SPECIAL MEETING – ECONOMIC AND COMMUNITY DEVELOPMENT AGENDA

JULY 6, 2026, 7:00 PM
BY ZOOM VIRTUAL MEETING

To allow public access, anyone may access a meeting by telephone and/or Zoom, or a recording in the City of Norwalk YouTube channel. Specific instructions and links can be found at norwalkct.gov/meetings.

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I. CALL TO ORDER

II. ROLL CALL

III. ACCEPTANCE OF MINUTES

A. Special Meeting: May 6, 2026

B. Special Meeting: June 4, 2026

C. Joint Special Meeting: June 17, 2026

IV. PUBLIC PARTICIPATION

V. NEW BUSINESS

A. Planning and Zoning

1. Development Update

2. Authorize the Mayor, Barbara C. Smyth, to execute any and all documents, to adopt the Strategic Harbor Study (2026, as amended).

3. Authorize the Mayor, Barbara C. Smyth, to execute any and all documents, to ratify the amendment to the Citywide Plan (Plan of Conservation and Development) to incorporate by reference the Strategic Harbor Study within Chapter 9, Coastal Resources & Resilience, and implement the plan's recommendations during the 2026–2031 planning period.

B. Transportation Mobility and Parking

1. Authorize the Mayor, Barbara C. Smyth to execute a contract agreement with Frank Capasso & Sons, Inc. in the amount of $2,777,000 for project NPA2026-02, Repairs and Improvements at Yankee Doodle Garage.

ACCT(S):
0920 4095 5777 C0303
0921 4095 5777 C0303
0923 4095 577 7 C0303
0926 4095 5777 C0303
0927 4095 5777 C0303

2. Authorize the Director of Transportation, Mobility, and Parking, James Travers to execute change orders and modify the contract with Frank Capasso & Sons, Inc. up to $277,700 (10%) for contingencies with project NPA2026-02: Repairs and Improvements at Yankee Doodle Garage.

ACCT(S):
0920 4095 5777 C0303
0921 4095 5777 C0303
0923 4095 577 7 C0303
0926 4095 5777 C0303
0927 4095 5777 C0303

3. Authorize the Mayor, Barbara C. Smyth, to enter into any and all documents and agreements required by the Connecticut Department of Transportation (CT DOT) or the Federal Highway Administration (FHWA) to accept funding related to Phase 2A of the Wall Street Corridor Improvement Project under state project number 0102-0379.

4. Authorize the Mayor, Barbara C. Smyth, to enter into any and all documents and agreements required by the Connecticut Department of Transportation (CT DOT) to accept funding related to Phase 2A of the Wall Street Corridor Improvement Project under state project number 0102-0373.

5. Authorize the Mayor, Barbara C. Smyth, to execute a permanent easement to construct and maintain a new block retaining wall and enter into temporary Right of Entry Agreement to go in a certain portion of the properties of 40 Lowe Street and 44 Lowe Street for construction of a new block retaining wall.

VI. ADJOURNMENT

CITY OF NORWALK
ECONOMIC AND COMMUNITY DEVELOPMENT
SPECIAL MEETING
MAY 6, 2026
BY ZOOM VIRTUAL MEETING

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I. CALL TO ORDER

Chair Goldstein called the meeting to order at 6:01p.m. There was a quorum present.

II. ROLL CALL

ATTENDANCE: Josh Goldstein; Chair, Jan Degenshein; Vice-Chair, Anne Wennerstrand, Jim Frayer, Jalin Sead, Darlene Young, Nicole Ayers
STAFF: Sabrina Godeski, Jay Habansky, Garrett Bolella, Ben Yeung, Nell Blaszkiewicz, Steven Ivan
OTHERS: Nicole Eaddy, Johan Lopez, Richard Dellinger

Chair Goldstein acknowledged those present as noted above.

III. ACCEPTANCE OF MINUTES

A. SPECIAL MEETING: MARCH 31, 2026

There were no changes, deletions, or omissions to the minutes as presented.

****MS. WENNERSTRAND MOVED THE ITEM**
****MOTION PASSED UNANIMOUSLY**

B. SPECIAL MEETING: APRIL 2, 2026

There were no changes, deletions, or omissions to the minutes as presented.

****MR. DEGENSHEIN MOVED THE ITEM**
****MOTION PASSED UNANIMOUSLY**

IV. PUBLIC PARTICIPATION

Public comments were given.
Chair Goldstein closed public participation at 6:43p.m.

****CHAIR GOLDSTEIN MADE A MOTION TO CHANGE THE ORDER OF NEW BUSINESS**
****MOTION PASSED UNANIMOUSLY**

V. NEW BUSINESS

A. REDEVELOPMENT

1. ADVANCE THE PY52 ANNUAL ACTION PLAN (AAP) TO THE CITY COUNCIL FOR ITS APPROVAL AND TO AUTHORIZE THE MAYOR TO EXECUTE ANY AND ALL DOCUMENTS ASSOCIATED WITH THE SUBMISSION OF THE PY52 AAP TO HUD AND ALL DOCUMENTS CONSISTENT WITH THE APPROVED PY52 AAP.

Mr. Sead recused himself from this item.

****MS. WENNERSTRAND MOVED THE ITEM**
****MS. YOUNG ABSTAINED**
****MOTION PASSED WITH ONE ABSTENTION**

B. **TRANSPORTATION MOBILITY AND PARKING**

1. **A. AUTHORIZE THE MAYOR, BARBARA C. SMYTH, TO EXECUTE AN AMENDMENT TO THE CONTRACT BETWEEN THE CITY OF NORWALK AND VHB FOR DESIGN AND ENGINEERING SERVICES FOR THE GREGORY BOULEVARD ROUNDABOUT & FIFTH STREET SHARED-USE PATH PROJECT, IN AN AMOUNT NOT TO EXCEED $246,000.**

B. AUTHORIZE THE DIRECTOR OF TRANSPORTATION, MOBILITY, AND PARKING TO EXECUTE ORDERS ON THE CONTRACT BETWEEN THE CITY OF NORWALK AND VHB FOR DESIGN AND ENGINEERING SERVICES FOR THE GREGORY BOULEVARD ROUNDABOUT & FIFTH STREET SHARED USE PATH PROJECT, FOR A SUM NOT TO EXCEED $24,600.

ACCT: 580000-5796-AID08

****MR. DEGENSHEIN MOVED THE ITEM**
****MOTION PASSED UNANIMOUSLY**

2. **AUTHORIZE THE MAYOR, BARBARA C. SMYTH, TO EXECUTE AN AGREEMENT BETWEEN THE CITY OF NORWALK AND STREETLIGHT DATA, INC. FOR CITYWIDE TRAFFIC DATA ANALYSES, FOR A SUM NOT TO EXCEED $21,938.00.**

ACCT: 01-37-50-525

****MS. WENNERSTRAND MOVED THE ITEM**
****MS. YOUNG ABSTAINED**
****MOTION PASSED WITH ONE ABSTENTION**

VI. OLD BUSINESS

There was no Old Business

VII. ADJOURNMENT

Ms. Young moved to adjourn.
Motion passed unanimously.
The meeting was adjourned at 8:19p.m.

Respectfully Submitted,
Monique Cipriano

CITY OF NORWALK
ECONOMIC AND COMMUNITY DEVELOPMENT
SPECIAL MEETING
JUNE 4, 2026
BY ZOOM VIRTUAL MEETING

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I. CALL TO ORDER

Chair Goldstein called the meeting to order at 7:10p.m. There was no quorum present.

II. ROLL CALL

ATTENDANCE: Josh Goldstein; Chair, Nicole Ayers, Jan Degenshein (7:33p.m.)
STAFF: Sabrina Godeski, Jay Habansky, Alex Cross, Steve Kleppin, Katie O’Leary
OTHERS: Megan Anderson, History Associates Inc.; Maria Miranda, Miranda Creative; Juliet Del Rio, Miranda Creative

Chair Goldstein acknowledged those present as noted above. He stated that since there isn’t a quorum, there would not be any votes on the Acceptance of Minutes or New Business. There will only be a discussion on the items under New Business.

III. **ACCEPTANCE OF MINUTES**

A. **SPECIAL MEETING: MAY 6TH, 2026**

Chair Goldstein moved the minutes to the next meeting.

IV. **PUBLIC PARTICIPATION**

Public comments were given.
Chair Goldstein closed public participation at 7:15p.m.

V. **NEW BUSINESS**

A. **REDEVELOPMENT**

1. **APPROVE THE ADVANCEMENT OF THE 2026 CONNECTICUT NEIGHBORHOOD ASSISTANCE ACT PROPOSALS SUBMITTED TO THE CITY OF NORWALK ONTO THE CONNECTICUT DEPARTMENT OF REVENUE SERVICES FOR INCLUSION IN THE 2026 CONNECTICUT NEIGHBORHOOD ASSISTANCE ACT PROGRAM.**

Presentation: Katie O'Leary, Community Engagement-Norwalk Redevelopment Agency

B. **PLANNING AND ZONING**

1. **APPROVE THE REVISED PLANNING & ZONING FEE SCHEDULE AS SUBMITTED BY THE PLANNING & ZONING DEPARTMENT, TO BECOME EFFECTIVE UPON ADOPTION.**

Presentation: Steve Kleppin, Director-Planning and Zoning

2. **DEVELOPMENT UPDATE.**

Chair Goldstein moved the Development Update to the next meeting.

C. **BUSINESS DEVELOPMENT AND TOURISM**

1. **AUTHORIZE THE MAYOR, BARBARA C. SMYTH, TO EXECUTE A ONE-YEAR EXTENSION OF THE MARKETING SERVICES CONTRACT WITH MIRANDA CREATIVE IN AN AMOUNT NOT TO EXCEED $163,600.**

ACCTS: 01-14-50-5258
01-37-80-5258

Presentation: Maria Miranda and Juliet Del Rio of Miranda Creative

2. **AUTHORIZE THE MAYOR, BARBARA C. SMYTH, TO EXECUTE AN AGREEMENT WITH HISTORY ASSOCIATES INCORPORATED FOR PUBLIC ART INVENTORY AND VALUATION SERVICES IN AN AMOUNT NOT TO EXCEED $268,265.55 ON A SOLE SOURCE PROCUREMENT BASIS.**

ACCT: 0927-3760-5777-C0860

Presentation: Sabrina Godeski, Director-Business Development & Tourism and Megan Anderson, History Associates Incorporated

VI. ADJOURNMENT

Ms. Ayers moved to adjourn.
The meeting was adjourned at 8:27p.m.

Respectfully submitted,
Monique Cipriano

CITY OF NORWALK
SPECIAL JOINT ECD - PLANNING & ZONING COMMISSION MINUTES
June 17, 2026

PRESENT FROM ECONOMIC & COMMUNITY DEVELOPMENT COMMITTEE (ECD):

Josh Goldstein, Chair of ECD; James Frayer; Jan Degenshein; Anne Wennerstrand; Richard Dellinger; Jalin Sead; Darlene Young (arrived at 6:15 pm)

PRESENT FROM PLANNING & ZONING:

Chapin Bryce, Chair of the Planning & Zoning Commission; Louis Schulman; Tammy Langalis; John Hubers; Harvey Jones; Diana Lenkowsky; Douglas Hempstead; Jaquell Wilson; Galen Wells (after roll call)

ABSENT: Ana Tabachneck; Nick Kantor; Jacquen Jordan-Byron

STAFF: Steve Kleppin; Bryan Baker

OTHERS: Lynelle Jones; Diane Lauricella; Diane Cece; Alix Pauchet; Shuprotim Bhaumik; Erman Eruz; Shea Thorvaldsen

I. CALL TO ORDER

The meeting was called to order at 6:01 p.m. It should be noted that this meeting was held on Zoom.com with participants calling in, separately.

II. ROLL CALL

Mr. Goldstein called the roll for the Economic & Community Development Committee and Mr. Bryce called the roll for the Planning & Zoning Commission.

III. PUBLIC PARTICIPATION

Mr. Goldstein explained how this portion of the meeting would work. Participants would receive 3 minutes to speak.

Public comments were given.

Public participation was closed at 6:06 pm.

It reopened at 6:09 p.m. when Mr. Goldstein said that participants had been missed.

Public participation closed again at 6:17 pm.

IV. NEW BUSINESS

A. Strategic Harbor Study Presentation

DISCUSSION

Presentation: Steve Kleppin; Alix Pauchet; Shuprotim Bhaumik; Erman Eruz; Shea Thorvaldsen

V. ADJOURNMENT

The meeting was adjourned at 7:29 pm.

Respectfully submitted,

Diana Palmentiero

PLANNING & ZONING

125 East Avenue
Norwalk, Connecticut 06851

MEMORANDUM

March 18, 2026

TO: Department of Energy & Environmental Protection, Katie Dykes, Commissioner
Norwalk City Council, Joshua Goldstein, President
WestCOG, Francis Pickering, Executive Director
Norwalk Harbor Management Commission, Jeffrey Mangels, Chairman

FROM: Steve Kleppin, AICP, Planning & Zoning Director SK

SUBJECT: **#2026-24 POCD – Amendment to the POCD Incorporating the Strategic Harbor Plan**

The City of Norwalk undertook a planning study to evaluate and potentially optimize operations of the Harbor. The study consisted of four components:

1. Understanding of baseline economic conditions for the broader harbor area
2. Evaluations and recommendations of mooring fields and water taxi potential
3. Evaluation of management and operations of the harbor
4. Study of Street Ends.

More specifically, the study seeks to maximize mooring fields, increase boating activities and increase visitation and economic opportunities within the harbor. The study also evaluates and outlines pros and cons of different management structures for the harbor, which are longer-term considerations. As an adjunct to the study, street ends were studied to determine areas where public access could potentially be provided and identify obstacles that are preventing their use and access today.

In order to codify the plan, we are recommending amending the Plan of Conservation and Development (Citywide Plan) to incorporate the 2016 Norwalk Strategic Harbor Plan. The proposed amendment to the Citywide Plan is outlined below. In accordance with CGS§ 8-23(h) and CGS§ 22a-104(e), we are referring the amendment for your consideration. The Planning and Zoning Commission has tentatively scheduled a hearing on the amendment for June 3, 2026.

Actions	When	Who	Resources
i. **As part of the zoning rewrite, establish zoning and urban design standards for areas with water dependent uses that enhance compatibility with adjacent uses.** Review zoning, adjacent uses, screening and site practices, and transportation.	2019-2022	Planning and Zoning; Redevelopment Agency; NHMC	Staff time; consultant
ii. **Preserve the locations for water dependent uses on the waterfront.** SoNo and East Norwalk near the Walk Bridge, and the Water Street marine businesses cluster are particularly important locations for preservation of water dependent uses.	2019 and ongoing	Planning and Zoning; Redevelopment Agency; NHMC	Staff time
iii. **Explore expansion of water dependent economic development opportunities.**	2019 and ongoing	Economic and Community Development; NHMC; Shellfish Commission	Staff time; possible consultant

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***Proposed Amendment**: Implement Recommendations of the 2026 City of Norwalk Strategic Harbor Plan*

When: 2026-2031
Who: Harbor Management Commission, Economic & Community Development Department, Public Works, Harbor Master
Resources: Staff Time; Grants, City Resources

The draft Strategic Harbor Plan can be viewed at:
https://www.norwalkct.gov/DocumentCenter/View/38634/Compiled-Strategic-Harbor-Plan---2025-12-04_rev_02_26

The Citywide Plan can be viewed at:
https://www.norwalkct.gov/DocumentCenter/View/36676/Norwalk-Citywide-Plan-2025-amend-signed



City of Norwalk Strategic Harbor Study

Executive Summary

The Norwalk Strategic Harbor Study provides a comprehensive, integrated roadmap for strengthening one of the city's most valuable public, economic, and ecological assets. Developed through collaboration between Indigo River, HR&A Advisors, the City of Norwalk, a Steering Committee, and the Harbor Management Commission, the Study brings together technical analysis, stakeholder engagement, and strategic recommendations to guide the long-term future of the harbor. The work encompasses baseline economic and environmental conditions, industrial and management analyses, a moorings strategy, a street ends access study, and a funding roadmap that positions Norwalk to invest in a resilient and inclusive waterfront. A brief summary of each section is provided below.

Understanding Today's Harbor

The Existing Conditions Analysis and Industrial Economic Analysis (**Section 1**) shows a harbor defined by its dual identity as both a working waterfront and a recreational destination. Norwalk benefits from deep-water access, long-standing marine businesses, aquaculture operations, and a strong maritime identity. At the same time, the harbor faces shrinking industrial land, aging infrastructure, workforce shortages, water-quality concerns, and significant vulnerability to sea level rise and storm impacts. Public access remains unevenly distributed, particularly for neighborhoods designated as Environmental Justice communities. These findings informed recommendations related to access, infrastructure, and long-term management.

Moorings and Water Access

The Moorings Study (**Section 2**) identifies opportunities to expand mooring capacity in the inner harbor, outer harbor, and Norwalk Islands, paired with new water taxi operations and improved access points. While physically feasible, expansion requires adequate support services and a sustainable administrative model. The study recommends a modified hybrid management model in which permittees continue to maintain private moorings while the City expands transient moorings, contracts for harbor management services, and establishes a water taxi system. Environmentally sensitive areas around the islands would require low-impact anchoring systems.

Street Ends and Public Access

The Street Ends Study (**Section 3**) evaluated 21 shoreline street ends and identified five potential priority locations—Lowndes Avenue, Knorr Street, 1st Street, 3rd Street, and Cove Avenue—for near-term improvement. These sites offer opportunities to expand equitable public access, particularly in neighborhoods lacking meaningful shoreline connection. Recommendations include ADA-compliant pathways, small-boat access, invasive species removal, living shoreline elements, interpretive signage, and amenities such as seating, bike racks, and wayfinding. Across all street ends, the Study emphasizes safe public access, ecological stewardship, and consistent design standards.

Management and Funding Strategies

The Study provides recommendations for refining management roles across municipal and state entities to improve coordination and decision-making through the Harbor Management Strategy (**Section 4**). The Funding Opportunities Roadmap outlines a strategic path for pursuing federal and state grants to support capital projects, resilience planning, and economic development.

Summary of Public Engagement

Public engagement played a central role in shaping the Study. Over the course of the project, the team conducted multiple focus groups, stakeholder interviews, meetings with the Steering Committee, and public presentations. Common themes included the need for clearer communication among agencies, strong support for expanded public access, concerns over industrial displacement, and interest in water-based recreation. This feedback directly shaped recommendations for access, mooring expansion, and long-term harbor management. Refer to the Appendix for more detailed summaries of public involvement efforts.

Development of the Norwalk Strategic Harbor Study was guided by a comprehensive, multi-format public engagement process conducted by Indigo River and HR&A Advisors throughout spring, summer, and fall 2025. Engagement activities included stakeholder interviews, virtual focus groups, public presentations, recurring meetings with the Steering Committee, and ongoing informal outreach. Input was gathered from a broad cross-section of harbor users—recreational boaters, marine businesses, environmental groups, institutional partners, residents, and community organizations—that directly shaped the Plan's recommendations.

Stakeholder Interviews and Focus Groups

In May 2025, Indigo River facilitated two virtual Recreational Harbor User Focus Groups with boaters, rowing advocates, and residents who regularly access the waterfront. Conversation centered on improving equitable access to the water, particularly in South Norwalk; enhancing maintenance and usability of public docks and launch sites; addressing water-quality concerns following rain events; and expanding opportunities for non-motorized recreation, including kayak access and trail connectivity along the Norwalk River.

During the same period, HR&A Advisors led a Business & Working Waterfront Focus Group with representatives from marinas, marine contractors, material suppliers, and waterfront institutions. Participants emphasized the vulnerability of water-dependent businesses as industrial land transitions to other uses, the ongoing importance of dredging and barge access, and the need to support the skilled workforce that underpins the city's marine economy. These sessions also highlighted rising operational costs and the interdependence between commercial and recreational harbor activity.

For stakeholders unable to participate in scheduled sessions, the project team conducted individual phone interviews and small follow-up discussions to ensure broad representation of perspectives across user groups and neighborhoods.

Public Presentations, Community Input, and Steering Committee Engagement

In addition to targeted focus groups, the project team held several meetings to present draft materials and solicit community and stakeholder feedback. These sessions focused on the Harbor Management Strategy, the Draft Street Ends Study and the Draft Mooring Study, and took place during the summer and fall of 2025. Each meeting included a presentation of findings followed by open discussion and Q&A. Following these events, residents, boaters, businesses, and community organizations contributed additional feedback through emails, phone calls, and informal conversations. This input

informed refinements to site-specific recommendations, adjustments to the draft mooring framework, and updates to maps, access strategies, and implementation guidance.

The project team met with the Steering Committee throughout the planning process. These meetings played a critical role in shaping project direction, contextualizing public and stakeholder feedback, and ensuring alignment with City goals, policy frameworks, and regulatory considerations. The Steering Committee reviewed interim deliverables, discussed emerging issues, and helped guide the evolution of the plan's final recommendations. The Indigo River and HR&A Advisors team greatly appreciate the Steering Committee's time, involvement, and feedback.

Section 1

Understanding Today's Harbor

Existing Conditions Analysis
Industrial Economic Analysis



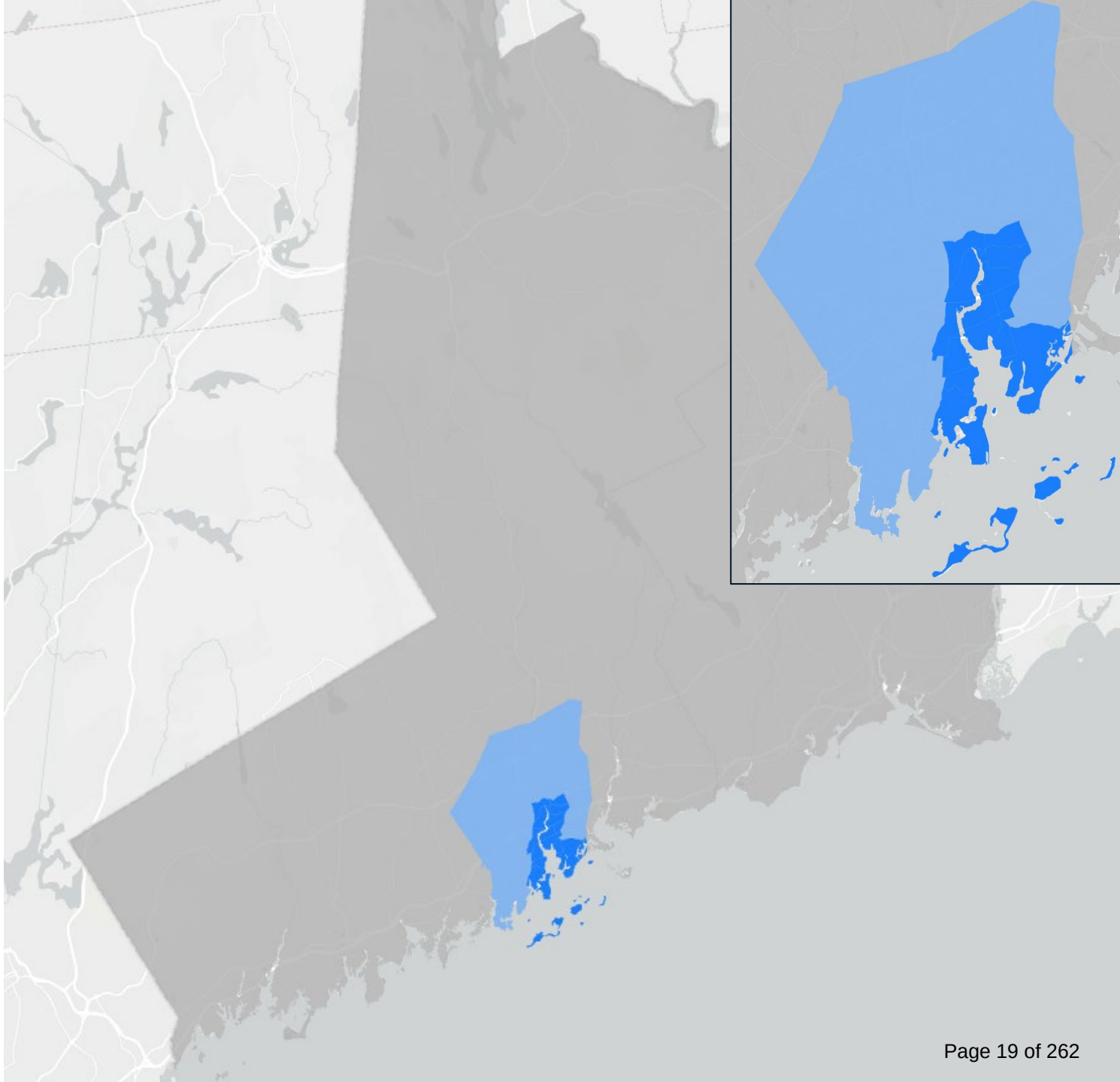
Norwalk Harbor Existing Conditions

June 2026

EXISTING CONDITIONS GEOGRAPHIES FOR DEMOGRAPHIC/INDUSTRY ANALYSIS

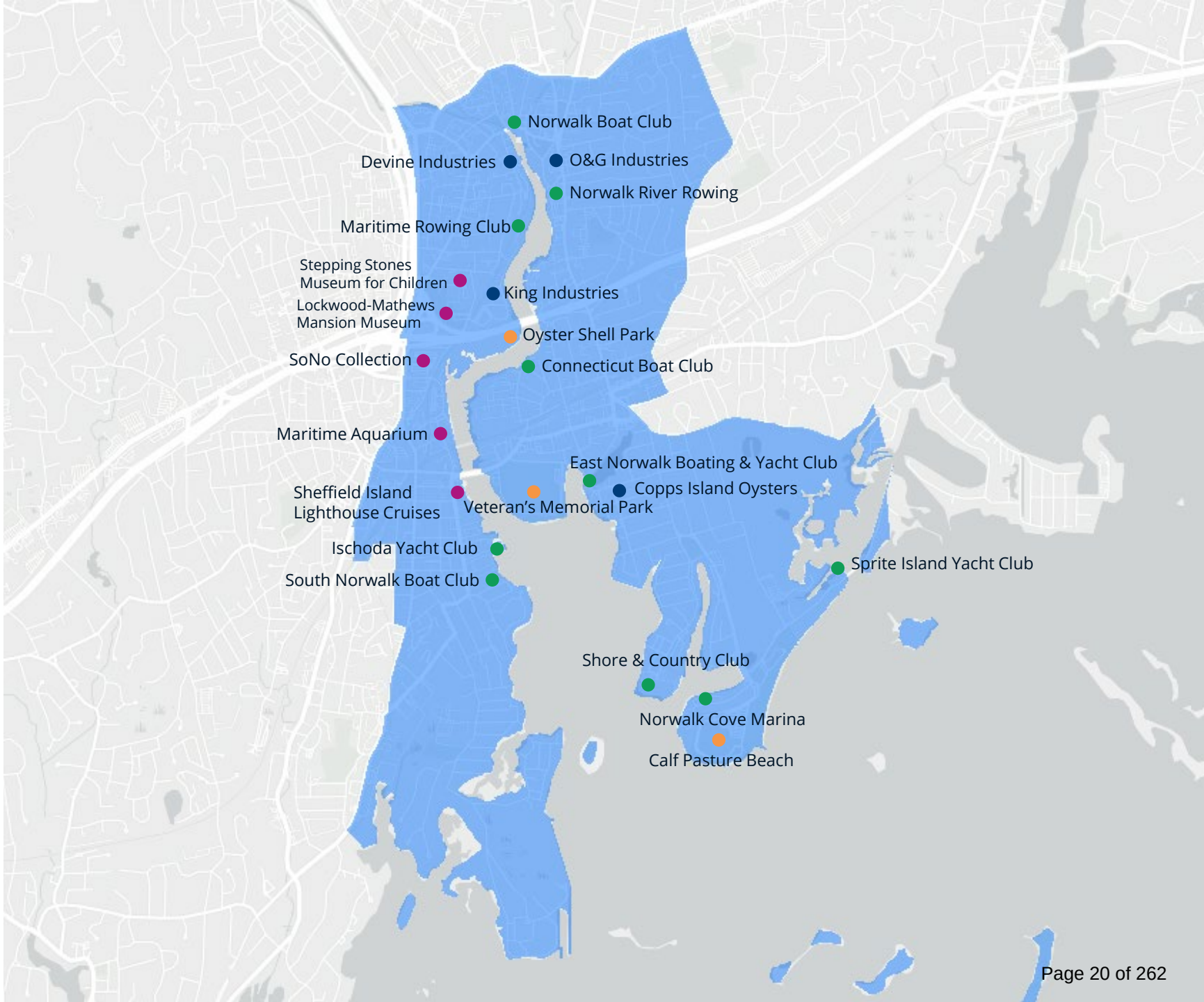
The **“Harbor Area”** includes 14 Census Block Groups, denoted in dark blue. The boundaries for the Harbor Area are based on previous City studies, including the Industrial Waterfront Land Use Plan, and were confirmed with the City and local stakeholders. Alignment with census designated boundaries ensures compatability with demographic and industry data sources.

For the demographic analysis, this area is compared to the City of Norwalk (**“Norwalk”**) in light blue and the Bridgeport-Stamford-Norwalk-Danbury Metropolitan Statistical Area (**“MSA”**) in grey. The industry analysis compares Norwalk and the Harbor Area.



HARBOR AREA KEY LOCATIONS

A closer look at the Harbor Area shows the distribution of key locations that define the Harbor's major economic, tourism, and open space assets. This includes waterfront businesses, malls, museums, parks, beaches, marinas, and boat clubs.



Waterfront Businesses

Attractions

Parks and Beaches

Water Recreation



01 Demography

DEMOGRAPHY | SUMMARY OF KEY TAKEAWAYS

1. Population and households are growing faster in the Harbor Area than both in the City of Norwalk and the region.

- The population in the Harbor Area grew by almost 20% from 2014 to 2023 across all age groups and household types.
- Nonfamily households make up the largest share of household type in the Harbor Area at 45 percent, a slight increase from 2014. This trend contrasts with the City, in which the number and share of nonfamily households decreased.
- This growth aligns with the new housing developments that have been concentrated at the top of the Harbor Area that may be attracting workforce-aged residents.

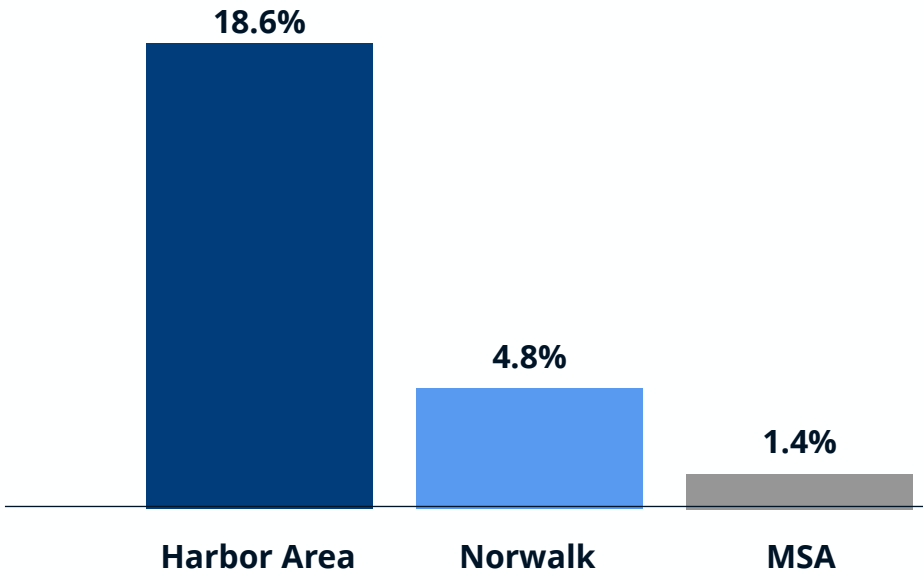
2. Harbor Area household incomes are increasing faster than the City and the region but are still notably lower.

- The median household income in the Harbor Area is about $10,000 lower than the City and $15,000 lower than the region.
- Only 43 percent of the households in the Harbor Area has a bachelor's degree, slightly lower than the comparative geographies, which suggests that local industries that do not require a degree would likely benefit the growing population.

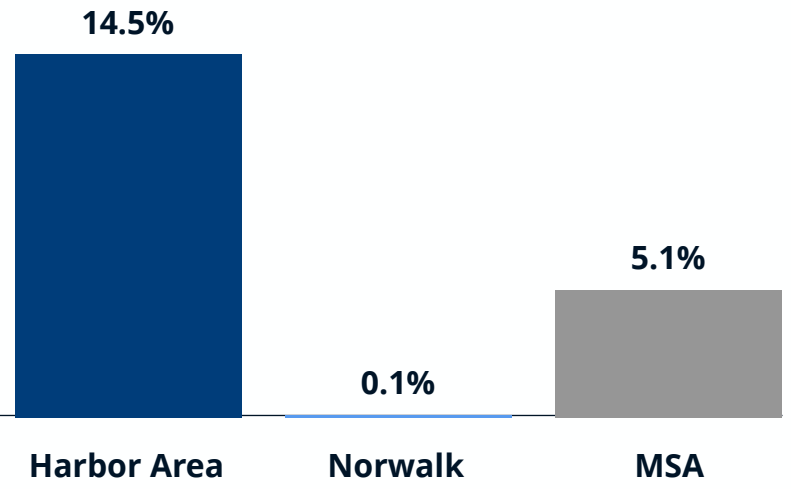
DEMOGRAPHY | POPULATION AND HOUSEHOLDS

The population of the Harbor Area, 22 percent of the Norwalk's total, is growing much faster than the city. The Harbor Area population size is smaller than both in Norwalk and the MSA.

