency medical services within New London. In addition to its firefighting-related responsibilities, the New London Fire Department

serves as the lead resource necessary to abate hazardous materials incidents, rescue operations, radiological incidents, and other emergency incidents.

### 3.3.3 Parks and Recreation

The city owns and operates recreational facilities that are scattered throughout New London and vary in type, size, and quality. According to the Plan of Conservation and Development, "*the City owns and operates one regional park, three city wide parks, three beaches, one senior center/auditorium, two historic sites, 11 neighborhood playgrounds, seven neighborhood parks, one pier, one marina and two open space parks. Included in these facilities are basketball courts, playgrounds, ball fields, swimming pools, miniature golf, a skating pond and a senior center.*" Several private facilities such as Mitchell Woods, Pequot Avenue Beach, Mitchell College Beach, and the Connecticut College Arboretum are also located throughout New London.

## 3.4 Aesthetic/Visual Resources

The following discussion provides background on the aesthetic and visual condition of the downtown New London waterfront area.

### 3.4.1 Regional Landscape

The city of New London was once a major hub for whaling activity in the state of Connecticut. The harbor and the historic characteristics of the mixed land use in the downtown area reflect some of the city's past maritime history. The Thames River has played an important part in the development of the city of New London. The city is well known as the home of State Pier, Fort Trumbull, Connecticut College, and the USCG. Amtrak's busy rail line traverses the city as well.

New London's State Pier is Connecticut's only major deep water seaport within a multiuse foreign trade zone. The Thames River directly accesses the major transatlantic and coastal sea lanes, which allows companies to utilize freight shipping and receiving from around the world. Immediately south of State Pier is Cross Sound Ferry Services, which provides ferry service to Fishers Island, Orient Point, and Block Island. Several other ferry services also provide service to Block Island, Montauk, and Martha's Vineyard. Ferry service to Orient Point on Long Island is year round while service to other locations is seasonal. This terminal has become increasingly important to the transport of visitors to the New London area from Long Island, New York.

### 3.4.2 Area Landscape

The landscape of the downtown waterfront area is highly developed and consists predominantly of commercial uses interspersed with residential and industrial uses. Union Square, the Greyhound Bus terminal, Parade Plaza, office buildings, and the railroad tracks are located in the vicinity of the proposed NCGM and pedestrian overpass.



Further east is the waterfront district, which includes City Pier, State Pier, Cross Sound Ferry Services, the Fisher's Island Ferry terminal building, a vacant lot, and the Thames River.

The central and southern areas of the city are predominantly occupied by residential development while much of the northern portion of the city is institutional land associated with Connecticut College and the Coast Guard Academy.



The aesthetic character of the downtown waterfront area is mainly centered on the architecture and significance of the buildings located within the Downtown Historic District, including Union Station and the Custom House. The historic district is further described in Section 3.6.2.

According to the NLL website, "*this district, now known as the Historic Waterfront District, showcases the commercial development of the city in the late 18th and 19th centuries. Many of the 19th century buildings were designed by prominent architects, most notably Union Station, by Henry Hobson Richardson and the Custom House, by Robert Mills. The many side streets included contain an array of urban residential and commercial buildings, dating to the same eras. Ten years after the original district was formed, its boundaries were increased to encompass a larger mix of commercial, religious, public, and residential buildings. Of particular importance is the 1784 Georgian New London County Courthouse at the top of State Street.*"

### **3.5 Public Utilities and Services**

Existing utilities are described in the narrative below. This inventory provides a baseline against which to measure impacts of alternatives, as presented in Section 4.5 of this document.

Water – Public water supply in the downtown waterfront area is provided by the City of New London Public Utilities Department. According to the Plan of Conservation and Development, "*the active water sources of the New London Water and Water Pollution Control Authority (WWPCA) are Fairy Lake, Barnes Reservoir, Bogue Brook Reservoir*

*and Lake Konomoc. In addition there are two diversions, referred to as the Beckwith Pond Diversion and the Great Swamp Diversion. Lake Konomoc in Waterford serves as the principle storage reservoir of the WWPCA system and has a storage capacity of 1,216 million gallons." Public water supply lines are located in the downtown waterfront area; however, no infrastructure improvements or connections are anticipated for the pedestrian overpass. Water connections, extensions, and/or infrastructure improvements will be required for the proposed NCGM, which is being reviewed under a separate EA under the NEPA.*

Sanitary Sewer – Sanitary sewer service in the downtown waterfront area is provided by the City of New London Public Utilities Department. While sanitary sewer connections, extensions, or infrastructure improvements will be required for the proposed NCGM, no infrastructure improvements or connections are anticipated for the pedestrian overpass.

Storm Sewer – Storm sewers are located throughout the city of New London. Due to the nature of the proposed action, no major infrastructure improvements or storm sewer connections will be required.

Electric/Energy – Electric service in the City of New London is provided by Connecticut Light and Power (CL&P).

Gas – The Yankee Gas Service Company provides natural gas service to the city of New London.

Telephone – Telephone service in the city New London is provided by AT&T.

Cable – Cable television service in the city of New London is provided by Eastern Connecticut Cable Television, Inc.

### **3.6 Cultural Resources**

#### **3.6.1 Historic Resources**

The National and State registers recognize properties that are significant on the local, state, or national level. In order to identify historic resources that could potentially be impacted by the proposed undertaking, a review of the National Register of Historic Places website was conducted. Historic resources include buildings, structures, objects, districts, and sites that are eligible for the State or National Registers of Historic Places, the criteria for which are essentially the same, as described below:

*The quality of significance in American history, architecture, archeology, 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 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.*

Based on the aforementioned review, it was determined that the proposed project is located within the Downtown New London Historic District, a National Register District of commercial and institutional buildings that borders State Street to the northeast, Bank Street to the southeast, Tilley Street to the southwest, and Washington Street to the northwest. According to the National Register, the Downtown New London Historic District was originally designated in 1979 and included approximately 215 sites and structures and encompassed approximately 60 acres. The western, northern, and southwest boundaries were expanded in 1988 to include an additional 37 buildings. Of the 37 buildings, four do not contribute to the District because they were less than 50 years old.

In addition to the historic district, one building, the New London Railroad Station, was added to the National Registry of Historic Places in 1971. This building was constructed in 1887 by architect H. H. Richardson and is one of the oldest railroad stations in the northeast.

Potential cultural resource impacts are evaluated in Section 4.6 of this document.

### 3.6.2 Archaeological Sensitivity

All or nearly all of project study area was created by deposits of fill. As such, the archaeological sensitivity for intact prehistoric archaeological resources is believed to be minimal.

## 3.7 Transportation

An understanding of existing transportation conditions in the downtown waterfront area provides a baseline against which future land use activities can be compared with respect to measures such as traffic volumes, travel demands, and levels of service. Aspects of the existing multimodal transportation system, including traffic and parking conditions, public transportation services, and pedestrian access are described in this section.

The approach used to establish existing conditions was based on information contained in the TranSystems report for the *Regional Intermodal Transportation Center Master Plan and Efficiency Study* (RITC study). The RITC study, which is based on 2008 data, was reviewed and compared to more current information from as recent as summer 2013 to ascertain if any of the transportation/traffic conditions have significantly changed over the past several years. Except for Shoreline East ridership, the characteristics of other potential traffic-generating uses in the area have not significantly changed through 2013. Changes in Shoreline East ridership would have little effect during the critical analysis period, which is Saturday during the summer. Lastly, traffic volume data collected by CTDOT shows that traffic levels decreased from 2008 to the time of the most recent data collected in 2011.

Recent developments have begun to take shape that may affect transportation conditions in the downtown waterfront area. Electric Boat (EB) located offices in the former Pfizer campus on Pequot Avenue starting in 2010 and has gradually increased the number of employees there since that time. Parking at the EB Pequot Avenue campus has reached capacity. Recent discussion has focused on using approximately 200 spaces within the downtown Water Street Parking Garage. An employee shuttle would transport these workers between the downtown garage and the Pequot Avenue campus. If this occurs, it will potentially have an impact on overall downtown parking during weekdays. Recent concerns have been voiced that EB has increased traffic levels through downtown, particularly Water Street. Though traffic along Water Street may have increased over the past several years, it is not believed to have increased above 2008 levels. As such, the existing conditions as presented in the RITC study were assumed to be a reasonable representation of current traffic conditions.

### 3.7.1 Roadway Network

Figure 3-10 is a location map of the downtown waterfront area roadway network. The city of New London is served by several major roadways, including I-95 to the north and several state roadways north and west of the downtown waterfront area. Notable state-maintained roads that are nearby include U.S. Route 1 and State Routes 32, 641, and 213.

State Route 32 provides access to and from the north as it connects with Eugene O'Neill Drive and Water Street, and also with I-95 and Mohegan Avenue further to the north where it continues toward Uncasville and Norwich. State Route 641 also serves as a main travelway to and from the center of New London as Huntington Street, which connects with I-95 and U.S. Route 1 northwest of the downtown New London waterfront area, and as Jay Street and Truman Street to the southwest, where it connects again with U.S. Route 1 and also with Route 213 at Bank Street. Route 213 provides north-south access through New London south of downtown. U.S. Route 1 provides east-west access through New London from Groton to Waterford.



**SOURCE(S):**  
 CT Ortho, 2012  
 City of New London GIS

**Figure 10: Roadway Network Map**

**LOCATION:**  
 New London, CT



**Project Study Area  
 Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Project Location\_wideview.mxd

Map By: JDW  
 MMI#: 2247-06  
 Original: 12/11/2013  
 Revision: 2/12/2014  
 Scale: 1 inch = 750 feet

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All of the streets within and directly adjacent to the downtown waterfront area are city roadways. Eugene O'Neill Drive and Water Street are one-way pairs providing southbound and northbound travel, respectively. Both contain multiple travel lanes and are classified as arterial roadways according to the Federal Highway Administration (FHWA) functional classification system. Eugene O'Neill Drive runs from Route 32 southbound to Tilley Street. Water Street runs northbound from State Street to Route 32. Eugene O'Neill Drive is a minor arterial roadway south of State Street toward Tilley Street. Bank Street is a northbound street containing multiple travel lanes between Tilley Street and State Street and is also classified as a minor arterial. Southwest of Tilley Street, Bank Street continues as a two-way multilane roadway toward U.S. Route 1 and Route 213.

State Street is the main east-west travelway through downtown New London. It runs from Water Street, in front of Union Station and Parade Plaza, to Route 641. Between Bank Street and Route 641, it contains a single lane of travel in each direction. East of Eugene O'Neill Drive, it is classified as an arterial roadway while west of Eugene O'Neill Drive it is a collector roadway. Governor Winthrop Boulevard is another east-west thoroughfare through the center of New London along the northern portion of downtown. It extends from Water Street at Ferry Street to Route 641 at Broad Street. Governor Winthrop Boulevard contains multiple travel lanes in each direction and has a planted median.

Key intersections in the area include the following:

- State Street at Bank Street
- State Street at Water Street
- Water Street at Governor Winthrop Boulevard
- Governor Winthrop Boulevard at Ferry Street

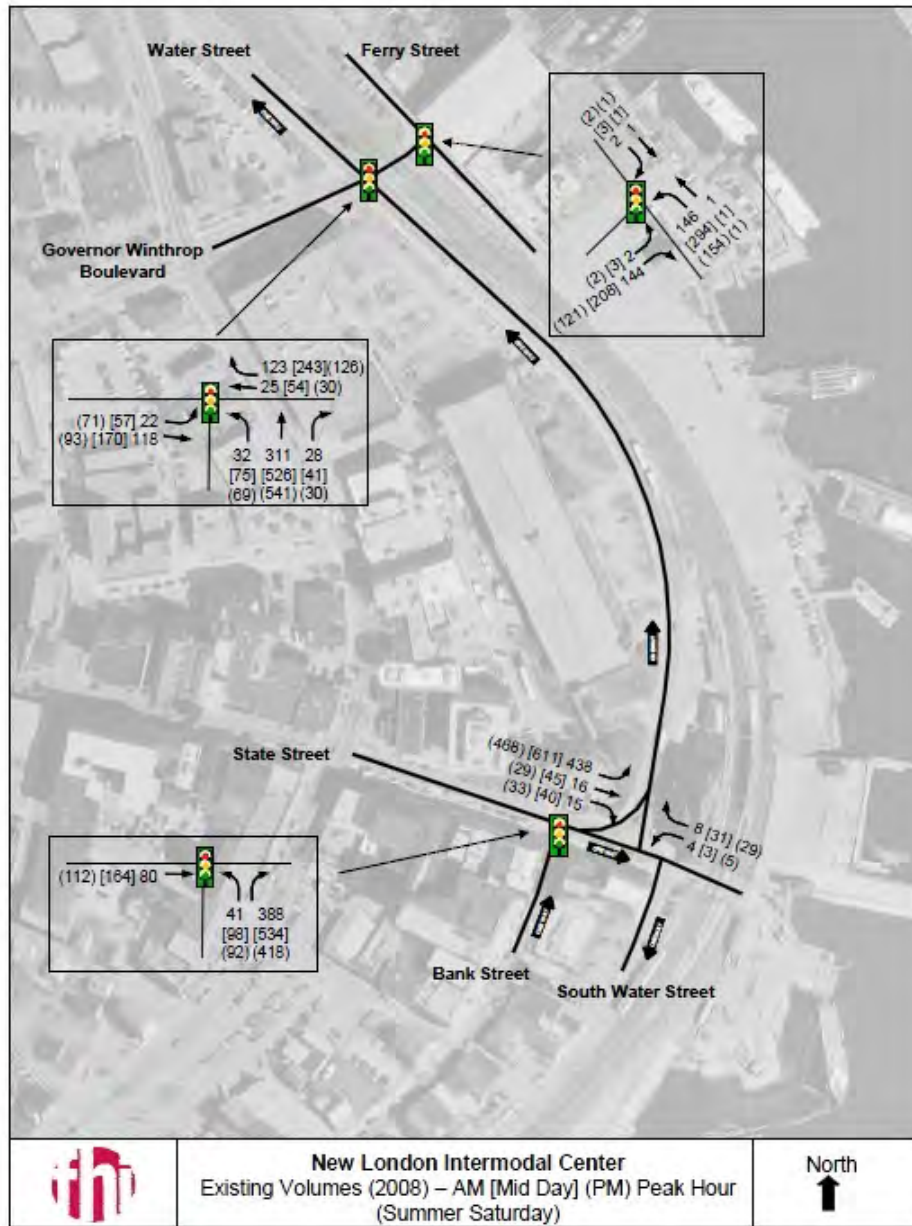
With the exception of State at Water Street and South Water Street, each of these intersections is signalized. The latter two intersections are closely spaced yet separated by the at-grade railroad crossing (Amtrak and freight). These two intersections operate on the same controller with the rail crossing. The other at-grade railroad crossings (Amtrak, Shoreline East, and freight) in the area are located at the end of State Street at the access to the Fisher's Island Ferry terminal and City Pier just south of Union Station.

### 3.7.2 Existing Traffic Conditions

Vehicle traffic volume data for the roadway network was assembled from the RITC study. As part of that study, intersection turning movement counts were conducted on a Saturday in August 2008. The counts were reportedly adjusted to represent typical summer Saturday conditions. The resulting morning, midday, and afternoon peak-hour traffic volumes are presented graphically on Figure 3-11.

**FIGURE 3-11**

**Peak Hour Traffic Volumes (2008 Existing Conditions)**



Source: Regional Intermodal Transportation Center Master Plan and Efficiency Study. TranSystems 2010.

Traffic conditions during weekdays were not fully assessed in the RITC study. This is because the greatest demands at the regional intermodal transportation center are typically not experienced during the week but rather on weekends during the summer. This focus remains the same for the subject EIE given the context of a proposed pedestrian overpass to be located at or in close proximity to the intermodal transportation center.

Assessment was made of recent historical Average Daily Traffic (ADT) volume data available from CTDOT to determine if the 2008 volumes from the RITC study are still relevant. Several CTDOT traffic monitoring stations are located in or near the downtown waterfront area. The latest available data from 2008 and 2011 was compared as presented in Table 3-7.

**TABLE 3-7  
Average Daily Traffic (ADT) Comparison**

<i>Location</i>	<i>2008</i>	<i>2011</i>	<i>% Change</i>
Water Street north of Union Station	11,900	9,900	-16.8%
Eugene O'Neill Drive north of State Street	9,500	8,800	-7.4%
State Street east of Route 641	3,400	3,400	---
Gov. Winthrop Blvd east of Meridan Street	3,900	3,400	-12.8%
Bank Street northeast of Pearl Street	10,800	10,200	-5.9%

*Source: CTDOT. The 2008 data was collected in Sept. The 2011 data collected in Nov.*

*Note that ADT volumes are seasonally adjusted.*

ADT decreased notably at most locations and stayed the same at one location from 2008 to 2011, thus indicating that the 2008 traffic volume profile from the RITC study is a conservatively high representation of present traffic conditions in the downtown waterfront area at least through 2011. The City of New London Office of Development & Planning was also contacted and confirmed that there has not been any significant new development within the study area over the past 5 years that would have altered traffic patterns, nor have there been any significant roadway projects in the area since 2008.

Review was additionally made to ascertain if the Pfizer departure and the EB occupation of the Pequot Avenue campus may have affected the ADT volumes. Pfizer began relocating approximately 2,500 staff out of the facility in 2009. EB purchased the office complex in June 2010 and by the end of 2011 had staffing levels within the facility similar to the earlier Pfizer levels. This would indicate that the employee fluctuations at the largest employment facility in the city between 2009 and 2011 did not significantly affect the ADT trends reported in Table 3-7. EB employment at the facility has increased somewhat since 2011 but not to the extent that traffic through the downtown waterfront area is likely to have increased above 2008 levels.

Analysis of capacity is important in determining the ability of a specific roadway or intersection to accommodate traffic under various levels of demand. Existing traffic conditions were analyzed in the RITC study for the key intersections identified in Table



3-7 following procedures in the Highway Capacity Manual (HCM). The analysis included a determination of the existing Level of Service (LOS) for each of the key intersections based on the aforementioned summer Saturday peak-hour traffic volumes.

LOS is a qualitative measure describing driver satisfaction with a number of factors that are influenced by the degree of traffic congestion. These factors include speed and travel time, traffic interruption, freedom of maneuverability, safety, driving comfort and convenience, and average delay. LOS is analyzed on a 1-hour basis.

Six levels of service describe different flow conditions as follows:

- The highest, LOS A, describes a condition of free flow, with relatively low volumes, high speeds, and little or no delay.
- LOS B represents a stable traffic flow with operating speeds beginning to be restricted somewhat by traffic conditions.
- LOS C entails moderately restricted movements due to higher traffic volumes, but traffic conditions are not objectionable to motorists.
- LOS D is considered acceptable in most built-up environments and during peak hours of traffic flow. This reflects conditions where queues and delays may occur during short periods, but lower demands occur often enough that queues are able to clear preventing excessive backup.
- LOS E is considered to be the limit of acceptable delay, where increasing vehicle congestion occurs and the capacity of the roadway is being reached.
- The lowest LOS F occurs when there are higher traffic volumes than can be served during the hour of analysis and is characterized by significant congestion and intersection spillback.

A description of the various LOS designations (A through F) for signalized and unsignalized intersections is given in Tables 3-8 and 3-9, respectively. These are quantified in terms of delay, which may be used as a measure of driver discomfort, excess fuel consumption, and lost travel time. Based on the RITC study, all of the study intersections currently operate at overall LOS C or better during peak hours on a summer Saturday. These are summarized in Table 3-10.

**TABLE 3-8  
Levels of Service for Signalized Intersections**

<i>Level of Service</i>	<i>Average Control Delay (sec/veh)</i>
A	≤ 10
B	> 10 AND ≤ 20
C	> 20 AND ≤ 35
D	> 35 AND ≤ 55
E	> 55 AND ≤ 80
F	> 80

Source: HCM - Transportation Research Board, 2000

**TABLE 3-9  
Levels of Service for Unsignalized Intersections**

<i>Level of Service</i>	<i>Average Control Delay (sec/veh)</i>
A	≤ 10
B	> 10 AND ≤ 15
C	> 15 AND ≤ 25
D	> 25 AND ≤ 35
E	> 35 AND ≤ 50
F	> 50

Source: HCM - Transportation Research Board, 2000

**TABLE 3-10  
Intersection Level of Service Comparison – Current Summer Conditions**

<i>Intersection</i>	<i>Saturday Morning Peak Hour</i>	<i>Saturday Midday Peak Hour</i>	<i>Saturday Afternoon Peak Hour</i>
State Street at Bank Street	A	B	A
State Street at Water Street	A	A	A
Water Street at Governor Winthrop Boulevard	C	C	C
Governor Winthrop Boulevard at Ferry Street	B	B	B

Source: Regional Intermodal Transportation Center Master Plan. TranSystems, 2010

### 3.7.3 Accident History

Review was made of recent accident history for Water Street, the major travelway in the downtown waterfront area. Copies of traffic accident reports were obtained from the New London Police Department for the period of January 2011 to February 2014. Table 3-11 summarizes the data by accident severity and collision type.

A total of 86 accidents occurred during this time period on Water Street from north of Governor Winthrop Boulevard to south of State Street. Approximately 83 percent (71) of all the accidents were property damage only, with the rest (15) involving injuries. Over half of all the accidents (43) occurred between Governor Winthrop Boulevard and Atlantic Street.

**TABLE 3-11**  
**Accident Summary Table**  
**New London, Connecticut**  
**January 2011 – February 2014**

LOCATION: WATER STREET	ACCIDENT SEVERITY			TYPE OF COLLISION											
	INJURY	PROPERTY DAMAGE ONLY	TOTAL	TURN		SIDESWIPE SAME DIRECTION	REAR END	HEAD-ON	BACKING	JACKKNIFE	OVERTURN	ANGLE	MISC.	FIXED-OBJECT	TOTAL
				INTERSECTING	SAME										
North of Governor Winthrop Boulevard	1	6	7	3	1	2	1								7
At Governor Winthrop Boulevard and Ferry Street	10	10	20	2	3	7	3	1		1		3			20
Between Governor Winthrop Boulevard and Atlantic Street	2	41	43	6	2	12	10	1	2		1	5	1	3	43
At Atlantic Street		7	7	1	1	3	1					1			7
At State Street	1	4	5		1	2	1		1						5
South of State Street	1	3	4		1	1			2						4
<b>TOTAL</b>	<b>15</b>	<b>71</b>	<b>86</b>	<b>12</b>	<b>9</b>	<b>27</b>	<b>16</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>86</b>

Source: New London Police Department

The single largest type of accident was the sideswipe collision. Approximately 31 percent (27) of all the accidents were sideswipes where motorists attempted to turn left (e.g., into a driveway such as the Water Street Garage) from the wrong lane, or where motorists made an improper lane change. This could, to some extent, be a result of motorists who are unfamiliar with the area and may imply that there is a need for better wayfinding. Two-thirds of the accidents involving injuries occurred at the intersection of Water Street and Governor Winthrop Boulevard. This intersection likely experiences higher travel speeds because it is closer to the interstate highway and may also pose confusion to some motorists due to the at-grade rail crossing of Ferry Street.

None of the accidents involved injury to pedestrians. However, four of the accidents may have been set in motion because of pedestrians. Only two of these accidents may have been the fault of the pedestrian. Three rear-end collisions and one sideswipe collision

involved vehicles stopping or avoiding pedestrians crossing the street near Union Station. For two of these accidents, the pedestrian was not crossing at a crosswalk.

### 3.7.4 Existing Parking

Several parking facilities are available to the public that are within and near the downtown waterfront area. These off-street parking facilities are shown on Figure 3-10 and include the following:

- Water Street Garage
- Governor Winthrop Garage
- Cross Sound Ferry lot
- Eugene O'Neill lots
- Julian lot

As part of the aforementioned RITC study, an assessment was made of the utilization of these facilities under 2008 peak summer Saturday conditions. The number of parking spaces and parked vehicles were counted at each facility. The data was then adjusted to reflect peak summer conditions and is summarized in Table 3-12.

As shown, the Cross Sound Ferry lot and the Julian lot both experienced peak occupancy by early Saturday morning. The Cross Sound Ferry terminal has a surface parking lot for use by its patrons that gets utilized on a first-come first-served basis. This lot is often over capacity during summer weekends, with overflow demand that is served at the Julian lot and the Water Street Garage. The Julian lot is only open to the public on summer weekends. Both the Julian lot and the Water Street Garage are currently owned by the city but operated by Pro-Park. The Water Street Garage experienced peak occupancy during the middle of the day while the Governor Winthrop Garage and the Eugene O'Neill lots further away from the study area experienced peak occupancy later in the afternoon/evening.

**TABLE 3-12  
Estimated 2008 Peak Summer Saturday Parking Utilization**

	Total Spaces	Peak Occupancy	Peak % Occupied	Time of Highest Occupancy	Lowest Occupancy	Lowest % Occupied	Time of Lowest Occupancy
Water Street Garage	975	747	77%	12:00 - 1:00 pm	370	38%	7:00 - 8:00 am
Governor Winthrop Garage	400	150	38%	3:00 - 4:00 pm	97	24%	7:00 - 8:00 am
Eugene O'Neill Surface Lot (1)	125	125	100%	6:30 - 7:00 pm	28	22%	7:00 - 7:30 am 8:00 - 8:30 am
Eugene O'Neill Surface Lot (2)	130	35	27%	6:30 - 7:00 pm	15	12%	1:30 - 3:00 pm
Julian Surface Lot	186	142	76%	8:00 - 8:30 am	56	30%	7:00 - 7:30 am
Cross Sound Ferry	130	142	109%	8:00 - 8:30 am	97	75%	7:00 - 7:30 am
<b>Total</b>	<b>1946</b>	<b>1341</b>	<b>69%</b>		<b>663</b>	<b>34%</b>	

(1) Eugene O'Neill Surface Lot (corner of Eugene O'Neill Drive and Golden Street)

(2) Eugene O'Neill Surface Lot (corner of Green Street & Pearl Street)

*Source: Regional Intermodal Transportation Center Master Plan and Efficiency Study. TranSystems 2010.*

All totaled, approximately 69 percent of off-street parking is utilized under peak demand summer Saturday conditions. With the exception of the Eugene O'Neill lots, all of these off-street facilities charge for parking on weekends. Free on-street parking is available on State Street, Bank Street, and South Water Street but not on Water Street or Governor Winthrop Boulevard.

Since the RITC study was completed, the only noteworthy change that has affected the parking profile is an increase in Shoreline East service (discussed in Section 3.7.5 below). However, this increased commuter rail service has had minimal impact on the peak summer Saturday parking profile of the downtown.

Review was made of recent data showing the number of vehicles entering the Water Street Garage on a daily basis during July and August 2013, made available from the parking authorities. Parking occupancy data similar to that from the RITC study was not available. During this 2-month period, a single-day peak of 695 vehicles entered the Water Street Garage on Friday, July 12, 2013. Many of these vehicles likely remained parked through the weekend. The next day was much less; only about 50 vehicles entered the garage.

Although not an exact comparison, it appears that the peak summer weekend parking demands from 2013 were similar to the 2008 demands. The number of vehicles that entered the Water Street Garage on weekdays (Monday through Thursday) during summer 2013 was less than half of those on weekends. EB is currently investigating the potential use of overflow parking in the downtown. Parking demand by EB will be during the week while the overall downtown parking need peaks on weekends.

### 3.7.5 Existing Public Transportation – Rail

Union Station is located east of Water Street and due west of the proposed NCGM. The station was constructed in 1887 and is listed on the National Register of Historic Places. Union Station is the primary railroad station in southeastern Connecticut and is a stop for most of Amtrak's Northeast Regional trains, as well as the Shoreline East commuter rail service. The proposed pedestrian overpass is likely to serve at least some of the train patrons.

New London is a stop on the Amtrak route between Boston to the north and New York City and points beyond to the south. With Shoreline East, Union Station is the easternmost terminus of the service between New London and New Haven. Three tracks are located at Union Station; two Amtrak tracks are located nearest to Union Station while the third, waterside track is a freight track used by Shoreline East.

Amtrak currently operates nine trips in each direction through New London on its Northeast Regional route on Saturdays. This service also runs during the week with additional trips available on the Acela Express route. Headways between trains are 60

minutes or more. According to the RITC study, 2008 annual Amtrak ridership out of New London was approximately 169,100 passenger trips. The busiest months were July and August. The peak day of the week in terms of ridership was Fridays, with an annual average of 595 passenger trips and a peak summer average of approximately 810 passenger trips. Recent Amtrak ridership out of New London has been slightly less than the 2008 levels. Although national Amtrak ridership has steadily increased to record levels since 2009, the FY2013 ridership out of New London was a total of 161,405 boardings plus alightings according to an Amtrak news release on October 14, 2013.

Shoreline East currently operates approximately 10 weekday round trips and eight weekend round trips at New London. Weekend headways are 60 minutes or more while during weekdays the headways are 30 to 60 minutes during the morning and afternoon commuter periods. Regular weekend Shoreline East service is provided as of mid 2013. At the time of the RITC study in 2008, there were only one to two daily round trips available on Shoreline East, and the number of passengers out of New London was 20 to 25 per day.

Current Shoreline East ridership has increased with the additional number of trains serving the route. Weekend Shoreline East service to New London began in June 2013. According to CTDOT data, Shoreline East ridership out of New London was approximately 120 passenger trips per day at that time. More recent data indicates that monthly Shoreline East ridership at New London has more than doubled since the weekend service was started. Monthly ridership as of March 2013 at New London was 2,500, which increased to 6,540 in August 2013. Slightly higher monthly ridership occurred in July 2013, coinciding with Sailfest that year. In the context of the entire downtown transportation system, however, these increased Shoreline East ridership demands should be somewhat tempered, particularly in light of declines in overall vehicle traffic and Amtrak ridership since 2008.

### 3.7.6 Existing Public Transportation – Bus

The Intermodal Transportation Center accommodates two bus operators: Southeast Area Transit (SEAT) bus service and Greyhound regional bus service. SEAT is a regional agency that serves the following nine towns: Norwich, New London, Groton, Montville, Stonington, East Lyme, Ledyard, Waterford, and Griswold. One of the regional SEAT pulse point hubs is located adjacent to Union Station on the east side of Water Street north of the Greyhound bus terminal. The Greyhound bus terminal is the small building that is connected to Union Station.

At the New London SEAT pulse point, seven to eight buses are able to park curbside along Water Street though only five to six buses typically serve the hub at one time. There are currently five corridor (regional) routes and four local New London routes that can be accessed at the pulse point. The different bus routes have schedule frequencies of five to 11 runs per day, with headways from 1 to 2 hours. SEAT has also recently partnered with Three Rivers Community College to implement an express run from

Groton to New London and then to Three Rivers. The route is intended to provide better service for college students and only provides minimal service through Union Station when the school is in session. SEAT routes are summarized below.

SEAT Corridor Routes:

- Route 1 – Norwich/Mohegan Sun/New London
- Route 101 – AM and PM Norwich/Mohegan Sun/New London
- Route 2 – Norwich/Groton/New London
- Route 3 – Groton/New London/Niantic
- Route 108 – New London/Groton/Mystic Village/Foxwoods

SEAT New London Routes:

- Route 12 – Jefferson Ave./Crystal Mall/New London Shopping Center/Senior Center
- Route 13 – Shaws Cove/L & M Hospital/Ocean Beach
- Route 14 – New London Mall/Waterford Commons/Crystal Mall/N.L. Shopping Ctr
- Route 15 – New London/Waterford – Evening Service

SEAT ridership through the New London Intermodal Transportation Center, per the RITC Study, was only available in terms of number of estimated transfers at the pulse point. In 2008, there were estimated to be approximately 575 daily transfers at the Water Street pulse point. Recent data from SEAT shows that total systemwide ridership during July and August 2013 was at the same level as what it was in 2008. No major changes have occurred to SEAT service at the New London pulse point since 2008.

Greyhound operates in New London as an intermediate stop for its bus routes headed to Boston, Providence, Mohegan Sun, and Foxwoods to the north, and New Haven, Bridgeport, Stamford, White Plains, and New York City to the south. Two full-sized saw-tooth bus bays and two shorter bus bays are located at the Greyhound terminal at Union Station. At the time of the RITC study, Greyhound had four to five round-trip stops at New London during weekdays and at least seven on weekends. Currently, Greyhound runs approximately two weekday trips in each direction through the New London terminal and three to six trips each direction per day during weekends.

In 2008, per the RITC study, Greyhound estimated that approximately 100 passengers board at New London on busy summer weekdays and approximately 160 per day on busy weekends. A similar number of passengers also alight, making the total number of passenger trips (boardings plus alightings) around 320 in 2008. Greyhound ridership is understood to have not increased since 2008.

Table 3-13 provides a summary of the aforementioned public transportation ridership information.

**TABLE 3-13  
Daily Public Transportation Ridership in 2008<sup>1</sup>**

Service	Approximate # of Passenger Trips
Amtrak	595 - 810
Shoreline East	120 <sup>1</sup>
SEAT	575 <sup>2</sup>
Greyhound	320

<sup>1</sup>2013 per CTDOT; transfers at the Water Street Pulse Point

**3.7.7 Ferry Service – Cross Sound Ferry Services**

Cross Sound Ferry Services operates service to Long Island and Block Island from its New London Terminal. The terminal is located between the railroad tracks and the water just northeast of Union Station. Vehicle access to the ferry terminal is located via Ferry Street at Water Street and Governor Winthrop Boulevard. Pedestrian access is available at this crossing and at the State Street rail crossing just south of Union Station at City Pier.

Per the RITC Study, Cross Sound has four auto-ferry slips and two passenger-ferry slips. It has a fleet of seven vessels that accommodates autos and two passenger-only vessels. The auto vessels provide service to and from Orient Point, New York and have capacities that range from 22 to 120 vehicles and 130 to 1,000 passengers. One of the passenger-only vessels, the *SeaJet*, has carrying capacity of 400 passengers and provides service to and from Orient Point, New York. The second passenger-only vessel, the *Jessica W*, provides service to and from Block Island, Rhode Island and has a carrying capacity of 530 passengers. Auto-ferry service is not available to Block Island from New London.

In 2008, according to the RITC study, there were 22 to 23 round trips on the auto-ferry service to/from Orient Point, with 30- to 60-minute headways during summer Fridays. The *SeaJet* service to Orient Point had six round trips, with approximately 2-hour headways during morning and afternoon. The Block Island service had four round trips, with approximately 3-hour headways. The *SeaJet* service is primarily provided for patrons from Long Island to travel to the casinos. A motor coach bus service connects from the Cross Sound Ferry terminal to transport *SeaJet* patrons to/from the casinos.

Table 3-14 provides a summary of annual Cross Sound Ferry ridership in 2008, per the RITC study. The busiest month is August, with summer Sundays being the busiest day. Table 3-15 presents summer Sunday ridership demands in 2008 per the RITC study.



**TABLE 3-14  
Annual Cross Sound Ferry Ridership in 2008**

Service	Approximate # of Passenger Trips	Approximate # of Vehicles
Auto Ferry	1,000,000	470,000
<i>SeaJet</i>	230,000	N/A
Block Island	100,000	N/A

**TABLE 3-15  
Summer Sunday Cross Sound Ferry Ridership in 2008**

Service	Approximate # of Passenger Trips	Approximate # of Vehicles
Auto Ferry	8,000	3,000
<i>SeaJet</i> *	950	N/A
Block Island	1,700	N/A

\* Connects with eight to nine casino motor coach buses

Based on discussions with Cross Sound Ferry Services representatives, it is understood that that no significant increases to ferry service have occurred, nor has ridership significantly increased since 2008.

### 3.7.8 Ferry Service – Fisher's Island Ferry

The Fisher's Island Ferry operates from its terminal located between the railroad tracks and the water just southeast of Union Station. The Fisher's Island Ferry terminal has no on-site customer parking. Per the RITC study, in 2008 it operated two auto vessels, one with capacity of 21 vehicles and 210 passengers and the other with capacity of 28 vehicles and 250 passengers. It also handled notable freight service between the island and the mainland.

In 2013, Fisher's Island Ferry had a peak schedule of approximately 18 round trips on summer Fridays. According to the RITC study, ridership in 2008 was approximately 153,000 passengers and 42,000 vehicles. Peak monthly ridership occurred during July and August. Peak day-of-week ridership in 2008 was Friday, with an annual average of 560 passengers and summer average of 910 passengers. Based on discussions with Fisher's Island Ferry representatives, it is understood that no significant increases to the ferry service have occurred, nor has ridership significantly increased since 2008.

### 3.7.9 Pedestrian Access

Perhaps the largest impetus or need for a pedestrian overpass stems from the fact that the two at-grade railroad crossings, at Ferry Street/Governor Winthrop Boulevard and at State Street, block access to the ferry terminals and the future NCGM on the east side of the tracks when trains pass through or are present. Southbound Amtrak trains that are

stopped at Union Station also block access to the northbound Amtrak tracks and the Shoreline East tracks. A pedestrian overpass would address these issues for pedestrian access and connectivity.

The Parade Plaza, reconstructed as of 2010, is noted to be a positive asset to the downtown waterfront area in terms of pedestrian access and connectivity. No quantifiable data on the volume of pedestrians walking along sidewalks, crosswalks, or other links at and adjacent to the transportation center is available. Appropriate sidewalks and street crossings do exist throughout much of the downtown waterfront area, with the exception of a few locations. There is a notable lack of a sidewalk along the east side of Water Street between the SEAT bus stop area and Governor Winthrop Boulevard/Ferry Street. Additionally, pedestrian access between City Pier, just east of Union Station, and the Cross Sound Ferry terminal is unpaved for a portion of the way. The RITC study notes that there is also a need for better wayfinding between the different modes at the intermodal transportation center.

For pedestrians crossing Water Street between Union Station and the Parade Plaza/Water Street Garage, two mid-block pedestrian crosswalks are available on either side of the intersection with Atlantic Street. These crosswalks have in-pavement flashers that light up upon being activated by pedestrian push-buttons, as well as an audible message that advises pedestrians: "***Cross street with caution. Vehicles may not stop.***" The in-pavement flashers act to advise motorists of a pedestrian wanting to cross the street. Pedestrians have been observed to cross Water Street without using this somewhat passive traffic control device and, especially during periods of low vehicle traffic volumes, pedestrians often cross the street without using the crosswalk altogether.

### **3.8 Water Resources**

#### **3.8.1 Surface Water Resources**

The downtown waterfront area is located within the Thames River drainage basin system as shown on Figure 3-12. The dominant water resource in the vicinity is the Thames River. The proposed NCGM and pedestrian overpass will be located adjacent to the mouth of the Thames River, which is influenced by both tidal and freshwater flows. The majority of the freshwater flow stems primarily from three tributaries (the Shetucket, Quinebaug, and Yantic Rivers). The Thames River is formed in Norwich, Connecticut and flows approximately 15 miles before it empties into Long Island Sound.

Recreation is a primary focus of the Thames River. It supports numerous marinas and yacht clubs and is host to the annual Yale-Harvard Regatta. The Thames River has also been a commercial and industrial shipping port and support for military operations for many decades, including building, docking, and operation of submarines.

The lower Thames River is an estuary and so possesses the qualities that are characteristic of this type of aquatic system. Tidal exchange of the lower Thames River

is from Long Island Sound. The mean tidal range in the Thames River varies from 2.6 feet at New London to 3.1 feet at Norwich.

### 3.8.2 Water Quality

#### Surface Water

Surface water quality may be influenced by both point and nonpoint sources of pollution. Point sources are well defined, discrete locations such as sewage treatment plant discharges or combined sewer overflows. Nonpoint sources of pollution include urban storm drainage, surface runoff, erosion, and leachate from broader areas and human activities. Subregional drainage basins are depicted on Figure 3-12.

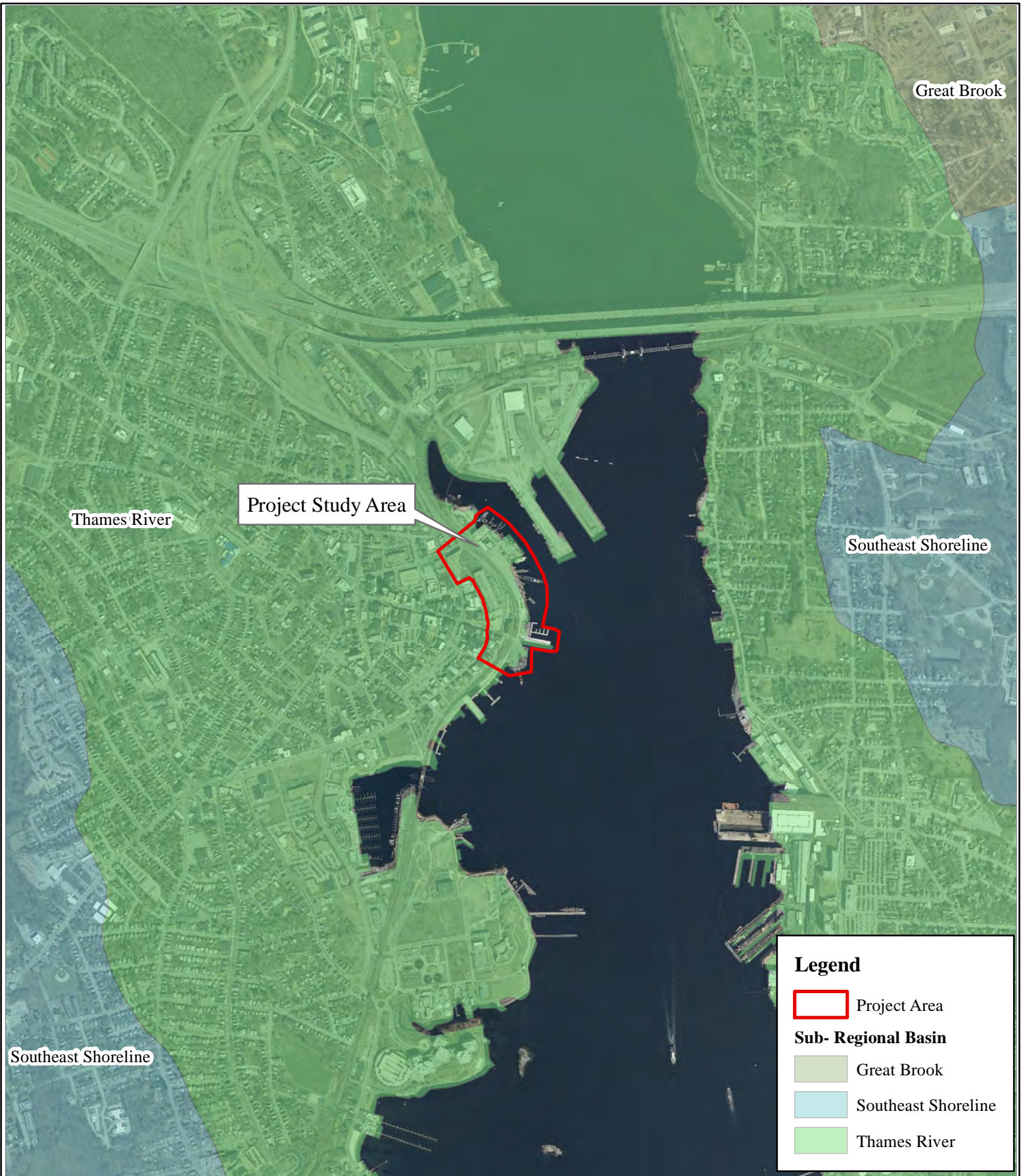
The State of Connecticut has set forth a policy for the management of water quality through the Water Quality Standards and Criteria, wherein criteria and a classification system are applied to all surface water and groundwater resources in the state. These classifications establish designated uses for surface and groundwater resources and identify the criteria necessary to support those uses. Criteria have been established with respect to desirable use, antidegradation, allowable types of discharges, waste assimilation, and a variety of physical and chemical constituents.

The Thames River has been classified as an SB surface water resource. Designated uses of Class SB surface waters include habitat for marine fish and aquatic life and wildlife; commercial shellfish harvesting; recreational use; industrial water supply; and navigation. The Thames River (mouth) in New London is listed in the *2012 List of Connecticut Waterbodies Not Meeting Water Quality Standards* (Impaired Waters List) because it does not support shell fishing uses and aquatic life due in part to urban runoff and storm sewers.

Federal law prohibits a state from lowering surface water quality classifications or standards in order to accommodate new or increased wastewater discharges or land use practices that impact a particular watercourse. Therefore, the state must attain and maintain the most sensitive existing and potential use for a respective waterbody.

#### Groundwater

Groundwater in the downtown waterfront area has been designated as Class GB. Class GB groundwaters are those within highly urbanized areas or areas of intense industrial activity and where public water supply is available. Designated uses of Class GB groundwater include industrial process water and cooling water. Class GB sources are presumed not suitable for direct human consumption due to waste discharges, spills or leaks of chemical, or land use impacts. These sources are known or reasonably presumed to be degraded due to pollution from a variety of sources. There are no groundwater supply sources in the downtown waterfront area used for potable consumption.



SOURCE(S):  
CT Ortho, 2012

**Figure 3-12: Subregional Drainage Basins**

LOCATION:  
**New London, CT**



**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Subregional Drainage.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 4/10/2014  
Scale: 1 inch = 1,500 feet

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Permits may be granted for discharges of treated industrial process waters amenable to further treatment by soils or for the siting of land disposal facilities. The resultant discharges may not cause groundwater degradation that could preclude its future use as a drinking water source or prevent maintenance or attainment of adjacent surface water designated uses.

### **3.9 Flood Hazard Potential**

#### **3.9.1 Background**

The downtown waterfront area is located along the west bank of the Thames River, approximately 2.5 miles upstream of Long Island Sound. River estuaries can be subject to two types of flooding: riverine runoff and coastal storm surges that raise tide levels along the shore to create wave run-up.

The Thames River has a watershed area of 1,473 square miles, consisting of rural woodlands, farmland, and moderately developed areas in eastern Connecticut. The river has a length of only 15 miles to Norwich, which is both the head of tide water and the confluence of three major tributaries (the Yantic, Quinebaug, and Shetucket Rivers). The Thames River does not have significant freshwater runoff related flood problems due to its large width and depth. The principal concern is thus coastal flood hazards.

The hurricane of September 21, 1938 caused tremendous damage in southeastern Connecticut, including coastal sections of New London. The reported water elevation was 9.7 NGVD, just below the forecast 100-year frequency event. This event caused tidal surges of 7 to 10 feet higher than predicted tides, destroying hundreds of cottages and buildings and leading to a total of 700 deaths. Hurricane Carol on August 31, 1954 also struck New London, with water levels at elevation 8.9 NGVD and surges of 5 to 8 feet. The center of the storm passed over New London. Winds of 135 mph were recorded at nearby Block Island.

Hurricane Irene in August 2011 brought sustained tropical storm winds, heavy rain, and destructive storm surge to parts of Connecticut. In New London, the storm surge was only moderate, but the waves broke over the seawalls, and a number of coastal streets were flooded. The maximum sustained wind measured by the National Weather Service's Automated Surface Observing System at New London Airport in Groton was south at 40 knots. The peak gust was south at 50 knots. Approximately 25,000 customers were affected by power outages, and a major disaster declaration was declared by the Federal Emergency Management Agency (FEMA).

The most recent hurricane to impact the New London area was Hurricane Sandy in October 2012. According to the National Oceanic and Atmospheric Administration (NOAA) storm events database, "*coastal communities along southern New London County experienced two successive tidal cycles with at least moderate coastal flooding on*

*Monday October 29th. The peak of this surge occurred Monday night as Sandy made landfall in Southern New Jersey, with widespread major coastal flooding occurring along the Southern New London coast."*

*"Peak storm tides surpassed water levels from Hurricane Irene in 2011, only being topped by Hurricane Carol in 1954 and the 1938 Hurricane. The record storm tide levels along Eastern Long Island Sound resulted from a peak storm surge of about 5 to 7 feet that coincided with normal high tides. These storm tides resulted in up to 2 to 3 feet of inundation a few blocks inland along low lying portions of Long Island Sound, with 1 to 2 feet of inundation working north of I-95 in several low spots along waterways such as the Niantic River in Niantic, Mystic River in Mystic, and almost 15 miles inland along the Connecticut and Thames Rivers."*

### 3.9.2 Astronomical Tide Levels

The U.S. Army Corps of Engineers has developed tidal water profiles for Long Island Sound that are also generally representative of water levels in coastal estuaries and harbors. The predicted tidal water elevations published for New London are presented in Table 3-16.

**TABLE 3-16  
U.S. Army Corps of Engineers Predicted Tidal Water Elevations**

<i>Parameter</i>	<i>Elevation, NGVD(ft)</i>
Mean Low Water	-0.9
Mean Tide Level	0.4
Mean High Water	1.7
Mean Spring High Water	1.9
One-Year Frequency Tidal Flood	3.6

Source: Army Corps of Engineers, 1988

Statistical data on historic tidal floodwater levels and forecasts of flood height probabilities are available from both the U.S. Army Corps of Engineers and from FEMA. The FEMA program is the basis of local floodplain zoning regulations. Jurisdiction is also provided to the Department of Energy & Environmental Protection (DEEP) via the CCMA for management and regulation of development and activities adversely affecting the coastal waters of the state. The permit and certification process of the coastal management program considers potential damage to and destruction of life and property to further reduce the necessity of public expenditure to protect future development from such hazards.

The published U.S. Army Corps of Engineers tidal flood profiles provide data for Long Island Sound, including the Connecticut shoreline. Their analysis of 340 years of tidal data is a comprehensive evaluation of historic trends, with a sea level adjustment to 1975 for comparative purposes. The tidal flood profiles were revised and reissued in 1988 and are presented in Table 3-17. The height of the storm surge above normal tide levels

depends on several factors, including atmospheric pressure, wind direction and magnitude, fetch, wave setup, storm location and rate of approach, and coastal geometry.

**TABLE 3-17**  
**Still Water Flood Levels (NGVD)**

<i>Average Frequency</i>	<i>1988 Forecast</i>
10-year	6.5 feet
50-year	8.9 feet
100-year	10.0 feet

Source: Army Corps of Engineers, 1988

### 3.9.3 FEMA Regulatory Designations

The majority of the downtown waterfront area is located within a Special Flood Hazard Area (SFHA) as delineated on the FEMA Flood Insurance Maps. The majority of the area is located within the 1 percent annual chance floodplain while the portion located further inland is located within the 0.2 percent annual chance floodplain. This is shown graphically in Figure 3-13.

The majority of the downtown waterfront area is located within Zone AE hazard areas, subject to the 100-year storm event caused by the Thames River flooding which, in this case, is the backwater area of the coastal floodway on Long Island Sound. The eastern portion of the downtown area is located within Zone VE. Hazard zones designated as zone V represent those highly exposed areas subject to flooding caused by the combination of coastal waves superimposed upon the 100-year frequency stillwater coastal flood level. A small area in the western portion of the downtown is located in Zone X, both within and outside of the 500-year flood. Table 3-18 gives a brief explanation of the FEMA map zone designations pertinent to the downtown waterfront area.

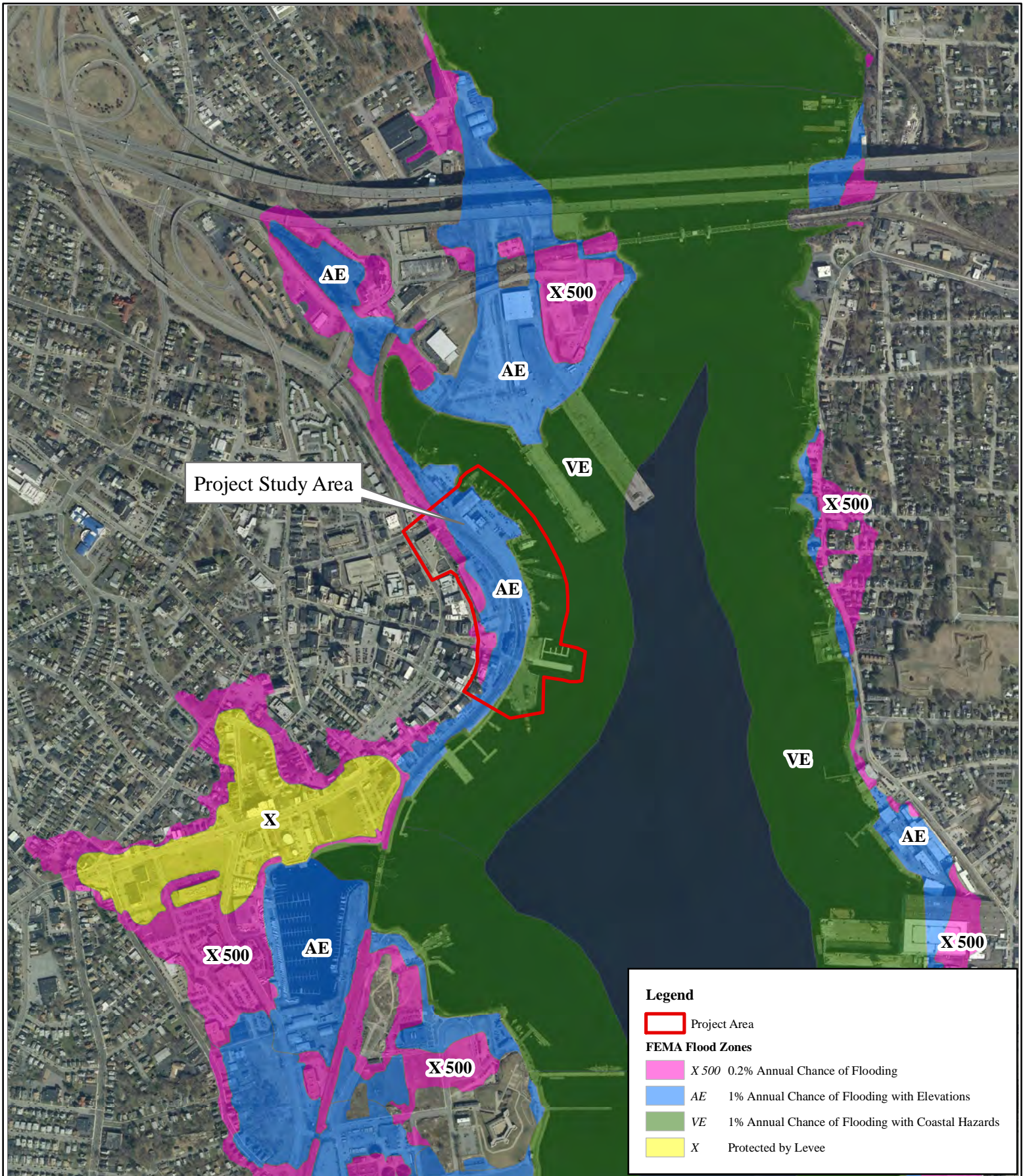
**TABLE 3-18**  
**Explanation of Flood Zone Designations**

<b>Zone</b>	<b>Explanation</b>
AE	Base flood elevations determined.
VE	Coastal flood zone with velocity hazard (wave action); base flood elevations and flood hazard factors determined.
X 500	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
X	Areas determined to be outside the 0.2 % annual chance floodplain

Source: FEMA Flood Insurance Rate Map, City of New London, Aug. 5, 2013

"Base Flood" means the flood having a 1 percent chance of being equaled or exceeded in any given year.