Population Growth (2014-2023)



Growth in Households (2014-2023)



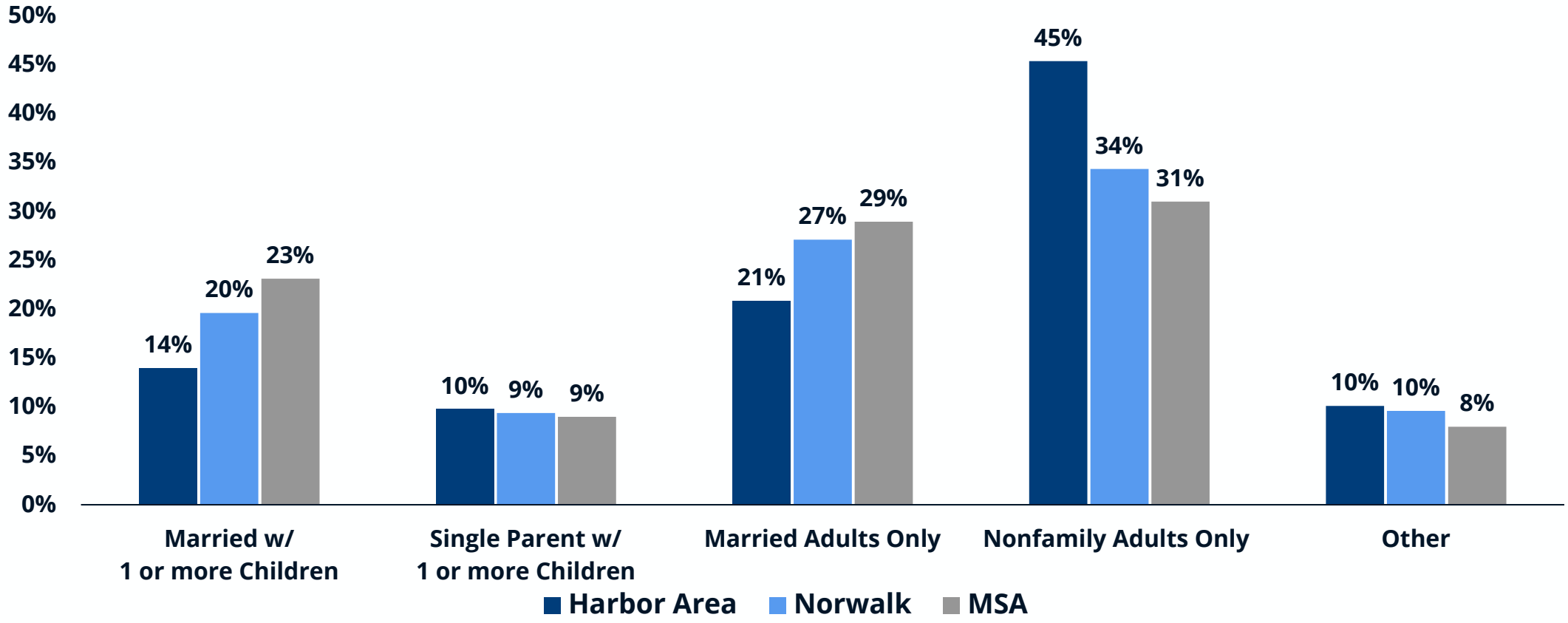
	Harbor Area	Norwalk	MSA
Total Population (2023)	*20,100*	*91,400*	*947,500*
Total Households (2023)	*8,500*	*35,500*	*350,600*
Average Household Size (2023)	*2.37*	*2.58*	*2.70*

Source: US Census ACS 2014, 2023 5-Year

DEMOGRAPHY | HOUSEHOLD TYPE

A smaller share of Harbor households have children compared with the city overall and almost half are nonfamily households, which suggests this area has less of a concentration of families relative to the city.

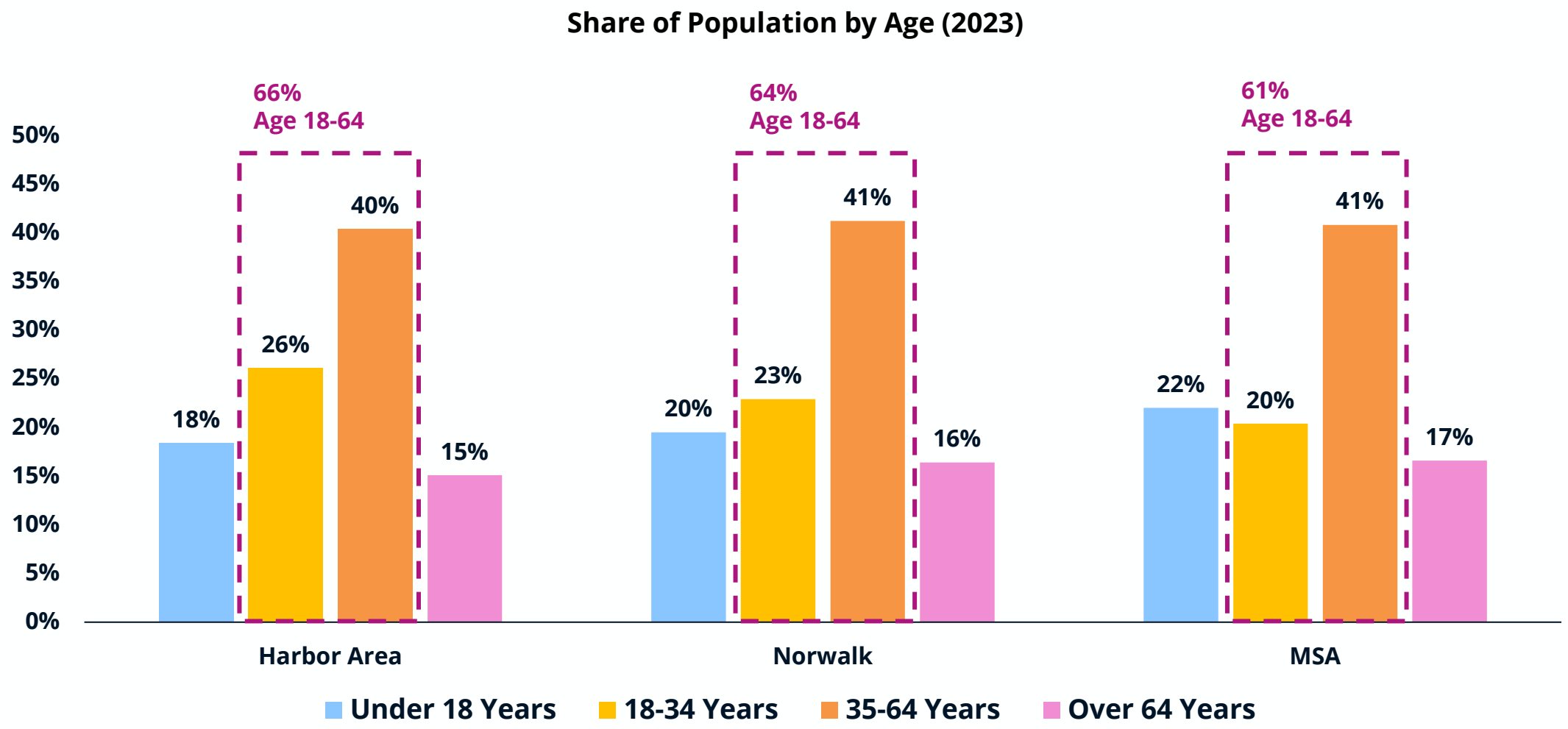
Share of Households by Type (2023)



Source: US Census ACS 2023 5-Year
Note: Nonfamily households is a single person or unrelated household members

DEMOGRAPHY | POPULATION AGE

The share of working area population in the Harbor Area is 66% compared to 64% in the city. In general, the distribution of population by age is similar across geographies.

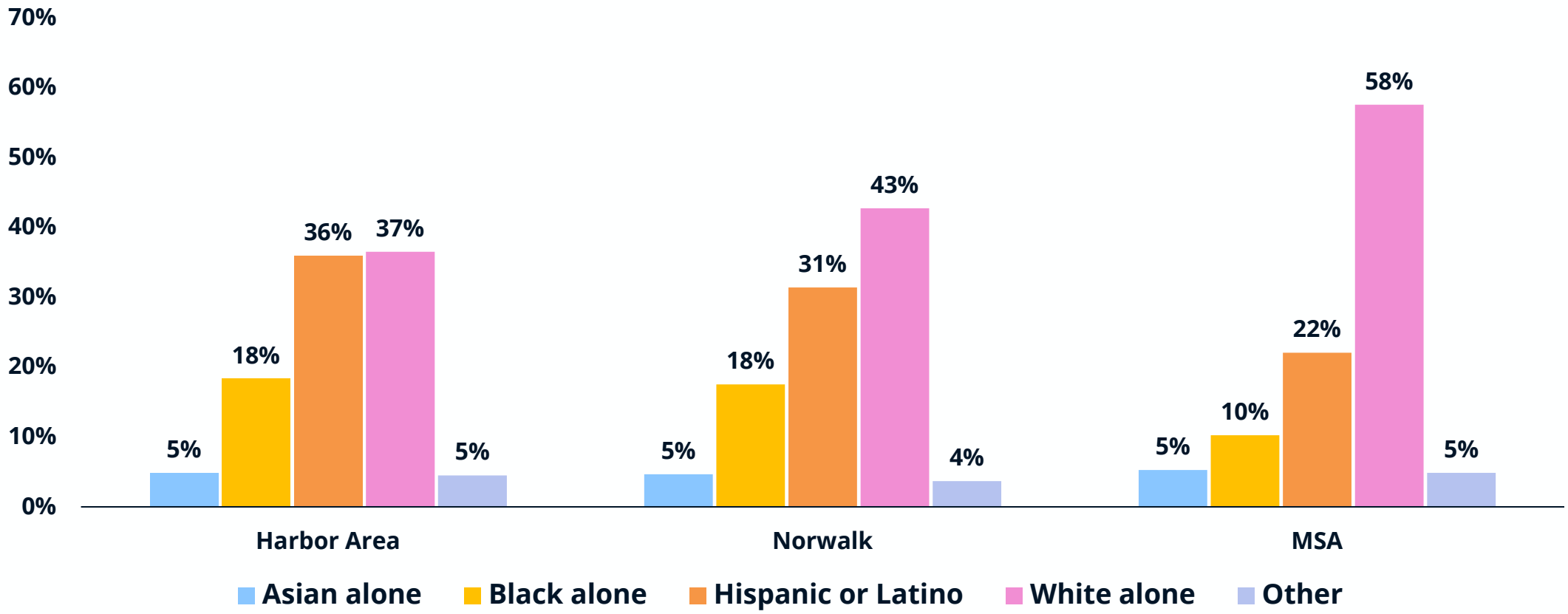


Source: US Census ACS 2023 5-Year

DEMOGRAPHY | RACE AND ETHNICITY

The Harbor Area is more diverse than both the city and the MSA. The Black and/or Hispanic population totals over 54% of the area compared to 51% for the city and 32% for the MSA.

Share of Population by Race and Ethnicity (2023)

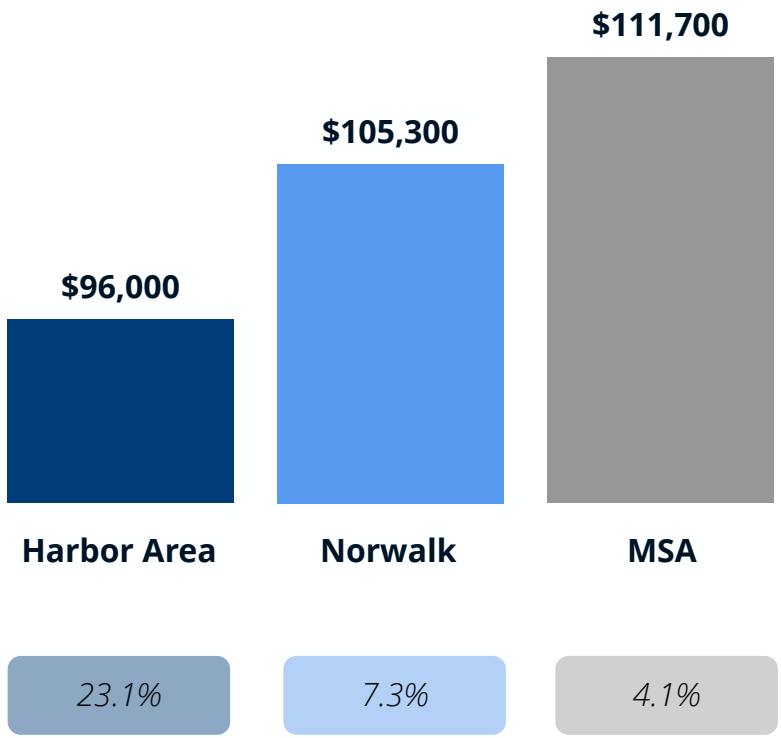


Source: US Census ACS 2023 5-Year
Note: Asian, Black, and white alone indicates non-hispanic or latino population.

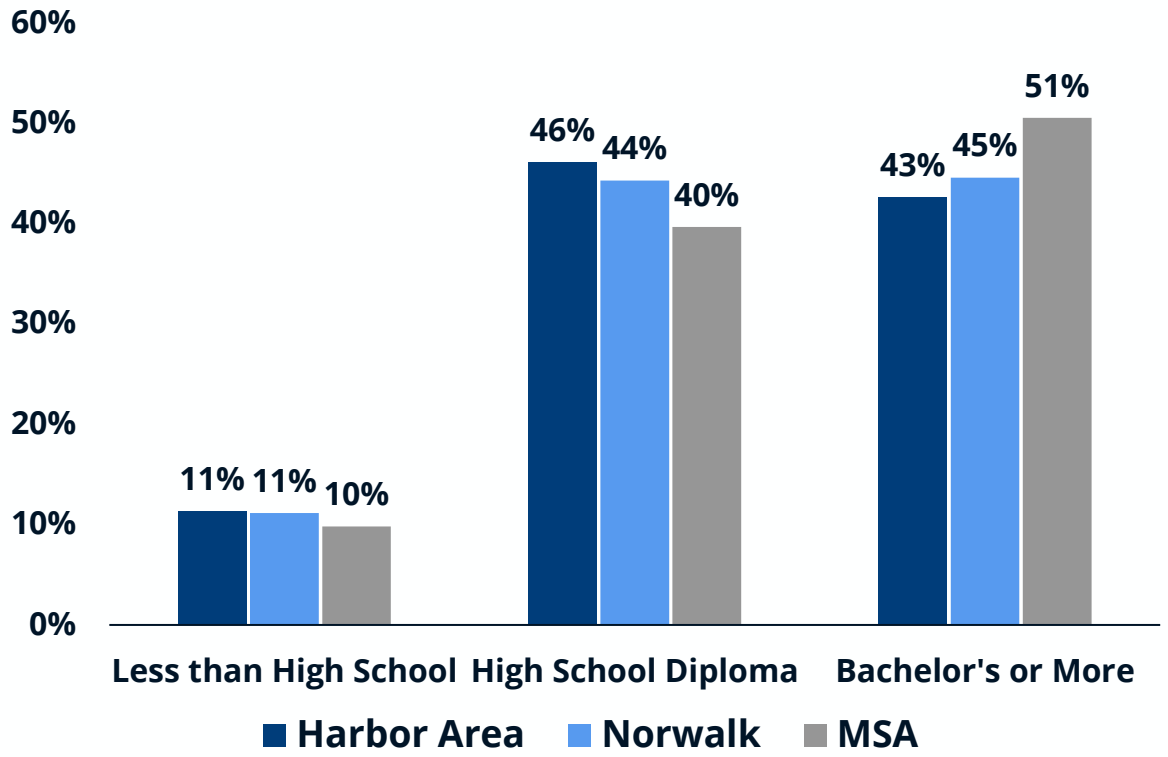
DEMOGRAPHY | INCOME AND EDUCATION

The Harbor Area's household income is lower than Norwalk and the MSA but had a steeper increase in the last 10 years. Bachelor's attainment is slightly lower, which could be a factor in income difference.

Median Household Income (2023)



Educational Attainment Population Over 25 (2023)



Source: US Census ACS 2014, 2023 5-Year



02

Industry

INDUSTRY | SUMMARY OF KEY TAKEAWAYS – CITYWIDE

1. Norwalk's economy is shrinking. The City experienced net job loss across almost all industry categories in the last 10 years.

- Norwalk lost almost 10% of its total jobs between 2013 and 2022 (compared to the 3.7% shrinkage in total jobs in the MSA), indicating a shrinking economic landscape.
- Only service and construction/real estate related industries have seen net job growth citywide.

2. In contrast, jobs in the Harbor area are growing, indicating growing economic activity and the Harbor's role as a regional employment center.

- The Harbor area jobs grew by 5.8% between 2013 and 2022, significantly counteracting the citywide shrinkage trend. With a total of almost 17,000 jobs, the Harbor area represents 39% of all jobs in Norwalk.
- The Harbor is a regional employment hub. Over 77% of the Harbor area workers commute from outside of Norwalk. The Harbor area receives a net inflow of jobs, compared to the net daily outflow the City experiences.
- The job growth in the Harbor area has been broad – including service, health, education, construction and real estate, waste management, and manufacturing.

3. Roughly 13 percent of all jobs in the City of Norwalk can be defined as "water-dependent jobs". This ratio increases to 17 percent in the Harbor Area.

- As common across the East Coast, the largest share of water-dependent jobs in Norwalk are supported by tourism activities, such as restaurants, amusement, and museums.

INDUSTRY | SUMMARY OF KEY TAKEAWAYS – HARBOR AREA

1. The Harbor Area's economy is heavily supported by jobs in healthcare, social assistance, and education.

- Healthcare, social assistance, and educational jobs comprise about 5,000 of the Harbor Area's job according to the data, driven in particular by social assistance organizations serving individuals and families, dentist offices, home healthcare services, and elementary and secondary schools.
- Education jobs are growing faster than healthcare and social assistance, likely as a result of a growing population in the Harbor Area.

2. Blue collar jobs are also an economic driver in the Harbor Area, comprising almost one-third of jobs.

- Blue collar jobs include construction, utilities, manufacturing, wholesale trade, and transportation and warehousing, overall representing more of the industrial economies near the Harbor.
- Some of these industries have seen a decline in jobs over the last 10 years suggesting the changing character of blue collar jobs and consolidation towards certain industries at the Harbor (Construction and Manufacturing).
- There is fishing and aquaculture activity in the Harbor area, albeit not accounting for a large number of jobs.

3. Of the Harbor Area jobs that are in water-dependent industries, a majority are jobs driven by tourism and recreation activity around the Harbor.

- Over 60 percent of these jobs are in restaurants, travel arrangement services and accommodation, museums, historical sites, and other amusement and recreation, which tend to lower paying jobs.

INDUSTRY | JOBS AND BUSINESS SNAPSHOT

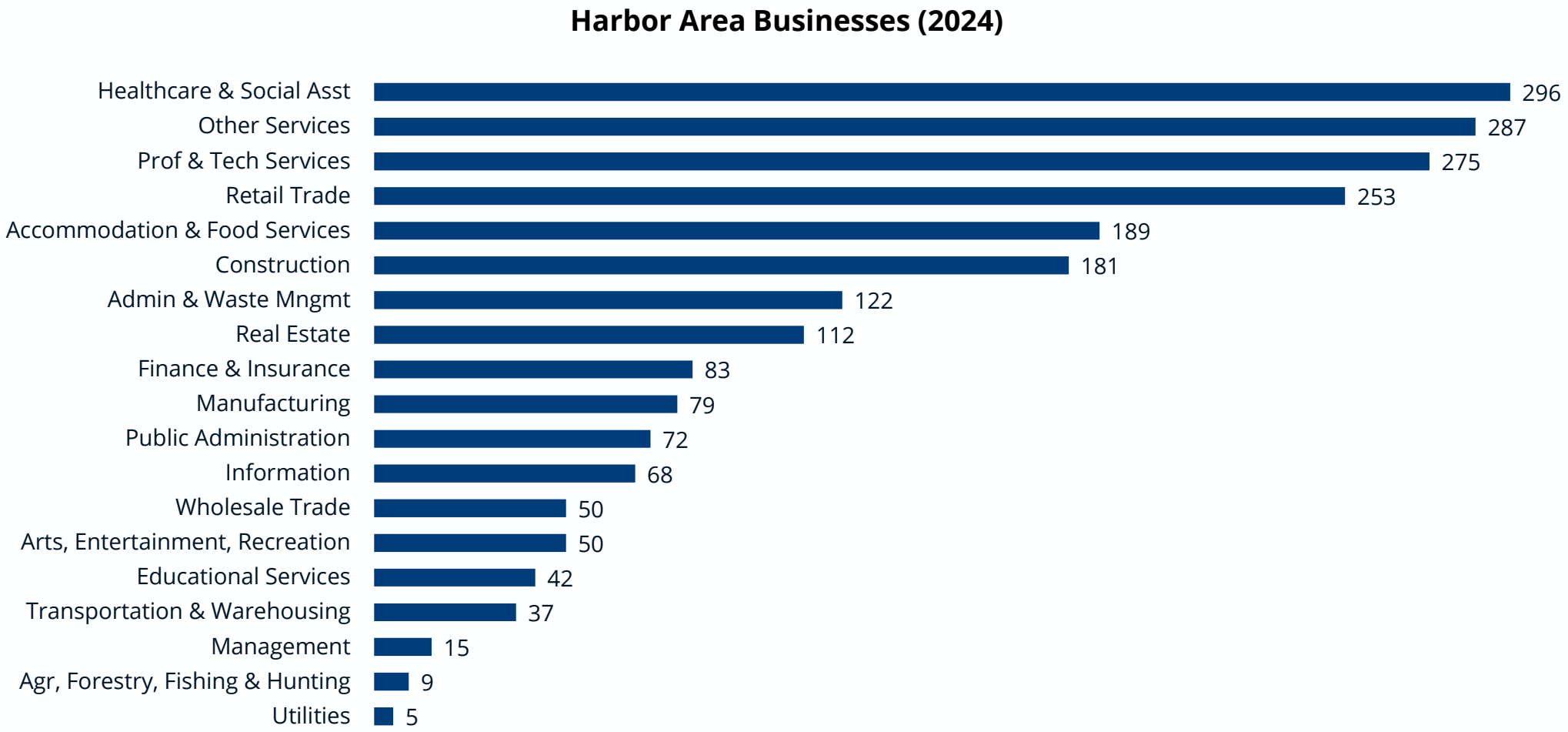
The Harbor Area represents about 39 percent of all jobs in Norwalk and has seen an increase in total jobs over the last 10 years compared to a decreasing trend for Norwalk and the MSA.

	Harbor Area	Norwalk	MSA
Number of Businesses (2024)	*2,347*	*5,694*	*52,758*
Top 3 Industries by Number of Businesses	• Healthcare and Social Assistance • Other Services* • Professional, Scientific and Technical Services	• Retail Trade • Other Services • Construction	• Professional, Scientific and Technical Services • Other Services • Retail Trade
Number of Jobs (2022)	*16,867*	*43,528*	*425,657*
Top 3 Industries by Number of Jobs	• Healthcare and Social Assistance • Educational Services • Retail Trade	• Healthcare and Social Assistance • Retail Trade • Professional, Scientific and Technical Services	• Healthcare and Social Assistance • Retail Trade • Professional, Scientific and Technical Services
Jobs CAGR (2013-2022)**	*0.6%*	*-1.0%*	*-0.4%*
Jobs Growth Rate (2013-2022)	*5.8%*	*-9.9%*	*-3.7%*

**Other Services includes automotive repair and maintenance, laundry, and civic organization related jobs and businesses.*
***The Compound Annual Growth Rate measures an annualized growth rate over a period of time, in this case 10 years.*
Note: The most recent business data is 2024. The most specific and recent jobs data is 2022, so the 10-year change period shifts to 2013-2022 from 2014-2023.
Source: Census OnTheMap and Lightcast, 2013 and 2022, ArcGIS Business Analyst, 2024

INDUSTRY | HARBOR AREA CURRENT BUSINESSES

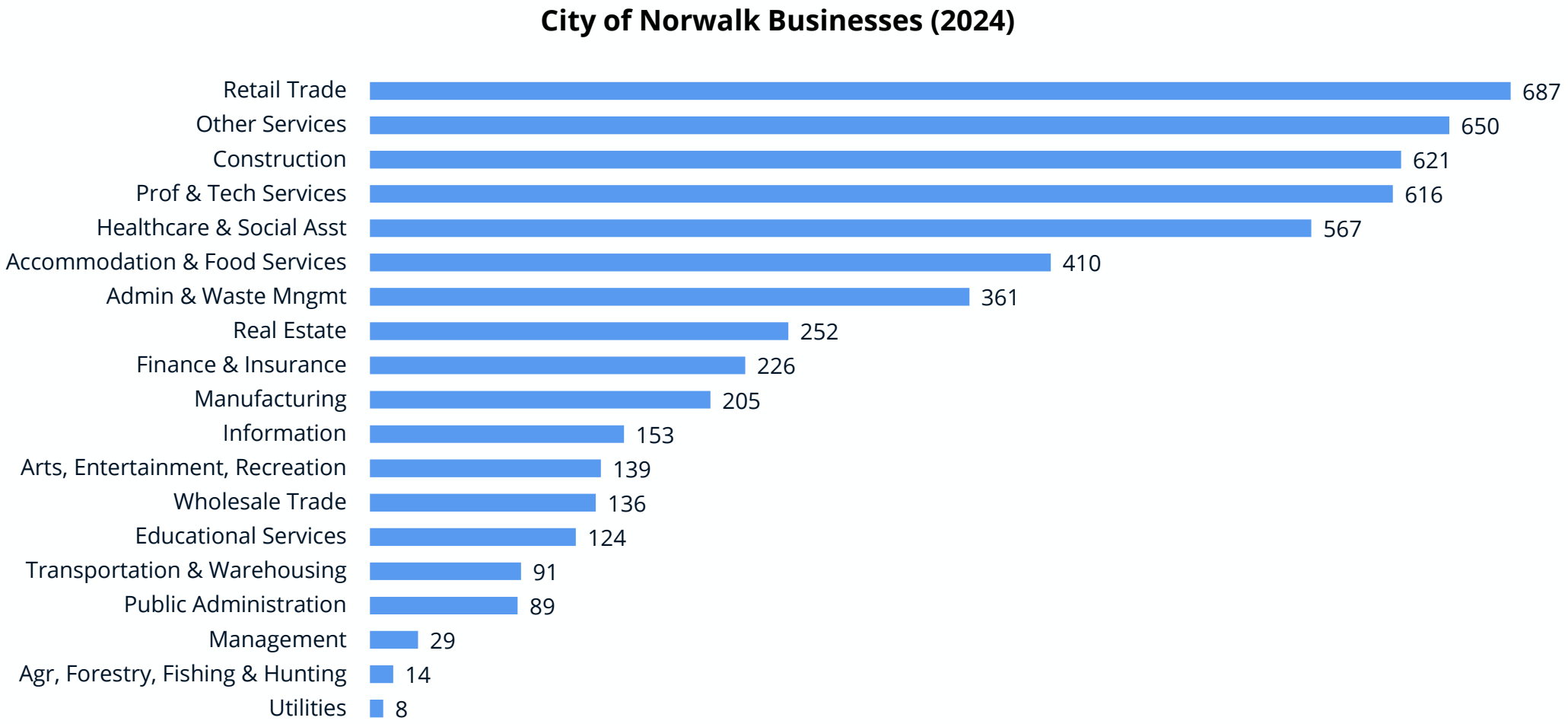
The Harbor Area contains almost half of all healthcare and social assistance businesses in the city, but also has a high number of construction, retail, accommodation, and food service businesses.



Note: Chart omits the following industries: Mining, Quarrying, and Oil and Gas Extraction; Unclassified.
Source: ArcGIS Business Analyst, 2024

INDUSTRY | NORWALK CURRENT BUSINESSES

The City's business composition reflects a diversity of sectors including a high number of retail, construction, professional services, and other services businesses (including automotive repair).

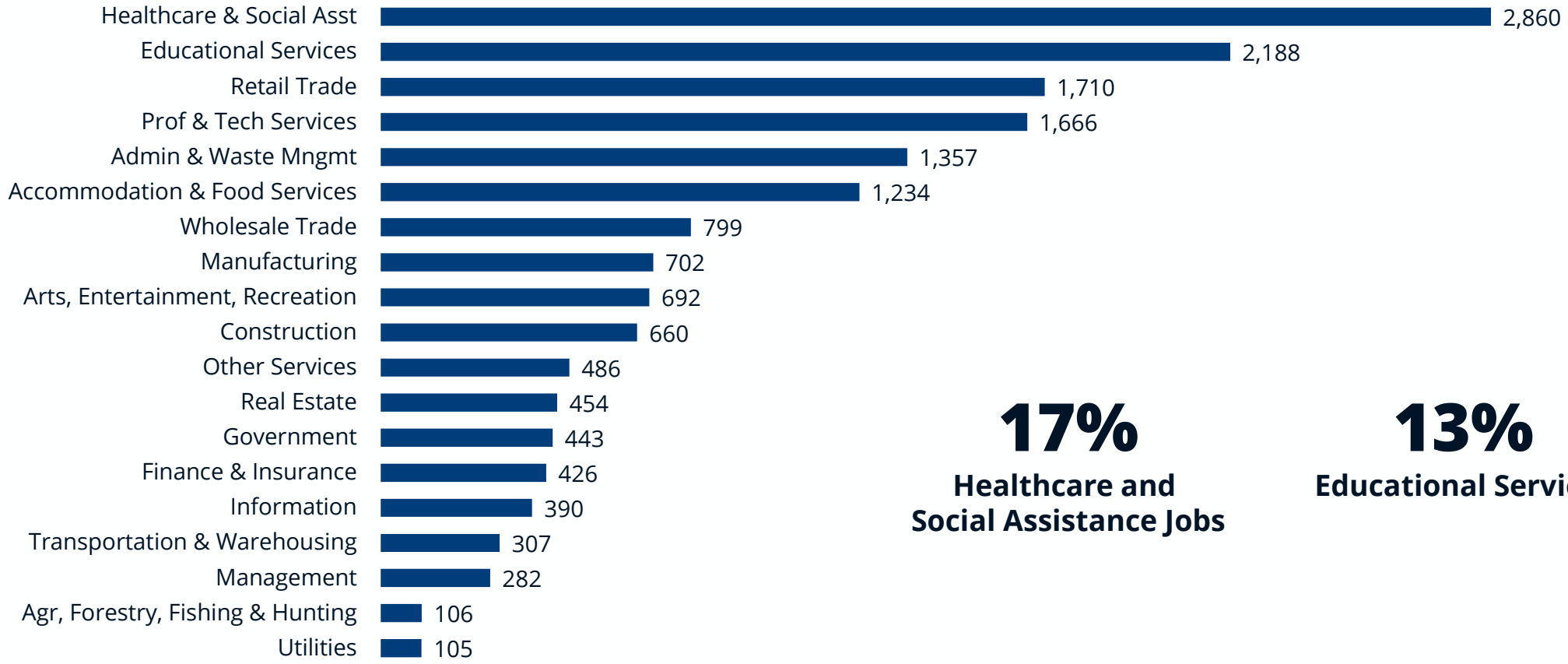


NOTE: Chart omits the following industries : Mining, Quarrying, and Oil and Gas Extraction; Unclassified.
Source: ArcGIS Business Analyst, 2024

INDUSTRY | HARBOR AREA CURRENT JOBS

Almost one-third of jobs in the Harbor area are related to education or healthcare and social assistance. Blue collar* jobs, such as construction and manufacturing, comprise 29% of total jobs.

Harbor Area Jobs (2022)



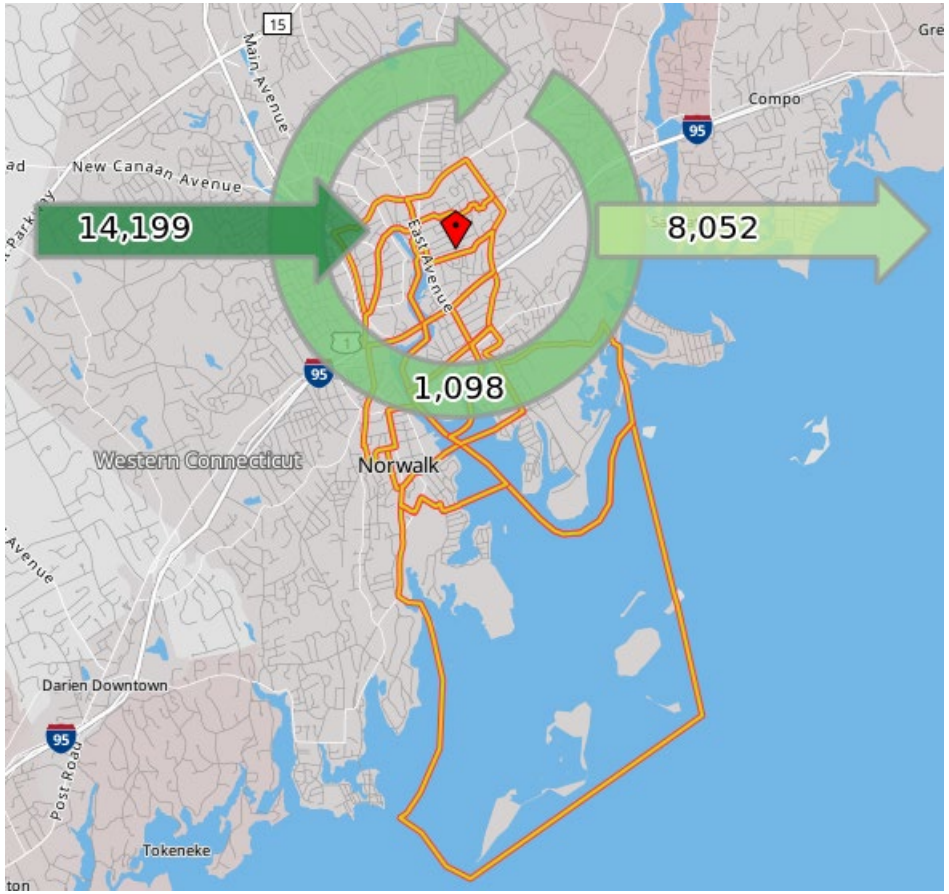
17%
Healthcare and Social Assistance Jobs

13%
Educational Services

**Blue collar jobs include agriculture, forestry, fishing, and hunting, utilities, construction, manufacturing, wholesale trade, and transportation and warehousing*
NOTE: Chart omits the following industries with 10 or fewer jobs: Mining, Quarrying, and Oil and Gas Extraction; Unclassified.
Source: Census OnTheMap and Lightcast, 2013 and 2022

INDUSTRY | HARBOR AREA INFLOW OUTFLOW

Over 90 percent of Harbor Area workers commute into the Harbor Area for work. Of these 14,200 workers, 3,200 live in Norwalk, 2,700 live in Stamford or Bridgeport, and 8,300 live elsewhere.