The FEMA regulatory base flood elevation in the downtown waterfront area is 12 feet.



**Legend**

- Project Area
- FEMA Flood Zones**
- X 500 0.2% Annual Chance of Flooding
- AE 1% Annual Chance of Flooding with Elevations
- VE 1% Annual Chance of Flooding with Coastal Hazards
- X Protected by Levee

**SOURCE(S):**  
 CT Ortho, 2012  
 FEMA DFIRM, 2013

**Figure 3-13: FEMA Flood Zones**

**LOCATION:**  
 New London, CT



**Project Study Area  
 Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\FEMA Flood Zones.mxd

Map By: JDW  
 MMI#: 2247-06  
 Original: 12/11/2013  
 Revision: 6/11/2014  
 Scale: 1 inch = 1,000 feet

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### 3.10 Biological Environment

#### 3.10.1 Fisheries

The CCMA empowers DEEP to manage the state's fisheries for the promotion of economic benefits of commercial and recreational fishing; to enhance recreational fishing opportunities; to optimize yield of all species; to prevent the depletion or extinction of indigenous species; to maintain and enhance the productivity of natural estuarine resources; and to preserve healthy fisheries resources for future generations.

The nearshore estuarine environment provides spawning, nursery, and productive feeding grounds for many of Connecticut's freshwater and marine resources. Finfish are high level consumers in coastal food webs and many are of commercial and recreational importance. Estuarine systems like the Thames River typically provide spawning and feeding habitat for adults of several species as well as feeding and refuge habitat for juveniles (Pellegrino, 1989).

The Thames River estuarine waters extend 15 miles northward from the river's mouth. A study of marine recreational fisheries was conducted in the Thames River by the DEEP Fisheries Division in 2012. According to the study "*sampling was expanded to the Thames River system after 1996 to monitor the effect of the operation of the Greenville Dam fish lift on anadromous fish restoration. The fish lift was constructed to aid in the enhancement of American shad and river herring in the system. CT DEEP initiated the seine survey in the Thames River to estimate juvenile production of shad and blueback herring. Sites were chosen based on previous work conducted by the department. The survey has documented few juvenile shad and river herring, but has been continued to monitor catches of forage fish and juvenile fish of recreationally important species such as menhaden, tautog, winter flounder and bluefish.*" The survey also found that American eel, Atlantic silverside, Bay anchovy, Killifish, Striped sea robin, and Striped Bass were present in the Thames River.

#### 3.10.2 Vegetation

The downtown New London waterfront area can be characterized as an urban setting that has been developed to very near its maximum density. The majority of the area consists of commercial and industrial buildings, parking lots, train tracks, and roads. Interspersed throughout the area are small, vegetated areas, primarily along the bank of the Thames River. Most of the vegetated areas are dominated by invasive plant species. These are aggressive, non-native species that tend to thrive in areas that have been severely disturbed.

#### 3.10.3 Inland Wetlands

The downtown New London area is densely developed and contains many areas that are underlain by fill. Soils are mapped by the University of Connecticut, Connecticut Environmental Conditions Online (CTECO) map viewer as being upland soils. The

dominant soil within the northern and eastern portions of the project study area includes the well-drained *Udorthents*-Urban land complex. Soils within the remainder of the project study area are mapped as Urban land, which are areas that consist mostly of sites for buildings, paved roads, and parking lots.

#### 3.10.4 Tidal Wetlands

The Thames River in the vicinity of downtown New London is influenced by tidal fluctuations due to its close proximity to Long Island Sound. Mean tidal range at State Pier, New London, located northeast of the downtown waterfront area, is 2.6 feet. The spring range is 3.0 feet (NOAA tide tables). Much of the riverbank in this area consists of fill material that slopes steeply to the river. Most of this steep embankment has been armored with riprap to prevent erosion. Additionally, piers and marinas have been constructed along the Thames River. No tidal wetland species as listed under the State of Connecticut Inland Wetlands and Watercourses Act CGS sections 22a-28 to 22a-35 were found within the vicinity of the proposed pedestrian overpass.

#### 3.10.5 Wildlife

Based on prior anthropogenic disturbances (e.g., buildings, parking lots, roadways, rail lines, etc.), wildlife habitat in the downtown New London waterfront area is severely limited. Most of the usable habitat is located along the edge of the Thames River. This habitat is represented by an intermittent and narrow band of shrubs and vegetation that provide some limited shelter and food resources for wildlife. The remaining area is a mix of paved roads, buildings, and areas of packed gravel that provide no beneficial wildlife habitat.

#### 3.10.6 Threatened, Endangered, and Species of Special Concern

The Connecticut DEEP provided comments during the public scoping period. DEEP indicated that a review of the Natural Diversity Data Base (NDDB) was conducted in order to determine if any areas of special concern for endangered and threatened species or significant natural communities exist in the area of the proposed pedestrian overpass. The NDDB review determined that the pedestrian overpass will not impact any extant populations of federally listed endangered or threatened species or species listed by the state pursuant to section 26-306 of the CGS as endangered, threatened or of special concern.

### **3.11 Physical Environment**

#### 3.11.1 Topography

The city of New London is a coastal community located on the Connecticut shoreline. The topography of the study area is generally flat, with maximum elevation reaching approximately 20 feet along the railroad tracks. Most of the site is at an elevation of approximately 8 feet National Geodetic Vertical Datum (NGVD) and slopes slightly toward the Thames River. The portion of the study area west of the railroad tracks generally ranges in elevation between 6 feet and 12 feet NGVD.

### 3.11.2 Bedrock Geology

The city of New London is located in the Eastern Highland physiographic section of Connecticut. The bedrock geology in the area is primarily composed of metamorphic rock known as New London gneiss. According to the United States Geological Survey (USGS), New London gneiss consists of a layered facies and a massive facies. Layered facies are described as alternating layers of light-colored biotite-quartz-plagioclase gneiss and amphibolite. Massive facies are described as granodiorite gneiss with a uniform texture, grain size, and color. Figure 3-14 illustrates the bedrock geology on site.

### 3.11.3 Surficial Geology

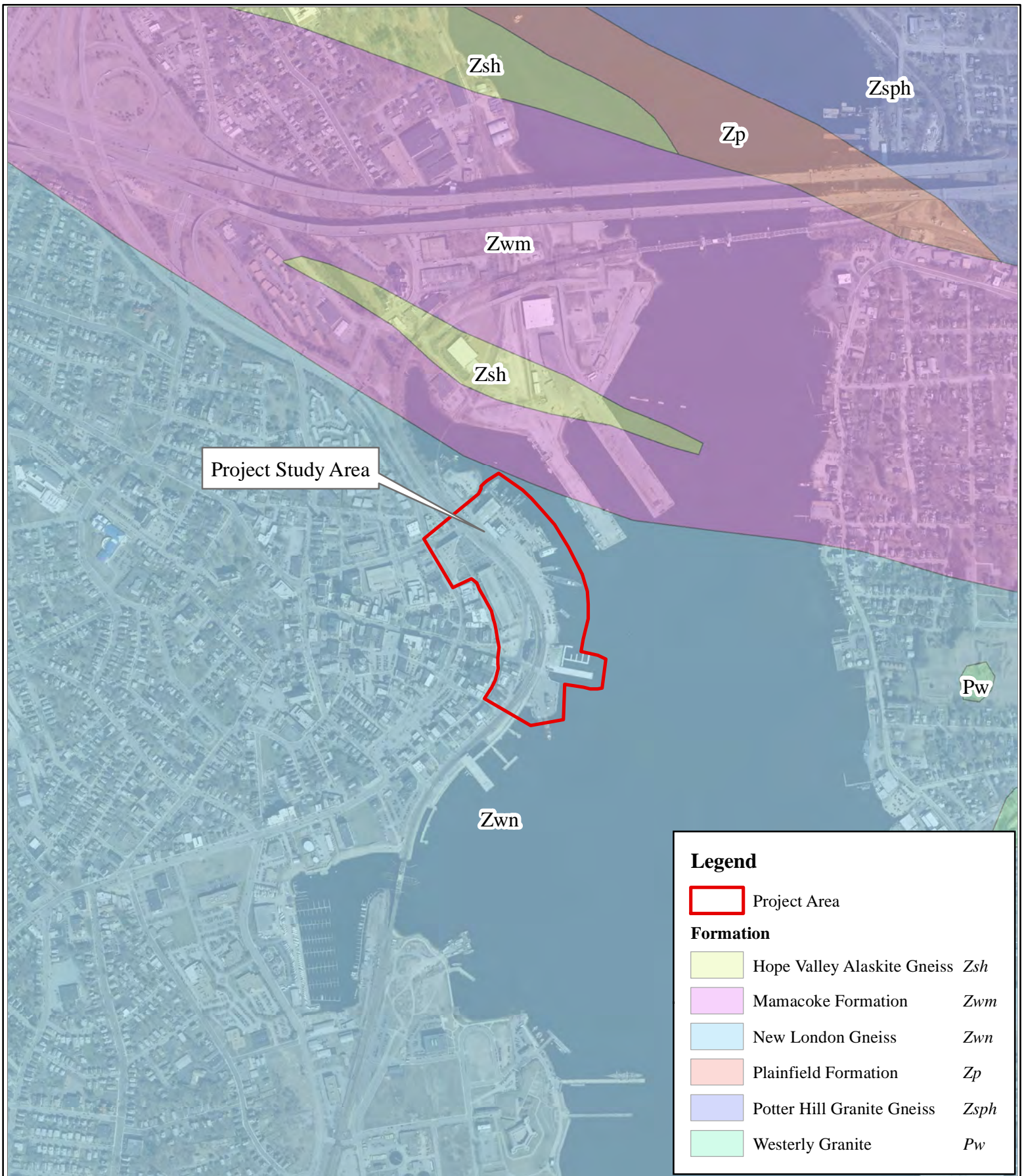
The dominant material deposited over the bedrock in New London is till, composed of rock particles that tend to be sandy, very stony, and containing a large percentage of boulders. Smaller, isolated areas of stratified drift contain deposits of sorted layers of sand and gravel primarily along valleys and streams. In New London, this stratified drift is found along Interstate 95, Fenger Brook, Alewife Cove, and the Thames River. As a result of the glacier and like much of the surrounding area, the major topographic features of the city are north-south oriented, elongated hills called drumlins. The most notable of these drumlins is the feature that is generally centered along Ocean Avenue in the southern portion of the city (New London Conservation and Development Plan). Figure 3-15 illustrates the surficial geology in the area of the proposed overpass.

## 3.12 Air Quality

### 3.12.1 Federal Air Quality Regulations and Criteria

The Federal Clean Air Act was passed by Congress in 1970 and signed into law by former President Nixon. It was last amended in 1990. This act requires the Environmental Protection Agency (EPA) to ensure that all Americans have safe air to breathe by (1) reviewing the public health standards for six major air pollutants every 5 years; (2) updating the standards as necessary to "protect the public health with an adequate margin of safety" based on the most recent studies available; and (3) consider only the public health, not the cost of compliance, when setting air quality standards.

In an effort to achieve the Clean Air Act goals, the EPA promulgated primary and secondary national ambient air quality standards (NAAQS) in 1971 for six pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter smaller than 10 micrometers in diameter (PM<sub>10</sub>). Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The NAAQS pollutants and standards as updated through June 2010 are presented in Table 3-19.



Project Study Area

**Legend**

Project Area

**Formation**

- Hope Valley Alaskite Gneiss *Zsh*
- Mamacoke Formation *Zwm*
- New London Gneiss *Zwn*
- Plainfield Formation *Zp*
- Potter Hill Granite Gneiss *Zsph*
- Westerly Granite *Pw*

SOURCE(S):  
CT Ortho, 2012  
CT DEEP

**Figure 3-14: Bedrock Geology**

LOCATION:  
**New London, CT**

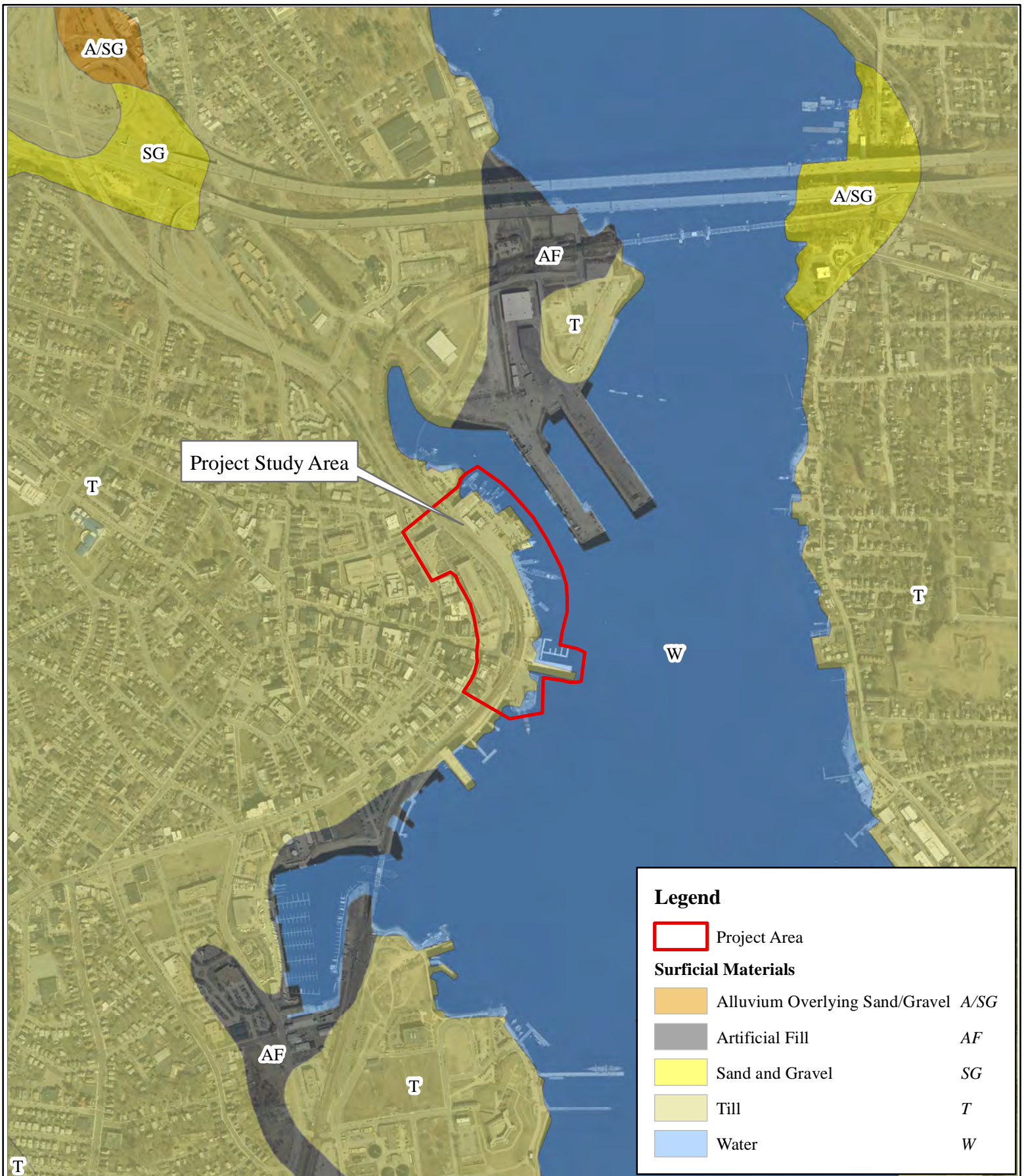


**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Bedrock Geology.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 4/10/2014  
Scale: 1 inch = 1,000 feet

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**Legend**

Project Area

**Surficial Materials**

- Alluvium Overlying Sand/Gravel *A/SG*
- Artificial Fill *AF*
- Sand and Gravel *SG*
- Till *T*
- Water *W*

SOURCE(S):  
CT Ortho, 2012

**Figure 3-15: Surficial Geology**

LOCATION:  
**New London, CT**



**Project Study Area  
Proposed Pedestrian Overpass**

MXD: W:\Design\2247-06-DE\GIS\Maps\Surficial Materials.mxd

Map By: JDW  
MMI#: 2247-06  
Original: 12/11/2013  
Revision: 4/10/2014  
Scale: 1 inch = 1,000 feet

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**TABLE 3-19  
National Ambient Air Quality Standards**

Pollutant	Primary Standards		Secondary Standards
	Level	Averaging Time	
Carbon Monoxide	9 ppm (10 mg/m <sup>3</sup> )	8-hour <sup>(1)</sup>	None
	35 ppm (40 mg/m <sup>3</sup> )	1-hour <sup>(1)</sup>	
Lead	0.15 µg/m <sup>3</sup> <sup>(2)</sup>	Rolling 3-Month Average	Same as Primary
	1.5 µg/m <sup>3</sup>	Quarterly Average	
Nitrogen Dioxide	53 ppb <sup>(3)</sup>	Annual (Arithmetic Mean)	Same as Primary
	100 ppb	1-hour <sup>(4)</sup>	None
Particulate Matter (PM <sub>10</sub> )	150 µg/m <sup>3</sup>	24-hour <sup>(5)</sup>	Same as Primary
Particulate Matter (PM <sub>2.5</sub> )	15.0 µg/m <sup>3</sup>	Annual <sup>(6)</sup> (Arithmetic Mean)	Same as Primary
	35 µg/m <sup>3</sup>	24-hour <sup>(7)</sup>	
Ozone	0.075 ppm (2008 standard)	8-hour <sup>(8)</sup>	Same as Primary
	0.08 ppm (1997 standard)	8-hour <sup>(9)</sup>	
	0.12 ppm	1-hour <sup>(10)</sup>	
Sulfur Oxides	0.03 ppm	Annual (Arithmetic Mean)	0.5 ppm over 3 hours <sup>(1)</sup>
	0.14 ppm	24-hour <sup>(1)</sup>	
	0.075 ppm <sup>(11)</sup>	1-hour	None

<sup>1</sup> Not to be exceeded more than once per year.

<sup>2</sup> Final rule signed October 15, 2008.

<sup>3</sup> The official level of the annual NO<sub>2</sub> standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

<sup>4</sup> To attain this standard, the 3-year average of the 98<sup>th</sup> percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb (effective January 22, 2010).

<sup>5</sup> Not to be exceeded more than once per year on average over 3 years.

<sup>6</sup> To attain this standard, the 3-year average of the weighted annual mean PM<sub>2.5</sub> concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m<sup>3</sup>.

<sup>7</sup> To attain this standard, the 3-year average of the 98<sup>th</sup> percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m<sup>3</sup> (effective December 17, 2006).

<sup>8</sup> To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm (effective May 27, 2008).

<sup>9</sup> (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.

(b) The 1997 standard – and the implementation rule for that standard – will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.

(c) EPA is in the process of reconsidering these standards (set in March 2008).

<sup>10</sup>(a) EPA revoked the 1-hour ozone standard in all areas although some areas have continuing obligations under that standard ("anti-backsliding").

(b) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

<sup>11</sup>Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99<sup>th</sup> percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

Source: DEEP Bureau of Air Management NAAQS (2010)

### 3.12.2 Statewide Air Quality Policies and Regulations

One of the Growth Management Principles identified in the *Conservation and Development Policies Plan for Connecticut* is to protect and ensure the integrity of environmental assets critical to public health and safety. Balancing air quality gains with the costs of such controls and the ability to provide for economic development is critical to future development. A list of the policies and strategies for air quality from the plan follows.

- Seek to attain NAAQSs by the applicable deadlines with emphasis on cost-effective strategies and effective enforcement.
- Develop strategies to achieve and maintain healthy air quality that will enable and foster economic development within the urban areas of the state as designated within this plan.
- Foster transportation and development plans and projects that promote attainment and maintenance of healthy air.
- Establish and maintain standards that will address climate change and address any potential impacts to air quality.

### 3.13 Noise

The Plan of Development adopted by the City of New London in 2007 identifies the development of a noise control program to reduce levels of harmful noise as a goal of the city. Noise is regulated in the city via police patrol, as required by the New London Code and the Zoning Regulations. These ordinances authorize the control of sound amplifying devices, construction activities, and all other operations that may be viewed as a nuisance to neighboring properties or the general public. Motor vehicles and railroad noise are considered to be principal sources of noise, with the major emitters considered to be Interstate 95, State Route 32, and other major roads.

The City Zoning Ordinances limit the sound level of all activities except the following:

- noise created as the result of an emergency;
- construction and demolition activities during the daytime;
- blasting other than that associated with construction activities between the hours of 8:00 a.m. and 5 p.m.;
- city-sponsored recreation activities such as parades and fairs;
- noise generated by maintenance activities for landscaping and snow removal;
- farming activities;
- noise generated by transmission and distribution facilities and substations of public utilities; and
- Noise that is caused by the flight operations "specifically preempted by the Federal Aviation Administration" shall not exceed the standards of the state statutes.

The zoning ordinance limitations are presented in Table 3-20.

**TABLE 3-20**  
**City of New London Noise Restrictions**

<b>Zone</b>	WC-1, LI-O	C-1, C-2, CBD, WD	R-1, R-2, R-3, R-4, WD, INST, NB
<b>Noise Limit</b>	70 dBA	66 dBA	Day: 61 dBA / Night: 51 dBA

Note: Night is defined as 10 p.m. to 7 a.m. (10 p.m. to 9 a.m. on Saturday).

Day is defined 7 a.m. to 10 p.m. (9 a.m. to 10 p.m. on Sunday).

### **3.14 Solid Waste and Hazardous Materials**

The State of Connecticut Solid Waste Management Plan was amended in 2006 in accordance with Section 22a-228 of the CGS. The plan is intended to "serve as the basis for Connecticut's solid waste management planning and decision making for the period fiscal year 2005 through FY2024. The Plan addresses a wide range of solid wastes, focusing primarily on municipal solid waste (or MSW, what is commonly considered household and commercial trash) and debris resulting from construction and/or demolition activities (C&D waste). Though some other special wastes are addressed, hazardous wastes are not covered. The Plan examines the existing state of solid waste management in Connecticut, identifies the problems that exist and the barriers to solving those problems, sets out a vision and goals and presents strategies to help achieve those goals and realize the vision." Any person, municipality, or regional authority shall ensure that their actions are consistent with this plan.

The goals set forth in the plan include the following:

- Significantly reduce the amount of Connecticut-generated solid waste requiring disposal through increased source reduction, reuse, recycling, and composting.
- Manage the solid waste that ultimately must be disposed in an efficient, equitable, and environmentally protective manner, consistent with the statutory solid waste hierarchy.
- Adopt stable, long-term funding mechanisms that provide sufficient revenue for state, regional, and local programs while providing incentives for increased waste reduction and diversion.

In an effort to achieve the above-referenced goals, Connecticut state law requires the recycling of certain items, including some items that are specifically banned from disposal. These include:



#### Items Designated (i.e. Mandated) for Recycling

- Glass and Metal Food and Beverage Containers
- Plastic Containers (PET or PETE #1)
- Plastic Containers (HDPE #2)
- Corrugated Cardboard
- Boxboard
- Newspaper
- Magazines
- White and Colored Office Paper (residences and businesses)
- Scrap Metal, including appliances
- Ni-Cd Rechargeable Batteries (from consumer products)
- Waste Oil (crankcase oil from internal combustion engines)
- Leaves (must be composted)
- Lead acid battery or motor vehicle batteries
- Grass clippings (should be left on the lawn or, if necessary, composted)

#### Items Banned from Disposal

- Grass Clippings
- Household Covered Electronic Devices (televisions, monitors, printers, and computers)
- Lead acid battery or a motor vehicle battery

Hazardous wastes are defined by corrosive, reactive, ignitable, or toxic characteristics that can potentially harm human health or the environment when improperly managed. Hazardous waste generation, treatment, storage, and disposal are regulated by the federal Resource Conservation and Recovery Act (RCRA).

## 4.0 IMPACT EVALUATION

Potential impacts associated with each resource identified in Section 3.0 of this document are evaluated for the preferred alternative presented in Section 2.0. This impact evaluation has been organizationally structured to be compatible with the existing conditions inventory presented in Section 3.0.

### 4.1 Land Use and Zoning Impacts

An assessment of the project's consistency with land use and zoning policies and regulations follows.

#### 4.1.1 Consistency with the Conservation and Development Policies Plan for Connecticut

Section 16a-31 of the CGS requires state agencies to be consistent with the *Conservation and Development Policies Plan for Connecticut* (the State Plan) when undertaking certain actions. The State of Connecticut is committing up to \$20M in funding to support the proposed NCGM project, including the planning, design, and construction of a pedestrian overpass and other ancillary improvements. As such, consistency with the State Plan is evaluated herein.

#### Balanced Priority Funding Area Policies

As described in Section 3.1.1, the proposed pedestrian overpass is believed to be a growth-related project and is located within a Balanced Priority Funding Area. The State Plan defines Balanced Priority Funding Areas as areas that *"meet the criteria of both Priority Funding Areas and Conservation Areas. State agencies that propose certain actions in these areas must provide balanced consideration of all factors in determining the extent to which it is consistent with the policies of the State C&D Plan."* The Plan states that growth-related projects located within a Balanced Priority Funding Area may proceed without an exception if the sponsoring agency documents how it will address any potential policy impacts. In this case, the potential impacts associated with Conservation Area policies are addressed below.

#### Conservation Area Policies

The land area near the proposed pedestrian overpass is designated as a Conservation Area due to its location within the 1 percent annual chance floodplain and within a Category 1, 2, or 3 Hurricane Inundation Zone. Given the land use designation, the pedestrian overpass must be constructed in a manner that incorporates appropriate design measures to address flooding and hurricane hazards. The overpass will also be subject to the State of Connecticut building codes.

The criteria for Conservation Areas states that growth-related projects may proceed with the following exception: *"in order for a growth-related project to be funded outside of a*

*PFA, CGS Section 16a-35d requires the project to be supported by the municipal plan of conservation and development. Furthermore, CGS Section 8-23(b) makes municipalities ineligible for discretionary state funding, effective July 1, 2014, if they have not updated their local plans within the required ten-year timeframe."*

A review of the City of New London's Plan of Conservation and Development (POCD) was conducted to evaluate the consistency of the proposed action with the plan. The POCD indicates that there is a need to "*promote the development of new and encourage the protection of the existing water dependent and related uses on the waterfront in order to create a balanced and multiple use development of the coastal area.*" The proposed action will support the efforts to safely bring more people to the waterfront and water-dependent uses, including water transportation, maritime education, and waterfront education.

In addition, the POCD discusses the need to promote the whaling city image and maritime history. Specifically, the POCD states that "*many other communities in the United States and around the world have effectively utilized their historic maritime roles as a vehicle to spur tourism and other economic development projects.*" The NCGM along the New London waterfront will promote maritime history while also supporting economic growth within the city of New London. The pedestrian overpass will complement the museum as well as the surrounding businesses and transportation hubs.

Another goal referenced in New London's POCD is the need to "*improve the movement of people and goods within and through the city by improving and maintaining the function, aesthetics, safety and the efficiency of the City's transportation system while minimizing the detrimental effects on existing and planned patterns of land use.*" The proposed action will complement the proposed NCGM while improving existing pedestrian access to the various transportation nodes located along the city's waterfront. The project will be designed in a manner that improves the functionality of the existing transportation system by providing a safe, efficient means of access to the waterfront.

With respect to pedestrian safety and sidewalk improvements, the POCD notes the significance of the downtown waterfront transportation area. Of particular importance is the linkage between the Water Street parking garage, Union Station, the Greyhound bus terminal, the ferry terminal, and the waterfront district. In addition to any proposed sidewalk improvements, the proposed pedestrian overpass will serve as another means of moving pedestrians to the various transportation nodes without having to cross high traffic roads or railroad tracks.

In short, construction of a pedestrian overpass is consistent with the city's 2007 POCD and, therefore, meets the exception for development in a Balanced Priority Funding Area.

### Consistency with Growth Management Principles

Growth Management Principle #3 of the State Plan promotes the concentration of development around transportation nodes and along major transportation corridors to support the viability of transportation options. The following transportation policies and guidelines are of interest in light of the proposed pedestrian overpass:

*Policy: Promote compact, pedestrian-oriented mixed-use development patterns around existing and planned public transportation stations and other viable locations within transportation corridors and village centers.*

*Policy: Encourage a network of pedestrian and bicycle paths and greenways that provide convenient inter- and intra- town access, including access to the regional public transportation network.*

Consistent with the State Plan, the primary goal of a pedestrian overpass is to provide access to the proposed NCGM and complement overall improvements to New London's RITC. The pedestrian overpass is central to the overall design of the NCGM and will provide access points between the proposed museum, the adjacent Cross Sound Ferry terminal, Union Station, and Parade Plaza adjacent to the Water Street parking garage. In addition, the overpass will improve pedestrian access to downtown waterfront recreational areas, such as the City Pier and Waterfront Park.

The proposed NCGM and associated pedestrian overpass will be located near the heart of the downtown waterfront area, in an area of active urban revitalization. Therefore, the overpass is expected to promote compact, transit-accessible, pedestrian-oriented mixed-use development patterns along major public transportation corridors. The pedestrian overpass is expected to improve and encourage pedestrian access to the RITC, thus providing convenient access to the regional public transportation network.

#### 4.1.2 Consistency with Regional Land Use

In 1997, the SCCOG published its *Regional Conservation and Development Policy Guide for Southeastern Connecticut*. The intent of the plan is to identify goals and objectives that are regional in scope and to implement actions in coordination with local municipalities.

Section 11 of the Regional Plan discusses land use, growth patterns, and zoning in the region. The proposed pedestrian overpass will be located in a highly developed portion of the downtown waterfront area and is not expected to have an impact on land use in the area.

The regional plan states that "*a continuing challenge for the region is to ensure that non-residentially zoned land be available for development. Such zoning designations must reflect site characteristics that lend themselves to more intensive non-residential development schemes as well as needed infrastructure accessibility.*" The pedestrian

overpass will provide access to the proposed NCGM and will facilitate pedestrian access among the rail, bus, and ferry transportation facilities in the area. The construction of the proposed NCGM and associated pedestrian bridge is consistent with the goals of the regional plan with regard to development of nonresidentially zoned land.

The 2007 regional plan map identifies land use in the downtown New London waterfront area as existing and proposed urban uses. These are areas used or recommended for the most intensive residential and/or industrial and commercial development. These areas can accommodate residential densities of greater than three units per acre and similar nonresidential activity density. Where feasible, these areas should be looked to for the location of compact, transit-accessible, and pedestrian mixed use. The pedestrian overpass as well as the proposed NCGM will be located in previously developed waterfront commercial areas and will remain consistent with surrounding land use.

One of the goals of SCCOG is to ensure that diversified and balanced development is sought in the region and opportunities are created in an effort to minimize dependence on a single industry for employment, thereby reducing the strain of high unemployment rates on the region's economic health. The proposed NCGM is expected to become a major attraction along the New London waterfront that will generate direct and indirect jobs and economic influx. The pedestrian overpass will support and complement tourism and economic growth along the New London waterfront.

#### 4.1.3 Land Use Impacts

The location of the proposed pedestrian overpass is designated as Waterfront Commercial in New London's 2007 Plan of Conservation and Development land use plan. This zone permits a variety of water-dependent and related uses as well as a variety of commercial and industrial uses in conjunction with this activity. A pedestrian overpass is consistent with this use.

Another key element of New London's POCD that relates to the pedestrian overpass and the proposed NCGM as a whole is related to the city's goal of creating new tourist destinations. Specifically, the plan states that one of the major goals is to "*continue to emphasize and support the creation of new tourist destinations in the city and worked to improve and expand the use of the existing destinations, attractions and support services within New London.*" This is significant in that the NCGM is intended to draw additional visitors to the city and provide an economic boost while also revitalizing the downtown waterfront district.

The downtown New London waterfront area is heavily developed, with the Thames River to the east; City Pier, Fisher's Island Ferry, and Waterfront Park to the southeast; and Cross Sound Ferry Services to the north. Land use to the west and south includes mixed-use downtown development, primarily commercial and municipal uses, interspersed with residential land uses.

Portions of the proposed pedestrian overpass are expected to be located on and over parcels 108-1.01 and 203-2, both of which are owned by the City of New London, and parcel 108-1B, which is currently owned by the New London Railroad Company, LLC. The preferred alternative has the pedestrian overpass terminating on the inland side at the northern side of Parade Plaza to the south of the Water Street Garage. The full-build condition extends over Water Street and over the active rail line to the NCGM entrance and adjacent ferry terminal on the waterward side. Entry/exit points would be located at Parade Plaza; at Union Station; at the train platform; and at the museum entrance. The partial build scenario omits the extension over Water Street.

The size and scale of the overpass and associated landing and access points will be designed to limit direct physical impacts to the extent feasible.

The proposed overpass will span existing transportation modes, including active rail and Water Street, and will be located predominantly on previously developed and/or disturbed land. The proposed land use associated with the overpass conforms to the land use plans, policies, and regulations established by the City of New London for this area and is consistent with surrounding development. The new planned terminal at Cross Sound Ferry Services and the NCGM are also compatible with the surrounding waterfront land uses.

#### 4.1.4 Relocation Impacts

Potential relocation impacts are described below for the affected parcels.

*Parcel 108-1B* – This 0.54-acre parcel is currently owned by the New London Railroad Company, LLC. The site includes the Union Station terminal building as well as the adjacent Greyhound bus terminal building and pickup/drop-off areas. Under the preferred alternative, relocation of the Greyhound bus terminal would occur. With or without the proposed pedestrian overpass, this is anticipated to be a positive direct impact. Representatives of Greyhound have expressed a need for a new location. The current terminal building is deteriorated and in need of repair. The location of the pickup/drop-off area presents challenges with respect to parking, traffic, and pedestrian movement.

The Regional Intermodal Transportation Center Master Plan and Efficiency Study (March 2010) states "*bus facilities and operations are in need of improvement. Greyhound's ticketing and waiting area is antiquated and there is no outdoor waiting area or outdoor seating. The existing saw-tooth bus bays are not configured as Greyhound prefers and create possible safety concerns when buses need to back up into traffic. Greyhound also desires access to a third bay.*"

Numerous potential relocation options are described for this facility in Section 5.0 of this document, and a preferred location is identified.

Parcel 203-2 – The City of New London owns this 2.19-acre parcel, which is the location of the Water Street Parking Garage. Under the preferred alternative, the garage will remain. A portion of the parcel (adjacent to the existing atrium) will be used for the construction of an exit/entry point to the pedestrian overpass. The overpass structure is not expected to have any impact on parking capacity though it will encroach upon the northern portion of Parade Plaza.

Parcel 108-1.01 – The City of New London owns this 0.49-acre parcel, which is a vacant, unpaved lot. The entrance to the proposed NCGM and adjacent ferry terminal will be located on this parcel. Construction of an overpass will not negatively impact existing land uses on this parcel.

#### 4.1.5 Municipal Zoning Regulations

Zoning within the western portion of the study area consists of Central Business District (CBD1). The eastern portion of the study area consists of Waterfront Development District (WD). Museums with nautical themes and water-related museums are allowed by special permit in the WD and WCI-2 districts, respectively. The construction of a pedestrian overpass associated with the proposed NCGM is believed to be consistent with the city's zoning regulations.

#### 4.1.6 Consistency with the Connecticut Coastal Management Act

The study area, including the location of the preferred alternative, has been designated as "developed shorefront." CCMA defines a developed shorefront as: "*those harbor areas which have been highly engineered and developed resulting in the functional impairment or substantial alteration of their natural physiographic features or systems*" [C.G.S. Section 22a-93-(7I)]

Adverse impacts to coastal resources are defined as activities that result in one or more of the following: (1) degradation of water quality; (2) alteration of existing circulation patterns; (3) degradation of erosion patterns; (4) alteration of natural or existing drainage; (5) increase of coastal flooding hazard; (6) aesthetic alteration of vistas and view points; (7) destruction or degradation of wildlife, finfish, or shellfish habitat; or (8) alteration of the characteristics or functions of tidal wetlands, beaches and dunes, bluffs and escarpments, and rocky shorefronts [CGS section 22a-93(15)]. Each of these is discussed below relative to the proposed pedestrian overpass. Each is described below.

Degradation of Water Quality – As described in Section 4.5.3 and 4.8 of this document, no adverse impacts to water quality are anticipated as a result of the proposed action.

Alteration of Existing Circulation Patterns – No work associated with construction or operation of an overpass is proposed within the Thames River and, therefore, no alteration of existing circulation patterns will occur as a result of the proposed action.

Degradation of Erosion Patterns – The pedestrian overpass will be constructed on land that has a low susceptibility to erosion due to its flat grade and paved surface. As described in Section 4.11, no adverse impacts to erosion patterns are expected to occur as a result of the proposed action.

Alteration of Natural or Existing Drainage – No significant changes in slope or elevation are proposed, nor are any obstructions to overall drainage patterns projected to occur. Stormwater quality and management practices are proposed as described in Section 4.5.3 of this document.

Increase of Coastal Flooding Hazard – Construction and operation of a pedestrian overpass will not adversely impact coastal flooding hazard in the project area as described in Section 4.9 of this document.

Aesthetic Alteration of Vistas and View Points – Significant adverse impacts are not expected to occur as a result of the proposed action. This is more thoroughly described in Section 4.4 of this document.

Destruction or Degradation of Wildlife, Finfish, or Shellfish Habitat – The study area is essentially devoid of wildlife, as described in Sections 3.10 and 4.10 of this document. No in-water work will occur that would impact finfish or shellfish habitat, and no water quality degradation is expected that might cause an adverse impact on aquatic resources in the project area.

Alteration of the Characteristics or Functions of Tidal Wetlands, Beaches and Dunes, Bluffs and Escarpments, and Rocky Shorefronts – The study area does not support these resources and, therefore, no adverse impacts will occur.

Coastal management policies, statutes, and regulations give highest priority and preference to uses and facilities that are dependent upon proximity to the water or the shorelands immediately adjacent to marine and tidal waters. Water-dependent uses are defined by the CCMA to be uses that: *require direct access to, or location in, marine or tidal waters and which therefore, cannot be located inland, including but not limited to: marinas, recreational and commercial fishing and boating facilities, finfish and shellfish processing plants, waterfront dock and port facilities, shipyards and boat building facilities, water-based recreational uses, navigation aids, basins and channels, industrial uses dependent upon water-borne transportation or requiring large volumes of cooling or process water which cannot reasonably be located or operated at an inland site and uses which provide general public access to marine or tidal waters [C.G.S. Section 22a-93(16)].*

The CCMA requires the minimization of adverse impacts on future water-dependent development activities and opportunities.

As defined by CGS section 22a-93(17), adverse impacts to water-dependent development include: (1) locating a non-water-dependent use at a site that is physically suited for a



water-dependent use for which there is reasonable demand or has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (2) replacement of a water-dependent use with a non-water-dependent use; and (3) siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters. Other pertinent sections of the CCMA are discussed in Section 4.8 (Water Resources), Section 4.9 (Flood Hazard Potential), and Section 4.10 (Biological Environment) as it pertains to these resources.

As per section 22a-92(a)(3), highest priority and preference must be given to uses and facilities dependent upon proximity to water or shorelands immediately adjacent to marine and tidal waters. Any proposed action must also conform to the policies set forth by the CCMA and minimize the potential for adverse impacts.

The proposed pedestrian overpass will provide improved access to multiple water-dependent uses, including the Cross Sound Ferry terminal and City Pier, as well as improved access to public waterfront recreation via the NCGM. Such access is believed to be consistent with the CCMA. The proposed action is not expected to cause adverse impacts to coastal resources as defined in the CGS.

#### 4.1.7 Summary of Direct Land Use Impacts

The pedestrian overpass is believed to be consistent with pertinent local, regional, and statewide land use plans and policies. Additionally, the proposed land use is consistent with the adjacent land uses and with the surrounding urban neighborhood. The proposed pedestrian overpass will be constructed on land that is currently vacant, with complementary linkages to adjacent existing land uses.

The operations associated with the Greyhound bus terminal will be directly impacted as a result of the proposed project and will require relocation. Relocation will occur in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, the specifics of which are described in Section 5.0 of this document. It is expected that relocation of the Greyhound facility will provide a better, more improved location and will ultimately improve Greyhound operations. Mitigation measures associated with relocation are discussed in Section 5.0 of this document.

#### 4.1.8 Indirect and Cumulative Land Use Impacts

The pedestrian overpass by its nature will serve to connect to various other existing and planned land uses, including principally the NCGM and the Cross Sound Ferry terminal. These land uses are consistent with the current downtown New London waterfront land uses as well as local, regional, and statewide planning documents and the policies contained therein.

## 4.2 Socioeconomic Impacts

The pedestrian overpass is not expected to create a significant amount of new employment in the city, nor will it affect population within New London. It will, however, complement the efforts to provide economic stimulus to the region through the construction and operation of the proposed NCGM. As a whole, the museum and associated overpass are expected to have a cumulative positive impact on the regional socioeconomic horizon through museum employment and by drawing an additional 200,000 visitors to the waterfront area on an annual basis. Many of these individuals are expected to utilize one or more of the various intermodal transportation hubs within the downtown New London area. A certain percentage of future visitors will also be patrons of area restaurants and businesses, thus infusing economic activity within New London.

## 4.3 Community Facilities and Services Impacts

*Education* – Construction and operation of a pedestrian overpass is not expected to generate secondary residential growth in the city of New London and will not tax the city's educational resources.

*Fire Protection* – The proposed overpass will be designed to meet current fire code requirements per the City of New London and the State of Connecticut. The majority of new construction will be largely devoid of combustible materials. Due to the size, construction material, and limited ability for sustained fire, the overpass will not place an undue burden on fire protection resources in the City of New London.

*Police Protection* – The human activity associated with the proposed pedestrian overpass, along with ample lighting, will tend to discourage activities warranting police intervention. As such, this facility is not expected to place an undue burden on police protection resources in the City of New London.

*Public Safety* – The pedestrian overpass will reduce pedestrian exposure to vehicular and rail traffic, thereby increasing public safety. In addition, the overpass will be designed in a manner that incorporates various security and safety measures, including ADA-compliant design, extensive lighting, a camera system to enable the monitoring of activities, and installation of handrails.

*Recreation* – The construction and operation of a pedestrian overpass is not expected to have a negative impact on recreation opportunities. Rather, the overpass will complement the NCGM, which is, in turn, expected to attract additional visitors to the downtown waterfront area, with an associated positive impact on local businesses and recreation.

*Public Transit* – The pedestrian overpass is expected to improve public transit by providing safe accessible points to Union Station, train platforms, and ferry service. These access points will allow passengers to safely access the various transportation modes while also allowing for more efficient and timely access.

In summary, no significant adverse direct, indirect, or cumulative impacts to community facilities and services are expected to occur as a result of the proposed action. Positive benefits are expected relative to public safety, recreational opportunities, and access to public transit services.

#### **4.4 Aesthetic/Visual Resource Impacts**

The aesthetic character of the downtown New London waterfront area is predominantly centered on the architecture and significance of the buildings located within the historic district, including Union Station, which serves as an anchor within the district.

The preferred alternative has the flexibility to be constructed in its entirety or in a phased manner, depending on the availability of funding. If the project is constructed in phases, the first phase will extend from the NCGM entrance to the Union Station parcel on the east side of Water Street, with a midway access to the train platforms. The second phase would extend over Water Street with an exit/entry point located at the Parade Plaza to the south of the Water Street Garage. It is envisioned that upon completion of each phase the pedestrian overpass will incorporate the aesthetic highlights of the surrounding area.

Aesthetic and visual highlights will include the following:

- Vistas from the overpass will provide visitors with an opportunity to enjoy the New London waterfront and downtown landscape.
- The overpass will be designed in a manner that incorporates an inviting access point for visitors to enjoy the downtown waterfront and associated amenities.
- A site-sensitive design will be developed to be an extension of the light and airy steel and glass structure of the NCGM.

In order to ensure that the pedestrian overpass sufficiently incorporates and does not detract from the historic significance of the New London landscape, recommendations and approvals will be sought from the SHPO and the City of New London Planning and Zoning Commission throughout the design phase.

Upon completion, the overpass is expected to serve as a gateway to the downtown waterfront by encompassing the architectural appearance of the area. As such, negative impacts are not expected.

Cumulative impacts are not expected as a result of the pedestrian overpass in combination with other planned projects, most notably the NCGM. The aesthetics of the proposed overpass will be closely aligned with the design of the NCGM, both of which will embrace the views of the New London landscape and will continue to emphasize the maritime character of the area.

## 4.5 Public Utilities and Services Impacts

### Water System

Public water in the downtown waterfront area is currently provided by New London Public Utilities. The proposed pedestrian overpass will not require a drinking water supply, and no measurable impacts are anticipated.

### Sanitary Sewer System

Sanitary sewer systems operated by New London Public Utilities are located within the downtown waterfront area. The pedestrian overpass will not require sanitary sewer services, and negative impacts are not anticipated as a result of the proposed project.

### Storm Drainage System

The proposed pedestrian overpass will produce a low volume of runoff with relatively minimal concentrations of pollutants. Runoff from the overpass will be directed to the existing stormwater management system, and negative impacts to water quality are not anticipated. Since the existing area is developed and largely paved, a measurable increase in runoff will not occur as a result of the proposed overpass.

### Electric/Energy

The pedestrian overpass will incrementally increase energy usage; however, it will not have a high electricity draw. Standard controls to reduce energy use and promote conservation will be implemented upon construction of the overpass, and Leadership in Energy and Environmental Design (LEED) standards will be considered whenever applicable.

### Gas

The proposed pedestrian overpass will not require the use of natural gas; therefore, no related impacts are anticipated.

### Telephone

Telephone service is readily available in the downtown waterfront area. The proposed pedestrian overpass is not anticipated to require telephone service, and no related impacts are anticipated.

## Cable

The proposed pedestrian overpass is not anticipated to require cable service, and no related impacts are anticipated.

## Summary of Public Utilities and Services Impacts

As with any new construction project, energy usage will increase as a result of the proposed action. Standard controls to reduce energy use and promote conservation will be implemented upon construction of the overpass, and LEED standards will be considered whenever applicable. With the development of the proposed NCGM and proposed ferry terminal expansion, additional cumulative demands will be generated for many or all of the utilities described above; however, these uses will not exert excessive demands on any single utility. Overall, the existing public utilities and services in the downtown waterfront area are believed to be adequate to serve the proposed overpass with no adverse impacts. Potential physical utility conflicts will be addressed during the design phase of this project; however, no major utility relocations are anticipated.

## **4.6 Cultural Resources Impacts**

The CEPA requires projects receiving state funding to consider whether the activity will result in any "disruption or alteration" of a historic, architectural, or archaeological resource or its setting, as part of an overall environmental evaluation (CGS 22a-1 et seq.).

The proposed pedestrian overpass will be located within the Downtown New London Historic District, a National Register district of commercial and institutional buildings that borders waterfront State Street to the northeast, Bank Street to the southeast, Tilley Street to the southwest, and Washington Street to the northwest.

Historic buildings within or adjacent to the proposed overpass that may be directly or indirectly impacted by the proposed pedestrian overpass include Union Station and the Greyhound bus terminal building, located at 27 and 45 Water Street, respectively. The proposed action may have a direct impact on the building that currently houses the Greyhound bus terminal, potentially requiring its demolition in order to accommodate the pedestrian overpass and connection points. The building is considered to be a contributing resource to the historic district; thus, mitigation measures have been identified and are described in Section 5.0 of this document. No direct impact to the Union Station building is anticipated.

Based on discussions with representatives from the SHPO, preservation of the historic district as a whole is critical to the success of the proposed action. Therefore, the impetus is to design a pedestrian overpass that improves and does not negatively impact the appearance and viewshed of the historic district. Accordingly, the overpass will be designed in a

manner that is sensitive to the historic context of the historic district and serves as a gateway to the downtown New London area.

A critical component of the design process will be maintenance of the integrity of the adjacent Union Station building and the historic district as a whole, both during construction and the subsequent operation of the pedestrian overpass. The 2009 City of New London Design Review Guidelines state that *"each new building should be designed to relate to its surroundings. Height, width, relationship to the street, roof forms, proportion, composition, rhythm, proportion of openings, material and colors are ten criteria that should be considered in the design."* A more detailed explanation of each criterion is as follows:

**Building Heights:** The height of a building should be in harmony with surrounding structures.

**Scale:** The size or bulk of a building as it relates to neighboring structures and the topography of the street. There is great diversity in the scale of New London buildings, and every effort should be made to evaluate size, rhythm, proportion, and roof form in relation to surrounding structures.

**Rhythm:** The pattern of relationships between buildings along the street. The scale of each building, its relative size, massing, and orientation to the street should contribute to, not detract from, the rhythm of the streetscape. Diversity in individual scale or style is encouraged where it creates a pleasing rhythm and architectural details of scale, windows, roof forms, and street-level retail spaces are appropriately related.

**Proportion:** The relationship of height to width. Most historic New London buildings emphasize vertical proportions. They tend to be narrow, reflecting a building pattern of a single span from side to side. This relationship should be retained. Buildings with extensive frontage should include variations in form and texture to avoid monotony and increase visual interest.

**Orientation:** Spacing, site coverage, and setback from side and rear property lines. Along historic New London streets, buildings should be sited on the sidewalk, matching adjacent structures. Where this pattern has been broken, consideration should be given to methods and design concepts that will balance a new structure with neighboring structures. Ideally, buildings should fill their space side to side with neighboring buildings. Rear spaces are determined on a case-by-case basis depending on the lot and buildings behind the new development.

**Roof Form:** The rhythm of a street is often influenced by the characteristic roof forms. Roof forms vary considerably in New London. Attention should be given to details of the roof and, most importantly, the roof cornice or other architectural features delineating the roof line, to insure they make a significant impact on the rhythm of the street.

**Materials, Textures, Color:** Building color should complement and harmonize with the natural tones of the primary building material. Building materials should be considered

for their textures including the size of their parts. New London's dominant brick buildings provide a rich, textured appearance along the streets. Colors relate to the existing natural unpainted surfaces of brick, stone, and mortar. Paint should complement and harmonize with these natural tones.

Throughout the design process, steps will be taken to ensure that the pedestrian overpass considers each of these key components as they are crucial to the overall success of the project.

SHPO representatives have indicated that the potential demolition of the Greyhound building is of lesser concern than minimizing the overall impacts to the historic district and Union Station in particular. The proximity of the overpass to Union Station and final design details will be significant as this building is the anchor to the historic district.

The pedestrian overpass is not expected to have a direct physical impact on Union Station. However, since the overpass will be located immediately adjacent to this historic resource, the design will strive to ensure that the viewshed of this structure is not significantly impacted. Due to the location of the overpass within the historic district and in close proximity to historic structures, the design will be driven in part by the Secretary of the Interior's standards for work in and around historic structures. Continued coordination with SHPO will occur throughout the design and development of the pedestrian overpass. Mitigation measures to offset impacts to cultural resources are enumerated in Section 5.0 of this document.

Indirect impacts to Union Station, such as from vibration, will be minimized in accordance with applicable regulations and standard construction practices.

A Programmatic Agreement (PA) will be prepared for the NCGM project. Specifically, the NEPA EA states "*a Programmatic Agreement (PA) between the Coast Guard, SHPO, NCGMA, and other and other consulting parties, as appropriate, is being prepared. The PA will outline procedures for review and comment on potential effects of the NCGM and, if an adverse effect determination results from further Section 106 consultation under the PA, compensatory mitigation would be developed and implemented, and/or the conceptual design of the NCGM may be reviewed and changed to avoid or minimize adverse effects of the project.*" The PA is intended to outline mitigation measures that will be implemented in order to address impacts associated with the NCGM as well as the pedestrian overpass, thus accounting for the potential for cumulative impacts of the pedestrian overpass with the NCGM.

## **4.7 Transportation Impacts**

### **4.7.1 Evaluation Methodology**

The adequacy of the downtown New London waterfront area's transportation system, specifically in terms of the key roadway intersections and public parking, was analyzed to

determine future operating characteristics and the need for improvements. The pedestrian overpass is a component of the transportation network and not a destination in and of itself. Since the overpass on its own will not generate any vehicular or pedestrian traffic, with the exception of construction impacts, all traffic-related impact analysis is based on the cumulative impacts of the overpass with other planned projects, most notably the NCGM.

In evaluating cumulative impacts, the first step is to estimate future conditions without proposed development projects. Next, trip generation and parking characteristics are estimated. Lastly, estimated future build conditions can be assessed.

As with the existing conditions assessment, the analysis of future conditions includes LOS findings for the study intersections near the proposed overpass. (Refer to Section 3.7.2 for a discussion of the LOS rating system.) Parking impacts have been assessed in terms of percent utilization of the off-street parking facilities in the study area. To begin this evaluation process, review was made of travel and ridership projections for the different modes at the Intermodal Transportation Center.

#### 4.7.2 Future Ridership Projections

The 2030 ridership estimates from the RITC study were reviewed for current appropriateness. The ferry, bus, and rail service providers at the New London Intermodal Transportation Center were contacted in this regard. Table 4-1 presents a comparison of the prior estimates from the RITC study and the current ridership estimates. All of the providers confirmed the projections, with the exception of Greyhound.