14,199 – Employed in Harbor Area, Live Outside
- 3,191 live in Norwalk
- 1,410 live in Stamford
- 1,296 live in Bridgeport

8,052 – Live in Harbor Area, Employed Outside
- 1,214 work in New York City
- 1,131 work in Stamford
- 985 work in Norwalk

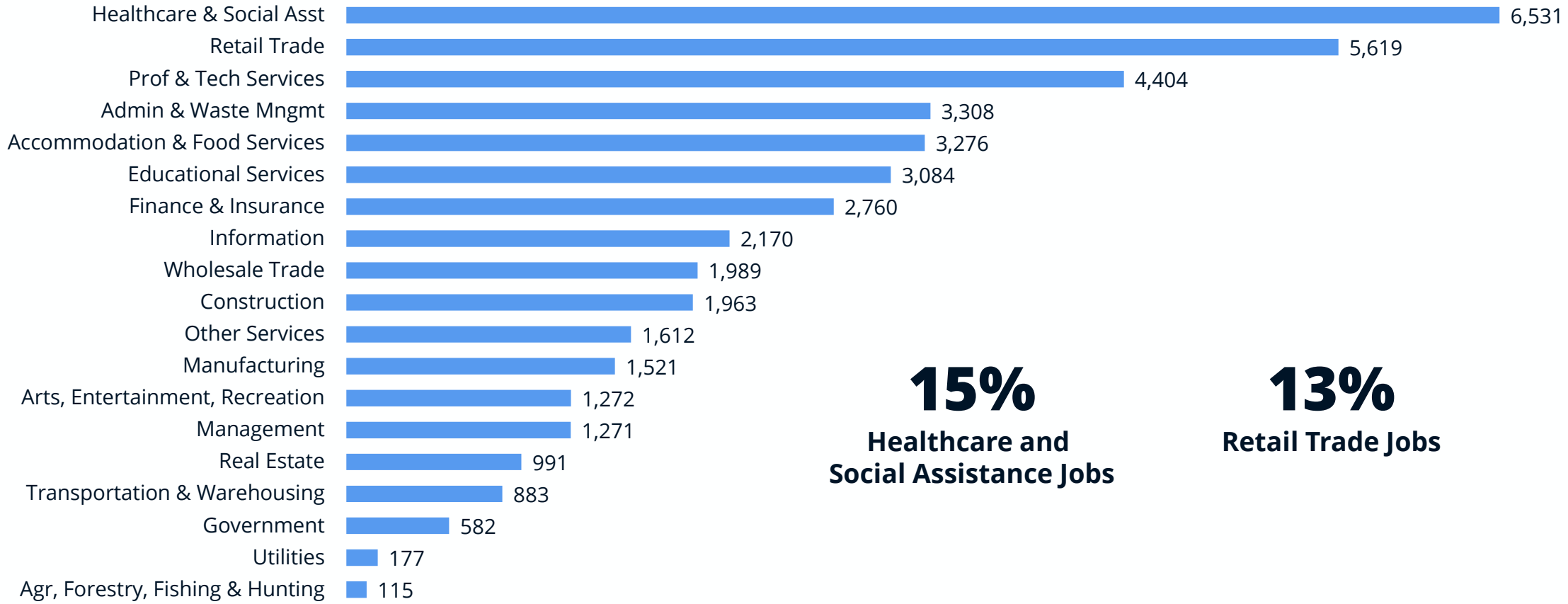
1,098 – Employed and Live in Harbor Area

Note: Due to data source constraints, this data does not include self-employed jobs, hence a discrepancy in total jobs number.
Source: Census OnTheMap, 2022

INDUSTRY | NORWALK CURRENT JOBS

The industry breakdown for the City of Norwalk shows that more jobs in the services sector such as retail trade, accommodation, and food services, while less jobs are in manufacturing and construction.

City of Norwalk Jobs (2022)



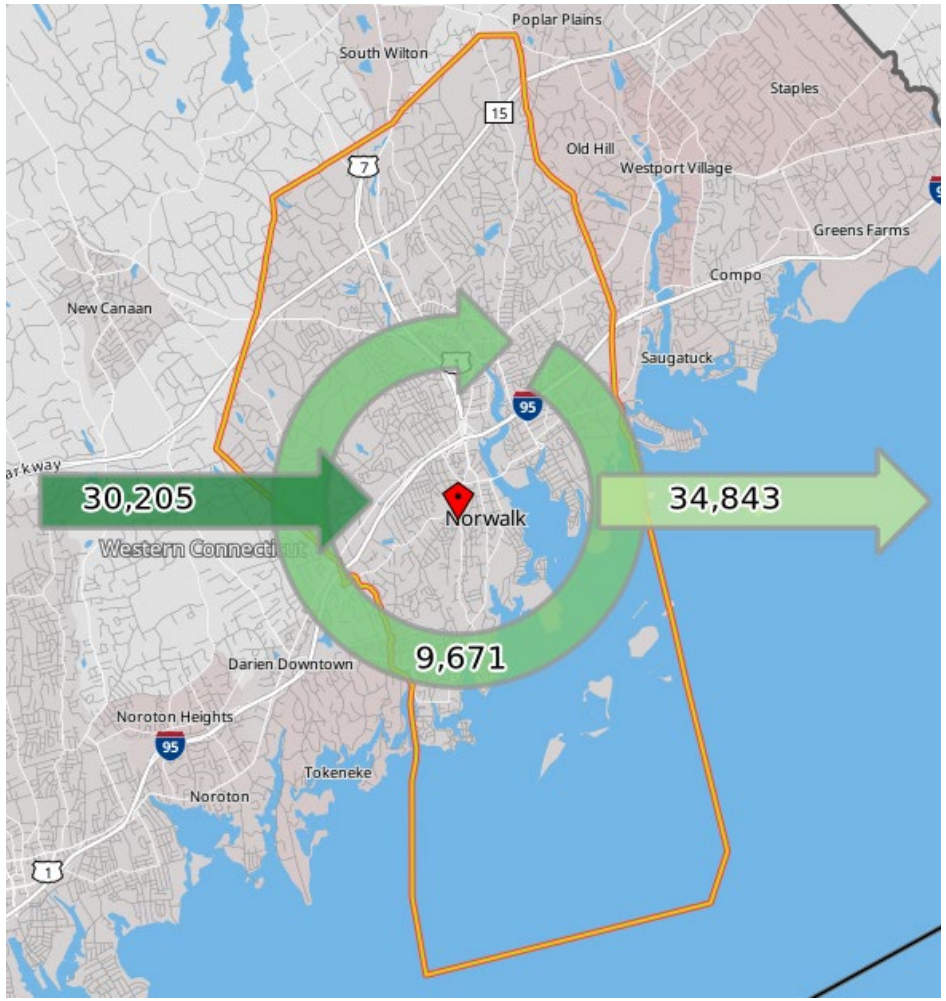
15%
Healthcare and Social Assistance Jobs

13%
Retail Trade Jobs

NOTE: Chart omits the following industries with 10 or fewer jobs: Mining, Quarrying, and Oil and Gas Extraction; Unclassified.
Source: Census OnTheMap and Lightcast, 2013 and 2022

INDUSTRY | NORWALK INFLOW OUTFLOW

Of the 30,200 workers that commute into Norwalk, 6,800 of them live in Stamford or Bridgeport, 2,600 live in Danbury, New York City, or Shelton, and 20,800 live elsewhere.



30,205 – Employed in Norwalk, Live Outside
- 3,906 live in Stamford
- 2,896 live in Bridgeport

34,843 – Live in Norwalk, Employed Outside
- 6,166 work in Stamford
- 6,070 work in New York City

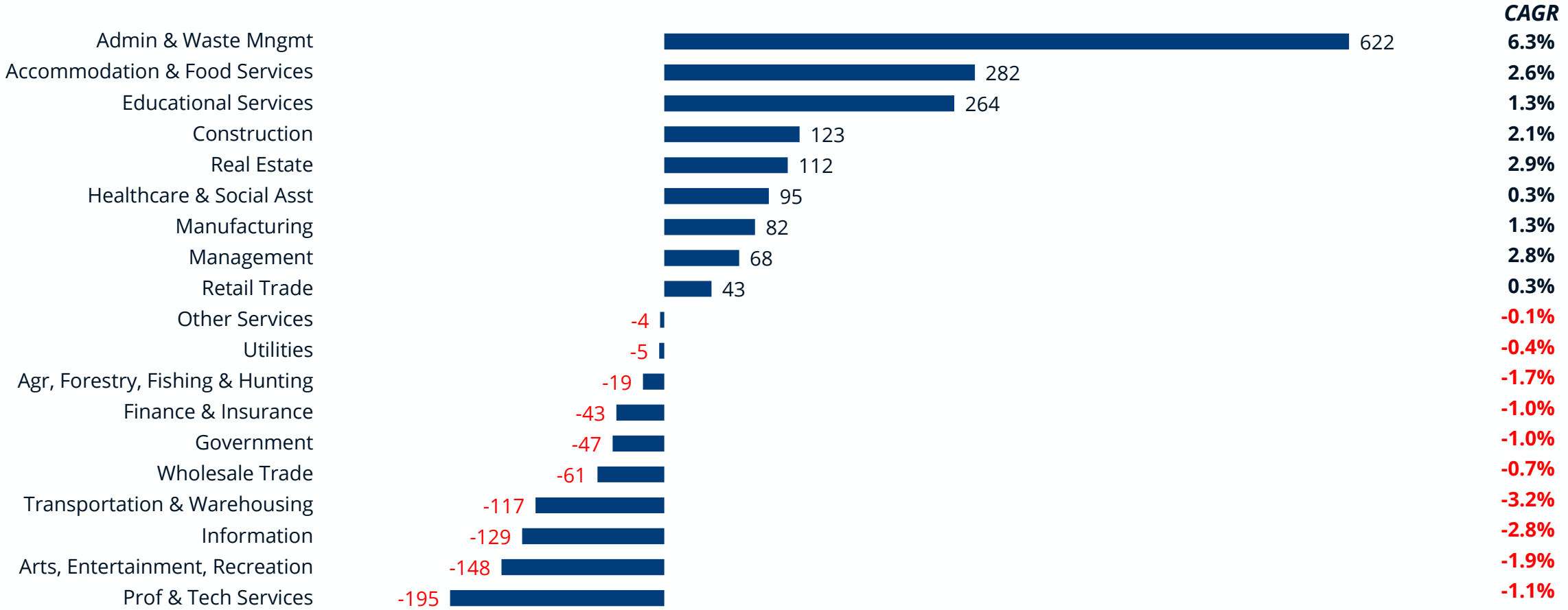
9,671 – Employed and Live in Norwalk

Note: Due to data source constraints, this data does not include self-employed jobs, hence a discrepancy in total jobs number.
Source: Census OnTheMap, 2022

INDUSTRY | HARBOR AREA 10-YEAR JOBS CHANGE

Office administration and cleaning jobs demonstrated the largest growth in jobs followed by tourism-related industries including accommodation and food services, as well as educational services.

Change in Harbor Area Jobs (2013-2022)

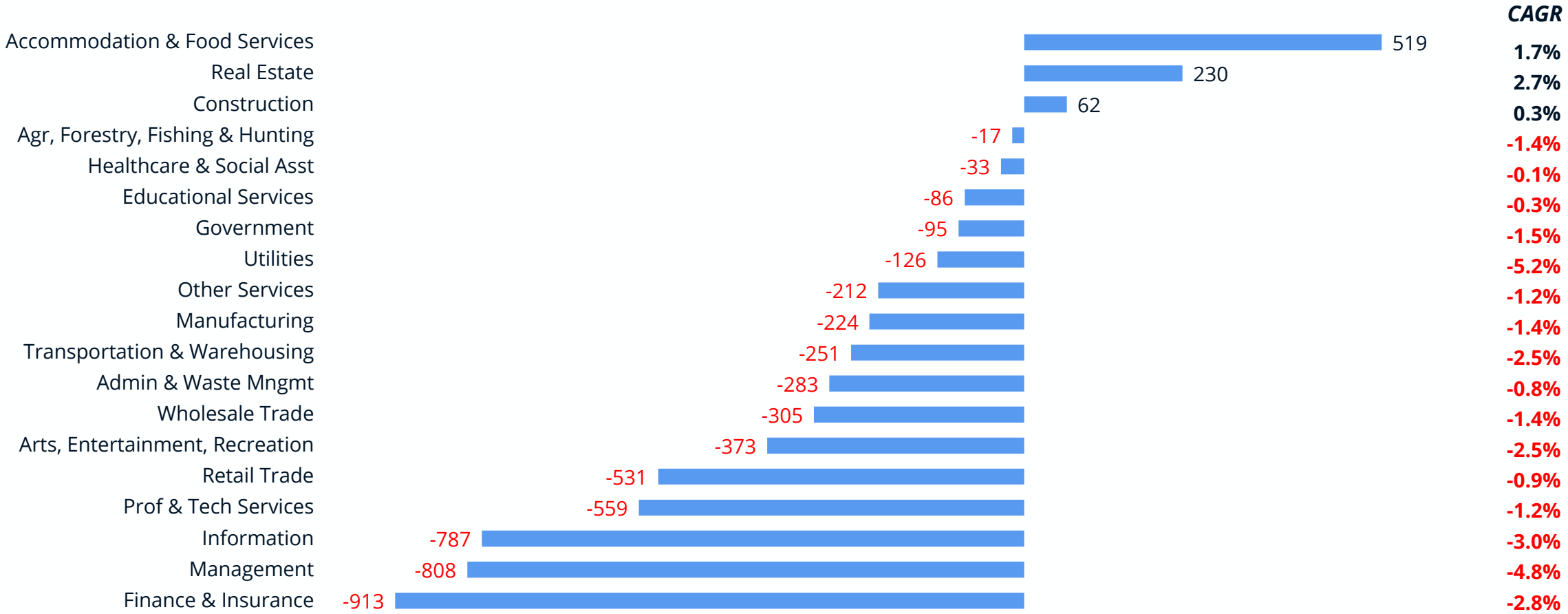


Note: Chart omits the following industries with 10 or fewer jobs: Mining, Quarrying, and Oil and Gas Extraction; Unclassified. Administration & Waste Management includes employment and business support services as well as janitorial and landscape services.
Source: Census OnTheMap and Lightcast, 2013 and 2022

INDUSTRY | NORWALK 10-YEAR JOBS CHANGE

The City of Norwalk experienced jobs loss across all industry categories in the last 10 years, except for accommodation and food services, real estate, and construction.

Change in Norwalk Jobs (2013-2022)



NOTE: Chart omits the following industries with 10 or fewer jobs: Mining, Quarrying, and Oil and Gas Extraction; Unclassified.
Source: Census OnTheMap and Lightcast, 2013 and 2022

INDUSTRY | WATER-DEPENDENT INDUSTRIES IN NORWALK

The below table summarizes the industries that contain jobs dependent on the Harbor in Norwalk.

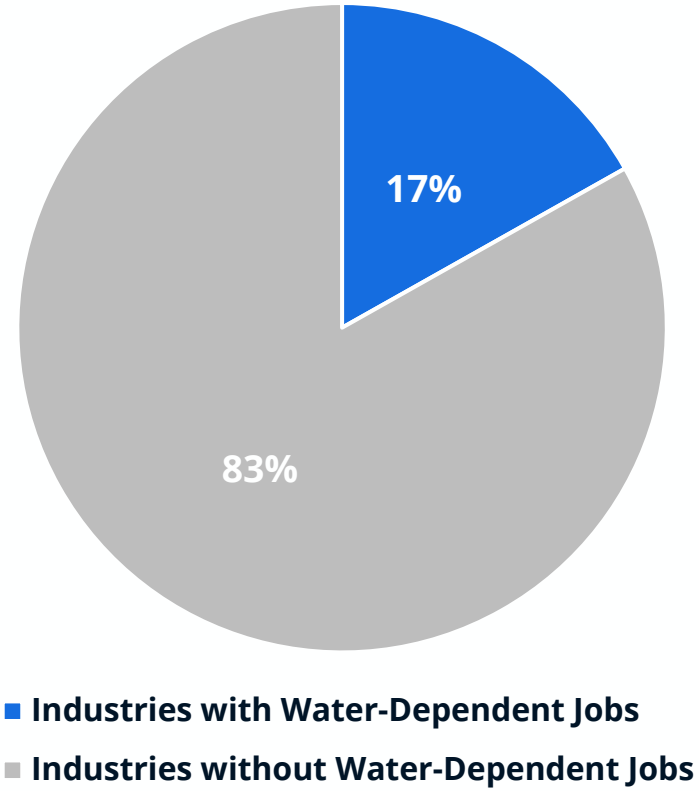
Industry Category	Industry Activity	NAICS Description
Aquaculture	1. Aquaculture	➢ Animal Production
Fishing and Fisheries	1. Fishing 2. Fish and Seafood Wholesales and Retailers	➢ Fishing ➢ Grocery and Related Product Merchant Wholesalers ➢ Specialty Food Stores
Boating and Marinas	1. Ship and Boat Building and Repair 2. Boat Dealers 3. Marinas	➢ Ship and Boat Building ➢ Other Motor Vehicle Dealers ➢ Personal and Household Goods Repair and Maintenance
Maritime Transportation	1. Port and Habor Operations 2. Warehousing and Storage	➢ Support Activities for Water Transportation ➢ Warehousing and Storage
Maritime Trade	1. Chemical and Gas Manufacturing 2. Nautical System and Trade Manufacturing 3. Other Manufacturing	➢ Basic Chemical Manufacturing ➢ Other General Purpose Machinery Manufacturing ➢ Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
Energy, Power, and Telecommunications	1. Electric Power Generation, Transmission and Distribution	➢ Electric Power Generation, Transmission and Distribution
Research	1. Scientific Research 2. Environmental Organizations	➢ Scientific Research and Development Services ➢ Social Advocacy Organizations
Tourism and Recreation	1. Water Sightseeing 2. Accommodations and Hotels 3. Restaurants and Other Eating Places 4. Parks, Gardens, and Other Amusement Places 5. Boating Instruction	➢ Scenic and Sightseeing Transportation, Water ➢ Consumer Goods Rental ➢ Travel Arrangement and Reservation Services ➢ Other Schools and Instruction ➢ Museums, Historical Sites, and Similar Institutions ➢ Other Amusement and Recreation Industries ➢ Traveler Accommodation ➢ Restaurants and Other Eating Places

Note: The table reflects the water-dependent industries that are present in Norwalk per the jobs data. Additional industries are reflected in the memo for Task 2.1
Source: The NAICS codes were derived from water-dependent uses as defined by Section 22a 93(16) of the Connecticut Coastal Management Act (CCMA), under the Connecticut General Statutes (CGS) as well as HR&A's previous project experience developing industry-based definitions of water-dependent and/or blue economy uses, in MA, RI, and NY.

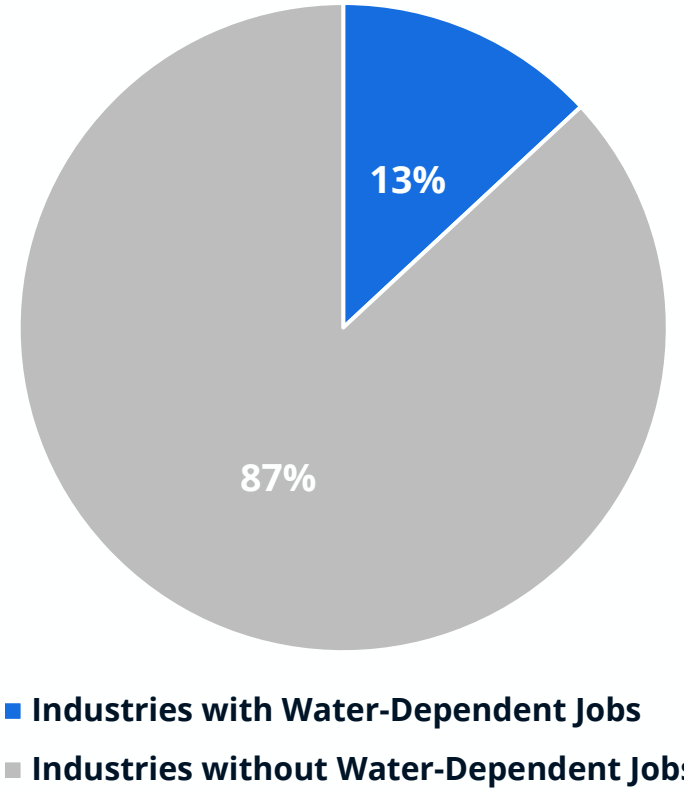
INDUSTRY | SHARE OF POSSIBLE WATER-DEPENDENT JOBS

Roughly 13 percent of all jobs in the City of Norwalk can be possible water-dependent jobs. This ratio increases to 17 percent in the Harbor Area. A more detailed analysis of the water-dependent industries is forthcoming in Task 2.

Harbor Area

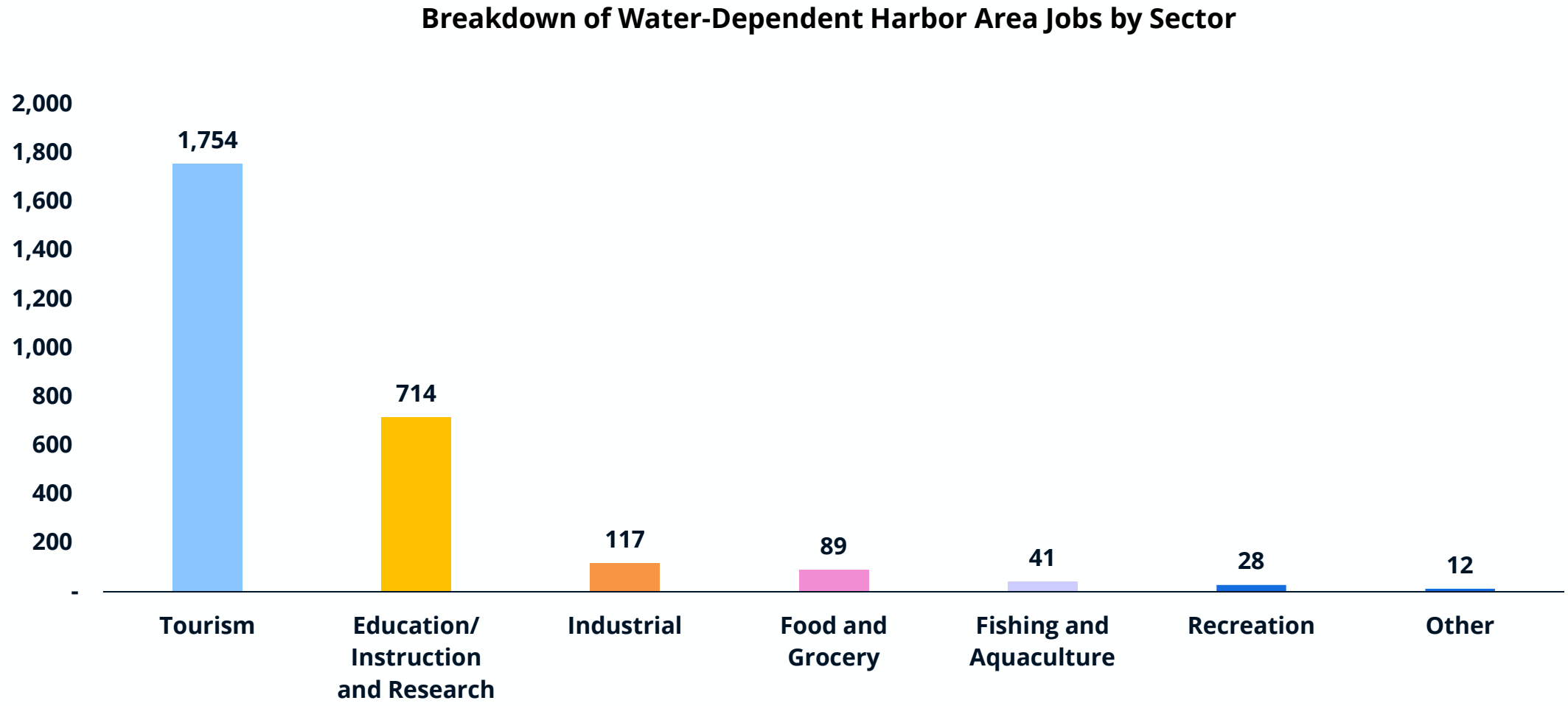


City of Norwalk



INDUSTRY | WATER-DEPENDENT INDUSTRIES IN THE HARBOR

Tourism sector jobs represent the majority of water-dependent jobs in the harbor, followed by education, instruction and research jobs. A more detailed breakdown is in the appendix.

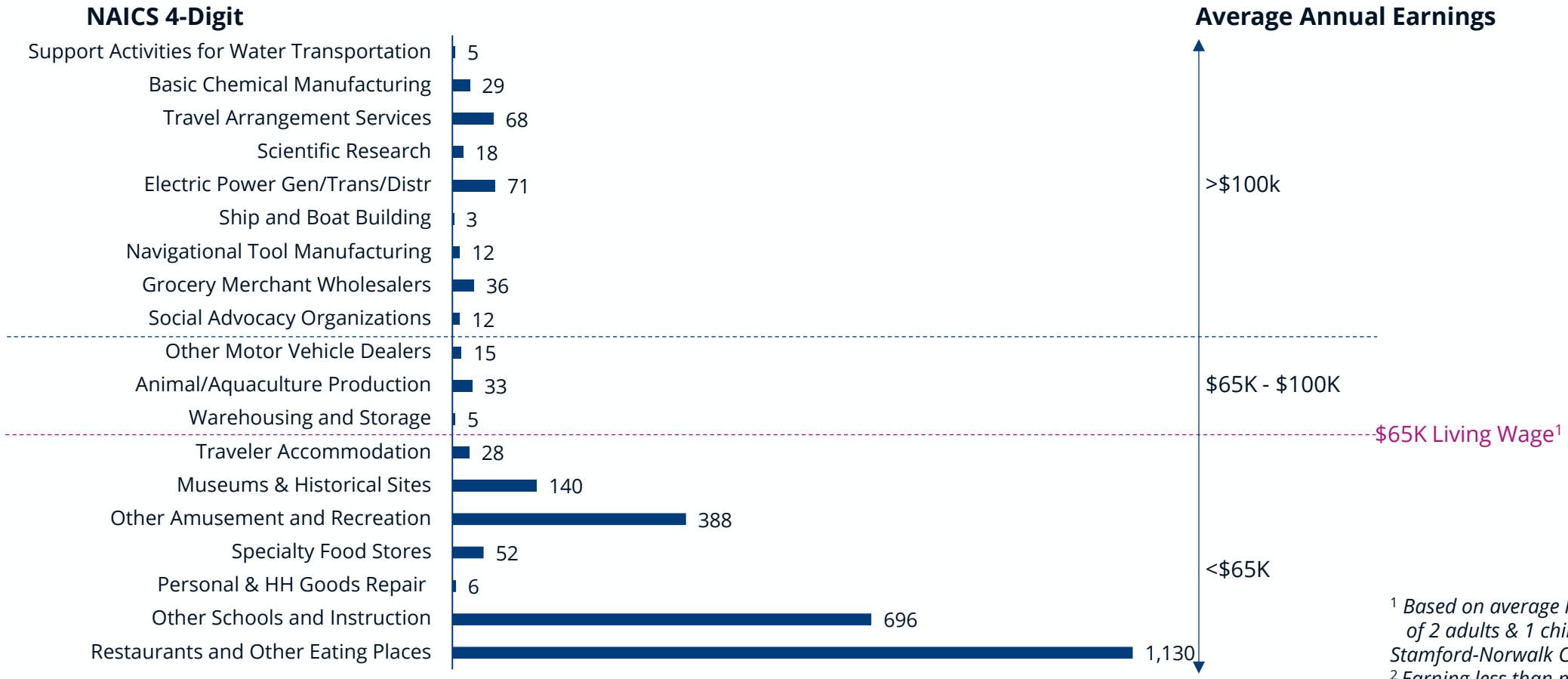


NOTE: While education jobs include some that are water-dependent, not all are.
Source: Census OnTheMap and Lightcast, 2022

INDUSTRY | HARBOR AREA WATER-DEPENDENT INDUSTRY EARNINGS

Jobs in water-dependent industries in the Harbor Area are concentrated below the living wage particularly restaurants which comprise a large portion of these jobs.

Harbor Area Jobs and Earnings in Water-Dependent Industries



[1] *Based on average household size of 2 adults & 1 child in Bridgeport-Stamford-Norwalk CT MSA*
[2] *Earning less than minimum wage*

Note: Earnings data is based on MSA level data for 4-digit NAICS.
Source: Lightcast 2023; MIT Living Wage Calculator.



03

Recreation

RECREATION | SUMMARY OF KEY TAKEAWAYS

1. The demographic trends across the different recreation categories and specific locations are generally more aligned with the MSA demographics than the Harbor Area.

- Visitors aged 35-64 comprise the largest share across analyzed destinations and the distribution of visitors by age is aligned with the local geographies analyzed in the demographic section.
- The share of white visitors varies from 56-59 percent across the recreation destination types. This trend is out-of-town the MSA population but distinct from that of the Harbor Area and the City of Norwalk, which are more diverse and are not majority white. This discrepancy will be investigated further to better understand the barriers Harbor Area residents face in accessing local recreational assets.

2. Regional anchors, such as The SoNo Collection, have the most out-of-town visitors, but the proportion is also high for parks, beaches, and marinas.

- The SoNo Collection has the highest share of out-of-town visitors, at 89 percent. This fact is expected given that it is a regional anchor drawing shoppers from all over.
- Notably, only one-third of visitors to marinas, parks, and beaches, are from Norwalk. Further analysis will show whether out of town visitors are from nearby towns or are coming from farther away.

3. Visitation peaked in Summer 2023, showing growth from 2022, but was not as high in 2024.

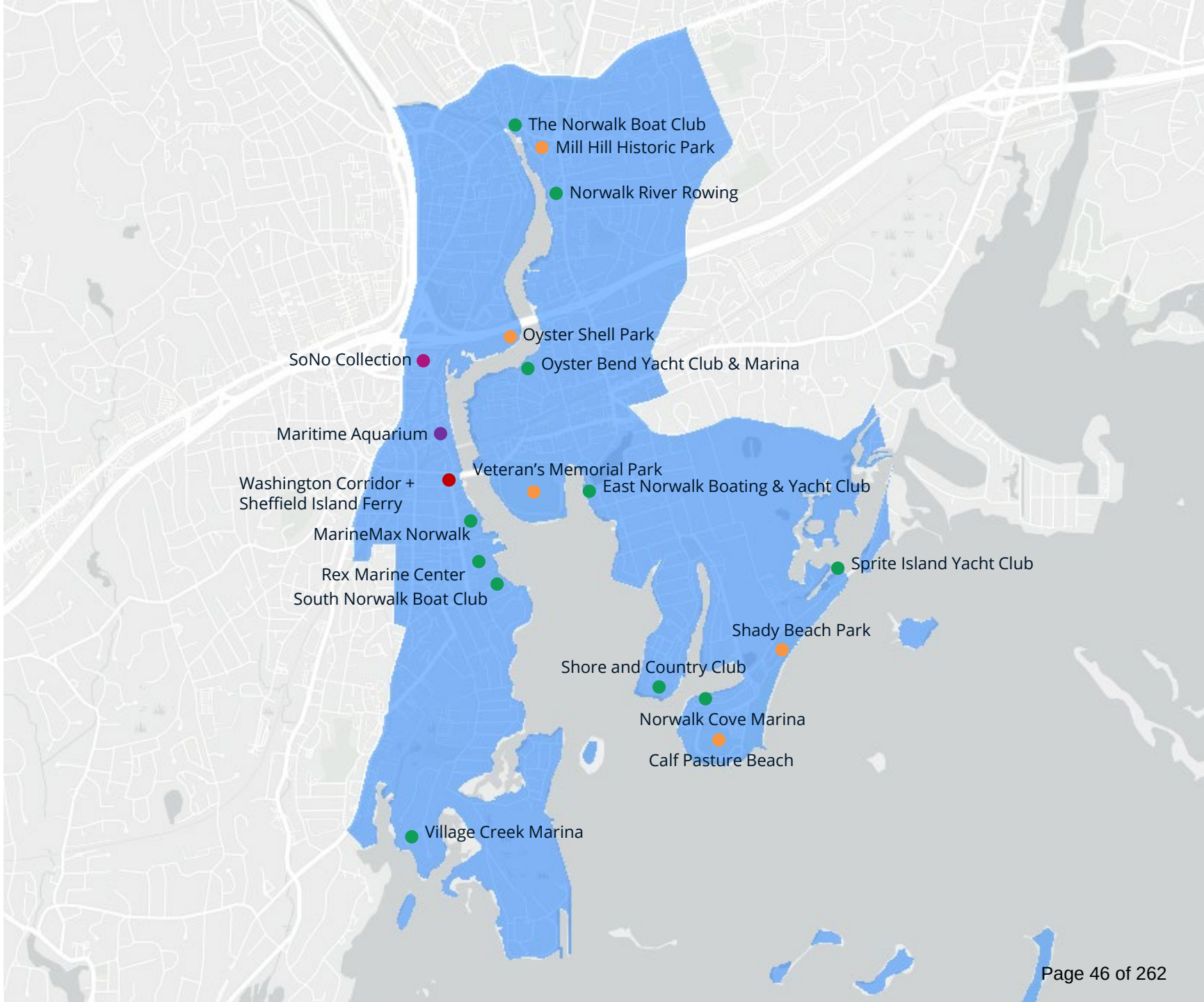
- Visitation has fluctuated over time, seemingly in similar ways across recreation destinations. In general, visitation appeared to peak in Summer 2023, showing growth from 2022. However, 2024 did not continue this positive trend and seemed to be lower than 2023, although still higher than 2022. More analysis is warranted to understand what drove this trend and how that can inform future investments in tourism and recreation.

RECREATION | OVERVIEW OF LOCATION GROUPS

An analysis of the Harbor Area's recreation destinations, leverages location information to information about visitors including visitation trends, home locations, and demographics. The data reflects a sample size of visitors between 2022-2024.

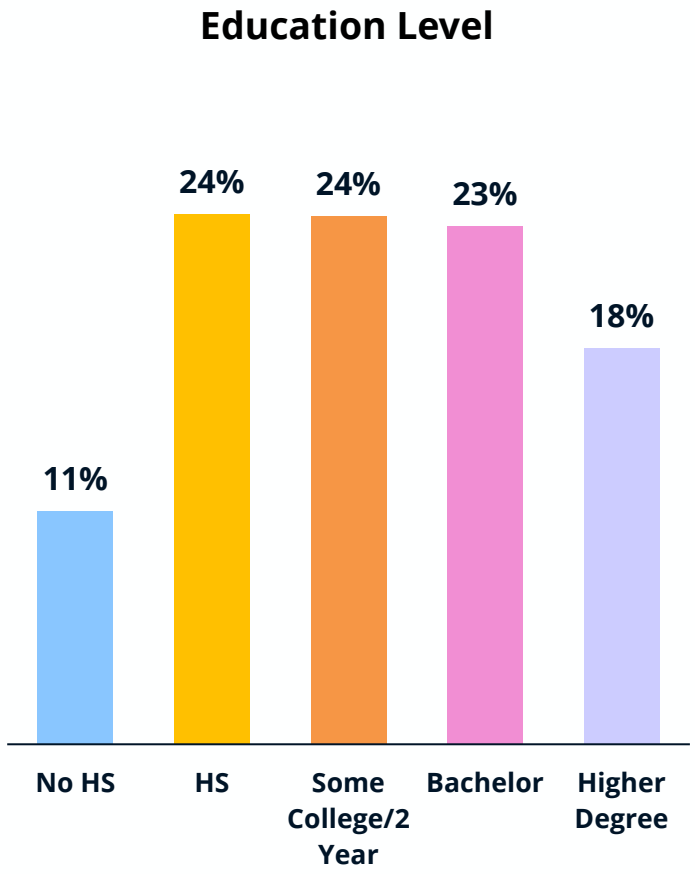
Five distinct types of places were analyzed, as shown on the map, including the SoNo Collection, the Maritime Aquarium, the Washington Street corridor and Sheffield Island Ferry, marinas, and parks and beaches.