**TABLE 4-1  
Peak Summer Weekend Future Daily Passenger Trips Projections**

	Current	Prior 2030 Projections <sup>1</sup>		New 2030 Projections <sup>2</sup>	
		Low	High	Low	High
<b>Amtrak</b>	760	1,197	1,832	same as prior	
<b>Shoreline East</b>	261 <sup>3</sup>	79	121	358	489
<b>SEAT</b>	435	815	1,108	same as prior	
<b>Greyhound</b>	320	504	771	same as prior *	
<b>Long Island Auto Ferry</b>	8,620 <sup>4</sup>	9,803	12,057	10,210	12,070
<b>SeaJet Ferry</b>	949	1,192	1,480	same as prior	
<b>Block Island Express Ferry</b>	2,202 <sup>4</sup>	2,131	2,645	2,610	3,085
<b>New Ferries <sup>5</sup></b>	0	848	848	same as prior	
<b>Casino Shuttles</b>	806	1,013	3,647	same as prior	
<b>Fishers Island Ferry</b>	746	746	933	900	1,000
<b>TOTAL</b>	15,099	18,328	25,442	19,647	26,330

1. RITC Study
2. Confirmed with transportation providers (\*with the exception of Greyhound)
3. 2014 Per CTDOT
4. August 2013 per Cross Sound Ferry
5. Potential future high-speed ferry service to Martha's Vineyard and other possible locations



The current ridership numbers shown in Table 4-1 are from 2008 to 2010, with the exception of Shoreline East, Long Island Auto Ferry, and Block Island Express Ferry ridership estimates, which are more recent as provided by the respective operators. Most of the previous 2030 projections have not changed significantly from the RITC study. These projections correspond with annual ridership increases from current levels to the 2030 horizon ranging anywhere from 1% upwards to 7% at the different transportation modes.

Not all passenger trips represent single individuals. Many passengers will utilize multiple modes in order to chain together multiple travel legs along a journey, as occurs today. Future unknowns such as a potential "Central Corridor" rail line that would extend from New London Union Station to Norwich and points north, as well as the Amtrak 2040 vision for the northeast corridor, are noted but have not been specifically taken into account in this EIE. An anticipated new future Cross Sound Ferry terminal building is accounted for.

#### 4.7.3 Future Base Condition Traffic Volumes

Future base condition traffic volumes are determined based on estimated increases to the current traffic volumes before the proposed NCGM is constructed and opened. Specific to the study area, this includes general ambient traffic growth, new traffic from any nearby developments, and new traffic associated with estimated increases in ferry, bus, and rail ridership. Keeping with the RITC study, the year 2030 has been used as the future horizon. The critical time period, Saturday midday peak hour during the summer, was analyzed.

Review was made of the 2030 future traffic volumes from the RITC study to determine the appropriateness of their use in this EIE. Figure 4-1 shows these future traffic volumes, estimated in the RITC study by expanding the 2008 traffic volumes by approximately 2% per year to 2030. It is understood that this growth rate encompasses all new traffic that would occur by 2030 from normal growth, new developments, and increased ridership at the Intermodal Transportation Center.

The CTDOT Bureau of Policy and Planning was contacted regarding the appropriateness of the 2% annual growth rate at the current time. They instructed that a 1% per year growth rate should be used instead. According to the CTDOT Office of the State Traffic Administration, there are also no major traffic generator developments that are currently anticipated in New London. The City of New London Office of Development & Planning was additionally contacted and indicated that there are currently no new large developments that are expected in the near future.

CTDOT indicated that the 2% annual growth rate used in the RITC study to estimate the 2010 traffic volumes is double what would currently be used to develop 2030 projections yet, at the same time, some of the transportation providers at the intermodal center have indicated increased ridership estimates above those stated in the past RITC study. Given these two somewhat mitigating conditions, the 2030 future traffic volumes shown in

Figure 4-1 are believed to be appropriate for use in this EIE and serve as the background traffic profile for this EIE.

Explained further, the 2% annual growth rate compounded over 22 years (from 2008 to 2030) is a total increase of 54.5% while 1% compounded over 22 years is 24.5%. The difference between the two is 30% of overall growth that can be removed from the traffic projections according to CTDOT. In comparison, the increase in the ridership projections between the prior and the new projections is somewhere between 3% - 7%. Thus, the 2030 traffic projections shown in Figure 4-1 remain conservative even with the latest increased ridership projections.

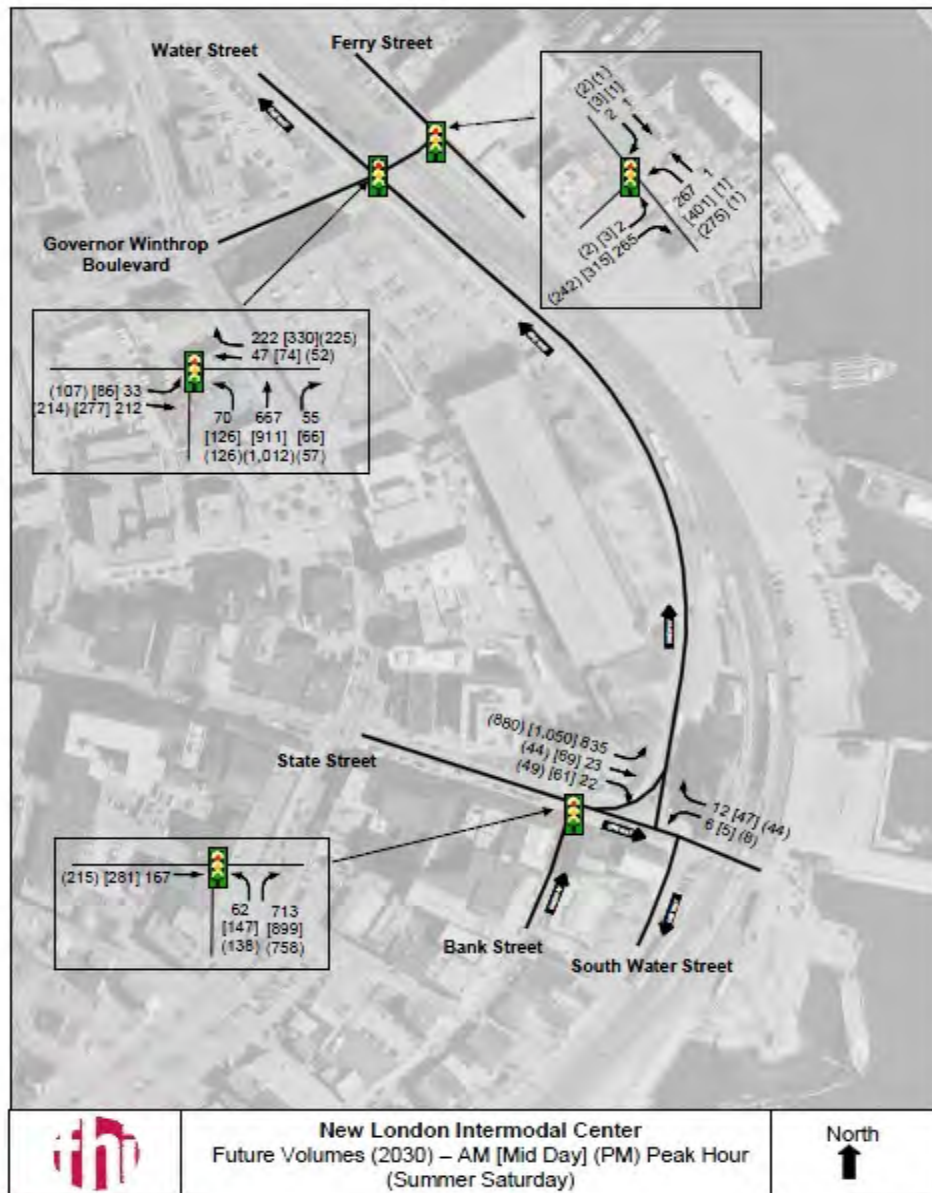
#### 4.7.4 Adjusted Future Traffic Volumes

The number of trips that will be generated by the proposed NCGM during the peak hour on a typical summer Saturday has been estimated based on information sourced to White Oak Associates Museum Planners and Producers (2014). The NCGM will be designed to accommodate 2,468 visitors on a typical summer weekend day, along with 34 staff/volunteers. Eighty percent of visitors are expected to arrive by car, at 2.7 visitors per car. The average visit is expected to be around 1.5 hours. Staff and volunteers are assumed to arrive mostly by car, at 1.1 person per car. It has been estimated that these demands will require 30 staff/volunteer parking spaces and 293 visitor parking spaces. It is assumed that the majority of these future parking demands will be oriented to and from the Water Street Garage, with overflow being accommodated at other nearby parking facilities downtown.

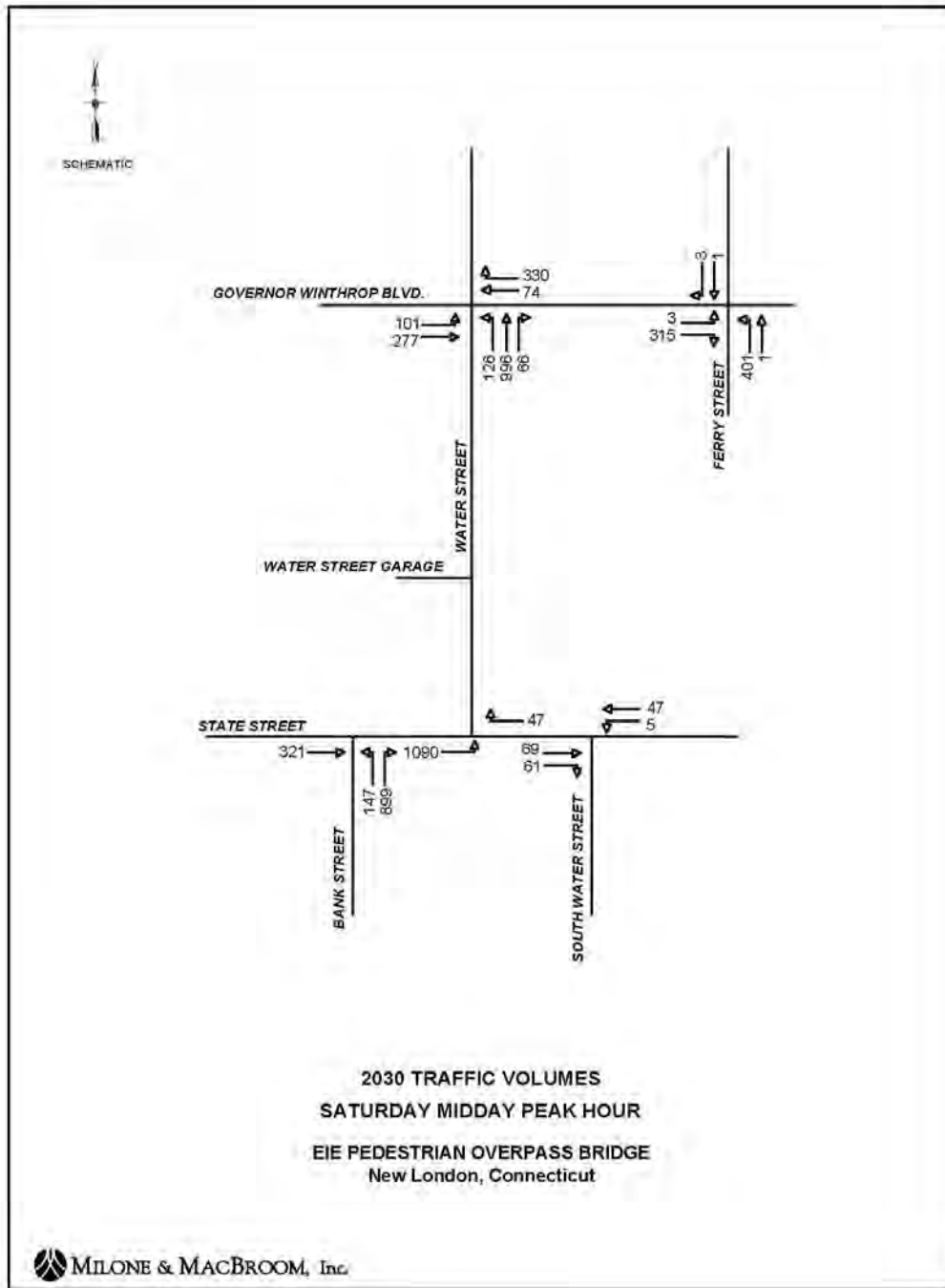
Based on the visitor demand and staffing assumptions, it can be estimated that there will be approximately 760 vehicles that will travel to the NCGM on a typical summer weekend day. Staff and volunteers are expected to mostly arrive during the morning and leave in the afternoon/evening. Visitors are expected to arrive throughout the day, with the heaviest time peaking during the middle of the day. Approximately 110 vehicle trips to the museum and 110 vehicle trips from the museum have been estimated during the midday peak hour on a summer Saturday.

The adjusted future build traffic volumes at the study intersections were determined by adding the estimated museum trips to the RITC study's 2030 base condition traffic volumes. These are shown graphically in Figure 4-2. This is reflective of conditions after the NCGM has opened. As part of the development of the proposed museum and ferry terminal expansion, approximately 100 parking spaces now utilized by Cross Sound Ferry Services will be displaced. It can reasonably be assumed that parking on the land side of the railroad tracks would, if anything, result in a minimal traffic reduction along the two Water Street intersections. To be conservative, no reductions in traffic volumes at the study intersections were assumed.

**Figure 4-1**  
**RITC Study Future Traffic Volumes**  
 Peak Hour Traffic Volumes (2030 High Scenario Conditions)



**Figure 4-2**  
**Adjusted 2030 Traffic Volumes – Saturday Midday Peak Hour**



#### 4.7.5 Intersection Capacity Analysis

Capacity analyses were conducted of the study intersections with the adjustments associated with the proposed NCGM. The findings were compared to the RITC study findings and are summarized in Table 4-2. As shown, the new traffic generated by the NCGM will not decrease overall LOS at any of the study intersections during the summer Saturday midday peak hour. The intersections of State Street at Bank Street and State Street at Water Street are expected to remain at LOS B. Ferry Street at Governor Winthrop Boulevard is expected to remain at LOS C. The intersection of Water Street at Governor Winthrop Boulevard is projected to remain at LOS F.

**TABLE 4-2  
Intersection Level of Service Comparison – 2030 Summer Conditions**

<i>Intersection</i>	<i>2030 Summer Saturday Midday Peak Hour</i>	
	<i>RITC Study Future Conditions <sup>1</sup></i>	<i>Updated Future Conditions</i>
State Street at Bank Street	B	B
State Street at Water Street	B	B
Water Street at Governor Winthrop Boulevard	F	F
Governor Winthrop Boulevard at Ferry Street	C	C

*1: Regional Intermodal Transportation Center Master Plan. TranSystems, 2010*

The subject EIE is an assessment of the impact of a pedestrian overpass bridge, not of the proposed NCGM. Consequently, the purpose of this analysis was to identify cumulative impacts or conditions in the future reflective of changes in base assumptions since the RITC study. The findings confirm that, with or without the pedestrian bridge, further study of current and future operations is warranted.

#### 4.7.6 Future Parking Conditions

Future weekend parking demands at the off-street parking facilities in downtown New London were estimated in the RITC study. Their 2030 high-end demand estimates are projected to be over capacity by about one-third. Under the low-end 2030 scenario, the utilization was estimated at 88%.

According to information sourced to White Oak Associates Museum Planners and Producers (2014), it has been estimated that the museum will require 30 staff/volunteer parking spaces and 293 visitor parking spaces on a typical summer weekend day, for a total of 323 parking spaces. The museum will also displace approximately 100 Cross Sound Ferry parking spaces.

Similar to the ridership projections, the RITC study's 2030 parking projections are assumed to be reasonable albeit slightly low given the updated future ridership estimates, the added future demands associated with new museum parkers, and the future relocation of the Cross Sound Ferry parking. Table 4-3 summarizes changes reflective of conditions after the museum has opened. Even under the low-end 2030 scenario, a downtown parking shortage is expected during peak summer weekends unless additional parking is added. Near-term parking conditions may not be as constrained, as indicated in the *Environmental Assessment – National Coast Guard Museum Project – New London, Connecticut*, prepared by URS (March 2014).

**TABLE 4-3**  
**Projected Future Parking Conditions - Downtown New London Off-Street Facilities**  
**2030 Summer Weekend Day**

	Number of Parking Spaces	Number of Parked Vehicles		Utilization	
		Low	High	Low	High
2030 RITC Study Parking Conditions <sup>1</sup>	1,946	1,714	2,581	88%	133%
2030 Adjusted Parking Conditions	1,846 <sup>2</sup>	2,037	2,904	110%	157%

1: *Regional Intermodal Transportation Center Master Plan*. TranSystems, 2010.

2: Approximately 100 parking spaces are to be lost in place of the proposed Coast Guard Museum and future new Cross Sound Ferry terminal building.

The subject EIE is an assessment of the impact of a pedestrian overpass bridge, not of the proposed NCGM. Consequently, the analysis of parking capacity was undertaken to identify cumulative parking conditions in the future that are reflective of changes in base assumptions since the RITC study. The findings confirm that, with or without the pedestrian bridge, further study of current and future operations is warranted.

#### 4.7.7 Pedestrian Accessibility

Pedestrian accessibility will positively change in the future with the addition of a pedestrian overpass. To optimize accessibility, the pedestrian overpass will be designed to adequately accommodate regular peak flows from the ferry, rail, bus, museum, and other users. According to Cross Sound Ferry Services, 600 to 700 pedestrians can unload from multiple ferries within short time frames of 15 minutes or less. Pedestrian volumes will also increase in the future with the addition of the NCGM. The pedestrian overpass will be sized in light of these pedestrian loads.

The pedestrian overpass will be a positive change compared to the current at-grade Water Street crosswalk, which has been observed to be underutilized. It is possible that the pedestrian overpass will be a phased project that may only bridge the railroad tracks at first. With or without phasing, mitigation is proposed by virtue of consolidating the two existing Water Street crosswalks into a single more functional crossing that is conservatively sized for pedestrian loading without the overpass extending over Water

Street. Control of traffic approaching the crosswalk will be improved with more appropriate devices such as a HAWK signal.

#### 4.7.8 Construction-Related Impacts

Local traffic disruptions within the downtown waterfront area are likely to occur during construction. Appropriate maintenance and protection of traffic (MPT) plans should be implemented in order to maintain safe traffic flows, as well as pedestrian pathways, during construction.

### 4.8 Water Resources Impacts

The predominant nearby water resource is the Thames River. The Thames River is classified SB in Connecticut's Water Quality Standards. Designated uses within this classification include marine fish, shellfish and wildlife habitat, shellfish harvesting for direct human consumption, recreation, and all other legitimate uses including navigation.

Groundwater in the area is classified GB in Connecticut's Water Quality Standards, denoting a highly urbanized area or an area of intense industrial activity where public water supply service is available. There are no watercourses or wetlands in the footprint of the proposed overpass.

No work is proposed in the Thames River or in any wetlands and, therefore, no direct impacts are projected to occur. Additionally, no wastewater discharges to the river will be generated as a result of the pedestrian overpass. Indirect impacts have been evaluated with respect to water quality and the Thames River. Water quality issues associated with stormwater runoff are presented in Section 4.5 of this document. Flood-related impacts are presented in Section 4.9. Potential impacts to fisheries and living marine resources in the Thames River are presented in Section 4.10.

### 4.9 Flood Hazard Impacts

#### 4.9.1 Overview

The majority of the downtown waterfront area is located within the FEMA 1 percent annual chance floodplain (Zone AE). A small area, located further inland, is located within the 0.2 percent annual chance floodplain. (Zone X). The proposed project is also located within a Category 1, 2, or 3 Hurricane Inundation Zone.

The proposed pedestrian overpass will be designed in conformance with state floodplain policies and FEMA planning considerations as defined in part 60.22 of the National Flood Insurance Program regulations. Figure 3-12 (presented in Section 3.9 of this document) graphically presents the FEMA Flood Zones in the project area. This is described more fully in Section 4.9.3 below.

#### 4.9.2 Consistency with Conservation and Development Policies Plan for Connecticut

The downtown New London waterfront area has been designated as a Conservation Area under the *Conservation and Development Policies Plan for Connecticut* (2013-2018) because of its location within a floodplain. Growth Management Principle #5 of the Plan strives to promote and ensure the integrity of Environmental Assets critical to public health and safety. The following policy is of interest in light of the proposed pedestrian overpass:

*Policy: Discourage new development activities within floodway and floodplain areas, manage any unavoidable activities in such areas in an environmentally sensitive manner and in compliance with applicable laws, and seek to prevent the loss of life and property by maintaining existing dikes, channels, dams, and other barriers, or removing such structures where removal would be a more cost-effective option for reducing threats to downstream property.*

Consistent with the State Plan policy, the proposed overpass will be constructed to withstand flooding impacts and will be designed to be in full compliance with local building and excavation codes and coastal management policies and regulations. Additionally, the overpass will comply with state and federal policies and regulations as described in Section 4.9.3.

#### 4.9.3 Consistency with State and Federal Regulations and Statutes

Because state funds are involved, this project must be certified as being in compliance with flood and stormwater management standards specified in Section 25-68 of the CGS and Section 25-68h-1 through 25-68h-3 of the Regulations of Connecticut State Agencies (RCSA).

State policy promotes long-term nonintensive uses for projects within flood hazard areas, with utilities located to discourage floodplain development. State policy regarding floodplain development is articulated in Section 25-68(b)(4) of the CGS, requiring that a proposed action promote long-term nonintensive floodplain uses and have its utilities located to discourage floodplain development. This policy invokes a higher standard than the engineering standards contained in federal or municipal floodplain regulations.

In order to certify the proposed action, it must be determined to be a nonintensive use of the floodplain. The determination of whether a specific proposal is considered nonintensive requires examination of numerous factors, including the existing state of the floodplain and its natural resources, the types of uses proposed for the floodplain area, the design of the entire proposal and the extent of encroachment into the floodplain, and the availability of alternatives to siting within the floodplain. In order to ensure compliance with state policy, any proposed development must not result in more intensive uses of the floodplain than presently exist.

Intensive floodplain uses have been interpreted by the DEEP to include:



- ❑ new residential uses within the floodplain;
- ❑ any increase in the square footage of office, retail, industrial, or business uses; and
- ❑ conversion of nonresidential use(s) to residential use.

Uses that are classified as intensive would preclude use of state funding unless an exemption was granted. Exemptions are unlikely for residential uses.

In order to comply with the FEMA National Flood Insurance Program management standards and to be consistent with coastal management policies concerning coastal flood hazard areas, the lowest floor (including basement and utilities) of all new construction of nonresidential structures must:

- (i) have the lowest floor (including basement) elevated to or above the base flood level; or
- (ii) together with attendant utility and sanitary facilities, be designed so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capacity of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

No activity within the *floodway* can occur that will result in any increase in the water surface elevation for the 10- or 100-year flood event.

The proposed pedestrian overpass is believed to be consistent with applicable flood regulations and statutes for the following reasons:

*Nonintensive Use* – The proposed pedestrian overpass is a nonintensive use since no new residential uses are proposed in the floodplain; no conversion of nonresidential use to residential use will occur; and there will be no increase in the square footage of office, retail, industrial, or business uses. The overpass will be enclosed, with the base floor elevation above the 1 percent annual chance floodplain elevation.

*No Floodway Impact* – No structures or placement of fill is proposed in a mapped floodway.

*No Impact on Flood Storage* – There will be no direct or secondary flooding impacts as a result of this project in that there will be no exacerbation of flooding. The 1 percent annual chance flood elevation is based upon the tidal backwater condition of the Thames River from Long Island Sound. Therefore, the placement of structures cannot and will not negatively impact flood water storage in the floodplain.

*No New Utility Development Proposed* – No new utilities are proposed within the 1 percent annual chance floodplain.

*Minimal Potential for Property Damage* – No impacts to property damage are expected since the majority of the proposed pedestrian overpass will be constructed above the 1 percent annual chance floodplain. Only the access points will necessarily be at a lower elevation to connect to existing ground.

*No Structures Below Base Flood Elevation* – The base floor elevation of the proposed pedestrian overpass will be constructed at or above the 1 percent annual chance floodplain elevation.

#### 4.9.4 Indirect Flood Hazard Impacts

Indirect flood hazard impacts will not occur as a result of the proposed action. The driving factor on coastal flooding is backwater conditions from Long Island Sound. The area is not located in a floodwater storage zone, and construction of the proposed overpass will not worsen flooding at adjacent properties.

### 4.10 **Biological Environment Impacts**

#### 4.10.1 Fisheries

The CCMA empowers DEEP to manage the state's fisheries for promotion of economic benefits of commercial and recreational fishing; to enhance recreational fishing opportunities; to optimize yield of all species; to prevent the depletion or extinction of indigenous species; to maintain and enhance the productivity of natural estuarine resources; and to preserve healthy fisheries resources for future generations. Construction and operation of the proposed pedestrian overpass will not impact the fishery resources of the Thames River. The overpass will be located approximately 300 feet from the edge of water and will not result in any physical disturbances in the river.

#### 4.10.2 Vegetation

Most of the flora found in the vicinity of the proposed overpass are non-native invasive species and are limited to the banks of the Thames River. The proposed project is not expected to negatively impact vegetation.

#### 4.10.3 Inland Wetlands

No impacts to inland wetlands will occur as a result of the proposed project. Best management practices will be employed to control influence on the nearby water resources and to reduce the overall amount of disturbance to the site during construction.

#### 4.10.4 Wildlife

Given the amount of development in the area and lack of usable wildlife habitat, the wildlife currently using the area will be minimally impacted by the proposed overpass.

#### 4.10.5 Threatened, Endangered, and Species of Special Concern

The Connecticut DEEP provided comments during the public scoping period. It indicated that a review of the NDDDB was conducted in order to determine if any areas of special concern for endangered and threatened species or significant natural communities exist within the project area. The NDDDB data determined that the pedestrian bridge will not impact any extant populations of federally listed endangered or threatened species or species listed by the state, pursuant to section 26-306 of the CGS, as endangered, threatened, or of special concern.

#### 4.10.6 Summary of Direct and Indirect Impacts

The limited biological resources within the footprint of the pedestrian overpass and in the surrounding area will be unaffected by the proposed action.

### 4.11 **Physical Environment Impacts**

No significant adverse impacts are anticipated to the physical environment as a result of the proposed pedestrian overpass. Localized impacts will occur as a result of the placement of footings and access points. However, extreme modifications to area topography are not expected. The general erodibility of soils that occur in the project area is low. Site-specific sedimentation and erosion controls will be implemented as part of the proposed project. No agricultural soils or significant farmlands occur in the downtown waterfront area and, therefore, no impacts can occur to such resources.

### 4.12 **Air Quality Impacts**

The intended use of the project area is not anticipated to significantly impact air quality. The future use of the proposed overpass is to serve pedestrian traffic. No long-term impacts to air quality are anticipated.

#### 4.12.3 Construction Period Air Quality Impacts

Primary short-term air quality concerns relate to construction activities and their potential to generate fugitive dust and mobile source emissions. Such sources of dust are attributed to construction vehicle disturbance during hauling, loading, dumping, and bulldozing on any areas of the proposed development.

Standard controls can be implemented to reduce the impact from such fugitive dust emissions as well as the effects of wind erosion. Additionally, use of water or wetting agents to control dust from exposed soil or gravel areas can further minimize airborne particulate matter, as can periodic sweeping and daily rinsing of truck tires. This can reduce the impact of off-site tracking of soil, which occurs when residual soil particles

are displaced from construction sites onto higher traffic roadways and then become airborne and waterborne.

Even well-maintained trucks and other construction equipment typically emit small amounts of pollutants, such as nitrogen oxides, sulfur oxides, and carbon monoxide related to internal combustion or diesel engines. Proper maintenance of portable generators, on-site machinery, and vehicles is, thus, important to reduce the potential for higher smoke emissions associated with improperly operating equipment.

#### 4.12.4 Summary of Direct and Indirect Impacts

Overall, pollutant emissions at the overpass site are expected to minimally increase as a result of construction activities. Air pollution control devices on construction equipment and other forms of controls will be implemented by contractors to reduce the impact from fugitive dust emissions, and proper phasing of construction will minimize the length of time that soil remains exposed to wind and water. Activities will be conducted in accordance with proper protocols and regulations, and no washings will be directed to storm drainage. Mitigation of short-term air quality impacts is described in Section 5.0 of this document.

#### 4.13 Noise Impacts

Section 22a-69 of the CGS gives the Commissioner of Energy and Environmental Protection the authority to develop, adopt, maintain, and enforce a comprehensive statewide program of noise regulation, including:

- ❑ Controls on environmental noise through the regulation and restriction of the use and operation of any stationary noise source
- ❑ Ambient noise standards for stationary noise sources that, in the commissioner's judgment, are major sources of noise when measured from beyond the property line of such source
- ❑ Consultation with state and local governmental agencies when such agencies adopt and enforce codes, standards, and regulations dealing with noise insulation and abatement for any occupancy or class of occupancy
- ❑ Controls on airport and aircraft noise to the extent not preempted by federal law

The primary noise concerns associated with the proposed action are short-term construction activities that have the potential to generate noise from construction vehicles and equipment. Construction activities will be limited to daylight hours when traffic noise is typically at a higher level; therefore, the additional construction-related noise is expected to be minimal. No significant construction-related noise impacts are anticipated to occur.

#### 4.14 Solid Waste and Hazardous Materials Impacts

The proposed pedestrian overpass is not expected to generate hazardous waste, nor will it have a substantial impact on solid waste. Any municipal trash generated during the

operation of the pedestrian overpass will be collected and transported to the appropriate municipal solid waste facility.

A certain amount of construction-related waste will be generated by the proposed project. Disposal and recycling of construction materials at approved facilities will minimize the potential for adverse environmental impacts. The disposal of construction materials will be handled in accordance with applicable solid waste statutes and regulations.

Overall, other than temporary construction-related impacts, minimal impacts related to solid waste and hazardous materials are expected to be associated with the construction and operation of the proposed overpass.

#### **4.15 Cumulative Impacts**

CEPA regulations require that the sponsoring agency for a project consider cumulative impacts. Cumulative impacts are those that result from the incremental impact of the proposed action when added to other past, present, or reasonably foreseeable future actions. Cumulative impacts associated with the pedestrian overpass take into consideration the construction of the proposed NCGM and ferry terminal expansion. Potential cumulative impacts include the following:

*Land Use* – The construction and operation of the pedestrian overpass in combination with other planned projects, including the proposed NCGM and ferry terminal expansion, is not expected to have a cumulative negative impact on surrounding land uses. These uses are consistent with a waterfront maritime community downtown and with local, regional, and state planning strategies.

*Socioeconomics* – The proposed action in combination with other planned construction is expected to have positive cumulative impacts on the local and regional socioeconomic horizon through increased tourism and multimodal transportation use. The proposed museum is expected to draw approximately 200,000 visitors to the waterfront area on an annual basis. Additional positive cumulative impacts are expected through ongoing employment opportunities at the NCGM and ferry terminal expansion.

*Aesthetics/Visual Resources* – Cumulative impacts to aesthetic/visual resources are expected as a result of the proposed action and surrounding planned projects. Due to their proximity to one another, the proposed NCGM, ferry terminal expansion, and pedestrian overpass will partially obstruct views of the historic district, including Union Station from the perspective of watercraft in the Thames River. In addition, the new structures will likely consist of a more modern design that will affect the aesthetics of the surrounding area. The City of New London's Design Review Guidelines encourage the use of contemporary designs and materials in a manner that is compatible with the sense of the past that is preserved throughout the Historic Waterfront District. The potential exists for the NCGM project to have a significant positive impact on the downtown waterfront landscape.

Overall, efforts will be made through the design process to minimize visual obstructions to Union Station and the Downtown New London Historic District. The overpass will be designed in a manner that maintains the maritime characteristics of the waterfront area and honors the heritage of the waterfront through the construction of a NCGM.

*Cultural Resources* – The planned projects along the downtown New London waterfront will alter the landscape within the historic district. There is also the possibility that the small building to the north of Union Station (currently occupied by Greyhound) may need to be demolished in order to accommodate the pedestrian overpass and connection points. Mitigation measures to address these impacts are described in Section 5.0 of this document. The PA discussed in Section 4.6 is intended to outline mitigation measures that will be implemented in order to address impacts associated with the NCGM as well as the pedestrian overpass. Opportunities exist to design the project in a manner that not only minimizes impacts but also embraces the maritime history of the New London waterfront.

*Traffic and Parking* – The pedestrian overpass will not generate vehicular or pedestrian traffic and will have no impact on parking. However, cumulative increases in pedestrian, vehicular, and parking demands are expected to result from other existing and planned uses, including the NCGM and ferry terminal expansion, necessitating further study and analysis.

#### **4.16 Unavoidable Adverse Environmental Impacts**

Although environmental impact avoidance, minimization, and mitigation have been sought, certain adverse impacts are unavoidable. One potentially unavoidable adverse impact associated with the proposed overpass is the need to demolish the small brick building that currently houses the Greyhound bus operations. Based on discussions with SHPO, this building is considered to be a contributing resource to the Downtown New London Historic District although its demolition is considered by SHPO to be a minor impact. Mitigation measures are discussed in Section 5.2 of this document.

Additional unavoidable impacts are predominantly in the category of short-term construction-related impacts. The project will undergo a construction phase wherein additional equipment will be utilized at the site. Mitigation measures have been identified with respect to associated short-term air and noise quality. However, a certain degree of additional truck and equipment use and access will be necessary during this time period, which is unavoidable. No other unavoidable adverse environmental impacts have been identified.

#### **4.17 Irreversible and Irretrievable Commitment of Resources**

The construction of the pedestrian overpass will utilize nonrenewable resources during the construction and implementation (i.e., construction supplies, fuel, electricity, etc.). Since these resources cannot be reused, they are considered to be irreversibly and irretrievably committed. Similarly, disposal of construction waste at a landfill and/or

solid waste disposal facility will take up capacity in such facilities, which is irreversible and irretrievable.

**4.18 Cost Benefit Analysis**

At this time, the State of Connecticut has committed up to \$20M in funding for the planning, design, and construction of a pedestrian overpass and any other ancillary improvements. Additional funding is actively being sought.

The following positive benefits are expected to occur as a result of the construction and operation of the pedestrian overpass:

- Improved pedestrian movement in a manner that complements the overall improvements to New London's RITC
- Provision for safe, ADA-compliant access points to Union Station, the Ferry terminals, and the Water Street parking garage
- Access to the NCGM as well as nearby public transportation facilities and the surrounding waterfront

**4.19 Certificates, Permits, Approvals**

**4.19.1 Pertinent Regulations and Statutes**

Table 4-4 presents pertinent local, state, and federal regulations and statutes that may affect this project.

**TABLE 4-4  
Pertinent Regulations and Statutes**

<i>Activity</i>	<i>Local</i>	<i>State</i>	<i>Federal</i>
Soil Erosion & Sediment Control	CGS-22a-329, CGS-22a-36	Construction Permit, CWA-402 NPDES	SCS
Floodplain	CGS-22a-36	CGS-25-68b, Flood Management Certificate	FEMA
Storm Drainage	Planning & Zoning, CGS-22a-30	CGS-22a-365	CWA 402(P)
Development within the Coastal Boundary	Coastal Consistency Site Plan Review	Section 22a-90 to 113	N/A

**4.19.2 Stormwater Construction General Permits**

Section 402 of the Federal Water Pollution Control Act regulates discharges to waterbodies and watercourses. EPA has delegated jurisdiction to the Connecticut DEEP. Stormwater

discharges from construction sites where one or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The DEEP Bureau of Water Management has issued a general permit that covers these discharges. A stormwater pollution prevention plan, including measures for erosion and sediment controls and postconstruction stormwater management, must also be prepared.

DEEP general stormwater permits for construction activities in tidal areas specify postconstruction management requirements, including retention (i.e., infiltration) of the first inch of runoff. The general permit also requires 80% total suspended solids removal and velocity dissipation. These elements will be factored into the project design.

#### 4.19.3 Flood Management Compliance Certification

Section 25-68b through h of the CGS authorizes DEEP to regulate proposed state activities in floodplains, including any grant or loan that affects land use or land use planning in floodplains, as well as the placement of fill or erection of structures in floodplains. The DEEP Commissioner also regulates actions by state agencies affecting floodplains. Section 25-68d states that "*(a) No state agency shall undertake an activity or a critical activity within or affecting the floodplain without first obtaining approval from the commissioner of a certification submitted in accordance with subsection (b) or exemption by the commissioner from such approval in accordance with subsection (d).*" Any state agency proposing an activity within or affecting the floodplain must certify it *does not*:

- obstruct flood flows;
- result in adverse increase in flood elevations;
- cause an adverse increase in flood velocities; or
- pose a hazard to human life, health, or property.

and that it *does*:

- comply with National Flood Insurance Program;
- comply with floodplain zoning; and
- promote long-term nonintensive floodplain uses.

A key requirement is to promote long-term nonintensive floodplain uses, or conversely to avoid intensive floodplain uses.

#### 4.19.4 Coastal Consistency Site Plan Review

Section 22a-90 to 113 requires projects within coastal boundaries to be consistent with the goals and policies of the CCMA. A local coastal consistency site plan review will be required since this project lies within the regulated coastal boundary. The CCMA authorizes local jurisdiction from mean high water to the coastal zone boundary.



#### 4.19.5 Other Likely Permits/Approvals

The presence of contamination must also be considered in developing plans for dewatering construction areas, including treatment, as appropriate, and discharge. The *General Permit for the Discharge of Groundwater Remediation Wastewaters to a Sanitary Sewer* and *General Permit for the Discharge of Groundwater Remediation Wastewater Directly to Surface Water* covers the discharge of certain contaminated dewatering wastewaters. Other local, state, and federal permits may be required, depending upon the exact nature of proposed work, including local planning and zoning permits and City Council approvals.

## 5.0 MITIGATION OPPORTUNITIES

### 5.1 Overview

Throughout the overpass planning process and evaluation of alternatives, avoidance of impacts has been a priority. In instances where impacts were unavoidable, mitigation measures have been sought. The following mitigation measures have been identified to reduce or offset potential adverse impacts associated with the proposed pedestrian overpass.

#### 5.1.1 Land Use and Relocation Mitigation

The Greyhound terminal building is currently leased from the New London Railroad Company, LLC and is reportedly in need of repair and maintenance. Greyhound representatives have indicated that existing site conditions are logistically challenging, and conflicts with taxi parking and pedestrian movement occur in concert with incoming and outgoing bus traffic.

Relocation of the Greyhound bus operations will be necessary in order to construct and operate the proposed overpass. The relocation will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. The act was developed in accordance with the following objectives:

- (a) To ensure that owners of real property to be acquired for federal and federally assisted projects are treated fairly and consistently, to encourage and expedite acquisition by agreements with such owners, to minimize litigation and relieve congestion in the courts, and to promote public confidence in the federal and federally assisted land acquisition program;
- (b) To ensure that persons displaced as a direct result of federal or federally assisted projects are treated fairly, consistently, and equitably so that such displaced persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole; and
- (c) To ensure that agencies implement these regulations in a manner that is efficient and cost effective.

In order to address bus operation inefficiencies, the Regional Intermodal Transportation Master Plan and Efficiency Study developed in 2010 evaluated several short-term, long-term, and conceptual alternatives. The short-term alternatives for the Greyhound facility included: (1) enhancing and/or reconfiguring the existing terminal; (2) relocating Greyhound and SEAT operations to the open space in front of the Water Street Garage on the west side of Water Street; and (3) relocating only Greyhound operations to the open space in front of the Water Street Garage.

The 2010 study also presented a conceptual transit-oriented development master plan that incorporated a new Greyhound and SEAT bus terminal on the ground level of a rebuilt Water Street Parking Garage. The terminal concept featured a center island to facilitate passenger transfers, pedestrian access from Water Street adjacent to Union Station, and bus access from John Street.

*The preferred alternative included "a new combined bus terminal for Greyhound and SEAT located on the east side of Water Street made possible by the relocation of Water Street. The relocation of Water Street makes it possible to create two parallel bus boarding areas along Water Street while also accommodating the vertical circulation elements (stairway and elevator) for the pedestrian bridge over the railroad tracks and sidewalks for pedestrian circulation. However, even with the relocation of Water Street the space is constrained and the sidewalk would be only about 11 feet wide at its narrowest point. With the two parallel bus boarding areas, the bus bays desired by the bus operators can be accommodated."*

Based on the information contained in the 2010 Master Study and discussions with representatives from Greyhound, the City of New London, and the Water Street Garage, relocating the Greyhound bus operations to the vacant space in front of the Water Street Garage has been determined to be the optimal mitigation for relocation associated with the construction and operation of the pedestrian overpass. This location is of sufficient size to accommodate the Greyhound bus operations without relocating Water Street. SEAT operations would not be relocated to this site.

Associated relocation efforts will allow for improvements to the Greyhound terminal building and facilities including space for an updated, fully accessible ticketing/waiting area, space for bus bays with no buses backing out, and an adequate pickup/drop-off area for Greyhound passengers. In short, relocation of Greyhound operations will provide a location that is better suited for bus operations.

Based on discussions with Greyhound representatives, a new location is strongly desired. It is possible that by the time the overpass is constructed Greyhound may already be relocated, in which case, no mitigation will be required.

### 5.1.2 Cultural Resources Mitigation

Based on discussions with SHPO, the following mitigation measures are proposed to address impacts to cultural resources and the Downtown New London Historic District:

1. Prior to demolition of the building that houses the Greyhound ticket terminal, documentation of the historic building's existence will be prepared as a permanent record. At a minimum, documentation will include current and historic photographs of the structure, an architectural description of the building, and scaled site and floor plans and maps.

2. Interpretative signage documenting the significance of the historic district will be erected in the vicinity of the pedestrian overpass in an effort to raise public awareness. An example of an interpretative panel is shown in the photograph to the right.
3. The design of the pedestrian overpass will consider its proximity to Union Station in an effort to ensure that the viewshed and appearance of the overpass embraces the maritime heritage of New London and the nature of the historic district.
4. The pedestrian overpass will be oriented in a manner that incorporates the parallel lines of adjacent structures.



DECD and the NCGMA will continue to coordinate with SHPO as design progresses on the overpass to ensure that the ultimate construction is consistent with the historic district and the vision for the New London landscape.

### 5.1.3 Pedestrian and Vehicular Traffic Mitigation

Pedestrian accessibility was discussed in Section 4.7.7 of this EIE. The pedestrian overpass will be a positive feature and an improvement over the current at-grade rail crossing. It is possible that the pedestrian overpass will be a phased project that may only bridge the railroad tracks at first. With or without phasing, mitigation is proposed by virtue of consolidating the two existing Water Street crosswalks into a single more functional crossing that is conservatively sized for pedestrian loading without the overpass extending over Water Street.

A new and wider crosswalk at Water Street will be established between the Intermodal Transportation Center and the Water Street Garage. This crosswalk will likely be located near the location where the Greyhound terminal is currently located. Control of traffic approaching the crosswalk can be improved with more appropriate devices such as a HAWK signal. In conjunction with the relocation of the Greyhound terminal and a new crosswalk, traffic signal warrant studies and possible consolidation of a new traffic signal with a new pedestrian signal will be evaluated as appropriate.

Potential temporary construction-related traffic impacts are expected to occur as a result of the overpass. These will be mitigated through development and implementation of MPT plans in order to maintain safe traffic flows, as well as pedestrian pathways, during construction.

#### 5.1.4 Flood Hazard Mitigation

The pedestrian overpass will be located in a coastal floodplain. The following flood hazard mitigation measures are proposed:

1. A flood emergency response/evaluation program will be developed for the overpass that will include identification of a responsible agency and flood hazard monitoring. In advance of a forecasted flood event, access points to the pedestrian overpass will be closed.
2. Structures will be designed to minimize overpass elements that occur below the 100-year flood elevation, such as the at-grade entry and exit points.
3. If elevators are incorporated into the final design, they will be installed in accordance with FEMA technical Bulletin 4, *Elevator Installation for Buildings Located in Special Flood Hazard Areas* in accordance with the National Flood Insurance Program.

#### 5.1.5 Air Quality Mitigation

Numerous controls are proposed for minimizing short-term impacts to air quality from fugitive dust and other pollutant emissions. The following mitigation measures have been identified for reducing the length of time that soils are exposed, off-site tracking, and vehicle and equipment emissions:

1. Construction will be properly phased to minimize the length of time that soils are exposed before final materials are placed and landscaping is completed.
2. Exposed earth will be stabilized with grass, pavement, or other cover as early as possible.
3. Water or wetting agents will be used on exposed soil or gravel areas.
4. Stockpiled material will be covered, shielded, or stabilized as necessary.
5. Periodic sweeping of the construction site will be performed.
6. Truck tires and equipment leaving the construction site will be periodically cleaned.
7. Portable generators, on-site machinery, and vehicles will be properly maintained.
8. Consideration will be given to using construction equipment with air pollution control devices and/or use of "clean" fuels including ultra-low sulfur diesel fuel (15 ppm sulfur), compressed natural gas or emulsified fuels (e.g., Purinox, approved by the California Air Resources Board).
9. Anti-idling regulations will be followed.

#### 5.1.6 Solid Waste/Demolition Waste Mitigation

Operation of the pedestrian overpass will not generate, use, or store hazardous wastes, hazardous materials, or chemical or petroleum products. In general, instituting the use of best management practices for future operations will serve to mitigate negative impacts.

Major excavation is not an element of this project. Any material requiring excavation will be reused on site where appropriate.

Disposal of demolition debris and soils will proceed in accordance with pertinent local, state, and federal regulations.

#### 5.1.7 Construction-Related Mitigation

The following measures will be taken to mitigate potential short-term, localized construction-related impacts:

1. Potential construction-related water quality and runoff impacts will be mitigated through the proposed stormwater management plan and erosion control plan. Construction-related erosion controls will be designed and installed in accordance with The Connecticut Council on Soil and Water Conservation *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* to protect nearby wetlands and watercourses.
2. Provisions for safety and security at the construction site will be reflected in the project specifications. Provisions for fencing, lighting, and other safety controls will be included in the project design.

## 6.0 CONSULTATION AND COORDINATION

### 6.1 Scoping

Numerous local, regional, and state entities have been consulted during the preparation of the subject EIE. A scoping notice was published in the *Environmental Monitor* on June 4, 2013. A copy of that notice is included in Appendix A. A public scoping meeting was held on July 8, 2013 to present the project to the general public and allow for comments. Local newspaper coverage has documented the project.

Agency comments were received from the Connecticut Department of Public Health and the Connecticut DEEP. A copy of the comment letters is included herein as Appendix B. A summary of these comments follows:

Connecticut Department of Public Health – In a letter dated July 18, 2013, the Department of Public Health indicated that it had reviewed the scoping notice for the U.S. National Coast Guard Museum Pedestrian Overpass project. Since the project is not located within a public drinking water supply source area, the Drinking Water Section had no comments. No response was received from any other section within the Department of Public Health.

Connecticut Department of Energy & Environmental Protection – In an interagency memorandum, DEEP commented on the proposed project. Specifically, the following topics were discussed:

- State policy regarding floodplain development
- Coastal management policies
- Stormwater management policies
- Federally listed endangered or threatened species and species listed by the state

General Public – Comments were received from various entities and the general public. A copy of each of the comment letters received as a result of the scoping notice is included herein as Appendix B. A summary of the nature of these comments is as follows:

- Historical preservation and aesthetics, particularly with regard to Union Station
- Public safety and pedestrian movement
- Traffic impacts (vehicular, rail, and marine)
- Potential relocation impacts
- Noise, air, and water pollution
- Economic impacts
- Energy impact analysis
- Regulatory impacts
- Ensuring a holistic approach is used in the evaluation
- Pedestrian overpass design, maintenance, and operation
- Implementation of elevators, escalators, and stairs or a combination thereof
- Community involvement in the planning process

All scoping comments have been evaluated and incorporated into the analysis and proposed action as required under CEPA.

## 6.2 Consultation and Coordination with Agencies/Organizations

General presentations have been made to the City of New London and have included various stakeholders as well as members of the public. Coordination meetings have taken place, primarily attended by DECD and its consultants. Other individuals and agencies have been routinely invited to these meetings for pertinent discussion topics. Table 6-1 provides a summary of consultation meetings that have been held.

**TABLE 6-1  
Summary of Project Meetings**

<i>Meeting Date</i>	<i>Location</i>	<i>Principal Purpose</i>	<i>Overview of Representation</i>
07/08/2013	City Hall – New London	Public Scoping	DECD, Office of Military Affairs, Payette
10/18/2013	DECD Offices – Hartford	Project Meeting	DECD, MMI, Various Stakeholders
03/18/2014	State Pier Admin Office - New London	Project Meeting	DECD, MMI, Various Stakeholders

DECD = Department of Economic and Community Development  
MMI = Milone & MacBroom, Inc.

## 6.3 Public Review

Formal notice of the existence of the EIE has been published in the *New London Day* and in the *Environmental Monitor*. A period of no less than 45 days will be provided for notice, distribution, and review of the EIE by any interested parties. Comments will be reviewed; additional environmental study and analysis will be performed, if warranted; and the evaluation will be amended as appropriate.

Upon completion of the 45-day public comment period, the sponsoring state agency (in this case DECD) must forward the following information to the OPM for determination of the adequacy of the evaluation: (1) all public notice documentation; (2) a brief summary of the public hearing, if one is held; (3) comments received from all interested parties; (4) the agency decision relative to proceeding with the proposed action; and (5) a discussion of the intentions for initiation of actions for minimizing impacts. This constitutes the Record of Decision (final EIE document and the measures for mitigation identified therein).

The CEPA process concludes with the review of the EIE and Record of Decision by OPM and its determination of whether or not regulatory requirements have been satisfied. The final EIE is the basis for the design and implementation of the project.



## 7.0 DOCUMENT PREPARERS

The following individuals, agencies, and organizations have contributed to this document.

*Sponsoring Agency:* Connecticut Department of Economic and Community Development  
505 Hudson Street  
Hartford, Connecticut 06106

*Primary Author:* Milone & MacBroom, Inc.  
99 Realty Drive  
Cheshire, Connecticut 06410

A brief description of authors and contributors follows.

The primary author of this Environmental Impact Evaluation is the consulting firm of Milone & MacBroom, Inc., a professional consulting firm comprised of engineers, planners, environmental scientists, landscape architects, and surveyors. A brief description and list of Milone & MacBroom, Inc. staff involved with the preparation of this document follows.

*Jeanine Armstrong Gouin, P.E., Vice President – Project Manager* – Ms. Gouin served as the project manager, contributor, and editor of this EIE. Ms. Gouin holds a Bachelor of Science degree in civil engineering and is a professional engineer licensed to practice in the State of Connecticut. Ms. Gouin's technical background has focused on water resources, water supply, environmental and ecological resources, and regulatory permitting.

*Maryellen Edwards, Environmental Scientist* – Ms. Edwards served as the primary investigator and principal contributor to this EIE. Ms. Edwards holds a Bachelor of Science degree in Environmental Science and Policy from the University of South Florida. Her technical background has focused on environmental permitting, environmental compliance, and wetland science.

*David Sullivan, P.E., Senior Transportation Engineer* – Mr. Sullivan has led the EIE team's efforts on traffic and parking assessment. He holds a Bachelor of Science degree in civil engineering. Mr. Sullivan's technical background has focused on traffic impact analysis, mitigation, and permitting.

*Neil Olinski, PTP, Transportation Planner II* – Mr. Olinski provided technical expertise in the area of traffic and parking assessment. He holds a Bachelor of Science degree in Environmental Design – Urban Studies from the University of Massachusetts.

*Alexandra Church, AICP, Planner II* – Ms. Church contributed to the analysis of historical and cultural resources. She holds a Bachelor of Arts degree in Art History from

Bard College and a Master of Science degree in Historic Preservation from the University of Pennsylvania.

Jeremy Wilcox, Environmental Analyst – Mr. Wilcox provided graphic and technical support. Mr. Wilcox holds a Bachelor of Science degree in Environmental Earth Science from Eastern Connecticut State University and a Master of Science in Natural Resources and the Environment from the University of Connecticut.

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**APPENDIX A**  
**Scoping Notice**



# COUNCIL ON ENVIRONMENTAL QUALITY

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Susan D. Merrow  
Chair

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## Monitor Archives



July 2, 2013

### Scoping Notices

**1. REVISED!** U.S. National Coast Guard Museum Pedestrian Overpass Project, New London, with date for public scoping meeting.

### Post-Scoping Notices: Environmental Impact Evaluation Not Required

No Post Scoping Notice has been submitted for publication in this edition.

### Environmental Impact Evaluations

No Environmental Impact Evaluation has been submitted for publication in this edition.

### State Land Transfers

No State Land Transfer Notice has been submitted for publication in this edition.

The next edition of the Environmental Monitor will be published on **July 16, 2013.**

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## Scoping Notices

"Scoping" is for projects in the earliest stages of planning. At the scoping stage, detailed information on a project's design, alternatives, and environmental impacts does not yet exist. Sponsoring agencies are asking for comments from other agencies and from the public as to the scope of alternatives and environmental impacts that should be considered for further study. Send your comments to the contact person listed for the project by the date indicated.

The following Scoping Notice has been submitted for review and comment.

### 1. Notice of Scoping for the U.S. National Coast Guard Museum Pedestrian Overpass Project

**Municipality where proposed project might be located:** New London

**Address of Possible Project Location:** Waterfront Park, New London, CT

**Project Description:** The State of Connecticut has committed to provide financial assistance for the construction of a pedestrian bridge overpass that will be integral to the success of the U.S. National Coast Guard Museum Project, access to the site, and overall improvement to New London's regional intermodal transportation center. State funds may also be used for ancillary work associated with the project, including property purchases, feasibility studies, traffic redesigns and other necessary project components.

The pedestrian overpass will provide a safe handicapped accessible connection between the Ferry Terminal and Museum on the waterfront and public parking garage located to the west across the railroad tracks. It will be fully enclosed and have three access points: 1) adjacent to the Union Station; 2) on the platform of

the north-bound passenger track; and 3) between the Museum and Ferry Terminal. The present rail crossing situation is less than satisfactory. The overpass will be enclosed and protected from the weather. The three access points will each have stairs and an elevator. The overpass will be ADA compliant and, in addition to serving the Museum, the Ferry Terminal, the waterfront Promenade, the recreational boating docks and the City Pier, it will provide AMTRAK with safe access to trains traveling in both directions.

**Project Map:** [Click here to view a map of the project area.](#)

**Written comments from the public are welcomed and will be accepted until the close of business on: July 18, 2013.**

**Written comments should be sent to:**

**Name:** Mark Hood  
**Agency:** Department of Economic and Community Development  
**Address:** 505 Hudson Street  
 Hartford, CT 06106  
**Fax:** 860-270-8157  
**E-Mail:** [mark.hood@ct.gov](mailto:mark.hood@ct.gov)

**There will be a Public Scoping Meeting for this project at:**

**DATE:** July 8, 2013

**TIME:** 5:00 pm

**PLACE:** New London City Hall, Council Chambers, 181 State Street, New London, CT 06320

**If you have questions about the public meeting, or other questions about the scoping for this project, contact:**

**Name:** Mark Hood  
**Agency:** Department of Economic and Community Development  
**Address:** 505 Hudson Street  
 Hartford, CT 06106  
**Phone:** 860-270-8089  
**Fax:** 860-270-8157  
**E-Mail:** [mark.hood@ct.gov](mailto:mark.hood@ct.gov)

## Post-Scoping Notices: Environmental Impact Evaluation Not Required

This category is required by the October 2010 revision of the [Generic Environmental Classification Document](#) for State Agencies. A notice is published here if the sponsoring agency, after publication of a scoping notice and consideration of comments received, has determined that an Environmental Impact Evaluation (EIE) does not need to be prepared for the proposed project.