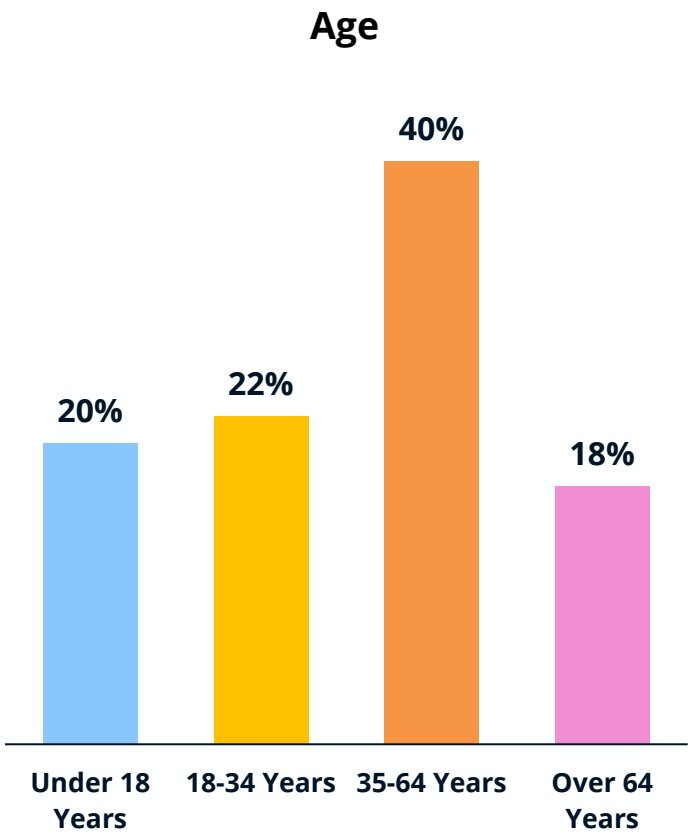
Maritime Aquarium
SoNo Collection
Washington St Corridor + Ferry
Marinas
Parks and Beaches

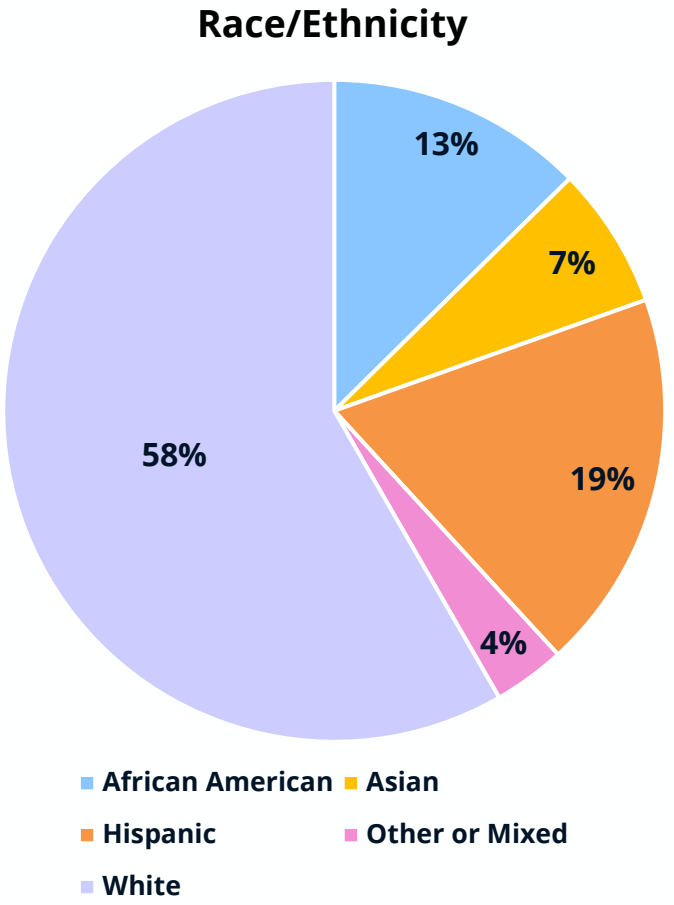


RECREATION | VISITATION DEMOGRAPHICS FOR MARINAS

The age, education, and race/ethnicity demographics for marina visitors are very similar to the MSA demographics. Marina visitors in the Harbor Area are notably less diverse than the Harbor Area itself.



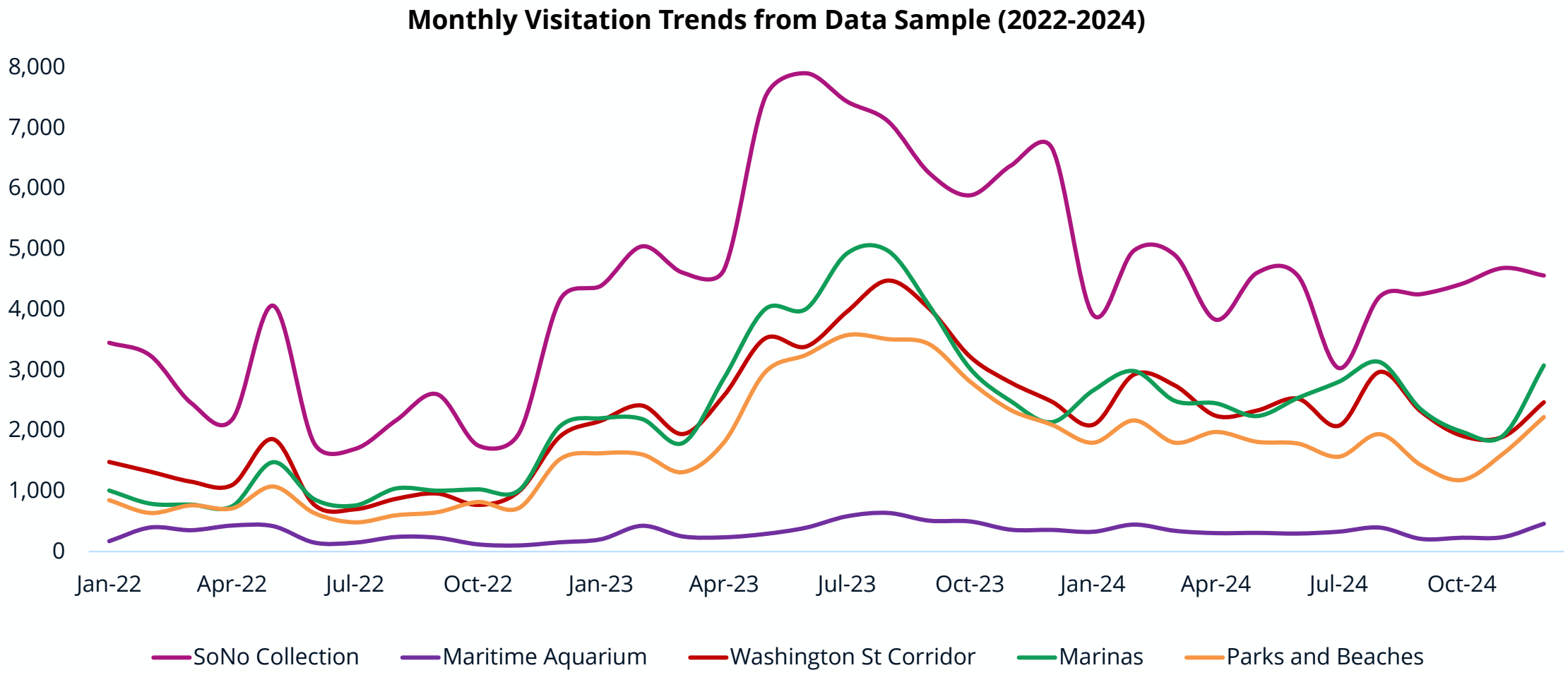




Note: the Marina data is comparable to the other recreation locations.
Source: Azira. Azira is a third-party data source, which provides a sample of anonymized user data, leveraging mobile device location information collected from smartphones. This data shows, on a sampled individual user basis, geographic origins, time spent in given locations, demographic, and spending pattern related information.

RECREATION | MONTHLY VISITATION TRENDS

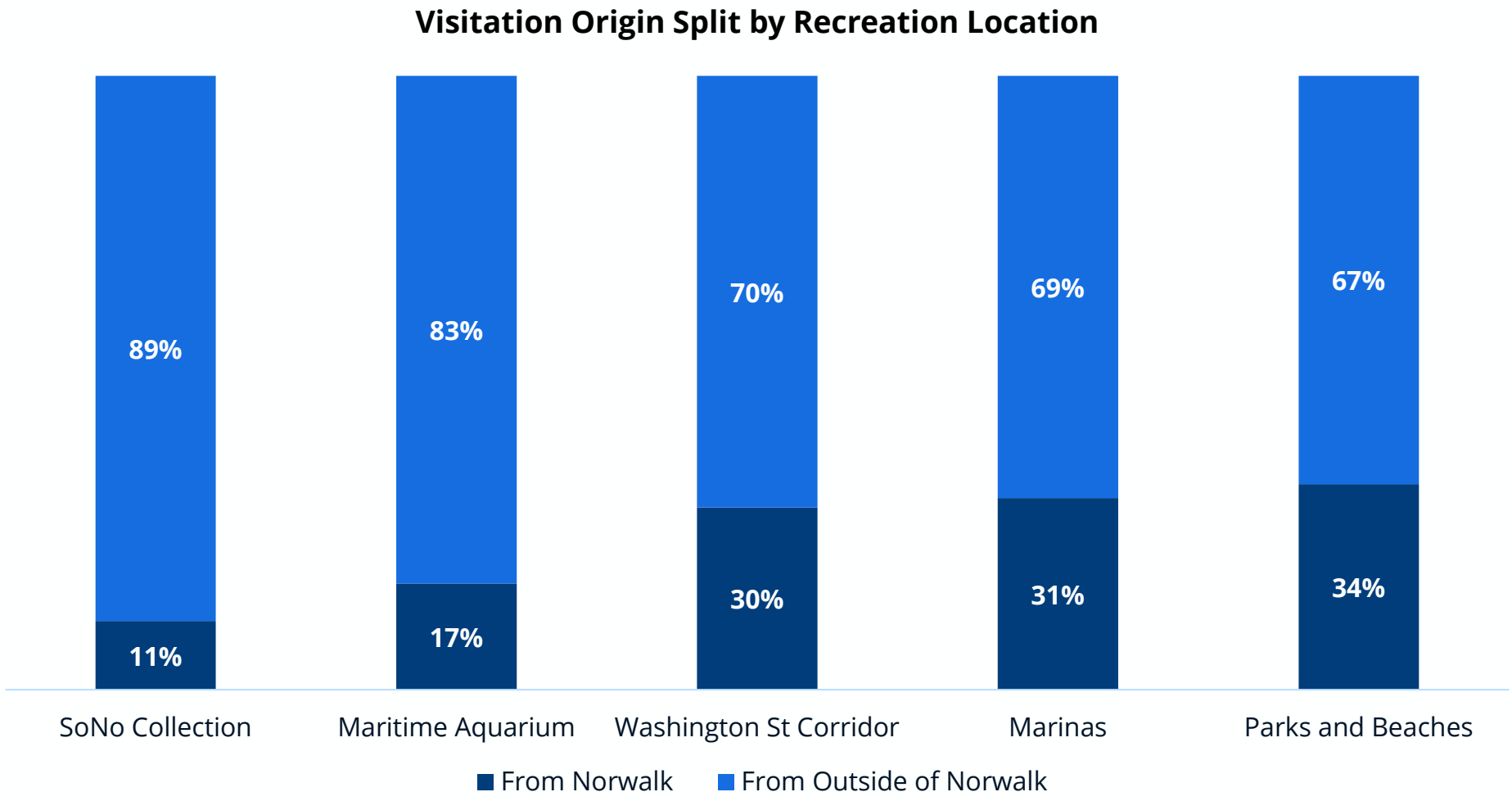
Visitation trends are similar across all types of locations, with the SoNo Collection showing the greatest visitation relative to the other categories. Visitation appears to be higher in 2023 than in 2022 and 2024.



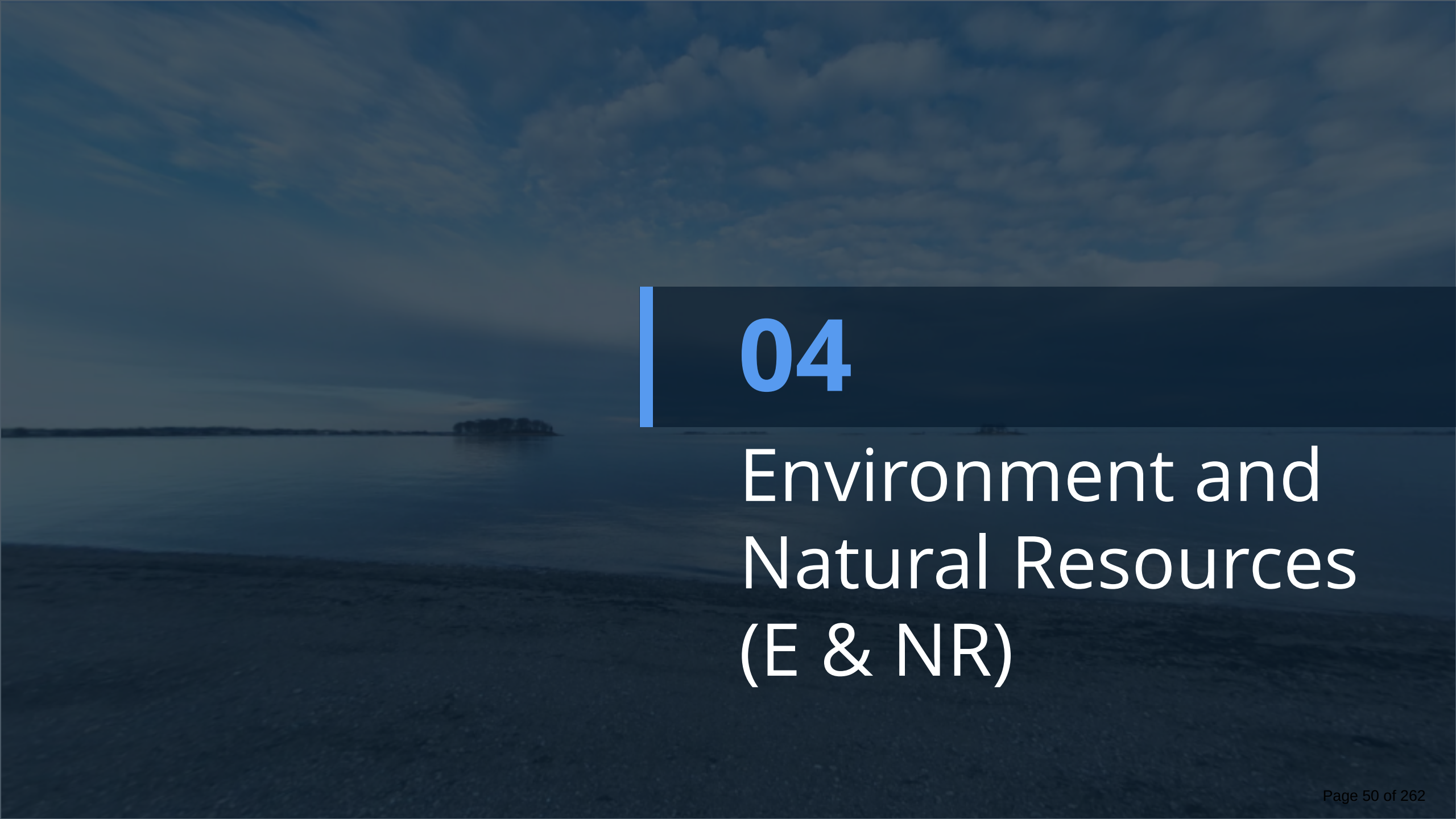
Note: The visitation trends are a sample and do not reflect total visitation counts.
Source: Azira

RECREATION | VISITATION ORIGINS

Regional anchors like the SoNo Collection and Maritime Aquarium have the highest shares of non-Norwalk visitors. About one-third of visits to marinas, parks, and beaches are by Norwalk residents.



Source: Azira



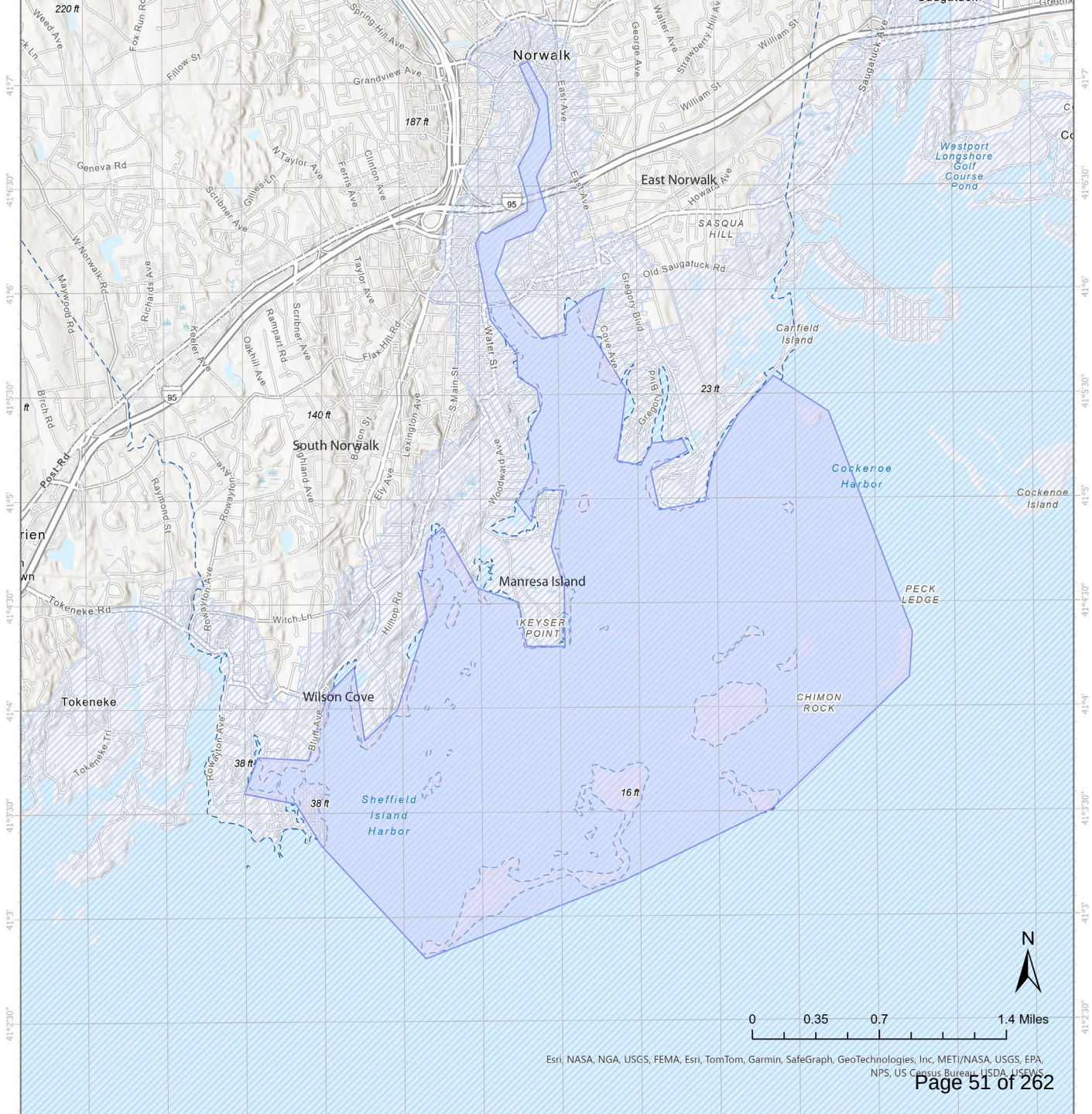
04

Environment and Natural Resources (E & NR)

E & NR|STUDY AREA OVERVIEW

The study area for Environment & Natural Resources is shown at right. The maps in this section look at the below components, detailed in the following slides:

- Navigational Opportunities & Hardships
- Shoreline Topography & Makeup
- Historic and Current Wetlands
- Harbor Wildlife and Critical Habitats
- Harbor Protected Areas
- Shellfish
- Public Access
- Heat Vulnerability
- Flood Hazards
- Sea Level Rise
- Erosion Susceptibility
- Land Use
- Recreational Boat Traffic

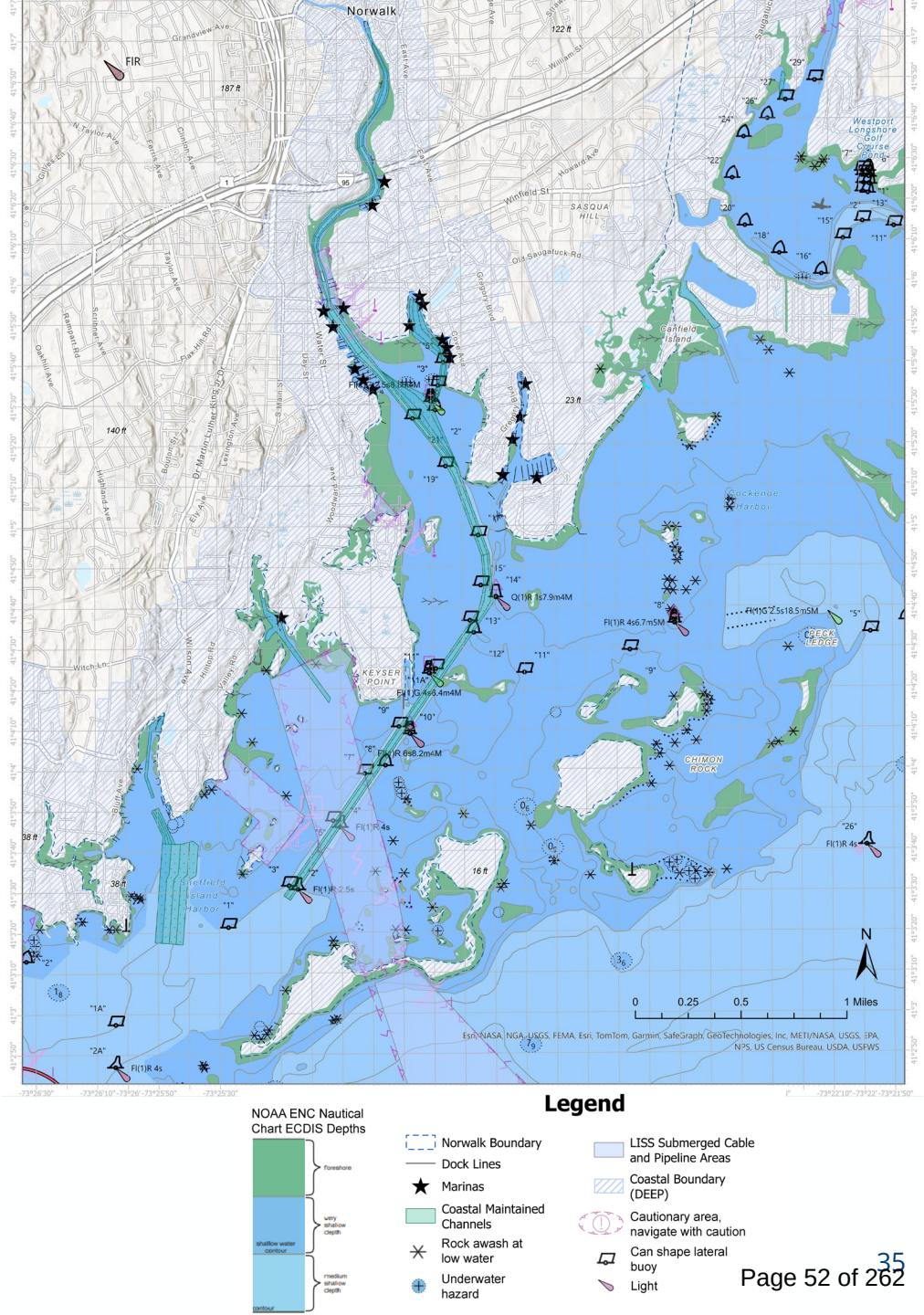


E & NR | NAVIGATIONAL OPPORTUNITIES & HARDSHIPS

Norwalk Harbor presents both challenges and opportunities for those who navigate its waters.

- The 4.7-mile Norwalk Harbor Channel is between 10-12 feet deep, and its width varies by location, ranging from 100 feet to 250 feet wide. This clearly defined, federally maintained navigation channel runs from the outer harbor to Norwalk Harbor, located at the mouth of the Norwalk River.
- Dredging of the channel is managed and overseen by the U.S. Army Corps of Engineers (USACE) in coordination with several City commissions including the Norwalk Harbor Commission and Shellfish Commission. USACE oversight also includes a 10-foot-deep, 17-acre anchorage near Fitch Point.
- Dredging maintains the critical depth needed for navigability in the Harbor. This occurs every 10-15 years based on sediment accumulation, and dredging last occurred in 2014. Over time, sediment accumulation can negatively affect navigability. Shallow zones and shoaling, particularly near the islands and along harbor edges, require careful navigation and can pose a risk to larger/deep-draft vessels, especially during low tides.
- Other hazards include congestion and visibility. Norwalk Harbor experiences a variety of vessel traffic (including commercial fishing boats, recreational yachts, and crew teams), which can become congested near the Washington Street Bridge connecting South Norwalk to East Norwalk.
- Navigation is further challenged by large tide swings (+/- 7 ft), geomorphic shoaling, outcropping, strong currents and fog.

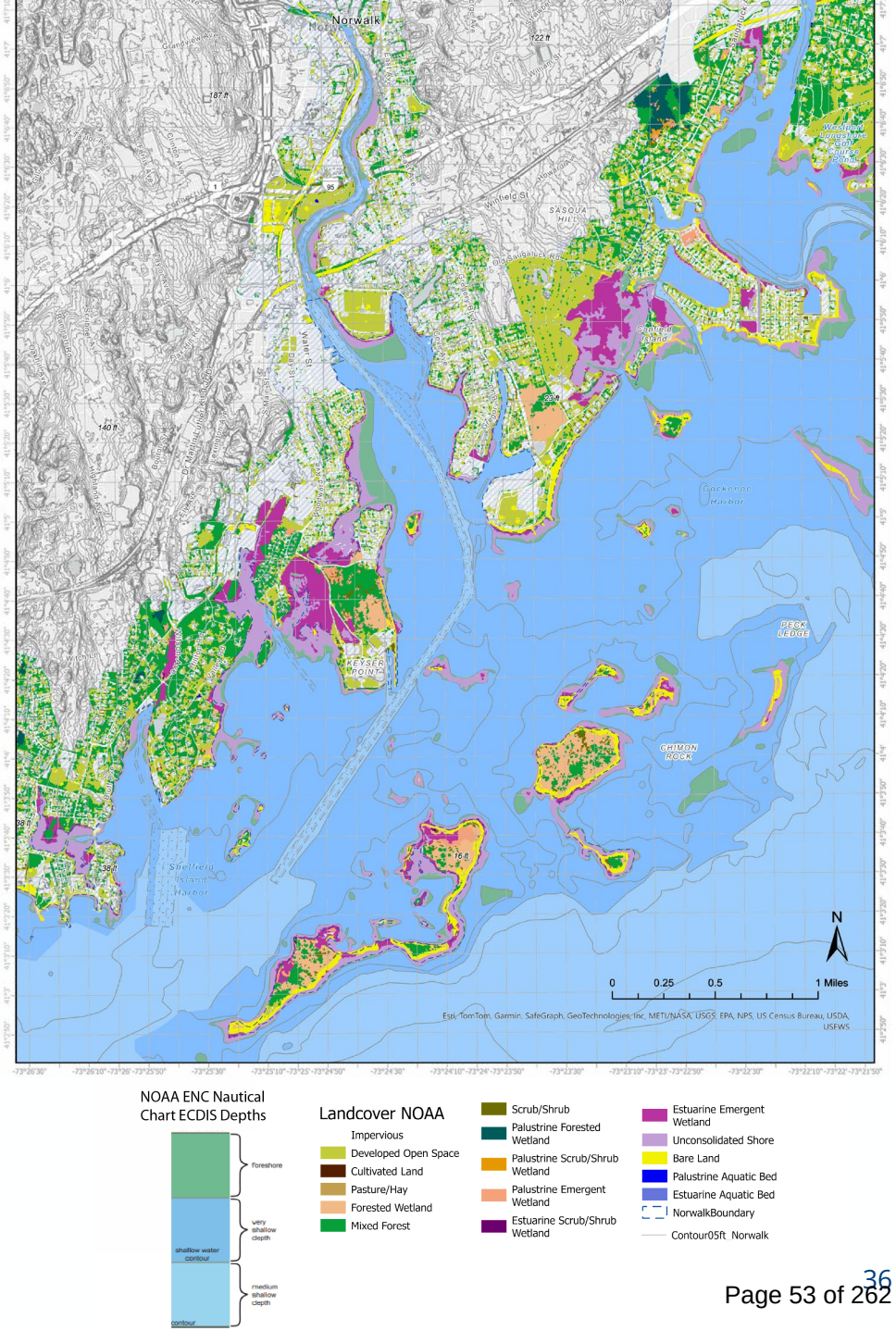
Source: USACE New England District, "Norwalk Harbor Navigation Project."



E & NR | SHORELINE TOPOGRAPHY AND MAKEUP

Norwalk Harbor's shoreline is characterized by a mix of natural and hardened edges.

- The topography features gentle slopes descending towards the water, with elevations ranging from sea level at the shoreline to higher terrains inland (60-70 feet above sea level).
- The shoreline includes a mix of wetlands and forests (typically located closer to the Long Island Sound) with developed, hardened shorelines more commonplace in the upper Harbor where commercial and industrial activity is centered.
- Per NOAA data, shoreline habitat categories present within the study area include Developed Open Space, Mixed Forest, Estuarine Emergent Wetland, Palustrine Emergent Wetland, and Bare Land (areas with minimal vegetation).
- Further into the Harbor, man-made structures such as seawalls and piers provide stability to the waterfront, reinforcing areas prone to erosion. These hardened shorelines and impervious surfaces support industrial and/or commercial use but limit natural absorption. They are not mapped with any specific habitat category.
- Areas in the southern area of the study area (such as at Calf Pasture, Canfield, and Sheffield), are critical for water filtration and serve as vital habitats for marine life. The wetlands absorb excess water during storms, reducing flood risks and helping to maintain the delicate balance between land and sea.
- The Harbor’s topography influences not only the environmental conditions but also the opportunities and challenges for those navigating its waters. The interplay of these shoreline features shapes Norwalk Harbor’s identity, blending natural resources with practical maritime function.

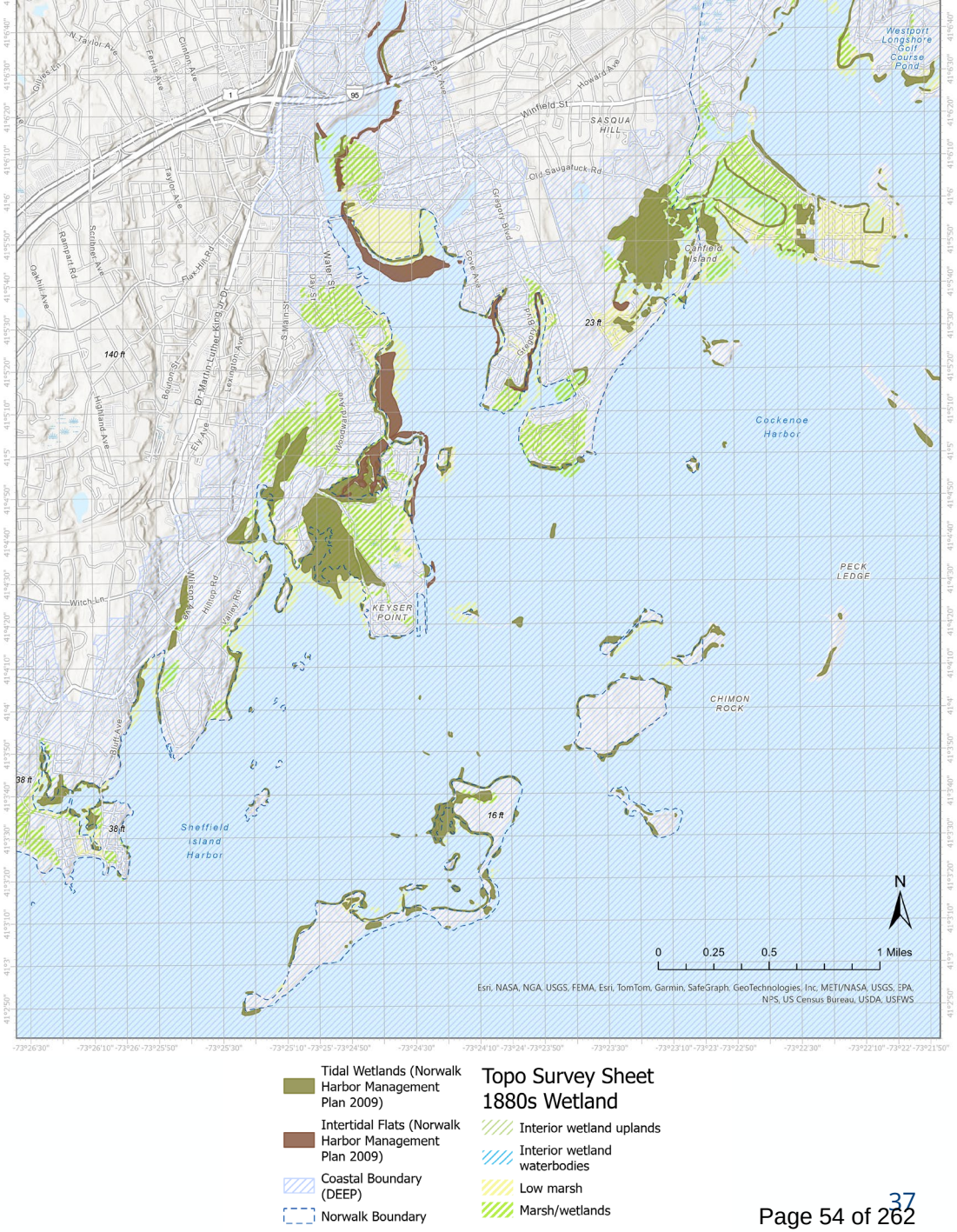


E & NR | HISTORIC AND CURRENT TIDAL WETLANDS

During the 20th century, significant wetland loss occurred along the Harbor from increasing shoreline development. Today, existing wetlands still serve an important purpose for fish and other marine organisms.

- The map at right shows historic wetlands (circa the 1880s) in lighter green and yellow cross hatch, with existing wetlands shown in darker green and brown.
- Significant wetland loss has occurred at inland areas near Calf Pasture Beach and Veterans Park, where historic low marsh and interior wetlands have been replaced by urban development or filled land.
- Wetlands around Keyser Point and Manresa Island have notably shrunk, with much of the historic marshland now absent along the eastern and southern shorelines.
- Offshore islands like Chimon, Shea, and surrounding isles retain much of their historic wetland extent, showing strong persistence likely due to minimal development pressure.
- The Harbor's tidal wetlands and intertidal zones serve as valuable habitat for a variety of species, as detailed on the following slide.
- Protection of wetlands in Norwalk was codified in 1974 through the establishment of the Inland Wetland Agency and the Inland Wetland and Watercourses Act.

Source: City of Norwalk, Connecticut Inland Wetlands & Watercourses Regulations. Adopted February 12, 1974.



E & NR | HARBOR WILDLIFE & CRITICAL HABITATS

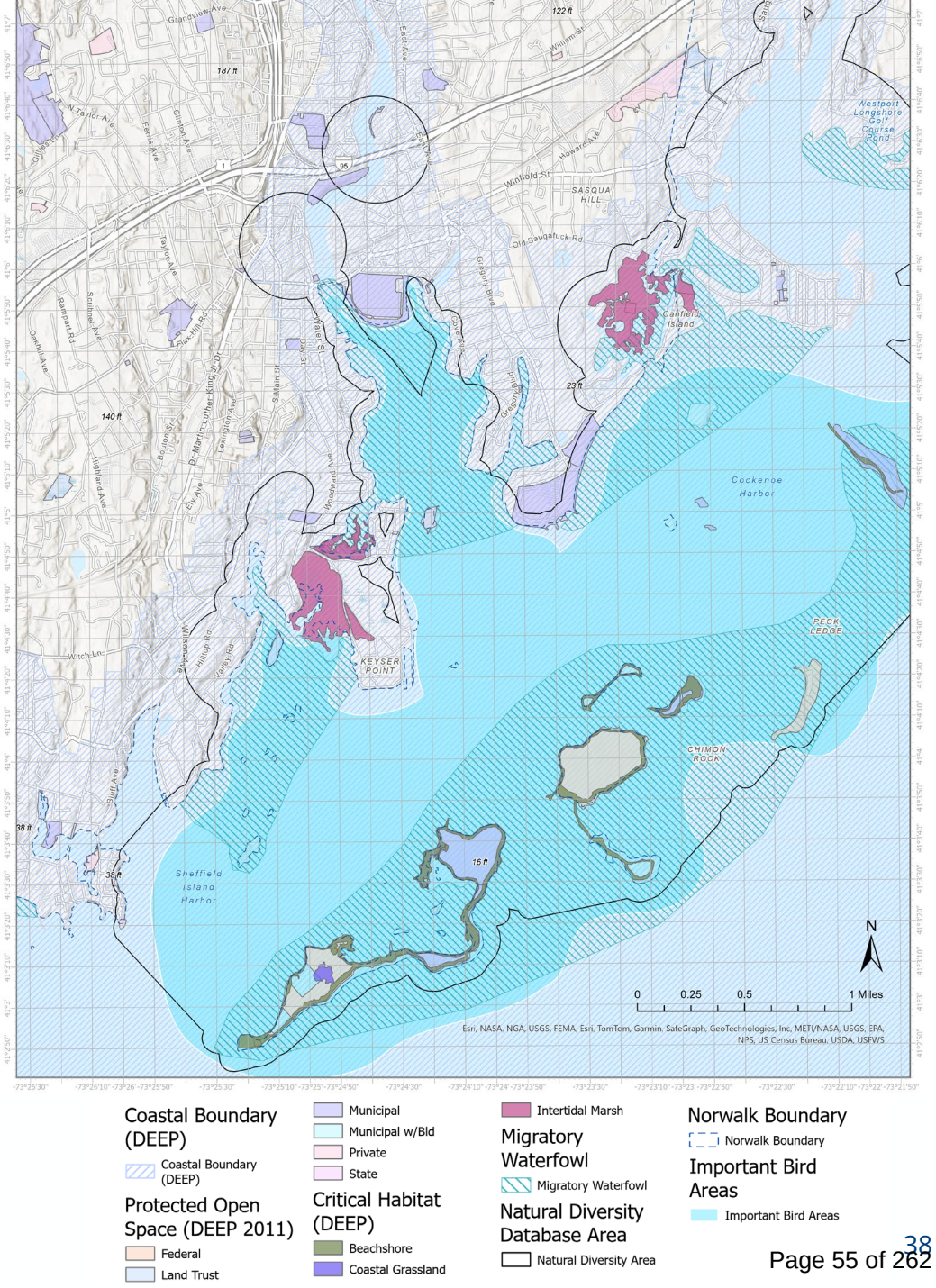
Norwalk Harbor hosts a vibrant ecosystem that supports a diverse array of wildlife, thanks to its varied habitats and protected open space areas. Beachshore and coastal grassland environments provide critical habitat for species both above ground and in-water.

- **Birds:** The Harbor and its surrounding areas, including the Norwalk Islands, are significant habitats for migratory waterfowl and colonial waterbird species such as herons, egrets, and ibises. These species are especially prevalent in the Stewart B. McKinney National Wildlife Refuge on the Norwalk Islands. The islands provide essential nesting and foraging grounds for these birds.

- **Marine Life:** The waters of Norwalk Harbor are home to various fish species, supporting both commercial and recreational fishing activities. The Harbor's tidal wetlands and intertidal zones serve as nurseries for juvenile fish and other marine organisms, contributing to the area's biodiversity. According to the 2018 Harbor Health Study, 148 individual fish representing 14 different species were documented in the harbor. The most abundant species observed include Cunner, Northern Searobin, and Northern Pipefish.

- **Mammals and Other Wildlife:** Coastal areas in Connecticut, including those around Norwalk Harbor, are known to support species such as white-tailed deer, red foxes, and various small mammals. The diverse habitats also support reptiles and amphibians, contributing to the ecological richness of the area. The prevalence of these species underscores the ecological importance of Norwalk Harbor and its surrounding environments.

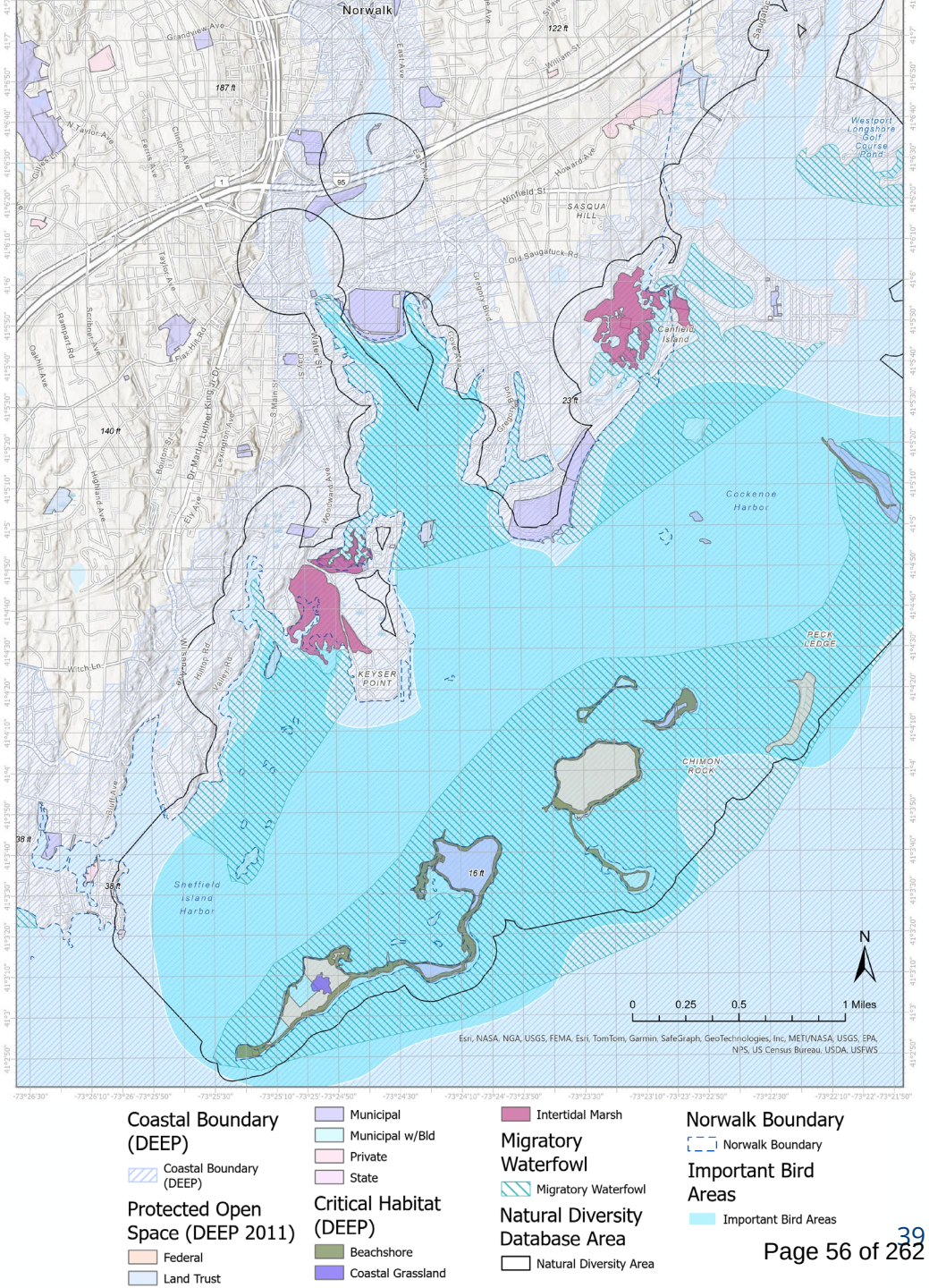
Source: Harbor Watch. Harbor Health Study, 2018.



E & NR | HARBOR PROTECTED AREAS

The Norwalk Harbor hosts a variety of protected open space under federal, state, and municipal jurisdiction, as well as under private ownership.

- The majority of this protected space exists on the lower end of the Harbor, closer to the Long Island Sound, as the northern component of the Harbor is largely developed. Municipal protected properties, through the Norwalk Recreation and Parks office, include Calf Pasture Beach, Veterans Park, Oyster Shell Park, Shea Island, and portions of Peach Island. This municipally protected land is intended and utilized for recreation purposes.
- Portions of the Norwalk Harbor Islands have been identified by the State as protected species areas. Sheffield Island and Chimon Island are also recognized by the federal government as portions of the Stewart B. McKinney National Wildlife Refuge.
- The forest, shrublands and beaches of the Norwalk Islands are recognized as regionally significant habitat for colonial nesting birds like herons and egrets, vital nesting and migratory habitat for neotropical birds, and high-quality wintering grounds for waterfowl. In addition, The Chimon Island Unit has historically supported as many as 1,200 breeding pairs of herons, egrets and ibises. To protect habitat, the West Beach is the only portion of the island open to the public. Passive public uses like wildlife observation and photography are encouraged there. The nearest public motorboat launch is at Veterans Park.
- Most recently, Manresa Island, on the southwestern portion of the lower Harbor, was recently purchased by a private donor, with plans to develop the island into a protected public park through the newly formed non-profit, Manresa Island Corp.



E & NR | SHELLFISH

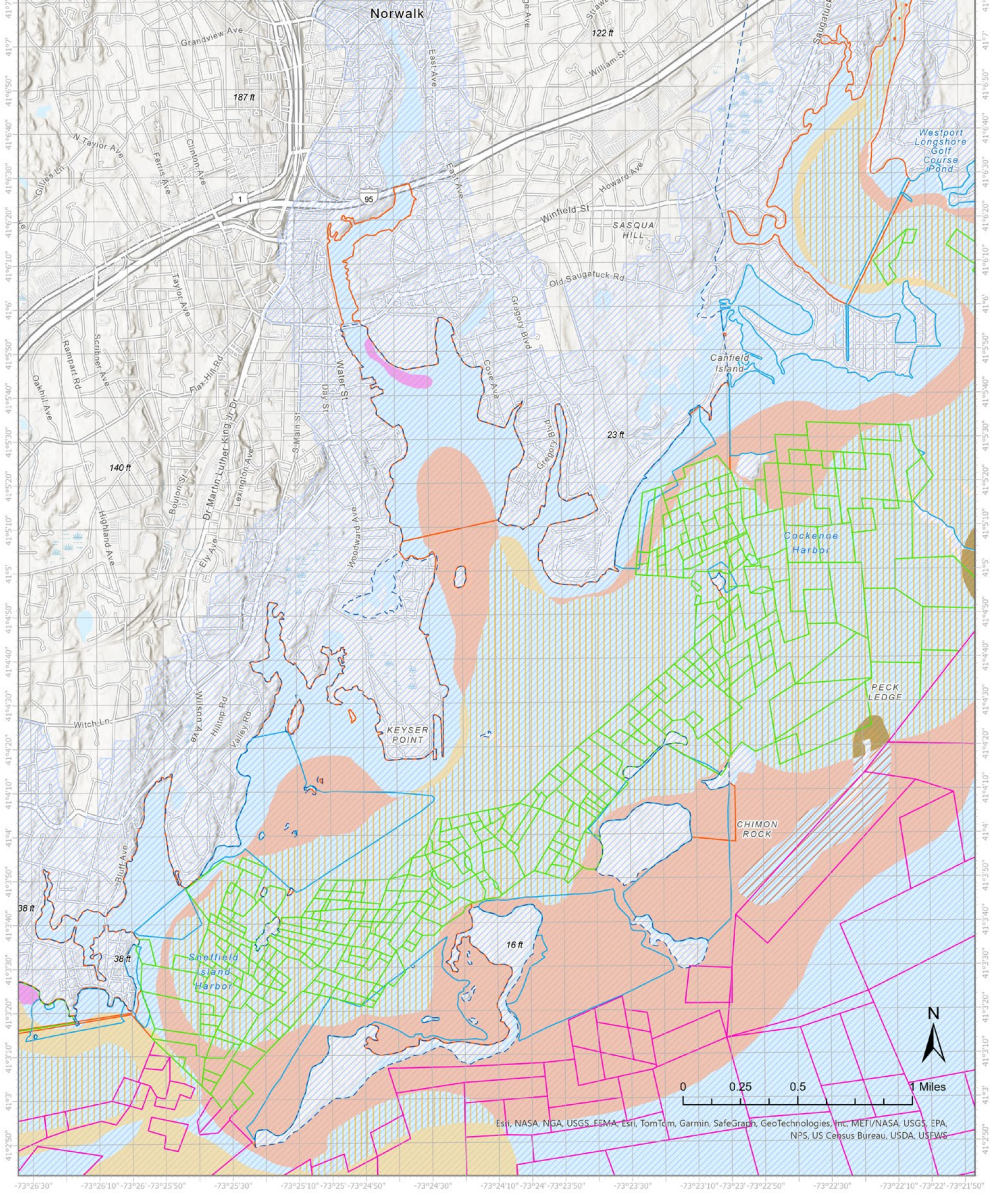
The Norwalk Harbor is well known for its role in the shell fishing industry. The Harbor supports various shellfish species, including Eastern Oysters, Hard Clams (Quahogs), and Soft-Shell Clams.

- Norwalk Harbor is home to significant aquaculture and shellfish operations. While natural shellfish beds exist throughout the Harbor, there are also shellfish beds managed by the government. These include State and Town managed beds for commercial shell fishing and recreational beds available to recreational fishermen.

- Recreational shellfishing areas are located near the central Harbor and along the shoreline south of Calf Pasture Beach. These areas are open to residents and visitors for personal use and are regulated to ensure sustainability.

- The Town beds are managed by the Norwalk Shellfish Commission, while the State managed beds are managed by Department of Agriculture's Bureau of Aquaculture. This Bureau is responsible for issuing commercial licenses for use of these beds along with regulating shellfishing in these areas and conducting water quality analysis.

- Designated recreational shellfishing areas are managed by the Norwalk Shellfish Commission, which establishes permits, seasonal restrictions, harvest limits, and other requirements to ensure sustainable use.



Legend

Coastal Boundary (DEEP)
- Coastal Boundary (DEEP)

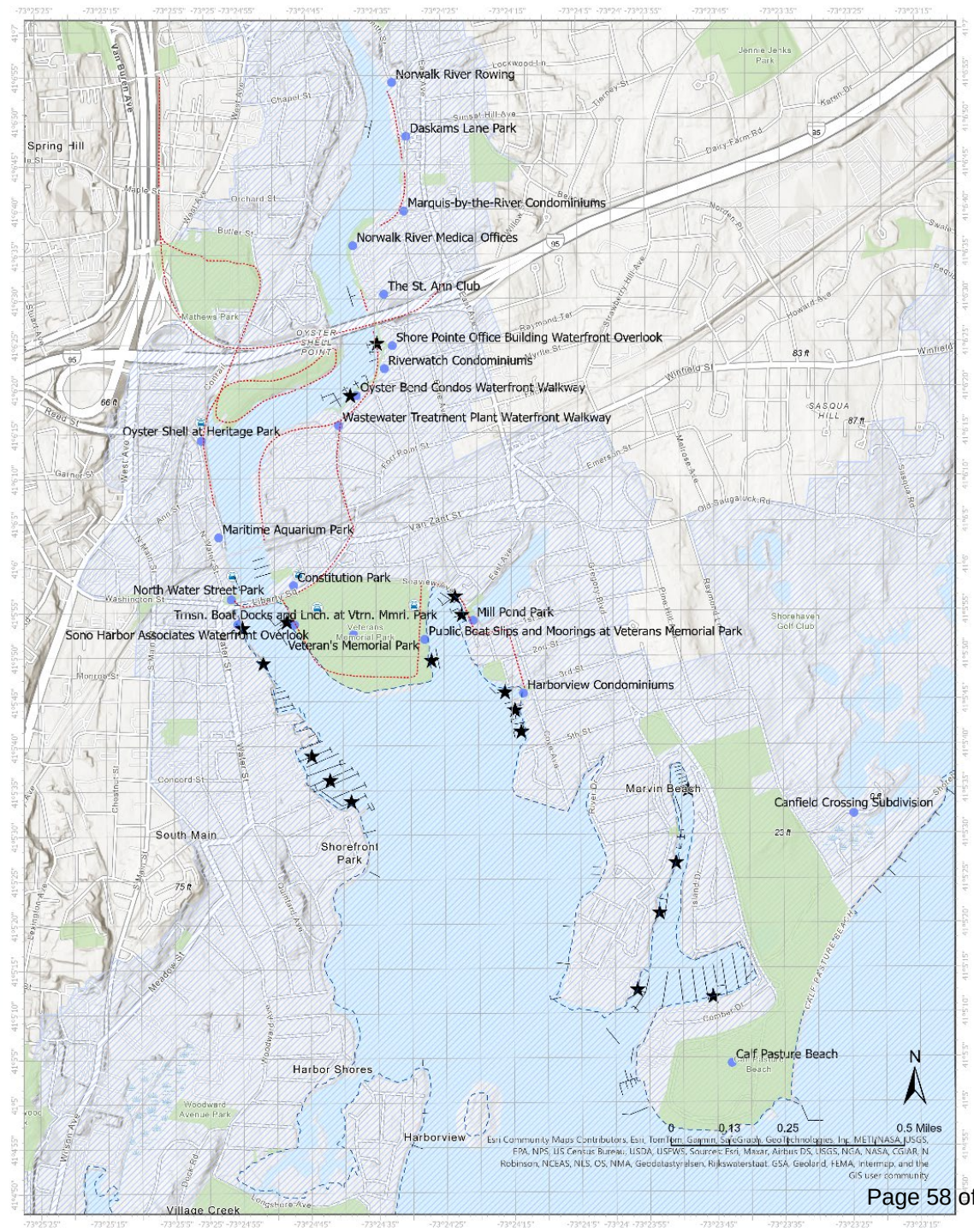
Shellfish
- Oyster
- Hard Clam
- Soft Clam
- Oyster / Hard Clam / Soft Clam
- Oyster / Hard Clam
- Oyster / Soft Clam
- Hard Clam / Soft Clam

CT State and Town Managed Shellfish Beds
- Natural Bed
- Recreational Bed
- State Mananged Bed
- Town Managed Bed
- Norwalk Boundary

E & NR | PUBLIC ACCESS

The Harbor hosts multiple public access options for residents and visitors to engage with the water.

- **Parks and Trails:** Notable public access park areas include the 35-acre Veterans Memorial Park, Calf Pasture Beach, Norwalk Heritage Park, Oyster Shell Park, and the Norwalk Harbor Loop Trail/Norwalk River Valley Trail.
  - The Norwalk Harbor Loop Trail connects several waterfront parks, including Oyster Shell, Mill Pond, and Constitution Park, though it remains incomplete in areas near the Maritime Aquarium and East Avenue.
- **Public Boating Facilities:** The harbor boasts 15 marinas and 13 private clubs equipped with boating amenities, providing ample opportunities for boating enthusiasts.
- **Street Ends:** There are numerous street ends around the Harbor that act as official and unofficial public access points. Some are well utilized or maintained by neighborhood associations, and some are blocked off by adjacent owners and/or unknown to the neighboring community. These street ends were evaluated in greater detail through the Street Ends & Public Access Study (Section 3).

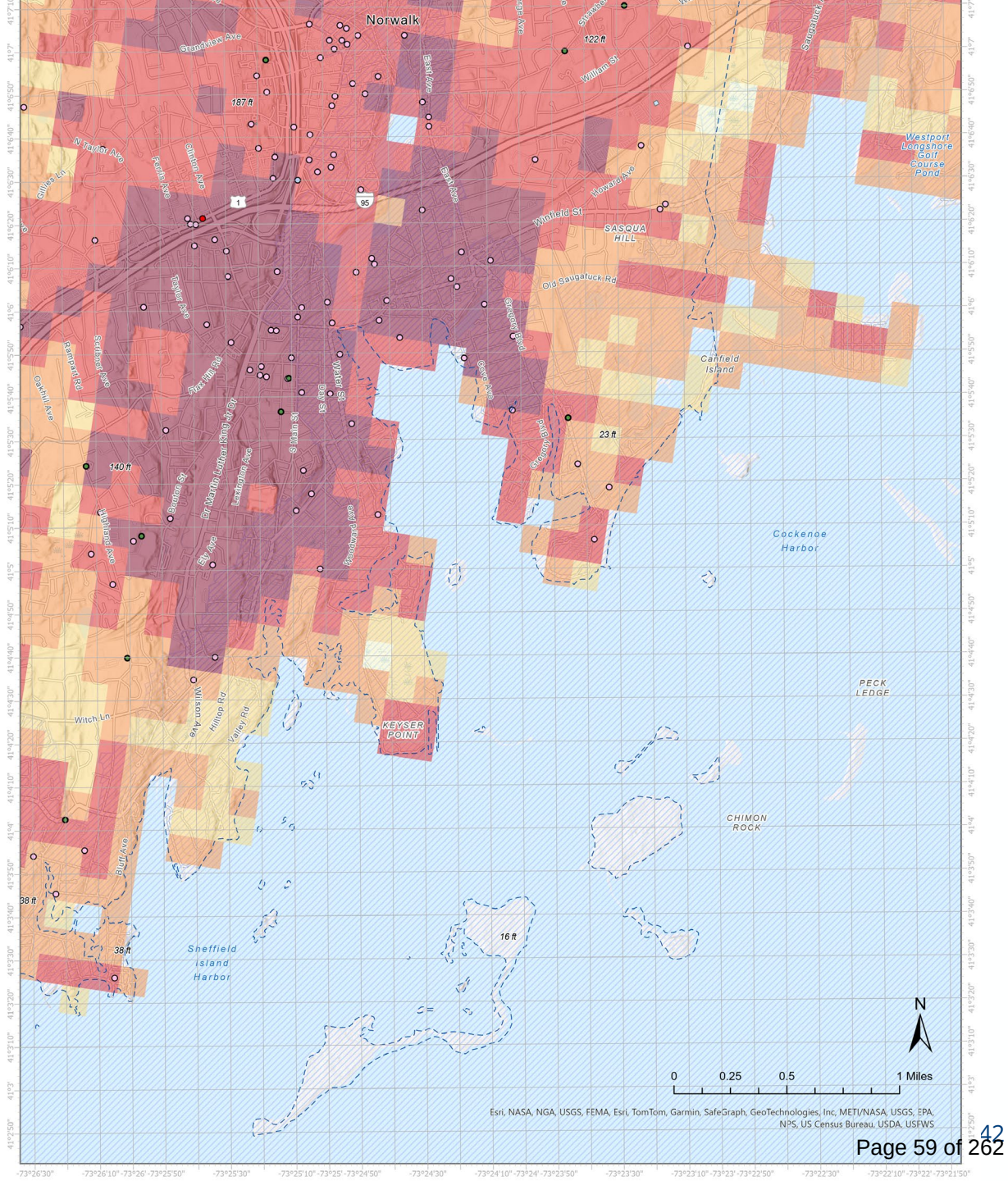


E & NR | HEAT VULNERABILITY

Heat vulnerability is one of several climate-related challenges posing a risk to Norwalk, in addition to flooding and sea level rise.

- The highest levels of heat vulnerability (shown in deep red and purple) are concentrated in the central and western parts of Norwalk, particularly along major road corridors and denser residential neighborhoods south of I-95.

- The eastern and coastal portions of Norwalk, including areas around Calf Pasture Beach and the Norwalk Islands, show significantly lower projected heat vulnerability, likely due to greater vegetation, open space, and proximity to Long Island Sound's cooling influence.

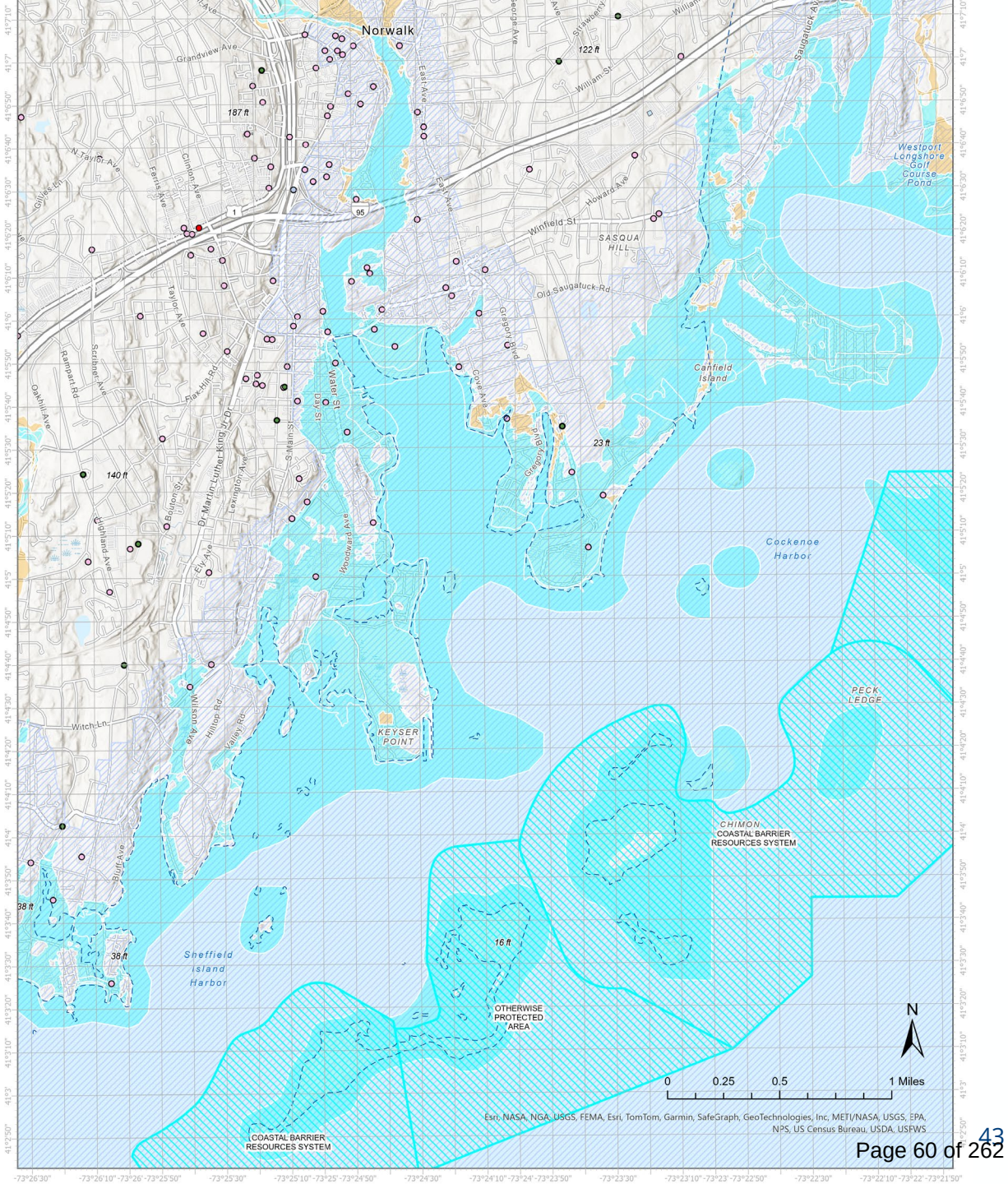


E & NR | FLOOD HAZARDS

Much of the Norwalk Harbor study area is within the FEMA flood hazard zone, posing a potential threat to the city's assets during flood events.

- As shown at right, significant portions of the Norwalk shoreline—particularly along the Norwalk River, Calf Pasture Beach, and the islands—fall within FEMA flood hazard zones (VE, AE, AO, and X), indicating high exposure to coastal and storm-related flooding. This includes areas with public assets and infrastructure.

- Chimon Island, Sheffield Island, and surrounding areas are designated as part of the Coastal Barrier Resources System (CBRS), meaning they are recognized as environmentally sensitive areas with restrictions on federal flood insurance and development, further emphasizing their flood exposure and ecological importance.

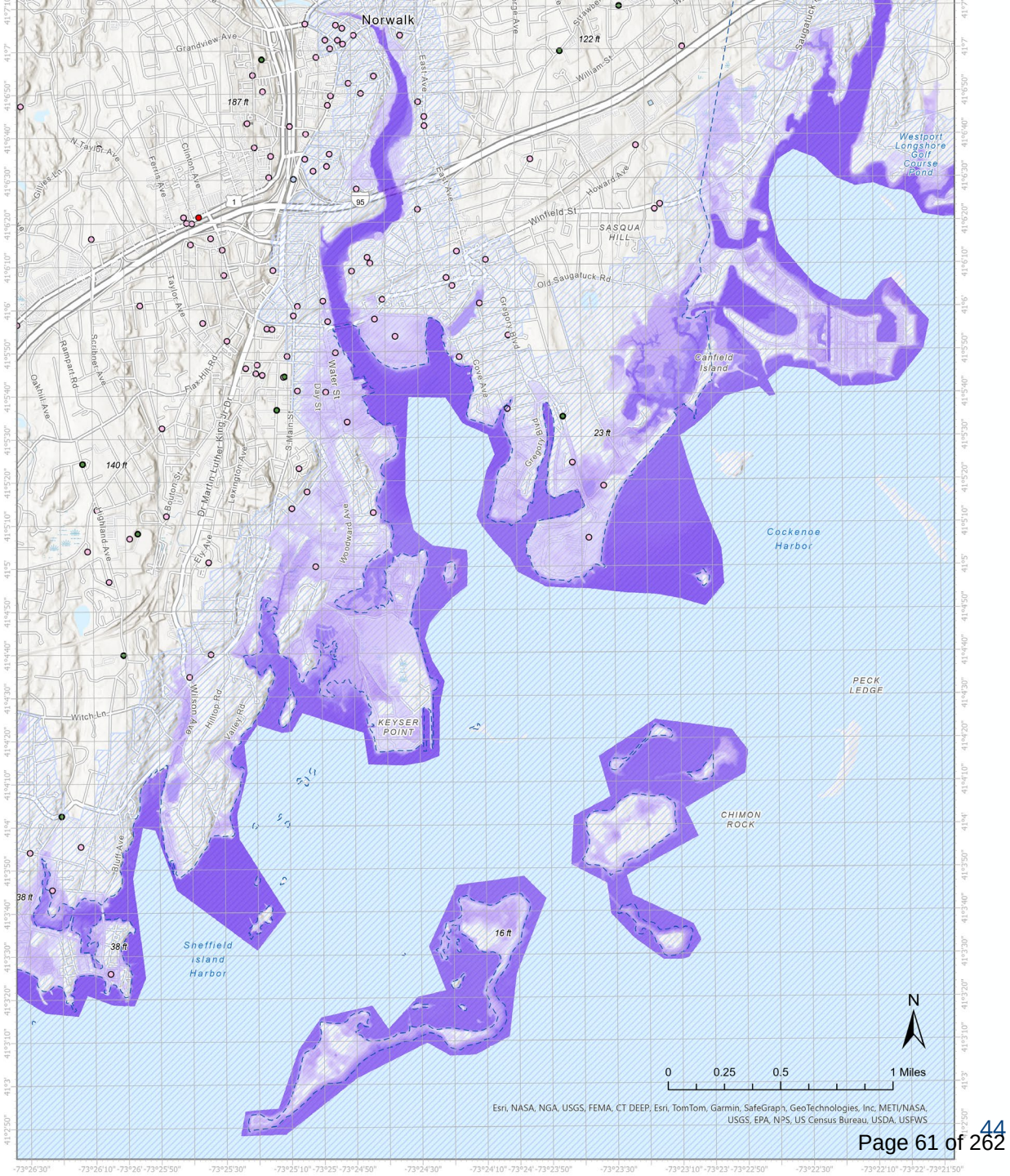


E & NR | SEA LEVEL RISE

Sea level rise is another hazard posing significant risks to Norwalk Harbor.

- Substantial portions of Norwalk's shoreline—especially areas around Veterans Memorial Park, Calf Pasture Beach, Keyser Point, and the Norwalk Islands—are projected to experience mean high water inundation with a 79-inch sea level rise. This includes several developed waterfront areas and open spaces.

- Low-lying coastal infrastructure and critical facilities are at risk, with multiple schools, emergency centers, and community assets located adjacent to or within the projected inundation zones, particularly in South Norwalk and along Water Street.