**No Post-Scoping Notice has been submitted for publication in this edition.**

## EIE Notices

After Scoping, an agency that wishes to undertake an action that could significantly affect the environment must produce, for public review and comment, a detailed written evaluation of the expected environmental impacts. This is called an [Environmental Impact Evaluation](#) (EIE).

**No EIE has been submitted for publication in this edition.**

## State Land Transfer Notices

Connecticut General Statutes [Section 4b-47](#) requires public notice of most proposed sales and transfers of state-owned lands. The public has an opportunity to comment on any such proposed transfer. Each notice includes an address where comments should be sent. [Read more about the five-step process...](#)

**No State Land Transfer Notice has been submitted for publication in this edition.**

**APPENDIX B**  
**Agency and Public Scoping Comments**



## COMMENT FORM

U.S. National Coast Guard Museum Pedestrian Overpass Project, New London, CT  
Public Scoping Meeting

In Accordance with the Connecticut Environmental Policy Act (CEPA)  
State of Connecticut  
Department of Economic & Community Development  
June 8, 2013

Name: Frank McLaughlin  
Address: 18 Starr Street, New London, CT 06320 phone:860-961-7746

Comment:

I believe the bridge should connect to the parking garage and the train station.  
Must have escalators, as well as elevators for handicapped and stairs.

Tunnel is a viable option but would not connect to garage. Tunnel would not require as many steps, might avoid need for escalator and elevator...just stairs and ramps.

Mark Hood  
Department of Economic and Community Development  
505 Hudson Street  
Hartford, CT 06106  
Email: [mark.hood@ct.gov](mailto:mark.hood@ct.gov)  
960-270-8089

Written comments will be accepted until July 18, 2013

## COMMENT FORM

U.S. National Coast Guard Museum Pedestrian Overpass Project, New London, CT  
Public Scoping Meeting

In Accordance with the Connecticut Environmental Policy Act (CEPA)  
State of Connecticut  
Department of Economic & Community Development  
June 8, 2013

Name: Charlotte Hennegan

Address: Thames River Greenery - 70 State Street, New London, CT

Comment:

In regards to a comment concerning the overpass project, I would like to quote from a book entitled "How To Turn A Place Around." (A handbook for creating successful public spaces and written by the Project For Public Spaces.)

" People provide perspective and valuable insights into how an area functions; they have a unique understanding of the issues that are important. The sooner the community becomes involved in the planning process the better - ideally before any planning has been done. And people should be encouraged to stay involved throughout the improvement effort so that they become owners or stewards of the place as it evolves."

Mark Hood  
Department of Economic and Community Development  
505 Hudson Street  
Hartford, CT 06106  
Email: [mark.hood@ct.gov](mailto:mark.hood@ct.gov)  
960-270-8089

Written comments will be accepted until July 18, 2013

**COMMENT FORM**  
U.S. National Coast Guard Museum Pedestrian Overpass Project, New London, CT  
Public Scoping Meeting

In Accordance with the Connecticut Environmental Policy Act (CEPA)  
State of Connecticut  
Department of Economic & Community Development  
June 8, 2013

Name: Sandra Kersten Chalk, New London Landmarks  
Address: 49 Washington Street, New London, CT  
[Sandy@newlondonlandmarks.org](mailto:Sandy@newlondonlandmarks.org) 860-442-0003

Comment:

**THE BRIDGE**

A bridge provides a connection or transition between two entities separated by geography, language, culture or other divides. The Bridge in question between New London's Water Street and the Thames River will need to accommodate an extensive variety of connections. The museum will be an important addition to New London's architectural and cultural traditions. The bridge will add beauty and excitement to the city's historic transportation center. An eclectic mix of historic and contemporary architecture can create a unique entry to the city that will appeal to a wide variety of cultural and entertainment interests.

While much can be made of late passengers unable to cross the tracks for northbound trains, a late passenger will still need to make the connection up-and-over the tracks, and trains notoriously do not wait. While this is a consideration, it is not really a critical piece of the connection goals. Future increases in rail use, the Central Corridor Line and Shore Line East, are very likely to increase use of the bridge and be more critical to its purpose.

New London Landmarks is especially concerned with Henry Hobson Richardson's Union Station and our focus begins there:

**UNION STATION**

Of great concern is the protection and safety of this 125-year-old historic building during all construction phases of the bridge/museum/ferry complex. Long-term use, maintenance and security of the bridge and buildings must be addressed as part of the bridge planning process.

Of course we are also concerned about the visual and architectural relationship between the bridge and the station, but thoughtful design planning for the entire museum/ferry/bridge/station complex should be able to resolve those issues and many interests will be involved in this decision-making. New London Landmarks assumes there will be additional meetings on this topic and we would like to be informed, and/or consulted on design/preservation issues.

**UNION STATION PROPERTY**

- x The historic brick building, currently used as a bus station, will presumably be demolished to make way for an entrance to the bridge. This is another preservation issue to be addressed at an appropriate time.
- x The parking and pedestrian area around the brick building, regularly used by bus and rail passengers, will be considerably altered during and after construction and could become unavailable for this use: new design plans should consider how this will affect current use, especially for rail passengers pick-up and departure.

Currently there is a major pedestrian crosswalk from the Parade/garage area to Union Station property on the "riverside" of Water Street and on to the SEAT bus parking/pick-up area. Construction of the bridge and eventual entrance to the bridge will affect uses of this area. Is this part of your planning and design considerations? If not, who will be responsible for decisions and uses of this area?

The bridge will be the primary (perhaps only) entrance to the proposed Coast Guard Museum and to the Block Island Express Ferry terminal which is the next area we wish to address.

#### U.S. COAST GUARD MUSEUM

What is a reasonable estimate on the number of people who will attend the museum on a typical summer day? This is a quantitative issue which needs to be explored. The number of ferry passengers during peak summer days could number 1,000 or more each way. Estimates of museum visitors could be 1,500 per day. [Note: total Mystic Seaport attendance last year was about 255,000. Of that number there were 17,000 school students and 14,000 tour bus travel groups.] We recommend development of realistic ranges of traffic estimates for numbers of people using the bridge, stairways, elevators, etc. when the museum opens and into future visitor estimates. How wide will the passageways need to be? How large the elevators? How high the steps up and down from street level to the entrance to the Museum and Terminal? All of these questions will affect the architectural relationship of the bridge to Union Station.

With those numbers in mind, access to the bridge becomes the question. All parking will be on the other side of Water Street. All pedestrians will need to cross Water Street from the Parade Plaza and the garage or by coming down State Street to Water Street and walking past Union Station. Tour and school buses will need drop-off and parking areas. The bridge will be the access point for museum visitors, Block Island Ferry passengers and many train passengers. The city of New London needs to be prepared to accommodate many more people than currently visit the city. Parking and access for cars and tour busses, with the passengers they contain, directly relates to use of the bridge.

#### MAINTENANCE AND SECURITY

These are issues of great concern to New Londoners. The bridge will get hard use from the expected number of pedestrians, some with bikes, baby carriages, suit cases and wheel chairs. The design and materials need to be first quality, easy to maintain and replace when necessary (Floors will need to be durable and of a material that will not slip when wet due to rain or snow. Also easily cleanable). Glass walls and windows need extensive maintenance. Light, heat, cooling, fresh air are essential environmental ingredients. The safety of all pedestrians, at all times, in all weather, is a significant obligation. Responsibility must be clearly defined.

Mark Hood  
Department of Economic and Community Development  
505 Hudson Street  
Hartford, CT 06106  
Email: [mark.hood@ct.gov](mailto:mark.hood@ct.gov)  
960-270-8089

Written comments will be accepted until July 18, 2013

**ROBERT FROMER**  
*EJD, MSEE, P.C., P.E., R.E.P.*

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P. O. Box 71, Windsor, Connecticut 06095-2205  
E-mail: saintrobert@comcast.net

July 2, 2013

**SENT AS AN E-MAIL ATTACHMENT TO: MARK.HOOD @CT.GOV**

Mr. Mark Hood  
Department of Economic and Community Development  
State of Connecticut  
505 Hudson Street  
Hartford, CT 06106

**Re: Comments on scoping for the U.S. National Coast Guard Museum  
Pedestrian Overpass Project in New London, Connecticut**

Dear Mr. Hood:

**I. Project Description**

According to the public notice appearing in the June 18, 2013 edition of the State of Connecticut Environmental Monitor:

The State of Connecticut has committed to provide financial assistance for the construction of a pedestrian bridge overpass that will be integral to the success of the U.S. National Coast Guard Museum Project, access to the site, and overall improvement to New London's regional intermodal transportation center. State funds may also be used for ancillary work associated with the project, including property purchases, feasibility studies, traffic redesigns and other necessary project components.

The pedestrian overpass will provide a safe handicapped accessible connection between the Ferry Terminal and Museum on the waterfront and public parking garage located to the west across the railroad tracks. It will be fully enclosed and have three access points: 1) adjacent to the Union Station; 2) on the platform of the north-bound passenger track; and 3) between the Museum and Ferry Terminal. The present rail crossing situation is less than satisfactory. The overpass will be enclosed and protected from the weather. The three access points will each have stairs and an elevator. The overpass will be ADA compliant and, in addition to serving the Museum, the Ferry Terminal, the waterfront Promenade, the recreational boating docks and the City Pier, it will provide AMTRAK with safe access to trains traveling in both directions.

Address of Possible Project Location: Waterfront Park, New London

## II. Applicable Law

Section 22a-1b(c) of the Connecticut General Statutes ("G.S.") requires that:

Each state department, institution or agency responsible for the primary recommendation or initiation of actions which may significantly affect the environment shall in the case of each such proposed action make a detailed written evaluation of its environmental impact before deciding whether to undertake or approve such action. All such environmental impact evaluations shall be detailed statements setting forth the following:

1. [T]he environmental consequences of the proposed action, including cumulative, direct and indirect effects which might result during and subsequent to the proposed action. Section 22a-1b(c)(2); and
2. [T]he effect of the proposed action on the use and conservation of energy resources. Section 22a-1b(c)(7).

Section 16a-35k, G.S. established the following state energy policy:

[T]he General Assembly declares that it is the policy of the state of Connecticut to (1) conserve energy resources by avoiding unnecessary and wasteful consumption; (2) consume energy resources in the most efficient manner feasible

...

(8) maintain planning and preparedness capabilities necessary to deal effectively with future energy supply interruptions; and

(9) when available energy alternatives are equivalent, give preference for capacity additions first to conservation and load management. The state shall seek all possible ways to implement this policy through public education and cooperative efforts involving the federal government, regional organizations, municipal governments, other public and private organizations and concerned individuals, using all practical means and measures, including financial and technical assistance, in a manner calculated to promote the general welfare by creating and maintaining conditions under which energy can be utilized effectively and efficiently. The General Assembly further declares that it is the continuing responsibility of the state to use all means consistent with other essential considerations of state policy to improve and coordinate the plans, functions, programs and resources of the state to attain the objectives stated herein without harm to the environment, risk to health or safety or other undesirable or unintended consequences, to preserve wherever possible a society which supports a diversity and variety of individual choice, to achieve a balance between population and resource use which will permit the maintenance of adequate living standards and a sharing of life's amenities among all citizens, and to enhance the utilization of

renewable resources so that the availability of nonrenewable resources can be extended to future generations. The General Assembly declares that the energy policy is essential to the preservation and enhancement of the health, safety and general welfare of the people of the state and that its implementation therefore constitutes a significant and valid public purpose for all state actions. Section 16a-35k, G.S.

"[T]he purpose of the [National and Connecticut] Environmental Policy Act[s] is to ensure systematic consideration of environmental risks at the early stages of planning before the state commits its resources to the particular use of a site." Westport v. State, 204 Conn. 212, 220 (1987). "An environmental impact evaluation shall be prepared as close as possible to the time an agency proposes an action. The evaluation shall be prepared early enough so that it can practically serve as an important contribution to the decision-making process and shall not be used to rationalize or justify decisions already made." Id.

The National Environmental Policy Act ("NEPA") and the Connecticut Environmental Policy Act ("CEPA") "require public agencies to undertake programmatic pursuit of environmental assessments of their actions so as to "conserve, improve and protect [Connecticut's] natural resources and environment and to control air, land and water pollution in order to enhance the health, safety and welfare of the people of the state." (Internal quotation marks omitted.) Id. at 221.

"Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses." (Emphasis added.) 40 Code of Federal Regulations 1502.1. "An environmental impact statement is more than a disclosure document." Id. "It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions." Id.

My comments will show that the content of the EA/EIE jointly prepared by the Federal Railway Administration ("FRA") and Connecticut Department of Transportation ("DOT") is contrary to the planning purposes embodied in NEPA/CEPA and Westport. Both NEPA and CEPA require facts in the EA/EIE to form the basis for system design and construction.

### III. Comments

The Environmental Impact Assessment/Evaluation should consider and address the following comments:

**DECD Claim #1:** The State of Connecticut has committed to provide financial assistance for the construction of a pedestrian bridge overpass that will be integral to the success of the U.S. National Coast Guard Museum Project, access to the site, and overall improvement to New London's regional intermodal transportation center.

**Fromer Comment #1:** The title of the project is the: U.S. National Coast Guard Museum Pedestrian Overpass Project. Yet, the description pronounces that its purpose is not limited to the Museum. A new title is warranted better describing the purpose of the project. For

example, the following title is more descriptive and encompassing: The Pedestrian Overpass for the Regional Intermodal Transportation Center (RITC).

**DECD Claim #2:** {P]edestrian bridge overpass that will be integral to the success of the U.S. National Coast Guard Museum Project, access to the site, and overall improvement to New London's regional intermodal transportation center.

**Fromer Comment #2:** Although it describes the purpose, the description does not provide a fact-based need for the project. The description claims a desire for the project and the state's predetermination to fund the project as the preferred alternative, which is contrary to and defeats the very purposes of CEPA as a planning function. Scoping must establish the criteria/standards for determining that the pedestrian overpass is the preferred alternative for the "overall improvement to New London's regional intermodal transportation center" instead of the recommended preferable alternatives in the RITC study documented in final reports found on the Southeastern Council of Governments website. Instead, the scoping notice establishes that the overpass is the preferential alternative.

**DECD Claim #3:** State funds may also be used for ancillary work associated with the project, including property purchases, feasibility studies, traffic redesigns and other necessary project components.

**Fromer Comment #3: (A)** The state should, also, devote funds for analysis of projected energies expended and Greenhouse Gases ("GHGs") produced by the project and ancillary work as implicated in section 22a-1b(c)(7), G.S., which requires consideration of the "use and conservation of energy resources" and section 16a-35k, G.S. establishing energy policy for the state. See, for example, CTDOT's Greenhouse Gas Emission Analysis, dated March 2, 2009 described in the *Environmental Assessment/Environmental Impact Evaluation for the New Haven-Hartford- Springfield Rail Program* based on CTDOT's *Travel Demand Model*.

**B)** When evaluating the overpass and ancillary work tasks, DECD should perform a life cycle energy analysis for the overpass and each of the RITC options for the purpose of selecting the alternative requiring the least energy expenditure and producing the least GHGs. Such analysis should include calculations of all embodied energy requirements used in construction materials, fabrication and manufacturing of components, maintenance and repair of the facility and ancillary work during its useful life, viz. cradle-to-grave. The analysis should, also, include the total fuel cycle energy required over the projected useful life of the facility. The boundary for both the energy calculations of the fuel cycle and materials for the facility construction and maintenance shall both be at the point of primary material extraction and include the energy consumed through the entire supply chain to final, but not be limited to, such subsequent steps as transportation, refinement and energy for delivery to the end consumer. For purposes of this paragraph, "facility energy" means the heat energy delivered by the facility contained in a fuel minus the life cycle energy used to produce the facility. "Fuel energy" means the heat energy contained in a fuel minus the energy used to extract the fuel from the environment, refine it to a socially useful state and deliver it to consumers, and "embodied energy" means the total energy used to build and maintain a process, expressed in calorie equivalents of one type of energy.



Consider the life cycle steps requiring energy at each step to produce a simple pencil.<sup>1</sup> Also, attached is a manuscript analyzing and assessing the *End of Fossil Fuels and Per Capita Oil* authored by Mr. John Howe.

## V. CONCLUSION

The EA/EIE is incomplete and inadequate to support the numerous presumptive conclusions.

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<sup>1</sup> The standard pencil begins when a cedar is cut down. Ropes and gear tug it onto the bed of a truck or a rail car.

Think of all the numberless people and skills involved in mining ore to produce steel and refine the steel into saws, axes and motors.

Think of all the people who grow hemp, then transform it, through various stages, into a strong rope.

Think of the untold thousands of people who produce the coffee the loggers drink!

The logs are shipped to a mill and cut into slats. The slats are kiln-dried, tinted, waxed, then, kiln-dried again.

How many skills were needed to produce the tint and the kilns. What about electric power? What about the belts, motors and other parts at the mill?

The pencil slats are shipped to a factory. A complex machine cuts grooves into each. A second machine lays lead into every other slat. Glue is applied. Two slats are sealed together as one, then, cut into lengths that form pencils.

The lead alone is complex; it's not really lead. To produce it, graphite is mined in Ceylon. The graphite is, packed and shipped, then mixed with clay from Mississippi. It is treated with wetting 'agents — such as sulfonated tallow, which is formed when animal fats chemically react with sulfuric acid.

The pencil receives six coats of lacquer. Lacquer has numerous ingredients, including castor oil. Think of all the chemists needed to create the paint — think of all the castor bean growers needed to produce, refine and ship the oil.

The brass end that holds the eraser in place is a marvel. Miners need to first extract zinc and copper from the earth. Experts transform those materials into sheet brass, which is then cut, stamped and affixed to the pencil.

That brings us to the eraser. It is made from "factice," a rubber-like product that is produced by rapeseed oil from the Dutch East Indies reacting with sulfur chloride.

To be sure, an awe-inspiring amount of work goes into producing a pencil. Millions of people collaborate to produce it — millions ply their unique trades and skills — yet they have no idea they are collaborating.

Each is merely changing his small piece of know-how for the money he needs to buy the goods and services he wants.

More amazing is this: No one person is capable of making a pencil. Not even the president of the pencil company.

No one person could possibly manage the millions of people — and the millions of decisions they make — who produce the ingredients that become a pencil.

Despite the absence of a mastermind, billions of pencils are made every year. They're produced with such humdrum efficiency that every one of us takes pencils for granted.

It is a folly for any, man, or group of men, to think of producing something as incredibly complex as a pencil. How much harder must it be to produce a car — one that consumers will want to buy, anyhow?

Coast Guard Museum Pedestrian Overpass  
Comments of Robert Fromer  
July 2, 2013  
Page - 6 -

Cordially,

A handwritten signature in black ink that reads "Robert Fromer". The signature is written in a cursive style with a large, prominent "R" and "F".

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Robert Fromer

Attachment: Howe, John, *The End of Fossil Fuels and Per Capita Oil*

**ROBERT FROMER**  
*EJD, MSEE, P.C., P.E., R.E.P.*

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P. O. Box 71, Windsor, Connecticut 06095-2205  
E-mail: saintrobert@comcast.net

July7, 2013

**SENT AS AN E-MAIL ATTACHMENT TO: MARK.HOOD @CT.GOV**

Mr. Mark Hood  
Department of Economic and Community Development  
State of Connecticut  
505 Hudson Street  
Hartford, CT 06106

**Re: Additional comments on scoping for the U.S. National Coast Guard Museum  
Pedestrian Overpass Project in New London, Connecticut**

Dear Mr. Hood:

In your e-mail to me dated July 3, 2013, you stated the following:

Thank you for your comments regarding the U.S. National Coast Guard Museum Pedestrian Overpass project in New London. The Department of Economic and Community Development will take into consideration the comments received and shall prepare a written memorandum that documents its findings and subsequent determination of the proposed action's environmental significance. The memorandum shall be posted on the Connecticut Council on Environmental Quality website. . . .

The purpose of scoping is to determine the significance of environmental impacts based on objective and subjective assessments of the impacts. Unless DECD is willing to engage in energy analysis, it is highly problematical that a reasoned and rational determination can be made as to the significance of impacts for the overpass. Without such analysis, the determination is fatuous and feckless.

Also, since the Governor has made a political predetermination, without benefit and concern for preventive planning, to fund and support the overpass and the Coast Guard Museum, I strongly believe that Catherine Smith, Commissioner of DECD, is in lockstep with the Governor's position and will declare the insignificance of the environmental impacts. And, I am willing to bet that such determination is 100% predictable.

Very truly yours,

*Robert Fromer*

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Robert Fromer

# Unexpected surge of New London visitors leaves some scrambling for a parking place

By Kathleen Edgecomb

Publication: theday.com

Published 07/05/2013 12:00 AM

Updated 07/05/2013 11:58 PM

## As Fourth of July becomes long holiday weekend, city garages are filled to capacity

**New London** — When the Water Street Parking Garage reached capacity Friday, employees were forced to redirect anxious vacationers looking to catch a train or a ferry to Block Island and Long Island.

"Go to the light, take a left, go up two blocks, there's a hotel on the right and another parking garage on the left," Kris Dunning repeated over and over again as cars tried to turn into the city-owned Water Street garage.

By 10 a.m. Friday, the 920 spaces in the garage and the 30 spaces in front were filled.

"Follow that car," he said, waving an orange baton as he tried to keep traffic moving. He was sending overflow to the Cornish Parking Garage on Governor Winthrop Boulevard, a few blocks away.

A few minutes later, the same car returned, with the driver complaining he couldn't find the garage.

"I know it's frustrating for them," Dunning said, after he repeated the directions. "But it's OK. They're not familiar with the city. It can get confusing."

The Cornish garage, with 450 spaces, was filled by noon.

Except for the Saturday of the city's annual summer Sailfest, no one remembers the two parking garages both being filled at the same time.

"This is a good problem to have," said Joseph Celli, manager of the Water Street garage.

"July 4th is always a busy day. But we've never, ever been close to this capacity."

Workers at the Governor Winthrop Boulevard garage, where it costs \$5 per day, cash only, to park, were stuffing \$5 bills into their pockets as they tried to keep up with the cars queuing up to get in.

"We've never been filled," said William Cornish, who owns the garage.

For a time, the sidewalks on Governor Winthrop Boulevard were filled with people toting beach chairs and beach bags, heading for the ferry terminals. Some, pulling suitcases and carrying garment bags, were going to the train station.

Irene Roman of Guilford was directing her family to hurry as they parked an oversized pick-up truck on the grass outside the Cornish Garage.

Roman was with her daughter, her son and his new bride. They were meeting her son's new in-laws, who are from Chicago, for a day on Block Island.

Roman joked that the last time she saw New London so busy "it was 100 years ago."

Judy Wawrzynowicz of Lisbon, who was taking a friend visiting from Florida to Block Island for the day to meet up with relatives, was second-guessing her plans after driving around the block looking.

"My sister thought this was a good idea," Wawrzynowicz said. But she and Helen Bell, who lives near Jupiter, Fla., appeared to be in vacation mode and were taking the parking dilemma in stride.

"We've got time," the women said, grateful they thought to leave Lisbon with plenty of time to take the 11:50 a.m. ferry.

Celli, of the Water Street garage, said in the past few years on the July 4 holiday, with the economy sagging, many people have taken day trips. This year, many did not return Thursday night, as he had expected.

"This may be a reflection of people's feelings on the economy," he said. "What was a one-day excursion has turned into a four-day weekend."

The municipal parking garage takes in about \$500,000 a year and spends about \$250,000 in operating expenses, Celli said. The rest is turned over to the city.

On the weekends, the garage also leases the surface parking lot next door.

"I guess this should be a celebratory thing," he said. "There's so much interest in coming to New London to see all we have to offer."

k.edgecomb@theday.com

# **Hurried vacationers scramble for downtown New London parking**

**By Kathleen Edgecomb**

Publication: theday.com

Published 07/05/2013 12:00 AM

Updated 07/05/2013 12:35 PM

New London — The nearly 1,000 spaces in the Water Street Parking Garage filled up quickly Friday morning, leaving those trying to get to the Block Island and Long Island ferries, circling the downtown area looking for parking.

A second garage on Gov. Winthrop Boulevard, with 450 spaces, was filled by noon.

Except for the Saturday of the city's annual summer Sailfest, no one remembers the two parking garages being filled.

"This is a good problem to have," Joseph Celli, who runs the Water Street garage, said Friday morning. "July 4 is always a busy day. But we've never even been close to this capacity."

Workers at the Gov. Winthrop garage, where it's \$5 per day, cash only, to park, were stuffing \$5 bills in their pockets as they tried to keep up with a line of anxious vacationers trying to hurry to catch their ferries.

"We've never been filled," said William Cornish, who owns the garage.

# COMMENT FORM

## U.S. National Coast Guard Museum Pedestrian Overpass Project, New London, CT Public Scoping Meeting

In accordance with the Connecticut Environmental Policy Act (CEPA)

State of Connecticut  
Department of Economic & Community Development

July 8, 2013

Name (optional): Barbara Sample

Address (optional): 424 Regent Ave

Other Contact Information (Email, telephone): \_\_\_\_\_

**Comment:**

If we get this bridge, which I'm not happy about, I suggest it only be open during museum hours. That won't make the Ferry service happy, but many of us don't care -

Please leave in Comment Folder or  
Mail or Fax to:

Mark Hood  
Department of Economic and Community Development  
505 Hudson Street  
Hartford, CT 06106  
Fax: (860) 270-8157  
Email: [mark.hood@ct.gov](mailto:mark.hood@ct.gov)  
Telephone: (860) 270-8089

Written comments will be accepted until July 18, 2013

## Hood, Mark

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**From:** Dorothy Galligan [dorothygalligan@gmail.com]  
**Sent:** Tuesday, July 09, 2013 7:36 AM  
**To:** Hood, Mark  
**Subject:** NO on New London pedestrian bridge

Dear Mr Hood,

In my opinion, the proposed pedestrian bridge would be unnecessary, unwanted, unsightly, costly for tax payers and another thing for New London to maintain.

Please, spend our money on more critical items.

Dorothy Galligan  
179 High St, Mystic, CT 06355



**ROBERT FROMER**  
*EJD, MSEE, P.C., P.E., R.E.P.*

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P. O. Box 71, Windsor, Connecticut 06095-2205  
E-mail: saintrobert@comcast.net

July 9, 2013

**SENT AS AN E-MAIL ATTACHMENT TO: MARK.HOOD @CT.GOV**

Mr. Mark Hood  
Department of Economic and Community Development  
State of Connecticut  
505 Hudson Street  
Hartford, CT 06106

**Re: Further comments on scoping for the U.S. National Coast Guard Museum  
Pedestrian Overpass Project in New London, Connecticut**

Dear Mr. Hood:

In today's Day newspaper article, which is attached, Mr. Bob Ross, Executive Director of the Connecticut Office of Military Affairs, which is coordinating all state departments for the proposed foot bridge, is quoted stating the following:

Ross said a meaningful discussion had to include plans for the proposed museum, the ferry terminal and access to the train station.