Legend

Coastal Boundary (DEEP)
- Coastal Boundary (DEEP)

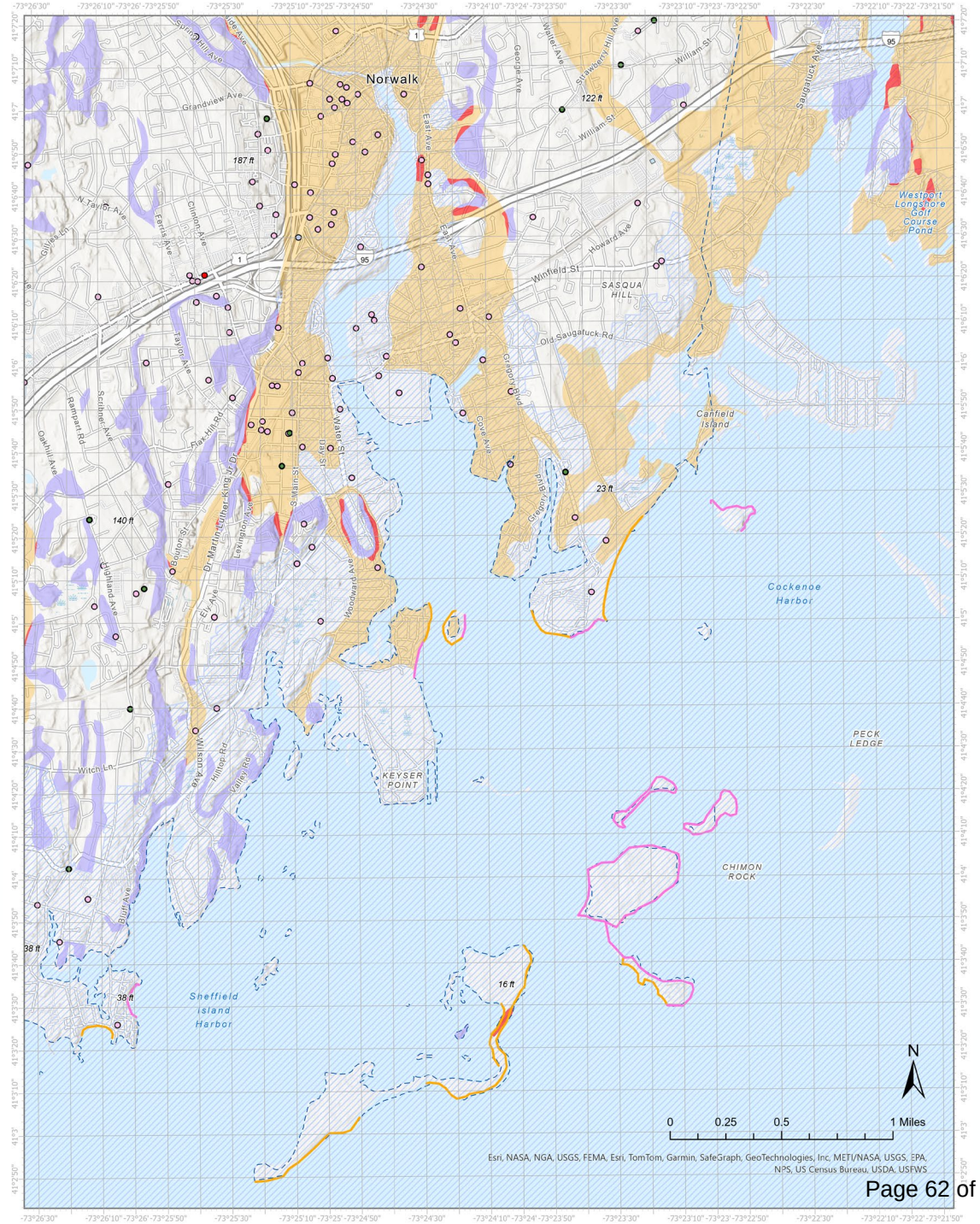
Mean High Water Inundation (+ 79 in)
- High : 0
- Low : -293
- Norwalk Boundary

- PoliceStations
- Schools
- AirPorts
- Assets
- Emergency Centers
- Fire Stations
- Hospitals

E & NR | EROSION SUSCEPTABILITY

- Shorelines along the central and southern harbor, particularly near the Norwalk River mouth and south of Veterans Memorial Park, contain areas highly or most susceptible to erosion, marked in red and orange. These areas coincide with developed waterfronts and public infrastructure, highlighting potential risk to access points and community assets.

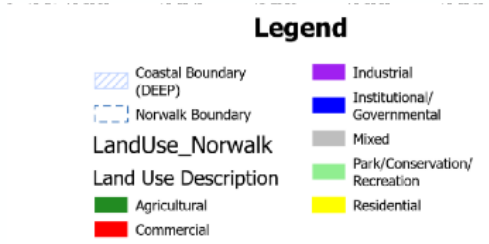
- Additional erosion hotspots are located on the Harbor-facing side of Ram Island and along narrow, exposed stretches of the western shore, where surficial materials are mapped as erosion-prone.

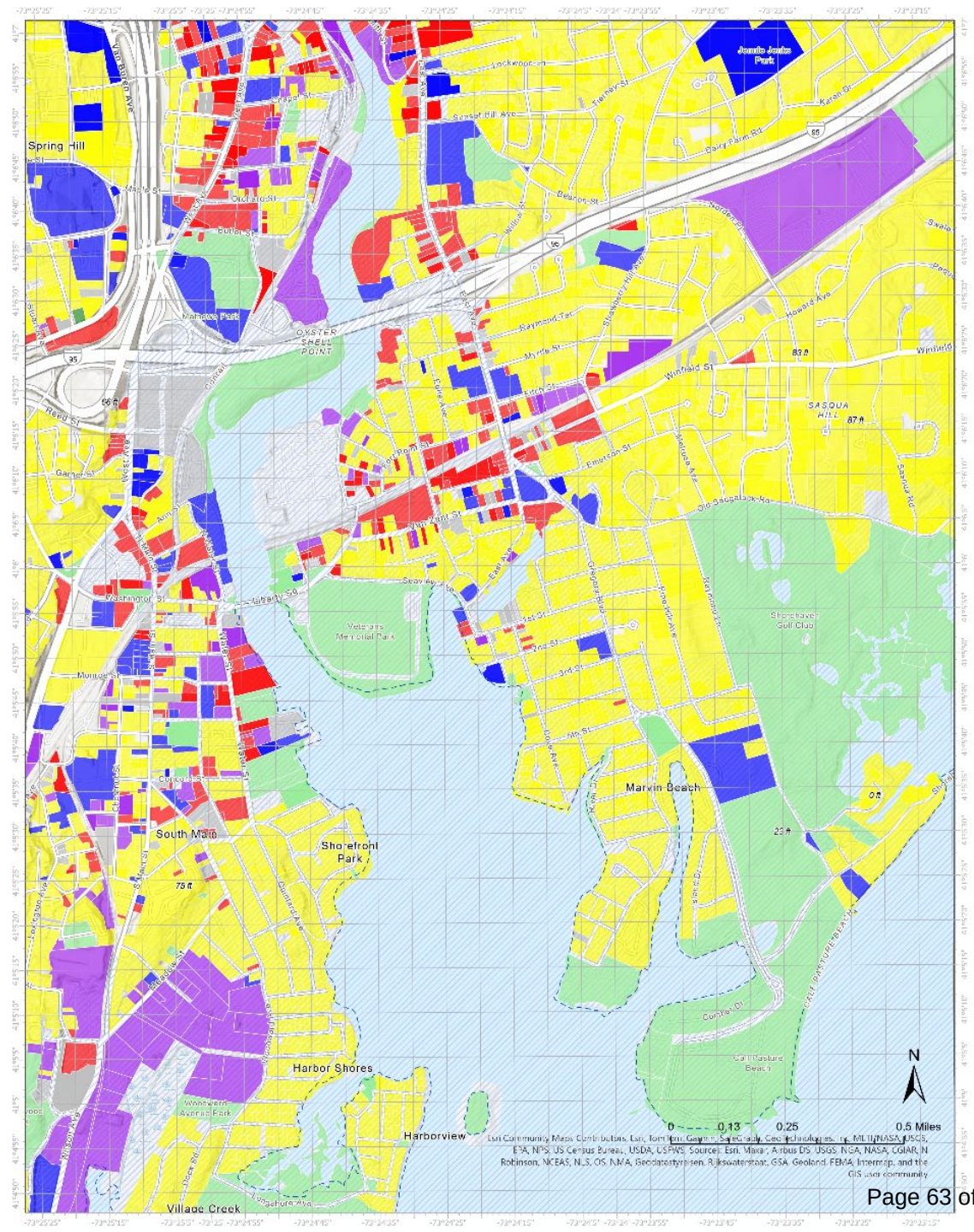


E & NR| LAND USE

Land adjacent to the Harbor is characterized by a mix of natural and developed landscapes, including residential uses, commercial facilities, conservation areas and recreational parks.

- Land use along the Harbor is highly varied, with a mix of industrial, commercial, institutional, and residential uses concentrated near Water Street in South Norwalk and East Avenue in East Norwalk. This reflects the Harbor's role as both a working waterfront and a civic waterfront.
- Residential areas dominate the upland portions surrounding the southern Harbor, including around Calf Pasture Beach and Shorefront Park, where low-density single-family housing transitions into public recreational land.
- The Norwalk Islands and much of the immediate shoreline around Keyser Point, Calf Pasture and southern Sasqua Hills are designed for park, conservation, or recreation use. This land use pattern supports ecological protection and public access near the Harbor.
- Pockets of industrial use remain on the western shore near I-95 and the Norwalk River mouth, consistent with the city's history of maritime and manufacturing activity.

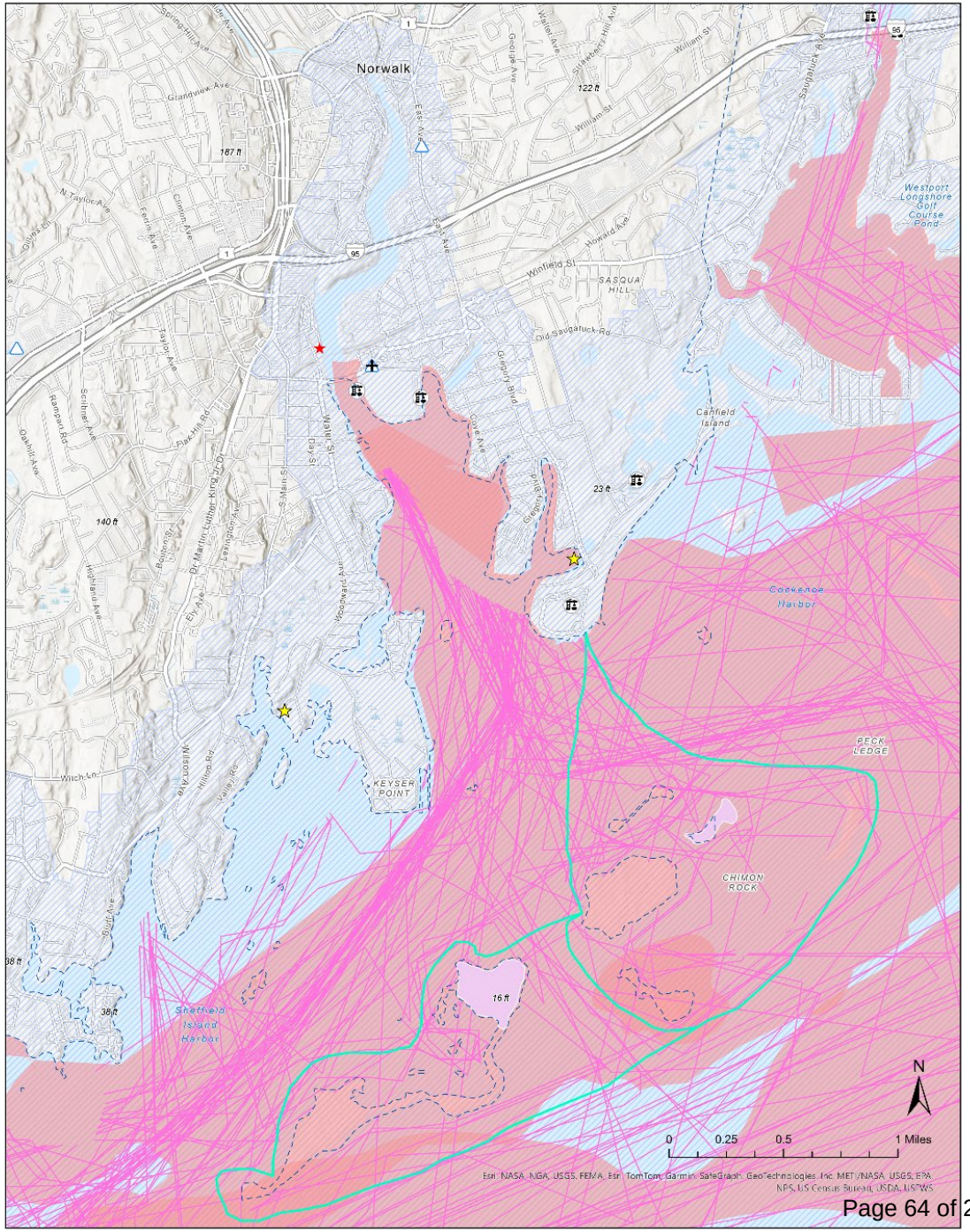




E & NR| RECREATIONAL BOAT TRAFFIC

Norwalk Harbor supports a wide range of water-dependent recreation, including numerous marinas, harbor infrastructure, and water trails visible on the map. The dense web of vessel traffic lines underscores the harbor's use for boating, kayaking, and marine transport.

- Calf Pasture Beach and Shady Beach Park, shown near the southern harbor, are major public waterfront recreation areas with access to swimming, fishing, and boating facilities. These parks anchor recreational use along the Sound.
- Sheffield Island and the Sheffield Island Lighthouse, noted in the map's southwestern extent, are accessible by ferry and serve as key historical and recreational destinations within the Norwalk Islands complex.
- Recreational shellfishing areas overlap with active use zones around the harbor and islands, supporting community access to natural resources, managed by the Norwalk Shellfish Commission.

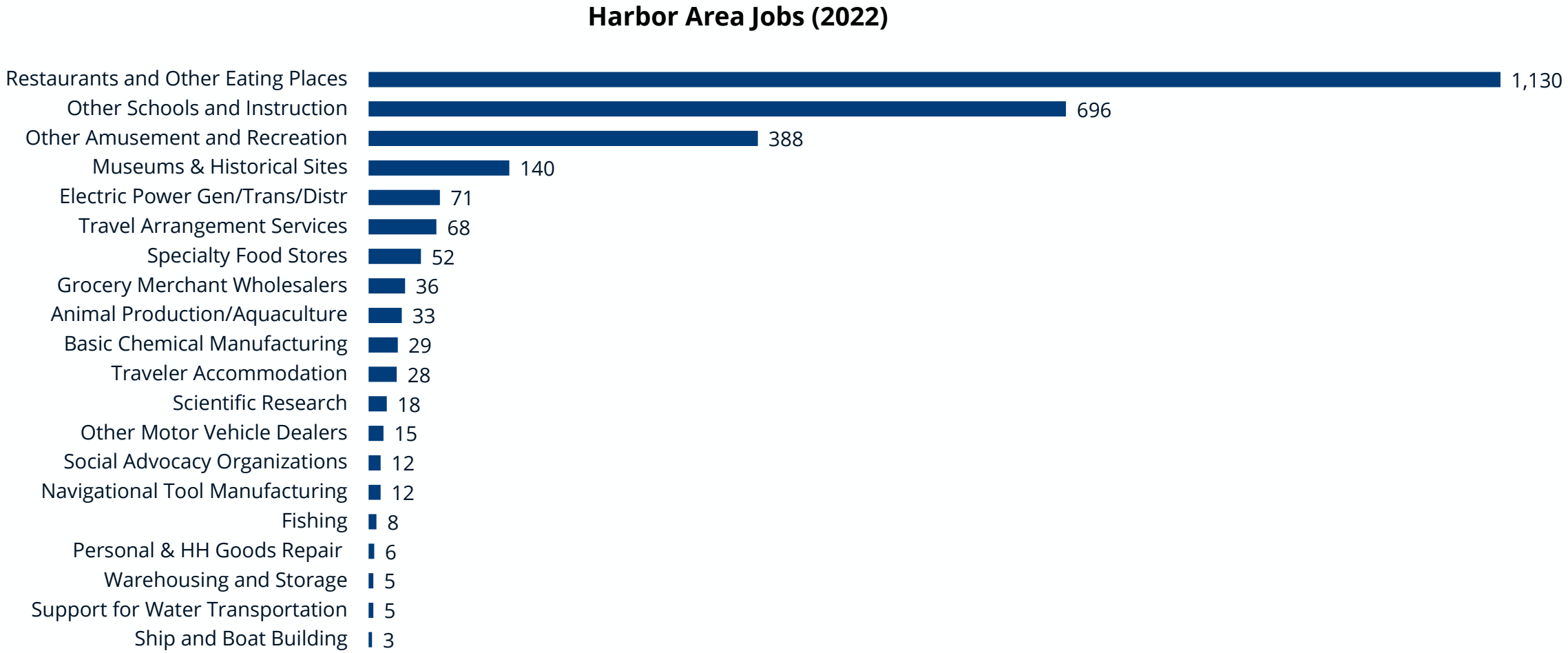


05

Appendix

INDUSTRY | HARBOR AREA WATER-DEPENDENT JOBS

Tourism industries such as restaurants, amusement, and museums have the most jobs that could be water-dependent. Out of all jobs related to schools and instruction only some are related to the Harbor.

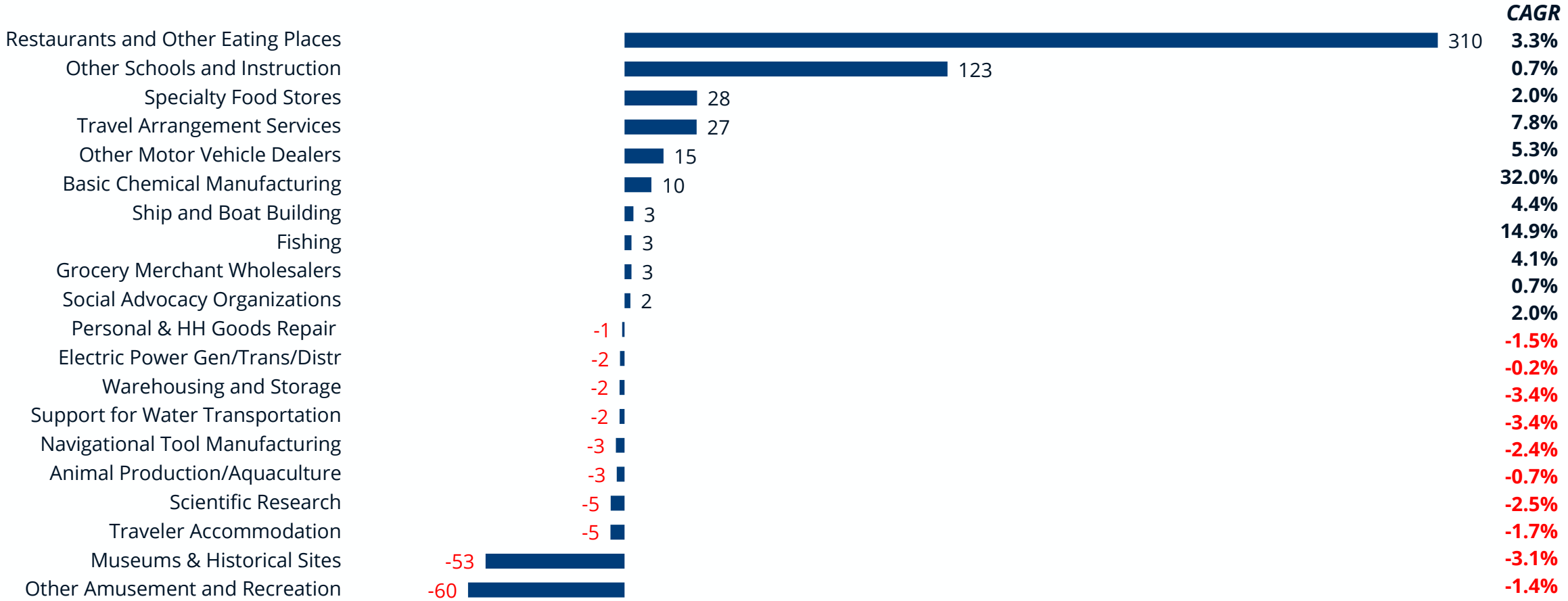


NOTE: The industry categories represent those jobs that could be water-dependent.
Source: Census OnTheMap and Lightcast, 2013 and 2022

INDUSTRY | HARBOR AREA WATER-DEPENDENT JOBS OVER TIME

Ship and boat building and fishing industries have been stagnant over the last 10 years. Growth is primarily driven by tourism-related restaurant and travel services jobs, as well as education-related jobs.

Change in Harbor Area Jobs (2013-2022)



NOTE: The industry categories represent those jobs that could be water-dependent.
Source: Census OnTheMap and Lightcast, 2013 and 2022

Norwalk Strategic Harbor Study

Task 2.2 Industrial Economic Analysis

July 2025

OVERVIEW | GOALS AND METHODOLOGY

Building on the Baseline Conditions Analysis, this Industrial Economic Analysis digs deeper into the water-dependent industrial landscape, including industry trends, challenges, and opportunities.

Goals

1. Demonstrate a comprehensive overview of water-dependent economy in Norwalk.
2. Position industry trends over time within the context of current industrial economic needs and challenges around the Harbor.
3. Provide recommendations to support the Harbor's industrial economic needs, which will inform other Management Strategy- and Funding-related recommendations as part of the Strategic Harbor Study.

Methodology

1. Data analysis of jobs, businesses, and gross regional product
2. Benchmarking with peer cities and regions
3. Industrial business focus group and city stakeholder engagement

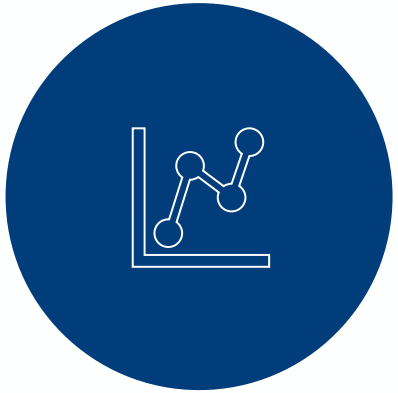
OVERVIEW | COMPONENTS

This analysis is broken down into three sections covering qualitative and quantitative analyses and a fourth section with a SWOT analysis and recommendations.



STAKEHOLDER ENGAGEMENT

Key takeaways from the interviews with city stakeholders and focus groups with harbor-dependent business owners.



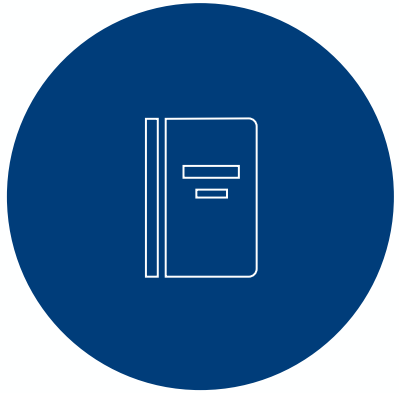
INDUSTRIAL ANALYSIS

Data-driven analysis of jobs and businesses over time, including a deep-dive into those that are water-dependent, with comparisons to peer regions.



WORKFORCE AND INFRASTRUCTURE NEEDS

Infrastructure and workforce needs as highlighted by stakeholders, as well as profiles of types of harbor jobs.



SWOT AND RECOMMENDATIONS

Analysis outcomes represented as strengths, weaknesses, opportunities and threats matrix, in addition to recommendations.

Stakeholder Engagement

STAKEHOLDER ENGAGEMENT | CITY STAFF

1. Different uses and interests coexist and compete over the Norwalk Harbor.

- There are three main drivers of demand over the limited available space in the Norwalk Harbor: 1) real estate development for new housing and other uses (commercial, schools, hospitals, etc.), 2) waterfront industrial, 3) tourism and recreation including boating.

2. Zoning and land use decisions in Norwalk inform the future viability of industrial businesses.

- The city's current zoning approach tries to balance industrial uses with new residential and recreational ones.
- Past efforts such as the 2022 Industrial Waterfront Land Use Plan provide neighborhood-specific suggestions, although no clear priorities are defined for the Harbor across the competing uses, which have organically been shaping the Harbor.

3. Governance fragmentation and infrastructure limitations pose barriers to use Harbor potential for economic growth across these uses.

- There are certain infrastructure needs that have been highlighted by the industrial- and boating/tourism-related stakeholders, such as moorings, dredging, bulkheads, docks, and waterfront resilience. The Harbor Management Commission rarely uses its capital budget.

4. Many valuable parcels within the Harbor's remain underutilized, often used for parking or boat storage, despite their potential for commercial, industrial, or mixed-use development.

- Specific actions as part of this Strategic Harbor Study, including the Moorings and Street Ends Studies, the Management and Funding Strategies, complemented by leveraging zoning, permitting, and capital planning, can help identify strategies to unlock the Harbor's potential as a driver of economic development and tourism.

STAKEHOLDER ENGAGEMENT | BUSINESS OWNERS

1. The Harbor's water-dependent industry is essential and vulnerable.

- Tourism and recreation depend on a healthy, functional waterfront—boats, marinas, and access to the islands. These uses are interdependent with industrial services that maintain infrastructure and ensure safety.
- Industrial businesses feel that decision making about the waterfront does not recognize how essential these services are to all uses of the Harbor.

2. Industrial space is threatened by new development and other uses of the Harbor.

- Condos, rowing clubs, and recreational development threaten the space used by industrial businesses, who provide services such as dock maintenance, barge deliveries, marine repairs, that support these activities. If these businesses are forced to close, services will have to come from outside Norwalk, increasing costs.

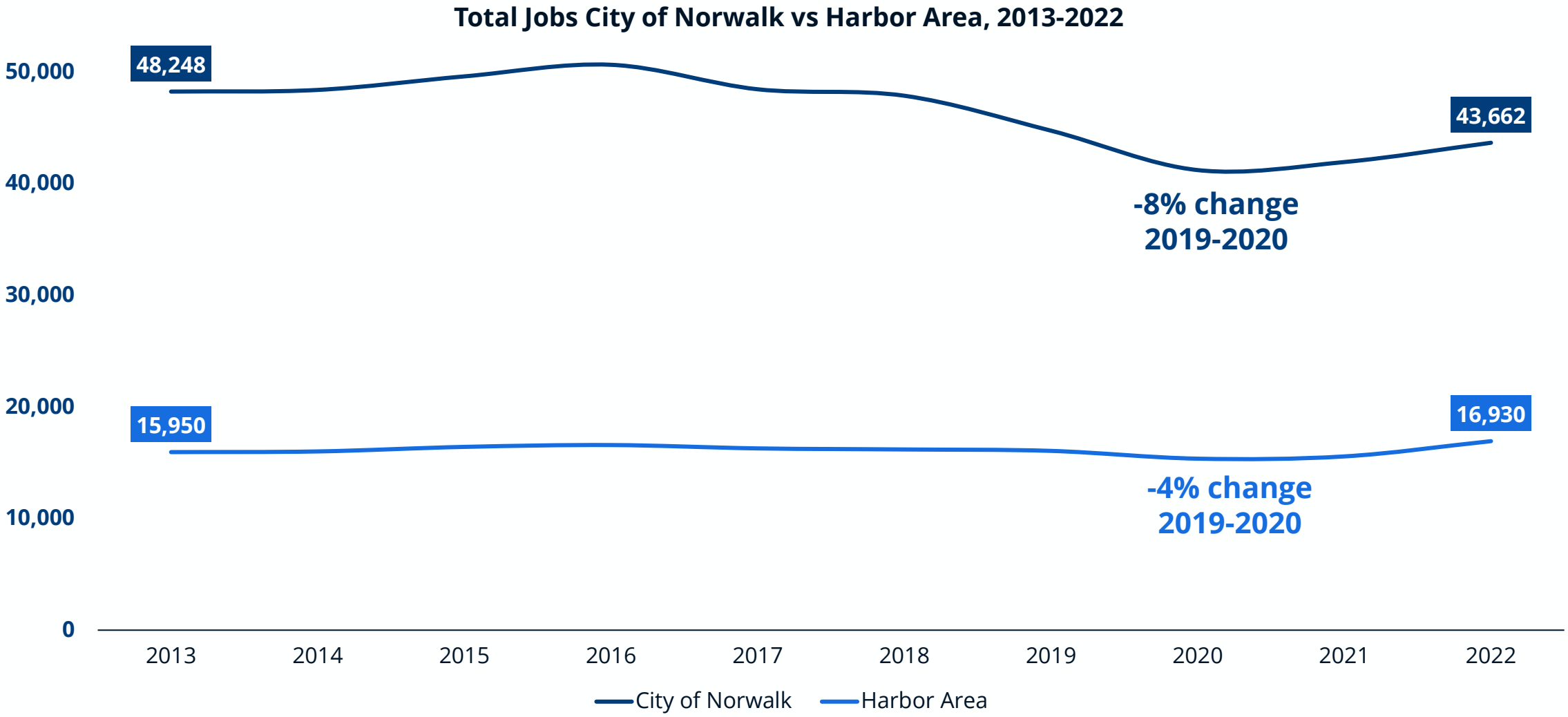
3. There is a lack of workforce development pipeline for marine economy businesses and a disconnect between organizations that invest in workforce development programs and the businesses that could benefit from skilled workers.

- There is a shortage of skilled tradespeople (carpenters, electricians, marine techs), and businesses are struggling to find and retain qualified workers in or near Norwalk. Many workers come from outside the City.
- There are some career exposure programs, such as the Maritime Pathways program at Maritime Aquarium, but connections between these programs and the businesses does not exist.

Industrial Analysis

INDUSTRY ANALYSIS | TOTAL JOBS

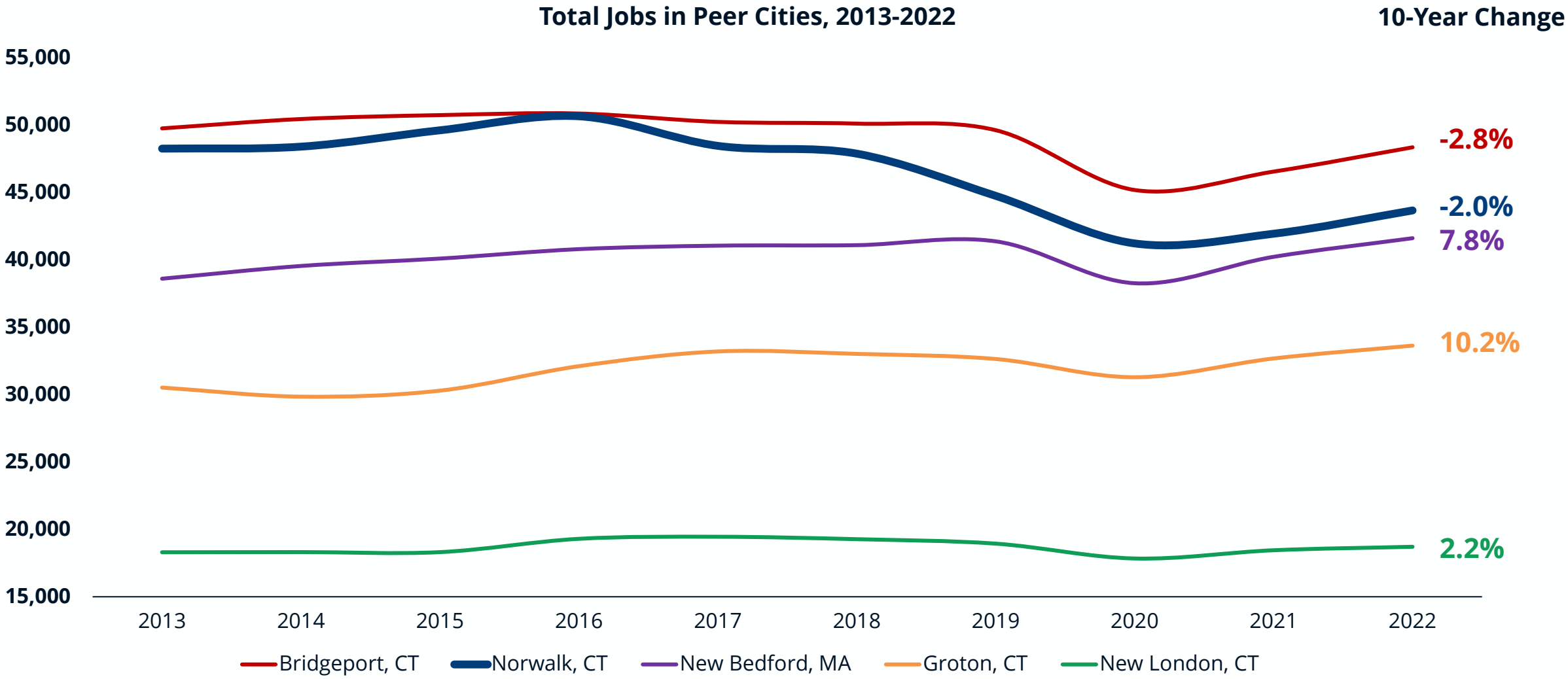
While total jobs in Norwalk started decreasing before the pandemic, jobs in the Harbor Area have stayed relatively consistent and have recovered from a slight COVID-induced dip.



Source(s): Census OnTheMap, Lightcast

INDUSTRY ANALYSIS | TOTAL JOBS COMPARISON TO PEER CITIES

Bridgeport and Norwalk both saw a decrease in jobs over a 10 year period, while smaller Connecticut cities like Groton and New London increased over this period, as did New Bedford, MA.



Source(s): Census OnTheMap, Lightcast

INDUSTRY ANALYSIS | WATER-DEPENDENT INDUSTRIES

Water-dependent industries fall into four overarching buckets aligned with business owners' perspective of the economic landscape.

Aquaculture

- Oyster and shellfish farming
- Commercial fishing

Boating/Marine Services

- Ship and boat building
- Boat dealer
- Marinas
- Boat repair and maintenance
- Sailing instruction
- Boat clubs

Tourism

- Harbor restaurants and cafes
- Recreational fishing charters
- Seaport association
- Fish and seafood markets
- Maritime Aquarium

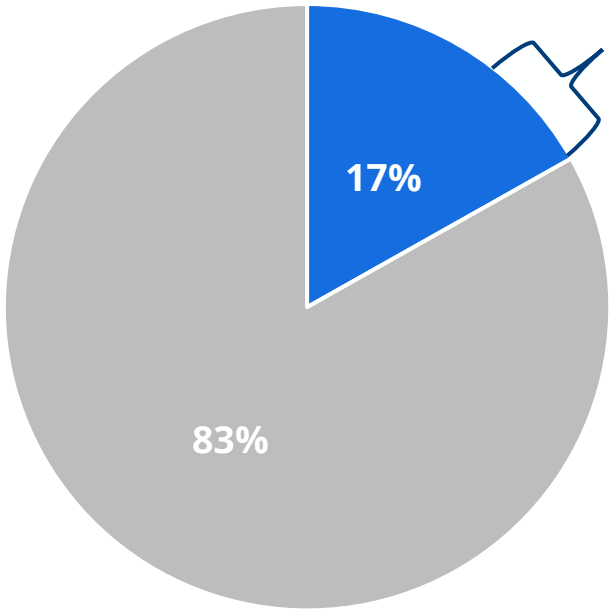
Waterfront Industrial

- Marine construction
- Harborside industrial businesses

INDUSTRY ANALYSIS | SHARE OF POSSIBLE WATER-DEPENDENT JOBS

Roughly 13 percent of all jobs in the City of Norwalk can be possible water-dependent jobs. This ratio increases to 17 percent in the Harbor Area, but remains lower than what is expected.