This statement provides a nexus to all the elements supporting the National Coast guard Museum. As a result, DECD should prepare scoping for the entire project including the Museum, not just the walkway. The environmental affects derived from the Museum and supporting facilities should receive holistic considerations instead of piecemeal review.

It appears that the state is deliberately limiting such considerations to thwart a thorough review of alternative locations for the Museum. Placing the Museum behind the railroad station is the equivalent of putting "two pounds of sausage in a one pound bag."

Further, DECD should examine the archival history of the City of New London in maintaining any public works projects. A perfect example is the parking garage on Governor Winthrop Boulevard formerly owned by the city. It was supported by wood columns for over two decades, and eventually sold because the city would not fund maintenance of the garage. There are many more examples.

Very truly yours,



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Robert Fromer

Attachment: *State seeks input on plan for bridge over train tracks in New London, the Day, July 9, 2013*

# State seeks input on plan for bridge over train tracks in New London

By Kathleen Edgecomb

Publication: The Day

Published 07/09/2013 12:00 AM

Updated 07/08/2013 11:55 PM

## Walkway would give improved access to Coast Guard museum

**New London** - If the state builds an enclosed pedestrian bridge across the railroad tracks to connect to the proposed National Coast Guard Museum, a proposed ferry terminal and Union Station, residents want to know where exactly it will be located, what it will look like and who's going to own it and maintain it.

On Monday the state Department of Economic and Community Development heard the concerns of several people during a "scoping" meeting Monday in City Hall.

"The state has learned, first get input as you go - that is what drives engineering and design," said Rob Ross, executive director of the state Office of Military Affairs, which is coordinating all state departments for the proposed foot bridge. "You people shape the project."

Ross said the state would build the walkway but the city would own it and be responsible for its maintenance and security. The walkway would not cross Water Street as previous proposals envisioned.

In April, the Coast Guard Museum Association announced it would build an \$80 million museum on the city's waterfront. The state pledged \$20 million to build the walkway and for other work associated with the project, including property purchases, feasibility studies and traffic redesigns.

Monday's meeting was about the proposed bridge, but Ross said a meaningful discussion had to include plans for the proposed museum, the ferry terminal and access to the train station.

Cross Sound Ferry and Union Station are also players in the project. A seasonal ferry terminal for Cross Sound Ferry is part of the overall museum project. The walkway also would allow train passengers better access to the northbound track at the station.

The glass walkway would get pedestrians over the railroad tracks to the museum's entrance and to the new ferry terminal. It would also provide access to Union Station. It would have three sets of steps and handicapped-accessible elevators.

Todd O'Donnell, co-owner of Union Station, a 19th century Henry Hobson Richardson structure, said the location is a difficult site but if the parties work together it could become a reality. He said the scoping process is an important first step.

He was one of a half dozen people who spoke at Monday's meeting. DECD is accepting written comments on the proposed walkway through July 18.

Barun Basu, a New London architect who helped restore Union Station, asked if it was possible to build a tunnel rather than a bridge. Others were concerned about the safety of pedestrians crossing Water Street and school children getting off buses to go to the museum.

Ross said all comments will be considered.

Architects for the project showed four possible locations for the bridge and said their preferred site would be located on Union Station property next to the bus terminal. The bridge would be built with three elevators and three stairwells, or possibly escalators, and be tall enough to cross above the electrical wires above the railroad tracks. The exact height has yet to be determined, according to Charles S. Klee of Payetta Architects, which is working with Gauchat Santos of Boston.

Union Station is an incredible asset for the city, Klee said after the meeting, and the walkway would be designed to complement it, not overpower it.

"It needs to sit next to the building (train station) sympathetically," he said. "It can't be more demanding. It has to sit there in a very well-behaved way and not overshadow the train station."

The proposed National Coast Guard Museum, which officials expect to draw hundreds of thousands visitors annually, will be a five-story, mostly glass building constructed above storm tide levels. It will jut out over the Thames River like the bow of a ship. It will have 26,000 square feet of exhibit space, 5,000 square feet of event space, a glass-roofed atrium and a gift shop, cafe and rooms for lectures and workshops.

The DECD, which is the lead agency for the proposed walkway, is required to hold a meeting on any project it might launch, such as a new building or new road. Other state agencies are also asked to comment on the project.

k.edgecomb@theday.com

**Hood, Mark**

---

**From:** Rod Frantz [rodfrantz@gmail.com]  
**Sent:** Wednesday, July 10, 2013 7:08 PM  
**To:** Hood, Mark; kip bergstrom; Bergstrom, Kip

Hi, Mark,

I work with Kip Bergstrom and had oversight of the four murals that were completed there last summer, one of which is located on the parking garage across the street from Union Station. I'd like an opportunity to introduce myself and see if there's some way for my office to contribute as the bridge project mentioned in the Day article moves forward. <http://www.theday.com/article/20130709/NWS01/307099919/1018>

Respectfully,

Rod

Rodgers Frantz

Director

CreateHereNow

A DECD Statewide Initiative

203-692-5269

## Hood, Mark

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**From:** russell49@cox.net  
**Sent:** Tuesday, July 16, 2013 3:42 PM  
**To:** Hood, Mark  
**Subject:** pedestrian walkway

Sir  
I would propose to handle multiple problems with one solution a walkway from the upper level of the existing parking garage accessed from the existing rebuilt stairs / elevator that crosses the street and tracks with further stairs/elevators on both sides of the tracks would help visitors to the trains ferries and the new proposed museum every thing could be seen from the parade so visitors wanting to cross water street would not be confused as they are now a starting and finishing points are easy to identify for giving directions

car vs pedestrians would be minimized as they are on different levels and air bridge could be glass enclosed for the view and for safety concerns crossing AMTRAK rails is eliminated

just and Idea that has a few merits  
I await others replies  
to see what other positive solution surface

thanks for listening

Rob Russell

401 742 8956

James D. Masterman  
Tel 617.310.6284  
Fax 617.279.8408  
mastermanj@gtlaw.com

July 17, 2013

**By Email and First Class Mail**

Mr. Mark Hood  
State of Connecticut  
Department of Economic and  
Community Development  
505 Hudson Street  
Hartford, CT 06106

**Re: Request for Scoping Determination  
CEPA Scoping Notice, June 4, 2013  
U.S. National Coast Guard Museum Pedestrian Overpass Project  
New London, Connecticut**

Dear Mr. Hood:

Union Station has been a part of New London for 125 years. The owner of Union Station, the New London Railroad Company LLC, looks forward to the day when the opening of the Coast Guard Museum Project contributes to the renewal of New London's waterfront as part of the city's bright future. However, the Museum Project will have a significant impact on Union Station and its surrounding area. An appropriate scope of environmental review to assess those impacts is the necessary first step in the permitting and approval process of what we hope will be a successful project. Therefore, this office represents the owner of Union Station which respectfully requests consideration of the following when deciding upon the appropriate scope of environmental review.

As such, this is a request pursuant to the Connecticut Environmental Policy Act ("CEPA"), Conn. Gen. Stats. §§ 22a-1 through 22a-1h, and its associated regulations, R.C.S.A. §§ 22a-1a-1 through 22a-1a-12, to have the State Department of Economic and Community Development ("DECD") issue a scoping determination of sufficient breadth to consider all direct, indirect and cumulative effects of the environmental impact of the proposed U.S. National Coast Guard Museum Pedestrian Overpass Project, New London.

**I. Facts**

Union Station serves as New London's train station for Amtrak's northeast corridor rail service and the State's Shore Line East Commuter Rail. More than 200,000 riders board and alight each year at Union Station, making it the 3<sup>rd</sup> highest Amtrak ridership in Connecticut behind New Haven and Stamford. Union Station is the eastern terminus for the Connecticut

Department of Transportation's Shore Line East ("SLE") commuter rail service with between 10 and 14 trains daily. Union Station also serves as a terminal for riders of both the Southeast Area Transit District ("SEAT"), where it is the most active stop of SEAT bus routes,<sup>1</sup> and for 35,000 Greyhound Bus passengers. Taxi traffic is heavy with passengers picked up and dropped off at all hours of the day.

At issue is the State's, in conjunction with the City, announced plans to build a pedestrian overpass, a covered footbridge, from the Union Station property over the railroad tracks to the waterfront (the "Footbridge Project"). The footbridge will serve as the primary link between downtown New London and its waterfront through which patrons will gain access to and egress from not only the planned United State Coast Guard (the "Museum") but also terminal serving the Cross Sound Ferry and all attractions on the harbor-side of the railroad tracks (collectively, the Museum, ferry terminal and Footbridge Project are referred to as the "Museum Project").

The Museum Project will be one of the most expensive and transformative in New London's history, certainly in this area of its waterfront. Preliminary estimates of the cost of the Museum are in a range of \$80 - \$90 million and that of the Footbridge Project, at approximately \$10 - \$20 million. Cost estimates for the Cross Sound Ferry's plans to construct a 500-passenger ferry terminal adjacent to the Museum are not available for this private project not available.

## **II. CEPA – Scope of Review**

CEPA requires DECD, the sponsoring agency, to conduct a public scoping process to determine the breadth of the environmental review of a proposed project and to consider public comments in that determination. An appropriate review is required to consider direct, indirect and cumulative effects of the proposed project. R.C.S.A. § 22a-1a-3. Direct effects are the project's primary environmental consequences. Indirect effects are the secondary consequences on local or regional social, economic or natural conditions or resources which could result from additional activities (associated investments and changed patterns of social and economic activities) induced or stimulated by the proposed action, both in the short and long terms. DECD must also consider cumulative impacts in its environmental review, which are the impacts on the environment which result from the incremental impact of the project when added to other past, present or reasonably foreseeable future actions or project to be undertaken. The environmental review of a proposed project, therefore, must be of sufficient scope to provide to the reviewing agencies, which includes the Council on Environmental Quality, the Department of Environmental Protection, the Commission on Culture and Tourism, and the Office of Policy Management, an adequate examination of all the issues presented by the new project and its related improvements and those reasonably contemplated.

Moreover, CEPA requires that the scope of review must necessarily encompass the impacts not just from the Footbridge Project, but also from the larger Museum Project, which

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<sup>1</sup> According to the 2010 Regional Intermodal Transportation Center ("RITC") study.



includes the proposed Museum and ferry terminal. The footbridge itself is an integral part of the overall development plan which can and should not be reviewed in isolation.<sup>2</sup> Impacts from the Museum and ferry terminal are within the statutory definitions of indirect and cumulative effects. R.C.S.A. § 22a-1a-3. A scope of review that does not include the construction and operation of the Museum and ferry terminal would make little sense. The Footbridge Project would not exist without the Museum and ferry terminal. A myopic scope that segments the Footbridge Project from the Museum and ferry terminal threatens to render the review meaningless.

The scope must also be of sufficient breadth to consider the consequences to be experienced by every person who will use Union Station during construction and once the Museum Project and all associated development is built. The impact of the proposed use of Union Station property will be severe. The Museum Project and related improvements will significantly increase the number and flow patterns of people entering onto and crossing over Union Station property resulting in a detrimental impact on the public safety, security and crowd control issues which are currently being managed adequately by the private owner.

Contributing to the difficulty in determining a proper scope is that many of the details, large and small, regarding the Footbridge Project itself and the Museum Project remain unknown. The design of the larger Museum Project's components (footbridge, Museum, ferry terminal) has not yet been fully realized. As of this date, only general plans, but not specific designs, have been made public. In fact, at the public scoping meeting on July 8, 2013, the architect retained to design each of the Museum Project's components indicated that the project was at the preliminary design stage, with much of the work yet to be completed. And though the State has indicated that it will spend \$20 million for construction of the footbridge, it includes "other necessary project components" in that estimate without additional detail. Connecticut Council on Environmental Quality, *Notice of Scoping for the U.S. National Coast Guard Museum Pedestrian Overpass Project*, Environmental Monitor (July 2, 2013).

### **III. Potential Environmental Impacts**

CEPA regulations specify several potential or actual consequences of a planned project that agencies must consider. The list of effects, which is not exhaustive, includes air, water and noise pollution, impacts to the water from runoff, alteration of a historic or cultural site or its surroundings, substantial aesthetic or visual effects, disruption of an established community, displacement or addition of substantial numbers of people, a substantial increase in congestion or energy usage, the creation of a hazard to human health or safety, and any other substantial impact on natural, cultural, recreational or scenic resources. R.C.S.A. § 22a-1a-3(a). All impacts outlined in CEPA and its regulations should be within the scope of review. These impacts and others are addressed below as they relate to the impact that the Museum Project will have on Union Station and its operations.

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<sup>2</sup> Indeed, a single architecture team has been retained to design the Museum, footbridge and ferry terminal.

#### A. Traffic Impacts

When completed, it is estimated that 1 million people will visit the Museum annually. During peak visitorship, Museum visitors alone may generate approximately 4,000 to 4,500 new auto trips per day to the local street network and require approximately 2,000 to 2,250 parking spaces.<sup>3</sup> The ferry terminal today services approximately 1.1 million passengers per year. The Cross Sound Ferry's two new high speed ferries, each with the potential to carry 500 passengers, may require an additional 125-175 parking spaces per ferry trip during the peak weekend periods. Four or five ferry runs over the course of a day could add demand for roughly 500-800 new parking spaces. Several large events, such as Sailfest, OpSail, and Schooner Week, bring significant numbers<sup>4</sup> of visitors to New London's waterfront. The waterfront is a permanent and temporary home to several ships that serve as tourist attractions, including the Mystic Whaler and the U.S. Coast Guard's Eagle.

The impact of increased vehicular, marine and pedestrian traffic and parking demand should be a part of the environmental review.

##### 1. Vehicular, Rail and Marine Traffic

As the project architects indicated at the public scoping meeting, the visitors are likely to use all modes of transportation to access the Museum and surrounding area. Buses load and unload at various points, including in front of Union Station and at the ferry terminal. School field trips often involve numerous buses loading and unloading at once. One public commenter indicated that local shuttle buses may serve as an option for transporting visitors and ferry patrons. Several ferry lines board and alight from the waterfront.

The environmental review should, therefore, report on the impacts that all forms of vehicular, rail and marine traffic, (e.g., taxi, bus, cars, boat, train, etc.) including the added volume, altered circulation patterns, access and egress, etc., will have on the existing operation of Union Station as a public transportation hub and the surrounding area's existing improvements and public infrastructure. This necessarily includes Union Station itself, nearby streets including Water Street and State Street, the New London Harbor area. A traffic management plan is required, at a minimum.

##### 2. Pedestrian Traffic

As is observable, Union Station handles many thousands of people daily. By adding the expected crowds from the new projects, the impact on existing pedestrian circulation and safety will be significant. As mentioned, up to a million people are expected to visit the new museum,

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<sup>3</sup> Traffic estimates are provided by VHB Inc., which the New London Railroad Company has retained in this matter.

<sup>4</sup> Sailfest attendance is typically 300,000 people over a weekend.

high-speed ferries carry up to 500 passengers each, hundreds of children on school field trips will arrive simultaneously. Bus and train usage is anticipated to increase as well.

The footbridge, Museum and ferry terminal must be able to accommodate the draw of new visitors in high volumes to the area and plan for the access to the footbridge on both sides of the rail with the consequent queuing likely to result. They also must be accessible to seniors and the disabled. The footbridge must be designed so as not impede train passengers' movement along the train platforms. Passenger bottlenecks can be dangerous when trains are passing the platforms.

An appropriate scope of environmental review should consider marshaling, preassembly, pedestrian accommodations, queuing, crowd control, and safety and security for all potential pedestrian routes. The review should include the potential pedestrian traffic resulting from the increased ridership on the trains, buses (Greyhound and SEAT), cars, boats and ferries, and the increased parking usage, automobile loading and unloading.

### 3. Other Traffic and Displacement Impacts

The downtown (westernmost) side of the footbridge will occupy an area that currently serves as the Greyhound bus station, taxi and passenger pick-up and drop-off area and parking area. According to preliminary design, the footbridge will displace all of these services which must therefore be relocated. The review should consider the effects of displacing these vital functions and the consequential impact on any new location. Relocation of the bus station, especially, will have a significant impact on the area to which it moves. It is unclear at this time whether the SEAT station will have to be relocated.

Furthermore, the waterfront is also home to authorized, special events (e.g., July 4<sup>th</sup>) which increase the number of people drawn to the area on those days. The scope of environmental review should include an evaluation on those days.

#### B. Noise Impacts

The environmental review should consider potential noise pollution. Given the draw of the Museum, the increased number of pedestrians, vehicles and other modes of transportation will increase noise levels. Construction activities, diesel engines from trains and emergency generators will contribute to noise levels, contributing to the noise already generated from rail whistles and braking.

#### C. Air Pollution Impacts

Trains regularly idle on the tracks outside the location for the planned Museum. Large diesel engines power many of these trains. Exhaust from diesel engines is a recognized source of air pollution. Construction activities may also contribute to air pollution. Similarly, the power demanded by the lighting, elevator, and heating and cooling systems of the footbridge, Museum

and ferry terminal, among other power demands, will likely necessitate the installation of diesel-powered backup emergency generators. Emergency generator emissions are a recognized air pollution source and should be within the scope of review. Increased traffic from the Museum Project is also likely to affect air quality.

#### D. Water Pollution Impacts

Increased marine traffic from the Museum Project, including storm water and construction run-off, within the Harbor and other sources has the potential to cause water pollution and impact wetlands areas, compounded by the likelihood of flooding in storm events. The environmental review should cover these potential impacts.

#### E. Energy Impacts

The scope should include the additional the power demanded by the footbridge, Museum and ferry terminal. Power demands include, but are not limited to, construction-related demands and the lighting, elevator, security, and heating and cooling systems necessary to operate the footbridge itself and to provide nighttime public safety.

#### F. Public Safety Impacts

Several commenters at the public scoping meeting were concerned with public safety and potential threats to human health. The New London Railroad Company agrees that public safety and potential threats to human health should be among the prime considerations within the scope of review; it is one of our principal concerns in the operation of Union Station today. The Museum Project presents several potential hazards to human health. In addition to noise and air pollution as set forth in above, with the increase in human traffic in the area, the risk that criminal activity will also increase must be reviewed. Additionally, it must be recognized that a museum dedicated to our nation's armed forces, a busy ferry terminal, and a footbridge connecting these attractions to a busy train station presents an increase in the risk of terrorism. The scope should seek review of the impacts of the increased risk of crime and terrorism, including the means necessary to police and provide increased security.

#### G. Historical Preservation and Aesthetic Impacts

The project area contains important landmarks in New London history. Built in 1887, Union Station was designed by noted architect H.H. Richardson. The Union Station and the northern-adjacent luggage building are listed on the National Register of Historic Places and included in the Downtown Historic District.

The Museum Project will impact the visual and aesthetic qualities of historic Union Station. Preliminary design information about the footbridge itself indicates that it must be at least 24 feet, 3 inches in height at its bottom surface in order to clear the train tracks. That could

mean a footbridge rising to over 30 - 40 feet in height (eliciting a comment at the public scoping session). The close proximity of the footbridge will negatively impact the appearance of the station and may obliterate the visibility and historical setting of the north edge of the station. In addition to constructing the footbridge, project activities are planned to include demolition of the former luggage building, which currently serves as the Greyhound bus station. An appropriate environmental review must include the impact on these two historic buildings, but the impact of the Museum Project on the Downtown Historic District.

#### H. Economic Impacts

The impacts associated with the construction and operation of the Museum Project are likely to affect area businesses, including Union Station itself. Increased traffic, crime, safety hazards, noise, pollution, alterations to the aesthetics of waterfront, and changes to recreational activities all have the potential to negatively impact business. It is unknown at this time whether increased use of Union Station property will discourage regular commuters, bus and rail passengers from using the station. Tour and school buses, taxis, and autos used to access the Museum may preempt the curbside use by Union Station patrons, thereby impacting the business and operational function of the train station. Union Station intermodal use could decline as rail passengers may seek more convenient alternatives. The scoping must address the additional number, type and location of vehicle drop-off/pick-ups, bus lay-by storage areas offsite, and bus pick-up areas and the impact each have on the present usage of Union Station today.

#### I. Impacts of Reasonable Alternatives

The review should include impacts of all reasonable alternatives. The Project architects, at the public scoping meeting, indicated that four locations were considered for the proposed Footbridge Project. The impacts associated with each of these locations should be considered as should the impacts from connecting the overpass to Union Station at various levels. Additionally, one public commenter indicated that a tunnel had at one point been considered. The impacts from these and other reasonable alternatives should be considered.

#### J. Regulatory Impacts

The regulatory requirements should also be considered. *See* Connecticut Office of Policy and Management, Generic Environmental Classification Document at II.g (revised Oct. 5, 2010). Many details regarding the footbridge, Museum and ferry terminal remain unknown. The details will greatly affect the regulatory path forward for this project. The following, non-exhaustive list regulatory requirements are relevant to the Museum Project, and must be scoped:

- Accessibility compliance with the Americans with Disabilities Act;
- Filing a Certificate of Operations with the Office of the State Traffic Administration;
- Compliance with air pollution regulations for the emergency generators and idling diesel engines;

- National Pollution Discharge Elimination System permitting for water discharges;
- Compliance with local and state zoning regulations;
- National Environmental Policy Act compliance if the Museum Project is federally funded or supported;
- Review, permitting and certification by the Army Corps of Engineers under the Clean Water Act sections 404 and 401 for work within the waters along the shore;
- Federal regulatory review and consent under sections 9 and 10 of the Rivers and Harbors Act for obstructions to waterways;
- Consultations with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, and CT Department of Energy & Environmental Protection;
- Review by the CT State Historic Preservation Office under section 106 of the National Historic Preservation Act;
- Compliance with the state's Coastal Zone Management Plan and consistency determination from the U.S. Office of Coastal Zone Management; and
- Preparation of environmental documentation in accordance with the United States Council on Environmental Quality's guidelines.

#### IV. Conclusion

I reiterate Union Station's unequivocal support for this transformative project. Since the public announcement of the Museum Project's plans, the principals of Union Station have been cooperative, supportive and invested. We shall continue to be until the Museum Project is successfully developed and a part of New London's renewal.

For the reasons set forth above, and as a constructive participant in the future of New London, the owner of Union Station seeks a broad review of the environmental impacts of the proposed Museum Project and all related project improvements.

Very truly yours,

  
James D. Masterman

JDM/nck

Cc: Ms. Barbara Timken, Union Station (*by email*)  
Mr. Todd O'Donnell, Union Station (*by email*)  
Mr. Daniel Quinn, Colliers International (*by email*)  
R. Paul Faxon, Esq. (*by email*)  
Adam Silverman, Esq. (*by email*)  
Stephen W. Thomas, P.E. (*by email*)

BOS 47216986v15

## Hood, Mark

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**From:** lowf@juno.com  
**Sent:** Wednesday, July 17, 2013 10:19 AM  
**To:** Hood, Mark  
**Subject:** Public comment regarding pedestrian walkway in New London

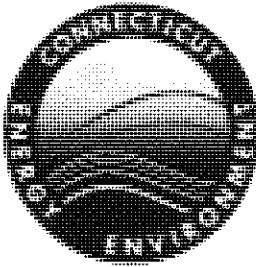
Dear Mr. Hood,

It is commendable to read about an attempt to provide a pedestrian walkway in New London to accommodate visitors to the proposed Coast Guard Academy Museum and those who would need access to the ferry district.

It is hoped that much consideration is also given to those pedestrians, fishermen and nature lovers who depend on the convenience of access for continued enjoyment and utilization of their beautiful New London waterfront.

Thank you.

Louise Fabrykiewicz  
281 State St  
New London, CT 06320  
860-444-8916



**CONNECTICUT DEPARTMENT OF  
ENERGY & ENVIRONMENTAL PROTECTION  
OFFICE OF ENVIRONMENTAL REVIEW  
79 ELM STREET, HARTFORD, CT 06106-5127**

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**To:** Mark Hood - Project Manager  
DECD - Office of Financial & Technical Review, 505 Hudson Street, Hartford, CT

**From:** David J. Fox - Senior Environmental Analyst      **Telephone:** 860-424-4111

**Date:** July 18, 2013      **E-Mail:** [david.fox@ct.gov](mailto:david.fox@ct.gov)

**Subject:** Pedestrian Bridge, New London

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The Department of Energy and Environmental Protection (DEEP) has received the Notice of Scoping for proposed state funding for construction of a pedestrian bridge over the railroad tracks at Union Station in New London. The following comments are submitted for your consideration.

These comments are focused on construction of the pedestrian bridge. They do not evaluate the proposed U.S. Coast Guard Museum or Cross Island Ferry Terminal. Some issues presented by construction of those facilities include intensive use of the floodplain and coastal management policies regarding use of the waterfront parcel as well as resource concerns and permitting associated with any in-water work. The extent to which the bridge is a stand-alone project, as an "up-and-over" for users of the train, or would serve as an inducement to development of the vacant parcel is not known.

The proposed bridge project is within the 100-year flood zone on the community's Flood Insurance Rate Map. Because it is a State action, the project must be certified by the sponsoring agency as being in compliance with flood and stormwater management standards specified in section 25-68d of the Connecticut General Statutes (CGS) and section 25-68h-1 through 25-68h-3 of the Regulations of Connecticut State Agencies (RCSA) and receive approval from the Department. All utilities must be constructed at or above the elevation of the base flood, which is 9' (NAVD88) at this location, or floodproofed with a passive system. For further information, contact the Inland Water Resources Division at 860-424-3706. A fact sheet regarding floodplain management and the certification form can be downloaded at: [Flood Management](#).

The proposed bridge project is within Connecticut's coastal boundary as defined by section 22a-94 of the CGS and is subject to the provisions of the Connecticut Coastal Management Act (CCMA), sections 22a-90 through 22a-112. The project can be considered to be a municipal improvement according to section 8-24 of the CGS. Therefore, a Coastal Site Plan Review, in accordance with sections 22a-105 through 22a-109 of the CGS, must be included in the review by the local planning commission.

The Natural Diversity Data Base (NDDDB) has determined that the proposed pedestrian bridge will not impact any extant populations of Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern in the project area. This determination is good for one year. If



work has not begun on this project by June 14, 2014 or the scope of the work changes, please submit an NDDB Request for Review. The request form is available on-line at: [NDDB Request](#).

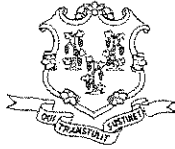
NDDB information includes all information regarding critical biological resources available at the time of the request. This information is a compilation of data collected over the years by the Natural History Survey and other cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Thank you for the opportunity to review this proposal. If you have any questions concerning these comments, please contact me.

cc: Jeff Caiola, DEEP/IWRD  
John Gaucher, DEEP/OLISP  
Robert Hannon, DEEP/OPPD  
Dawn McKay, DEEP/NDDB

**STATE OF CONNECTICUT**  
DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, M.D., M.P.H., M.P.A.  
Commissioner



Dannel P. Malloy  
Governor  
Nancy Wyman  
Lt. Governor

July 18, 2013

Mark Hood  
Department of Economic and Community Development  
505 Hudson Street  
Hartford, Connecticut 06106

Re: Notice of Scoping for the U.S. National Coast Guard Museum Pedestrian Overpass Project

Dear Mr. Hood:

The Drinking Water Section of the Department of Public Health has reviewed the above-mentioned project for potential impacts to any sources of public drinking water supply. This project does not appear to be in a public water supply source water area; therefore, the Drinking Water Section has no comments at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric McPhee".

Eric McPhee  
Supervising Environmental Analyst  
Drinking Water Section



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