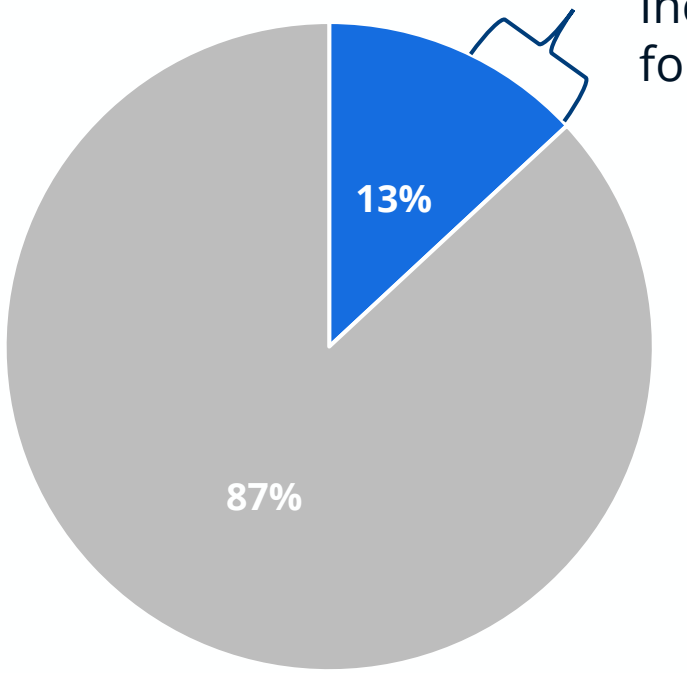
Harbor Area



Includes 7% for restaurants

- Industries with Water-Dependent Jobs (No Restaurants)
- Industries without Water-Dependent Jobs

City of Norwalk



Includes 6% for restaurants

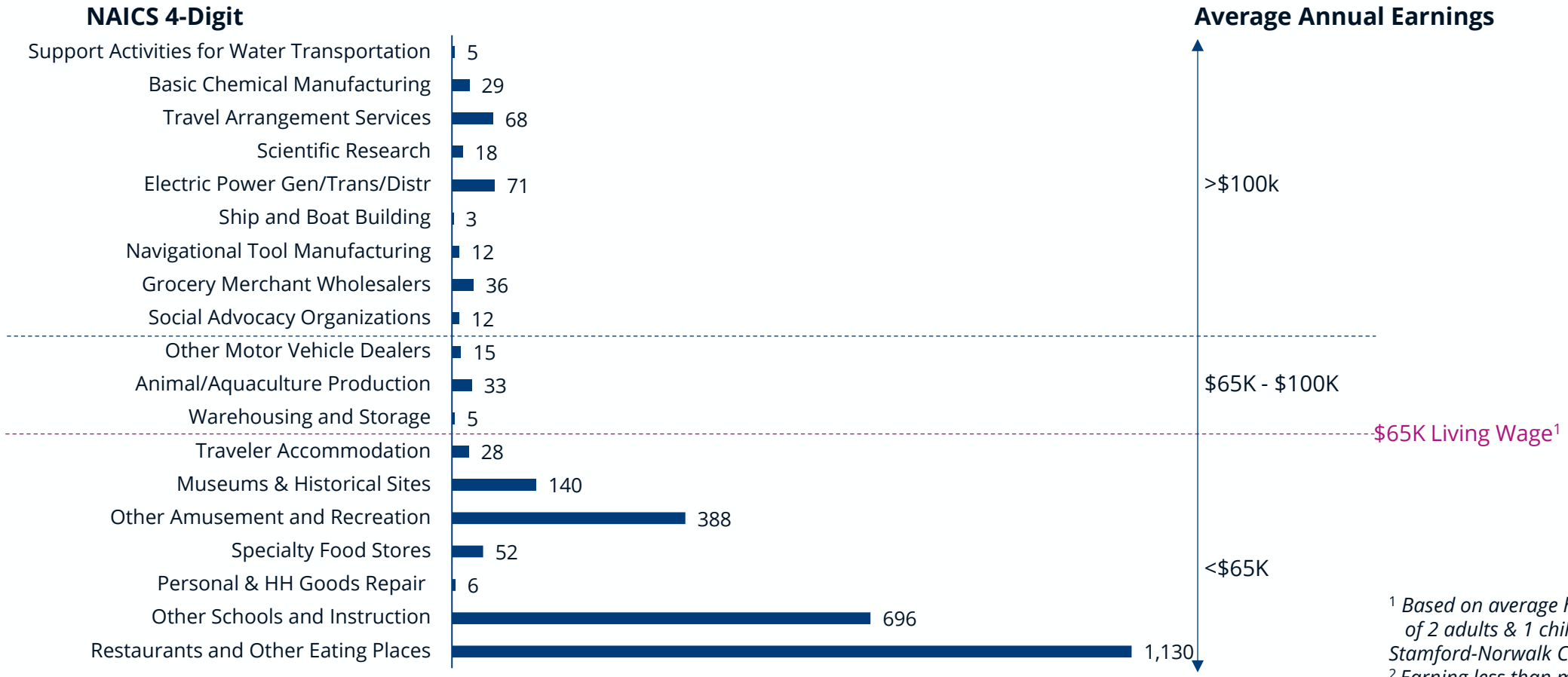
- Industries with Water-Dependent Jobs
- Industries without Water-Dependent Jobs

Source(s): Census OnTheMap, Lightcast

INDUSTRY ANALYSIS | HARBOR AREA WATER-DEPENDENT JOBS EARNINGS

Jobs in water-dependent industries in the Harbor Area are concentrated below the living wage particularly restaurants which comprise a large portion of these jobs.

Harbor Area Jobs and Earnings in Water-Dependent Industries



[1] *Based on average household size of 2 adults & 1 child in Bridgeport-Stamford-Norwalk CT MSA*
[2] *Earning less than minimum wage*

Note: Earnings data is based on MSA level data for 4-digit NAICS.
Source(s): Lightcast; MIT Living Wage Calculator.

INDUSTRY ANALYSIS | WATER-DEPENDENT ECONOMIC ACTIVITY COMPARISON ACROSS PLANNING REGIONS

The water-dependent economy makes up just over 5% of the Western Planning Region's total economy, which is significantly less than Southeastern, but is the second fastest growing across the coastal regions.

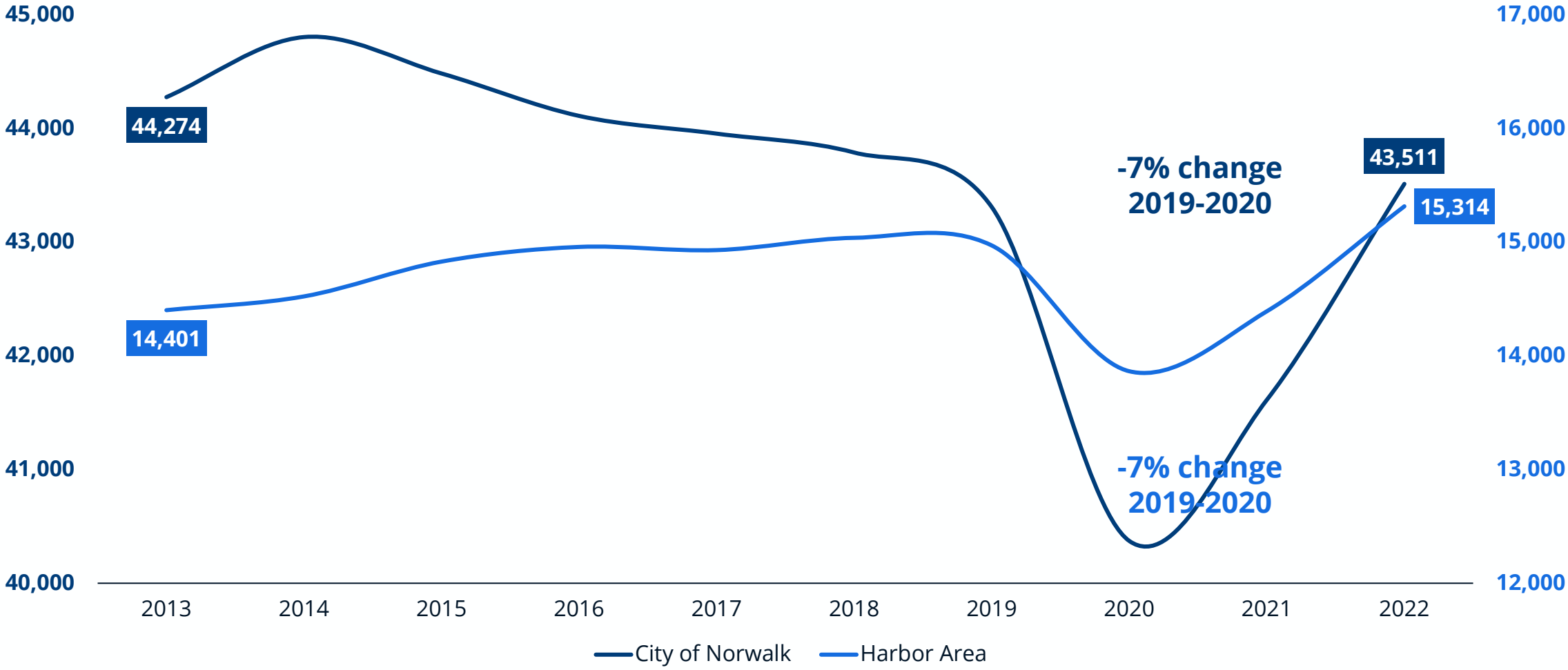
CT Planning Regions	Total Economy GRP 2022	Water-Dependent Economy GRP 2022	% of Total Economy	Total Economy GRP Growth since 2013 (%)	Water-Dependent GRP Growth since 2013 (%)	Difference (%)
Western	$70.9B	$3.8B	5.4%	36.5%	69.4%	32.8%
Southeastern	$19.4B	$3.2B	16.5%	34.1%	57.8%	23.7%
South Central	$46.3B	$3.3B	7.0%	38.0%	75.3%	37.3%
Greater Bridgeport	$22.6B	$955M	4.2%	27.1%	59.3%	32.1%

Source(s): Lightcast

INDUSTRY ANALYSIS | WATER DEPENDENT JOBS

Industries with water-dependent jobs in the Harbor Area experienced more volatility in 2020, but still recovered, driven by restaurant and recreation jobs.

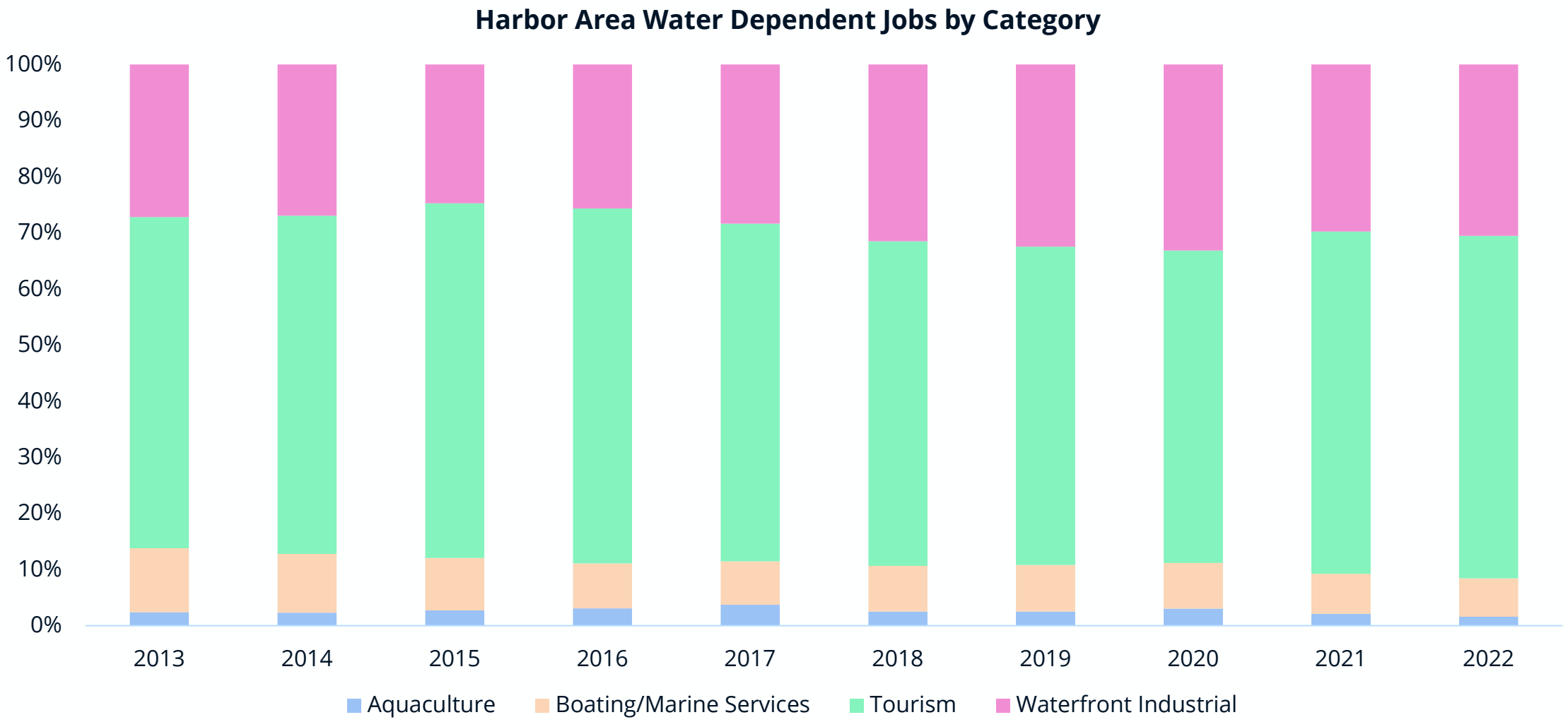
Total Water-Dependent Jobs City of Norwalk vs Harbor Area, 2013-2022



Source(s): Census OnTheMap, Lightcast

INDUSTRY ANALYSIS | WATER DEPENDENT JOBS BY CATEGORY

The share of jobs related to aquaculture, boating, and marine services has decreased over time while those related to tourism and waterfront industrial have increased.

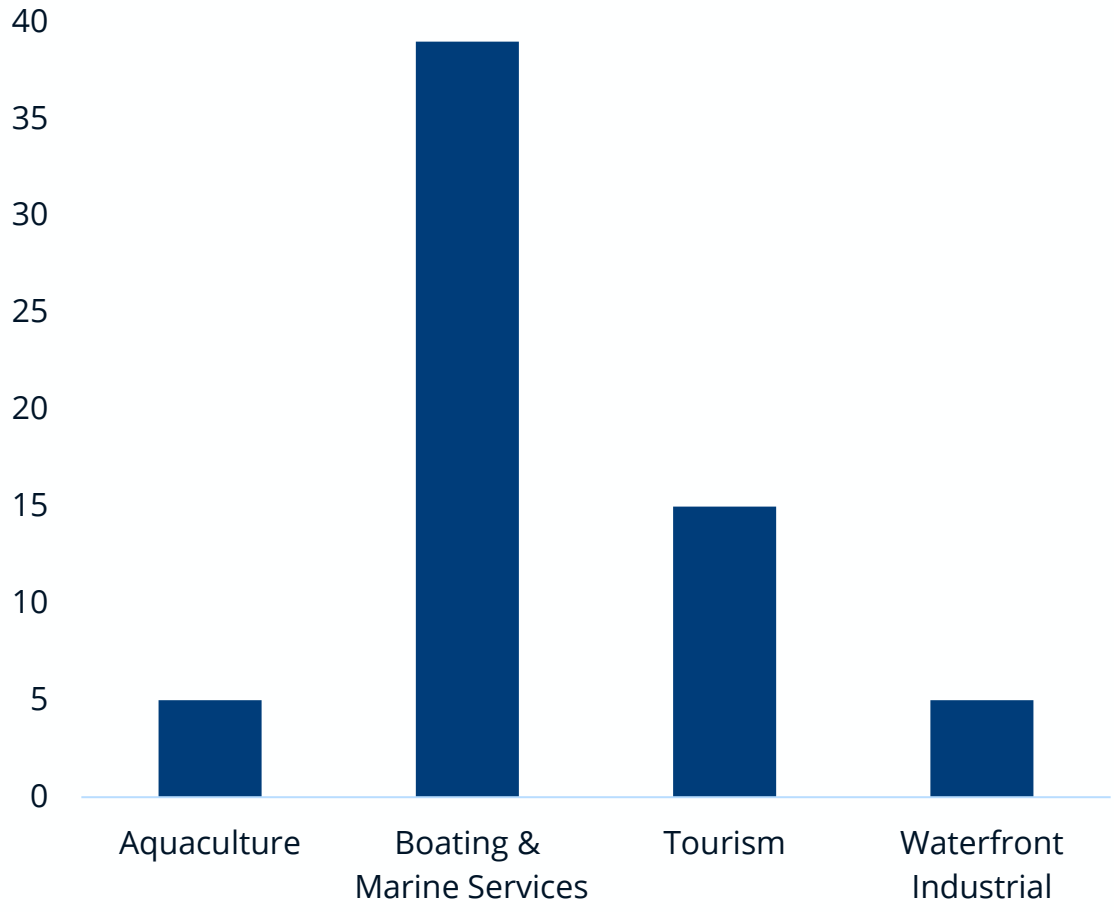


Source(s): Census OnTheMap, Lightcast

INDUSTRY ANALYSIS | WATER-DEPENDENT BUSINESSES

A majority of water-dependent businesses in the Harbor Area are related to boating and marine services, speaking to the recreational use of the harbor and commercial industries that support it.

Harbor Area Water-Dependent Businesses by Category



Aquaculture
- Copps Island Oysters (60 FTE)

Boating & Marine Services
- Norwalk Cove Marina/Rex Marine (70 FTE)

Tourism
- Maritime Aquarium (80 FTE)
- Harbor Lights Restaurant (20 FTE)

Waterfront Industrial
- King Industries (260 FTE)
- G&C Services (9 FTE)

Source(s): ArcGIS Business Analyst, business owner focus group

Workforce and Infrastructure Needs

WORKFORCE EXAMPLES

For each industry category, there are a range of job types that fall within them. The ones that are sampled below have a range of salaries, but generally do not require college degrees.

Oyster Farmer (~$35k-$45k)
Responsible for cultivating, maintaining, and harvesting oysters. Includes physically demanding work on boat and land.

Harbor Restaurant Owner (~$65k-$100k)
Responsible for overseeing all aspects of waterfront dining operations—from staffing and service to vendor management and customer experience.

Boat Mechanical Foreman (~$75k-$90k)
Oversees the maintenance and repair of vessels, ensuring all mechanical systems, such as engines, hydraulics, and mooring equipment operate safely and efficiently.

Marine Construction Worker (~50k-75k)
This worker carries out projects including pile driving, masonry, maintenance and repair, dock building, and dock carpentry.

INFRASTRUCTURE AND WORKFORCE NEEDS

1. Industrial space is critical not only for industrial businesses but for the recreational and development activities that rely on them.

- Industrial businesses are losing operational land to residential development, undermining their ability to support development and recreational uses of the harbor through services like barge delivery, dock construction, and harbor maintenance.

2. There is a need for investment in infrastructure upgrades to support the commercial activity of the harbor.

- Upgrades are needed for dredging, bulkheads, docks, and waterfront resilience to support the sustainability of the commercial economy of the Harbor.

3. There is a shortage of skilled tradespeople that provide the necessary services to support all Harbor uses.

- The harbor economy depends on marine techs, electricians, and carpenters, but there’s a growing gap due to aging workers and limited training pipelines.

4. There is a lack of affordable housing in the Harbor Area to attract new workers.

- High local rents force workers to live farther away, making it harder to attract and retain staff across all levels—from marine construction to marine education to waterfront industrial.

SWOT and Recommendations

SWOT MATRIX

The Harbor is Norwalk's premier asset, and the strengths, weaknesses, opportunities, and threats of that asset inform the recommendations that can create the future the city wants for it.

Strengths

- Set of long-standing legacy businesses that represent the working waterfront including marine construction, aquaculture, and other industrial businesses.
- Deep water access through dredging that supports harbor-wide functionality for industrial uses, marinas, and resilience initiatives.

Weaknesses

- Shrinking availability of land to support the complete Harbor economy.
- Lack of skilled workforce for necessary marine construction activities.
- Limited housing affordability along the Harbor for local employees.
- Aging infrastructure for marine facilities including bulkheads and docks.

Opportunities

- Position Norwalk as a regional center for waterfront access.
- Expand workforce development and training opportunities through connections between local education groups and employers.
- Manresa Island offers an opportunity to increase public access to the Harbor.
- Ensure zoning aligns with city's goals for the harbor and coexistence of different uses that support one another.

Threats

- Loss of remaining industrial businesses that support the recreational uses of the Harbor.
- Climate change impacts (sea level rise, flooding) that threaten all uses of the Harbor.
- Dredging as an activity that both supports recreational and commercial boating but also disrupts local harbor ecosystems and water quality.

02

Appendix

APPENDIX| WATER-DEPENDENT INDUSTRIES DEFINITION

The below table summarizes the industries that contain jobs dependent on the Harbor in Norwalk.

Industry Category	Industry Activity	NAICS Description
Aquaculture	1. Aquaculture	➢ Animal Production
Fishing and Fisheries	1. Fishing 2. Fish and Seafood Wholesales and Retailers	➢ Fishing ➢ Grocery and Related Product Merchant Wholesalers ➢ Specialty Food Stores
Boating and Marinas	1. Ship and Boat Building and Repair 2. Boat Dealers 3. Marinas	➢ Ship and Boat Building ➢ Other Motor Vehicle Dealers ➢ Personal and Household Goods Repair and Maintenance
Maritime Transportation	1. Port and Habor Operations 2. Warehousing and Storage	➢ Support Activities for Water Transportation ➢ Warehousing and Storage
Maritime Trade	1. Chemical and Gas Manufacturing 2. Nautical System and Trade Manufacturing 3. Other Manufacturing	➢ Basic Chemical Manufacturing ➢ Other General Purpose Machinery Manufacturing ➢ Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
Energy, Power, and Telecommunications	1. Electric Power Generation, Transmission and Distribution	➢ Electric Power Generation, Transmission and Distribution
Research	1. Scientific Research 2. Environmental Organizations	➢ Scientific Research and Development Services ➢ Social Advocacy Organizations
Tourism and Recreation	1. Water Sightseeing 2. Accommodations and Hotels 3. Restaurants and Other Eating Places 4. Parks, Gardens, and Other Amusement Places 5. Boating Instruction	➢ Scenic and Sightseeing Transportation, Water ➢ Consumer Goods Rental ➢ Travel Arrangement and Reservation Services ➢ Other Schools and Instruction ➢ Museums, Historical Sites, and Similar Institutions ➢ Other Amusement and Recreation Industries ➢ Traveler Accommodation ➢ Restaurants and Other Eating Places

Note: The table reflects the water-dependent industries that are present in Norwalk per the jobs data. Additional industries are reflected in the memo for Task 2.1
Source: The NAICS codes were derived from water-dependent uses as defined by Section 22a 93(16) of the Connecticut Coastal Management Act (CCMA), under the Connecticut General Statutes (CGS) as well as HR&A's previous project experience developing industry-based definitions of water-dependent and/or blue economy uses, in MA, RI, and NY.

Section 2

Moorings & Water Access

Mooring Study

Mooring Study

Norwalk Harbor and Geographic Area

City of Norwalk, CT



Prepared by Indigo River Architecture and Engineering,
D.P.C. Revision 02 – June 08, 2026

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I. Introduction

Norwalk, Connecticut is a major boating destination on Long Island Sound, with a vibrant recreational boating economy supported by extensive infrastructure, a strong marina network, and access to the scenic Norwalk Islands. The city's waterfront offers opportunities for seasonal boaters, transient cruisers, and charter operators alike. Specifically, it offers the following valuable resources:

- Natural deepwater harbor with protected access to Long Island Sound;
- A mix of tidal river, estuary, and coastal harbor environments with approximately 3.5 miles of navigable shoreline; and
- Extensive recreational opportunities, including parks, private marinas and yacht/boat clubs, with access to the Norwalk Islands that are popular for anchoring, beach access, kayaking, and fishing.

There are limitations, however, as a substantial portion of the inner harbor is shallow, with extensive shoaling, mudflats, and tidal wetlands. Moreover, the harbor is busy in the summer months with substantial traffic. That, combined with the environmentally significant and shallow waters, substantially impacts the location and types of moorings that can be utilized.

The City of Norwalk, as part of the Strategic Harbor Study effort, is interested in expanding access to the waterfront through public mooring fields that serve a larger geographic area than currently utilized, and that potentially provide access to the Manresa and Norwalk Islands. To that end, Indigo River Architecture and Engineering, D.P.C. ("Indigo River") along with our maritime specialist TMS Waterfront ("TMS") performed a detailed analysis of the harbor, community research, and limited field work to provide a feasibility and alternatives analysis for the moorings and water taxi access. Please note that additional public access considerations are covered in other deliverables included in the Strategic Harbor Study, including the Street Ends Study.

II. Harbor Data

A. Facilities and Mooring Providers

The harbor includes over 2,000 berthing and mooring spots, which include transient moorings, dinghy docks, marinas, commercial uses, and private dockage. This number includes over 500 mooring locations, with approximately 150 to 200 designated for recreational use—often managed by boating clubs or private individuals. There are two permitted (and charted) mooring anchorages, the north field at Veteran's Memorial Park and the south field along the east side of the navigational channel.

Recreational boats typically moor via swing moorings (Single Point Moorings or "SPM") or Double Point moorings ("DPM") and may tie near docks or in club fields depending on membership or slip availability. Furthermore, there are fifteen (15) marinas and thirteen (13) private boating clubs serving the harbor, offering both annual and transient mooring options. Notable existing facilities include the following:

- Norwalk Transient Moorings: This anchorage, located centrally in the harbor, offers both seasonal and transient moorings with dinghy access to the town docks at Veteran's Memorial Park and Marina, typically through platforms like Dockwa.

- Veteran's Memorial Park and Marina: Offers up to 20-ft boat slips and dinghy slips, linked to harbor mooring holders. This facility is widely used by recreational users and city residents.

B. Mooring Permits and Regulations

Mooring regulations in Norwalk are governed by the NHMC's "Rules and Regulations for Mooring and Anchoring Vessels in Norwalk Harbor."[1] Pursuant to Section 2 of the Regulations ("Mooring Permits Required"):

(i) The Harbor Master must approve all mooring locations in Norwalk Harbor, including locations used for "individual-private" mooring purposes and locations used for "commercial" mooring purposes as defined by the U.S. Army Corps of Engineers (USACE) and the Connecticut Department of Energy and Environmental Protection (DEEP). A mooring permit issued by the Harbor Master shall be required for the use of each approved mooring location.

(ii) It is a violation of the Norwalk Code for any person to moor any vessel in Norwalk Harbor without a permit from the Harbor Master approved by the Mooring and Harbor Safety Committee and issued through the online mooring system established by the NHMC.

(iii) Placement of mooring tackle to secure any floating dock unattached to land and greater than 100 square feet to which a vessel may be attached for any period of time is subject to these Rules and Regulations and state and federal regulatory requirements administered by the Connecticut DEEP and USACE, and must be reviewed by the NHMC for consistency with the Norwalk Harbor Management Plan.

C. Wind, Wave, and Environmental Conditions

- Wind: The harbor is characterized by the prevailing wind directions of South-Southwest (SSW) and South-Southeast (SSE) in the warmer months, with winter experiencing higher occurrences of East-Northeast (ENE) winds. Average wind speeds are typically around 8 to 9 miles per hour (mph), with occasional gusts up to 30 to 40 mph during active weather conditions. The summer doldrums are typical of the Long Island Sound, and generally during the boating season from May to October, winds are lighter, more varied in direction, and overall lest gusty. Data for the harbor is available from SailFlow and is provided below.[2]

[1] Rules and Regulations for Mooring and Anchoring Vessels in Norwalk Harbor. The City of Norwalk Harbor Management Commission. Last updated 2016 March 22. Accessed via https://www.norwalkct.gov/DocumentCenter/View/9478/MooringRulesAdopted41916-2

[2] Norwalk Light: Complete Wind Report & Forecast. SailFlow.

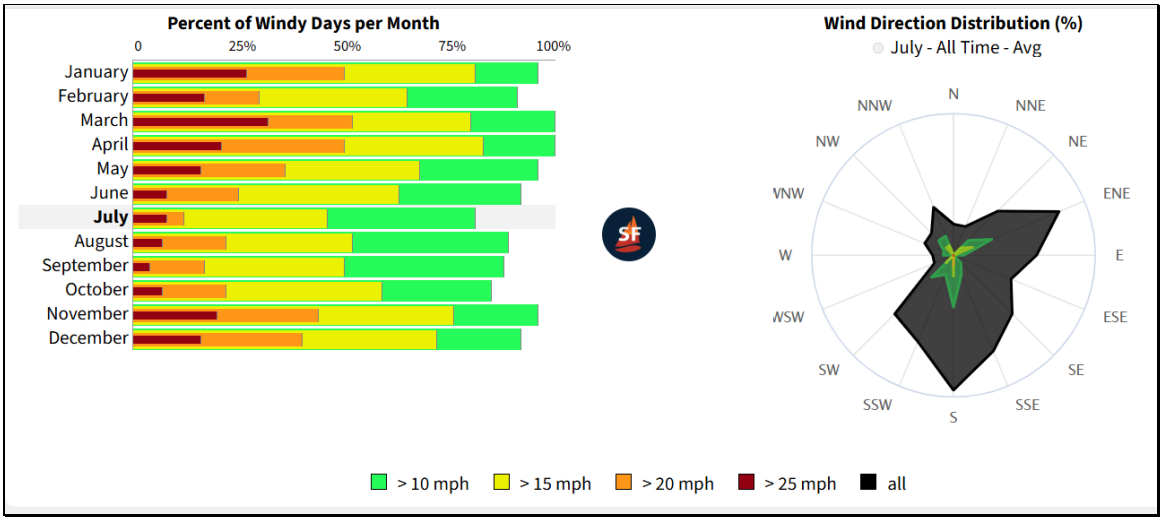


Figure 1: Wind Rose: Norwalk Harbor, Average. *Source: SailFlow*

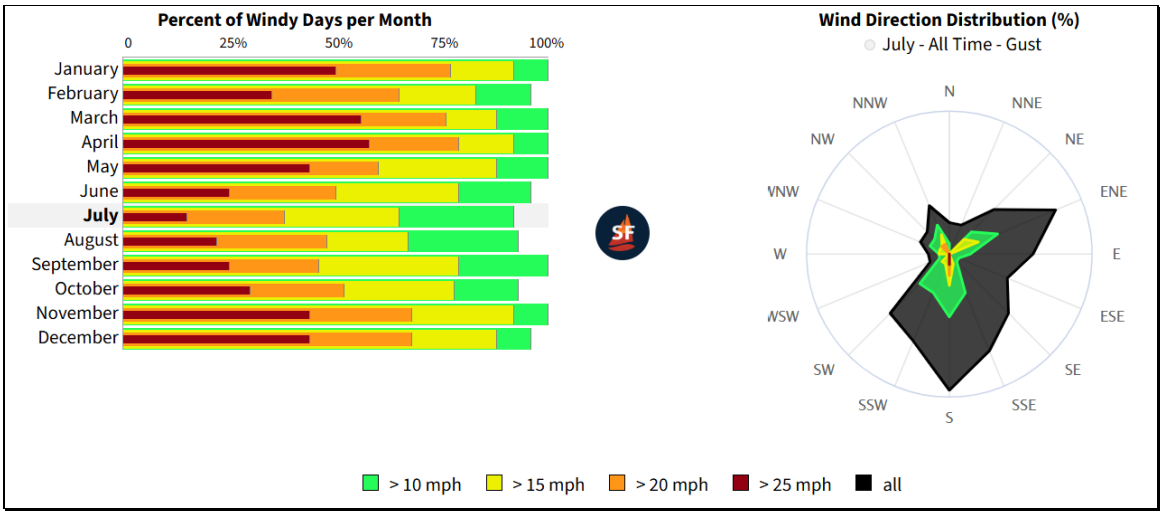


Figure 2: Wind Rose: Norwalk Harbor, Gusts. *Source: SailFlow*

- Waves: Wind driven waves in the Norwalk greater geographic area are a function of the direction of the wind, tidal conditions, and geographic locations. Inside the inner harbor, prevailing southerly winds create waves of 1.5 ft to 4.5 ft (wind speed and shallow water dependent) perpendicular to the channel. Southwest and easterly winds create the same heights of waves everywhere south of Plum Island and Calf Pasture Beach. As such, a large portion of the geographic areas are significantly exposed to large waves. At the Norwalk Islands, each is unique – different directions of wind create lee-effects, most notably at Shea Island where Ram Bay is protected from large waves in from all directions, except from West and West northwest, which have low probabilities of occurrence.
- Wake: No wake studies are available publicly for Norwalk Harbor, so Indigo River has utilized several studies performed in the New York Harbor which has similar constraints – notably, restricted area tidal estuary characteristics in the East River, Hudson River, and the Upper

Bay.[3] Vessel wakes outside of the navigation channel is consistent throughout the harbor with periods of 4 to 7 seconds and wave heights of 1.5 to 2.6 ft based upon observed small boat data. Closer to the navigation channel, wake from recreational boats is very steep (high wave height with short period). In general, where water depths are adequate and tidal shoals are present (such as in the navigational channel in the inner harbor), the governing waves on site are wakes from vessel traffic, especially during high-volume summer months. These waves are steep with long periods and result in "whitecaps" due to the prevalent shoaling. Furthermore, the inner harbor is geographically constrained, and therefore wakes can reflect, superimpose, and stack, causing a "confused" sea state; in the outer islands, open stretches of water allow the wake waves to dissipate.

Short period "choppy" waves can be stopped easily by surface attenuators and deflection at shoals. Longer swells carry a lot more energy and are a deeper wave, i.e. their profile extends down into the water much deeper than the surface. Typically, these long waves pass under pile-supported structures and floats, and they can only be attenuated with deep wave fences or rubble mound/island structures (e.g., groins, breakwaters).

D. Tides

Due to the shoaling throughout the geographic area, tidal swings are critically important to any mooring. Under normal conditions, the tidal swing (diurnal) is approximately 7.67 ft; highest astronomical (HAT) to lowest astronomical (LAT) tides are 9.48 ft and -1.76 ft respectively, for a swing of 11.24 ft. Many locations of the geographic area are accessible at high tide; with the swing as much as 11 ft, low tide presents a significant hazard to navigation and access. The tidal datums are available via the National Oceanic Atmospheric Administration.[4]

E. Currents

Data for currents is not publicly available, however, typical Long Island Sound currents at the mouth of river-fed harbors typically do not exceed 1 to 1.5 knots.

F. Bottom Composition, Habitat, and Aquaculture

- Norwalk Inner Harbor.
    - Dominant bottom: Fine mud/silt with high organic content; this is typical of low-energy, dredged estuarine channels and berths in western LIS harbors.
    - Hard/rocky substrate: Very limited; most edges are bulkheaded or rip-rap with scattered gravel/cobble pockets.

[3] The comparison of Norwalk Harbor and NY Harbor is justified by the use of AIS data confirming that the volume and type of traffic in the NYC East River area is similar to that for Norwalk; specifically, the volume of smaller recreational boats (under 100 ft), which are the governing criteria for mooring field comfort and placidity.

[4] Datums for 8468448, South Norwalk CT. Tides & Currents. NOAA. Accessed via https://tidesandcurrents.noaa.gov/datums.html?id=8468448Current

- Shellfish resources: Inner-harbor waters are not the core of Norwalk's recreational or natural seed beds; those are seaward.
- Aquaculture: No active aquaculture plots mapped in the inner harbor; leases and natural beds lie offshore of the harbor mouth.
- Submerged Aquatic Vegetation (SAV, or eelgrass): No mapped eelgrass within inner-harbor Norwalk (according to 2012/2017 CT DEEP datasets); eelgrass in western LIS is sparse and not recorded in CT DEEP datasets.

- Norwalk Outer Harbor
  - Dominant bottom: Mixed sand and muddy sand on shoals and channel flanks; mud persists in deeper, lower-energy pockets. Regional sidescan/backscatter mapping shows increasing grain size (harder returns) approaching the island ledges.
  - Hard features: Scattered gravel/cobble patches and anthropogenic hard edges; most substantial rock occurs nearer the islands/reefs just outside the mouth.
  - Shellfish use/classification: Portions adjacent to the mouth are conditionally approved or otherwise classified for shellfish harvesting; status varies with rainfall.
  - Aquaculture: No lease blocks mapped inside the dredged approach; leases are offshore toward the island chain (see below).
  - SAV: No mapped eelgrass polygons in the outer-harbor polygon for 2012/2017.
- Manresa Island (shoreline & nearshore within Norwalk)
  - Dominant bottom: Intertidal mudflats/sandy mud and salt-marsh fringe on the landward side; sand to muddy sand around exposed beaches and the causeway margins; increasing coarse/rocky elements toward the island-chain side.
  - Hard features: Rip-rap revetments and man-made shore structures from the former power station; localized rocky patches. (Site has ongoing remediation/reuse planning, but in-water jurisdiction remains the City of Norwalk.)
  - Shellfish/Aquaculture: Immediately adjacent waters connect to classified beds and nearby leases offshore; Manresa's immediate nearshore is not itself a core lease area.
  - SAV: No eelgrass mapped adjacent to Manresa in 2012/2017 CT DEEP datasets.
- Norwalk Islands (within Norwalk's jurisdiction)
  - Dominant bottom: Rock outcrops, boulder and cobble fields (hard, high-backscatter substrate) around island ledges/reefs. Sand to sandy gravel, shell hash common on shoals and bars. Muddy sand to mud in lee/depressions.
  - Shellfish beds: This area contains Norwalk's historic natural beds (designated by Superior Court in 1882) and is the focus of recreational beds used today (status conditional). These lie in waters around/among the islands.
  - Aquaculture: Extensive commercial oyster leases seaward and among the islands within Norwalk (e.g., Copps Island grounds).
  - Rock outcrops/reefs: Numerous named/unnamed ledges and reefs are charted (hard bottom hazards/structure) around Sheffield–Chimon–Copps complexes.
  - SAV: No eelgrass mapped (according to 2012/2017 CT DEEP datasets) within Norwalk's island complex; historic eelgrass layers do not show contemporary presence here.

- Shellfish status/areas: State classifications (Approved, Conditionally Approved, Restricted, etc.) are maintained by the Connecticut Department of Agriculture (CT DoAg). It is important to always check the latest classification layer. Recreational shellfish zones and closures are mapped and hotline-controlled by Norwalk; beds are largely around the islands within city limits. Natural oyster seed beds established by court decree (1882) include tracts in Norwalk waters.
- SAV: CT DEEP datasets for 2012 and 2017 show no eelgrass mapped in Norwalk's waters for those years (this is the most recent statewide data available.)

III. The Nuts and Bolts of Moorings

A. Types of Moorings

- Swing Mooring (Single-Point Mooring or "SPM"): A boat is secured to a single anchor point, and it swings in a circle around the anchor depending on wind, wave, wake, tide and currents. This mooring arrangement is best for large, open areas where space is not a constraint, and it is generally the most common and economical mooring practice. Furthermore, the swing allows the vessels to align with prevailing forces to minimize wind, wave, and current from being perpendicular to the beam of the vessel (generally they take most of the force parallel to the main axis). The spacing of the moorings is critical to avoid vessels overlapping as they swing, and therefore the space efficiency is very low, typically 11,000 sf to 14,000 sf. Due to that extra space, waterfront view interferences are reduced to a minimum. In Norwalk, due to the shoaling and tight quarters adjacent to the navigational channels, this type of mooring is generally reserved for yacht clubs, such as at Wilson Point, and is common throughout the remainder of the Long Island Sound such as in Larchmont and Oyster Bay.

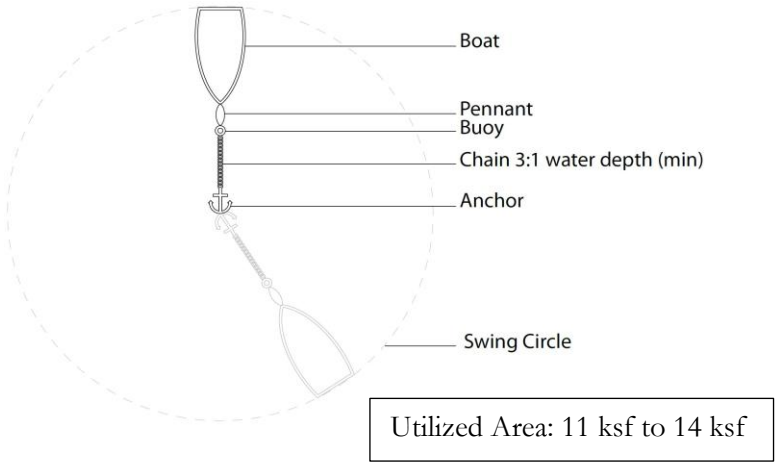


Figure 3: Single Point Mooring

- Fore and Aft Mooring (Double Point Mooring or "DPM"): The boat is held in place by two mooring lines — one at the bow and one at the stern — usually tied to separate anchors or pilings. Primarily, this arrangement reduces space requirements but is harder to maneuver to. As such, this mooring arrangement is best for narrow and congested harbors, mooring fields adjacent to navigation channels, and where large swings are not feasible (such as where rock outcrops or other obstructions are present). The two-anchor system provides additional holding capacity in most conditions if they are aligned with prevailing wind, wave and current. However, when the forces are perpendicular to the orientation, waves and wind can batter vessels during extreme conditions. While this configuration should be reserved for protected harbors, it is common in the Long Island Sound to have these fields in open water – such as in Byram, Shippan Point, and Larchmont Harbor.

  In Norwalk, due to the shoaling and tight quarters adjacent to the navigational channels, this type of mooring is common in both the North and South Anchorages. Other locations where this can be found include Mamaroneck, NY and Southport, CT.

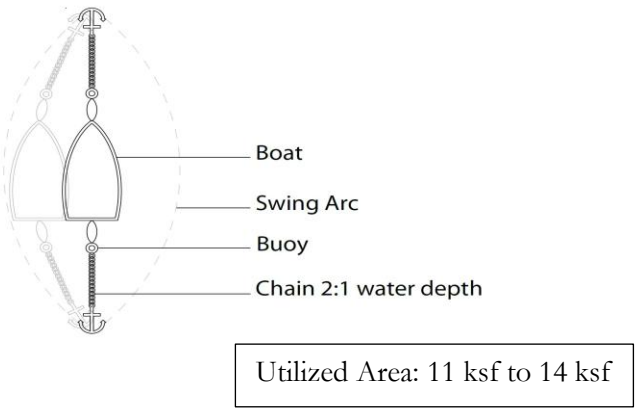


Figure 4: Two Point Mooring

- Mooring Docks (Double Point Mooring Dock or "DPMD"): A fairly unique configuration that can be found on the Long Island Sound (such as at Glen Island) is where floating docks are moored to the Double Point Moorings and vessels tie up to the floating docks like they would on land. This arrangement is a further reduction in required space, as multiple boats can be tied up on a single DPM, and is the safest way to access. However, it does have the same constraints as DPM, with the added cost of infrastructure and maintenance, and is therefore reserved for very well protected harbors or rivers and lakes. One distinct advantage to this system is that the docks would attenuate waves and wake waves.

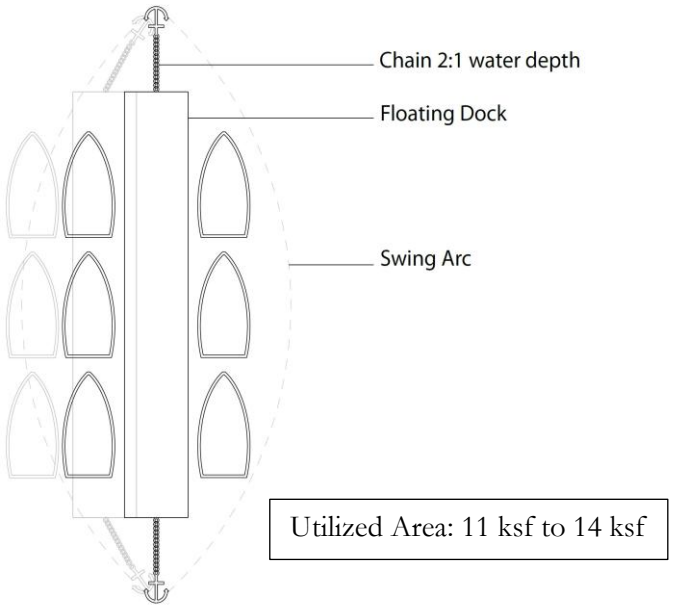


Figure 5: Dock Mooring

B. Anchor and Rode Types Commonly Used

- Anchors:
  - Mushroom Anchor: Often used for permanent moorings in soft bottoms. Holding power is proportional to the length of chain, weight of the mushroom, and whether or not it is buried. Typically, these moorings hold well when left in place; annual disturbance prevents deeper embedment. Additionally, due to the length of stem, wrapped chain and pennants are more common.
  - Pyramid Anchor: Similar to a mushroom anchor, pyramid anchors are used for soft bottoms, but are designed to penetrate and immediately bury themselves, resulting in a much higher holding power. Due to their embedment, chain and pennant wraps are less likely.
  - Helix Anchor (Screw Anchor): Installed by rotating into the seabed to a set tonnage through torque and depth; just the stem is visible above the seabed.
  - Deadweight (Block or Concrete): Heavy objects placed on the seabed. This is generally not recommended nor used in the Long Island Sound due to the buoyant weight of and reduction of holding power in the concrete blocks, and the leaching of chemicals from the concrete.
- Anchor Rodes:
  - Chain Moorings: Typical arrangement is a weighted, heavy chain at a general scope of 3:1 (chain: water depth) or more, a buoy, pennants and a pickup mechanism.
  - Advanced Mooring Systems ("AMS"): Elastic rodes such as SeaFlex, MarineFlex, or Hazlett Marine can be utilized effectively and eliminate the need for chain dragging across the bottom. These are held off the bottom by the buoy or intermediate floats.

Table 1: Chain Moorings vs. Elastic Moorings

Aspect	Chain (block + chain "swing" mooring)	AMS: Elastic (Seaflex, HarborFlex/Hazelett-style)
Environmental impacts	Chains drag on the seabed within the swing circle, creating seagrass "halos" (bare patches) and edge effects; loss of habitat and stored carbon documented.	Keeps riser off the bottom (elastic rode and/or floats; often with helix anchors), greatly reducing or eliminating scouring; widely recommended for seagrass protection.
Typical lifespan	Chain life varies widely with corrosion/abrasion; typical ~5–15 year-service life for chain in normal conditions.	40+ years in service with an industry 20-year warranty.
Cost (CAPEX vs. lifecycle)	Lower upfront hardware cost, but higher lifecycle cost from periodic chain/hardware replacement, diving, and bottom damage.	Higher upfront than chain, but lower O&M and inspection burden; manufacturers and harbor-authority AMS packs note potentially lower total cost of ownership.
Maintenance requirements	Routine inspections (often annual topside and 3-year full inspections); chain wear limits (e.g., 20–33% loss) trigger replacement; swivels/shackles frequently replaced.	Reduced dive work because the rode doesn't scour, but still requires periodic checks of elastomer elements, shackles, and buoy hardware per manufacturer guidance.
Storm behavior / footprint	Catenary needs scope (often 3:1+), larger swing radius and seabed footprint; shock loads transmitted during extreme events.	Elastic rode absorbs energy, allows shorter scope (some vendors cite ~1:1 at high water), improving density in mooring fields and reducing loads.

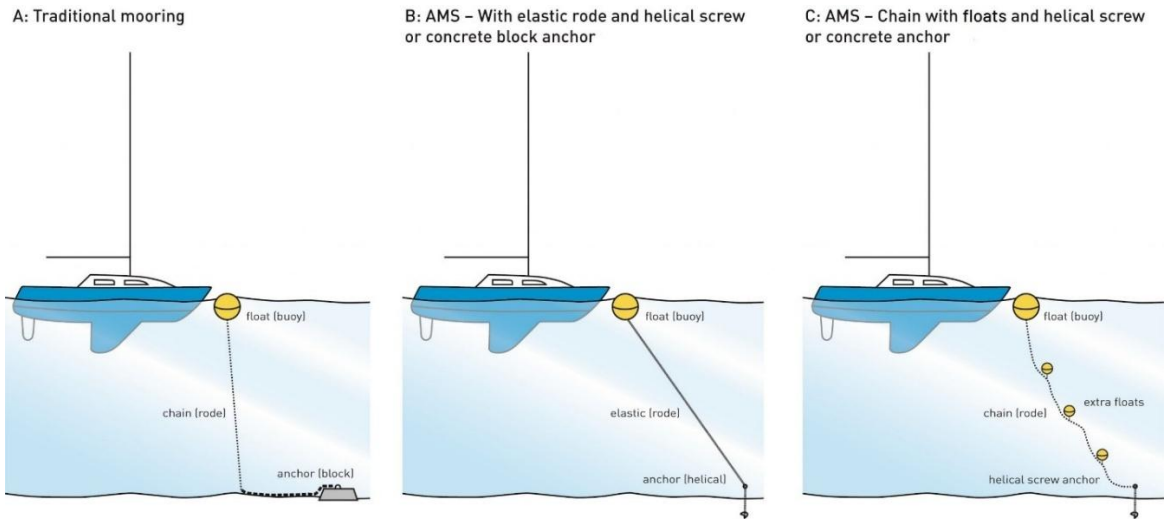


Figure 6: AMS and Chain Mooring Comparison Diagram[5]

[5] Save Our Seabed. Recreational Boating: Mooring. Accessed via https://saveourseabed.co.uk/protecting-our-seabed/recreational-boating/mooring/.

IV. Existing Mooring Zones in the Harbor (Historic and Actual)

Based on navigational charts, the Norwalk Harbor Management Plan, and historic aerials, the following areas are being utilized for moorings (refer to **Figure 6** and **Table 2**). Access to the public moorings is by dingy; no public launch is available to boaters. However, a pump-out boat is available to all boaters. **Figure 7** shows historically popular destination points within the harbor (moorings and anchorages) where boaters are either mooring or anchoring.

- Inner Harbor Basin. Concentrated mooring areas near Veteran's Memorial Park, central Norwalk Island shoreline, and along the river where swing moorings are allocated. This field is significantly constrained by the navigation channel to the west and shoals to the south-southeast. As noted above, there are no legal shellfishing or aquaculture areas in the inner harbor.
- Outer Harbor Area. Mooring zones in deeper water (around 10 ft in depth), including visitor mooring cluster near Norwalk Cove Marina and transient mooring facilities. Again, this area is constrained by the navigation channel and shoaling; moreover, it is central to the harbor along the busy channel.
- Norwalk Yacht Club Field. This field holds about 150 permanent swing moorings, as documented in the Norwalk Harbor Management Plan. A private launch is available.
- Transient/Dinghy Moorings. City-managed guest moorings for visitors near the municipal visitor docks and Veteran's Memorial Park area.
- Norwalk Islands: Unofficial Mooring Area. Unofficial mooring areas at Norwalk Islands, which include Shea, Sheffield, Chimon, Grassy, Betts Island, and Ram Bay. There are extensive leased and recreational shellfishing areas throughout the islands.

Table 2: Mooring Zones

Zone	Type	Moorings	Description
Inner Harbor Basin	DPM; SPM	~150–200	Near Veteran's Memorial Park and along riverbanks
Outer Harbor / Cove	DPM	~20 guest	Visitor moorings near Norwalk Cove Marina entrance
Norwalk Yacht Club	SPM	~150	Licensed under CT DEEP, maintained seasonally
City-Managed Zones	SPM	Varies	Access for city boaters and transient use
Unofficial Areas including Shea, Sheffield, Chimon, Grassy, Betts Islands and Ram Bay	Anchor	Varies	Clusters of anchor moorings for access to the Norwalk Islands.

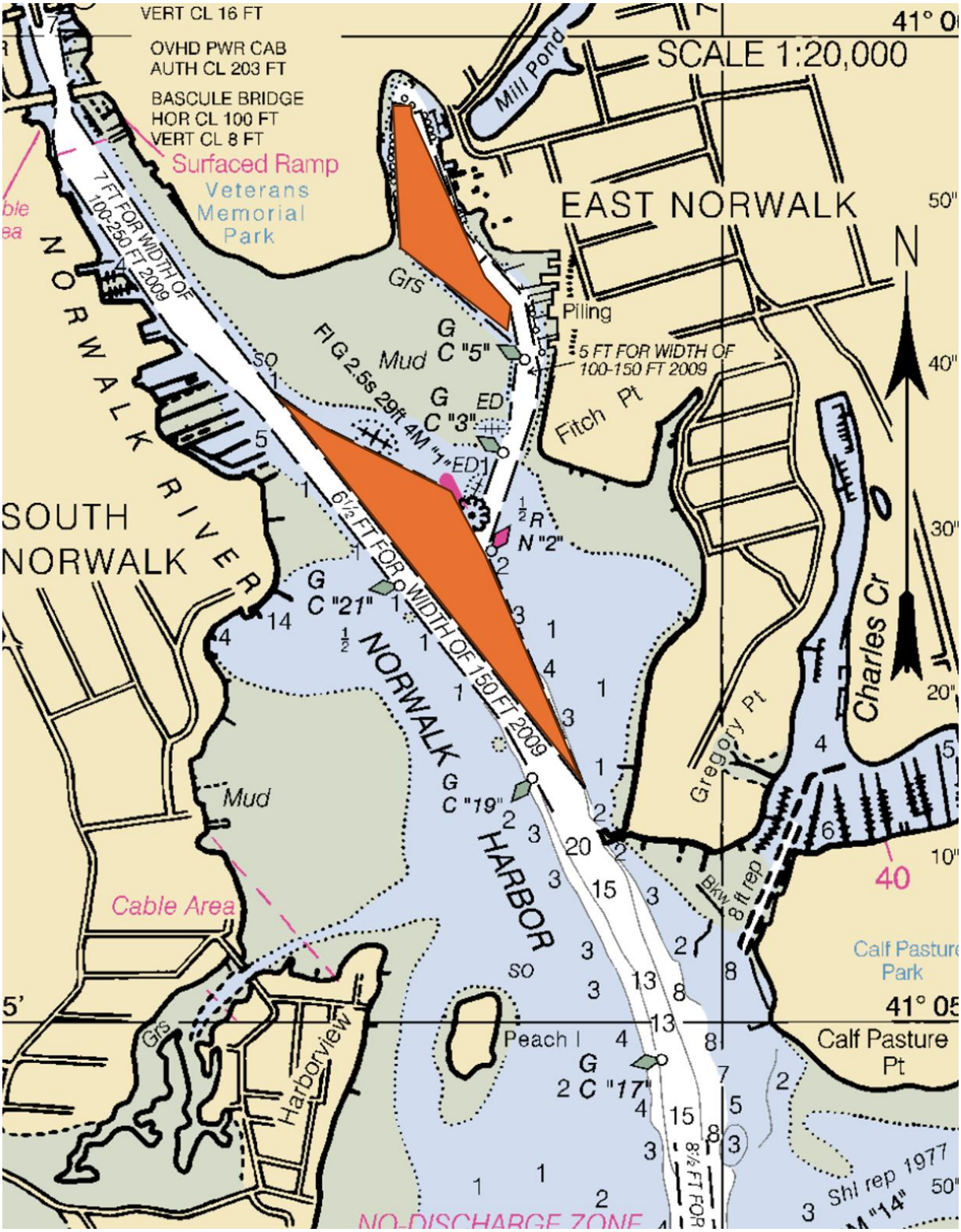


Figure 6: Officially Permitted Existing Moorings (Anchorage): Inner Harbor *(depicted in orange)*

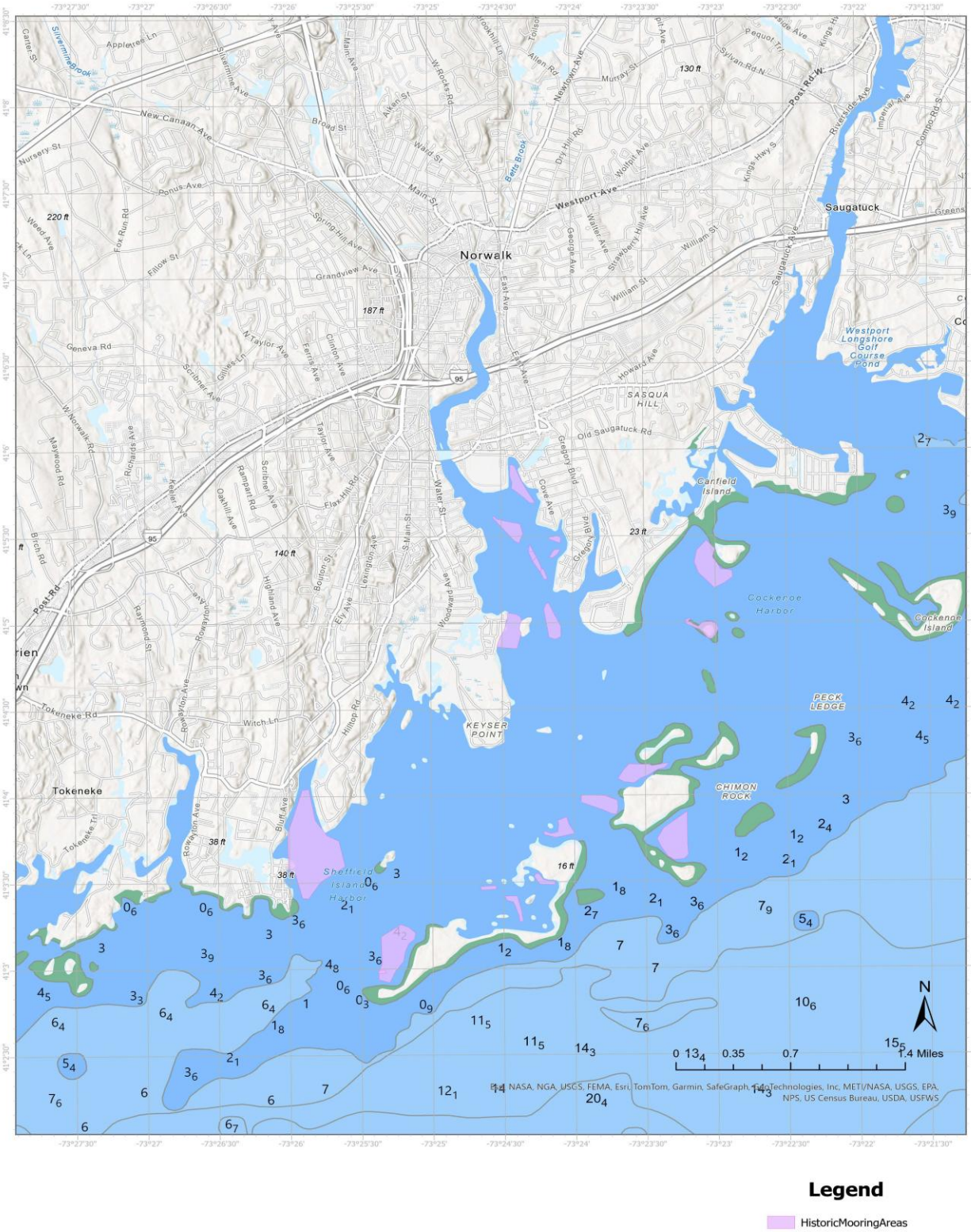


Figure 7: Historically Used Recreational Moorings and Anchorages *(Combination of moorings and/or boats anchoring)*

V. Mooring Upgrades and Expansion

As noted previously, the City of Norwalk is looking to further activate its geographic area with water access and boating. Part of the activation includes the identification of potential mooring fields and street ends where access may be developed for a water taxi or dinghies. Another is the question of whether the equipment should be owned and installed by the lessee or the City of Norwalk (or a mix). The other part is to determine if any proposed expansion a) is environmentally feasible and b) is economically feasible.

A. Challenges

Indigo River started with defining the challenges and opportunities in the harbor.

- Congestion in peak season, especially around Veteran's Memorial Park and the Norwalk Islands.
- Environmental: The presence of extensive shellfish beds, bedrock outcrops, terminal moraines, tidal wetlands, intertidal flats and other ecological systems can be drastically affected by vessels.
- Avoidance of shellfishing lease areas.
- Restrictive environmental permits.
- A restricted fee structure for moorings promulgated by the State of Connecticut.
- Dredging backlogs: Significant parts of the harbor face sedimentation and depth issues; dredge costs and disposal location availability are critical issues currently on Long Island Sound.
- Access: How to get people to and from their boats conveniently without relying upon dinghies; access from the water to "destination" points in Norwalk. Additionally, access to amenities (water, shopping, sanitary discharge, fuel, etc.).
- Pollution and environmental damage caused by moorings and boats when in sensitive areas.

B. Opportunities

Opportunities included the following:

- Expansion of mooring fields to include the Norwalk Islands, eliminating shellfish bed unfriendly anchoring. Further, this could provide direct beach access.
- Growing interest in eco-tourism, paddle sports, and transient cruising.
- Increased demand for floating docks, electric boat infrastructure, and modernized harbormaster systems.
- Programming of Manresa Island and the basin offshore for increased capacity outside of the inner harbor where more parking is potentially available.
- Creating a water-taxi system for increased access to the waterfront around the entire extent of the harbor, which also creates an opportunity for non-boat owners to access the Norwalk Islands.

C. Selection Criteria

Indigo River considered the following factors and criteria in selecting the potential alternatives for new mooring fields:

- Water depth: Due to the extreme tidal swings, it is not recommended that any mooring be installed or swing through less than 5 ft of water at Mean Low Water (MLW). This minimum depth

accounts for lowest astronomical tide of approximately -2 ft (MLW), waves, avoidance of tidal wetland vegetation and of vessels bottoming out. Smaller vessels may be able to moor in two (2) to three (3) ft of water, however, prop wash at that depth has deleterious effects on both bottom habitat and wetlands.

Table 3: Boat Types and Water Depths

Boat Type	Draft (Approx.)	Recommended Min. Depth
Small Dinghies	6–12 inches	2–3 feet
Sailboats (20–30 ft)	3–5 feet	6–8 feet
Sailboats (30–40 ft)	5–7 feet	8–10 feet
Powerboats (under 25 ft)	2–3 feet	4–6 feet
Larger Yachts (40+ ft)	6–8 feet or more	10–12 feet or more

- Seabed type: Preferred bottom condition is silt and sand wherein a pyramid or mushroom anchor can bury itself to establish maximum holding power. Helical anchors can be utilized on any type of bottom except rock. Weathered rock, till (rocks and stones), and shallow bedrock should be avoided as moorings will drag due to lack of embedment and lower friction coefficients.
- Wind, wave, and current exposure
    - Inner Harbor: The primary consideration for protection is to place the moorings in the lee of geographic features that block prevailing winds – specifically South-southwest to East-southeast. That means locations should be north of the line drawn between Plum Island and Calf Pasture Beach.
    - Outer Harbor: The same prevailing directions apply, meaning that moorings should be in the lee of the Norwalk Islands to the maximum extent practicable.
- Density of boats in the area: This criterion was given loose consideration in this round of analysis, as density already clashes with exposure. In general, fields should be located away from the navigation channels and yacht clubs as well as sailboat racing and regatta course areas.
- Environmental regulations (e.g., wetland protection): The moorings will have to adhere to all CT DEEP requirements for permitted mooring areas.
- Budget and Maintenance Capacity: See below for a Cost Benefit Analysis.
- Access: Currently, access to and from public mooring fields is by the boat owner's dinghy. There is an opportunity to provide City-run access through the activation of a water taxi or launch operator system, which can increase safety, reduce the need for dinghy storage, and generate revenue. Indigo River analyzed standard launch and water taxi services and recommends that the criteria be determined by distance and speed. Within the inner harbor, distances are short, but speed is restricted; in the outer harbor, it's exactly the opposite. Rides should be comfortable and under 15 minutes if possible. As such, the criteria used for selection should be as follows:

- Inner Harbor – 6-8 knots (kts) for a maximum of 1 nautical mile (nm) for a trip time of 15 minutes.
- Outer harbor and Norwalk Islands – 12-15 kts for a maximum of 3 nm, for a trip time of 15 mins.
- Inner harbor launches can be open vessel; due to prevailing conditions, outer harbor and the islands should be accessed by a covered vessel.
- Launch docks should be strategically placed to meet the criteria above.

- Amenities:
  - Pump-out boat. If expansion of the mooring fields is planned, an additional pump-out boat should be mandated. There is an opportunity to have a specific pump-out facility on the DPMD-type floating moorings, which would relieve some of the burden on the existing pump-out boat.
  - Access to parking and/or biking and walking paths, including activating underutilized street ends.
  - Safe access to human-powered boating areas (paddleboarding, kayaking, windsurfing, etc.)
- Requirements for Expansion:
  - Launches / water taxi, as detailed above.
  - Optional: Installation, removal, inspection and maintenance crews. With significant potential to add moorings, a capabilities inventory of the City's marine and waterfront staff would have to be completed to determine if the fields can be serviced on an annual basis for installation and removals. Alternatively, a public Request for Proposal (RFP) process could be commissioned for the selection of a marine contractor to do the installations, removals, and inspections (including divers).
  - Optional: Mooring installation work boat (under the City-owned and supplied model).
  - Mandatory: Inspection Program. The inspection of the moorings, for those that may be owned by the City, should have a standard pull and inspection program that rotates on a 3-year basis. Pulling moorings annually actually works against their need to embed themselves into the mud.
  - Mandatory: Additional pump-out boats.
  - Recommended: Standard engineering and installation manual for moorings, to meet minimum criteria for public safety and environmental excellence.
  - Recommended: Conversion from a mushroom system to a helical and APM system for higher reliability, less environmental damage, and tighter density.

VI. Potential New Mooring Field Areas

Indigo River started by eliminating any areas that are shallower than 4 ft. using the current 2025 Navionics Charts (ENC) and the Connecticut Environmental Conditions Online (CT ECO) Geodatabase.[6] These criteria eliminated most of the inner harbor and a large portion of the outer harbor. Cross referencing the available locations with historic anchorage areas, unused space, and access points yielded the following

[6] Connecticut Environmental Conditions Online (CT ECO). Accessed via https://maps.cteco.uconn.edu/.

potential new areas. Note that for the purposes of this study, the inner harbor average boat size was set to be 25 ft, and the outer harbor average boat size was 30 ft, in calculating the number of potential moorings. Please refer to Figures 8 through 11 for the locations discussed below.

A. Inner and Outer Harbors

- Area 1: Veterans Park – Western Shore. South of the boat ramps and transient launch docks, there is a length of shoreline that can accommodate non-swinging moorings outside of the navigation channel, but in enough water for smaller boats (Figure 8). Water depths range from 3 ft to 8 ft at MLW. Using the DPMD system, approximately 16 to 32 boats could be moored along this shoreline with direct access from the boat launch. A water taxi stop could be placed at this location, along with an additional pump-out dock; connections could be provided at the Aquarium and Washington streets on the west side of the Norwalk River.
- Area 2: Gregory Point. This would be an expansion of the moorings between the navigation channel and Peach Island – an area also extensively used by Norwalk Cove Marina (Figure 9). Water depths range from 5 ft to 10 ft at MLW allowing for a range of large and small vessels, including sailboats. Bathymetry and wetland surveys need to be completed, but based upon the potential area deeper than 5 ft at MLW, approximately 25 SPM or 44 DPM moorings could be installed. The advantage to this location is the vicinity to the largest marina in the harbor that has significant dry storage capacity – the moorings would provide temporary wet slips that could be licensed to the marinas. This location could be serviced by both the marina and a water taxi stop at The Point, Calf Pasture Beach or even the proposed improved street end at Lowndes Street.
- Area 3: Calf Pasture Beach. Immediately outside of the breakwater for Norwalk Cove, this smaller area would be available, potentially, for additional transient moorings (Figure 9). Water depths range from 5 ft to 8 ft at MLW allowing for a range of medium to smaller power boats and shallow draft sailboats. However, this area is a bit more exposed than the other identified areas in the outer harbor, so it most likely is a "fair weather" temporary mooring location. Bathymetry and aquatic surveys need to be completed but based upon the potential area deeper than 5 ft at MLW, approximately 10 SPM or 18 DPM moorings could be installed. Again, the advantage to this location is the vicinity to the largest marina in the harbor that has significant dry storage capacity – the moorings would provide temporary wet slips that could be licensed to the marinas. This mooring location could be serviced by a water taxi stop at Calf Pasture Beach.
- Area 9: Veteran's Park Mooring Area (North Anchorage). This existing mooring field could be reconfigured to a DMPD dock mooring for an increase in the number of boats. Existing SPM or DPM moorings would be replaced with helical anchors and elastic rodes. A water taxi stop could be placed at this location, along with an additional pump-out dock; connections could be provided at the Aquarium and Washington streets on the west side of the Norwalk River.

- Area 10: Inner Harbor Mooring Area (South Anchorage.) Due to this location's density and adjacency to the navigation channel, no additional moorings are recommended here.

B. Manresa Island

- Area 4: Manresa Island West Mooring Field. West of Manresa, there is adequate water depth and access to the once-private navigation channel into the Basin (**Figure 10**). Moreover, this location is more sheltered than Area 5 and is in a restricted recreational shellfishing area. Water depths range from 3 ft to 8 ft at MLW allowing for a range of smaller vessels and outboards. Bathymetry would need to be completed to verify depths; based upon the potential area deeper than 3 ft at MLW, approximately 20 SPM or 60 DPM moorings could be installed. Bottom composition would need to be surveyed to determine optimal placement of moorings and confirm that no SAV is present. The field could be serviced by water taxi from Lowndes Street, Manresa Basin, or even the Point.

Advantages:	Protected from wind, wave, wakes Setback from Navigation Channel
Disadvantages:	Distance from downtown and Veteran's Park Adjacent to the navigation channel (wakes) In a charted recreational shellfishing area Intermittent shoaling

- Area 5: Manresa Island Basin. While Manresa Basin offers advantages in terms of access, water depth, and protection against environmental forces, it will be further studied as part of the ongoing Master Plan for the Island. Indigo River considers the basin as feasible for shallow and deep draft (keeled sailboats) and encourages development of the same, but the site makes more sense as a marina with floating docks. Moreover, this is the natural staging point for the Norwalk Islands through a water taxi, ferry, or launch. Finally, from Veteran's Memorial Park or potential street end activation, a water taxi or ferry can connect the inner/outer harbor to the future park planned at Manresa Island, in addition to launching to the beaches. The basin itself is not a shellfishing area, nor is any SAV present. Bottom composition would need to be surveyed to determine optimal placement of moorings. This would be an ideal location for a water taxi stop and homeport.

Advantages:	Deep water basin Highly protected from wind, wave, and wakes Adjacent to navigation channel Manresa Island could act as a parking and staging point
Disadvantages:	Distance from downtown and Veteran's Park

	Under private ownership and development
	More suitable for a marina

- Area 6: Manresa Island South Mooring Field. South of the Basin, there is adequate water depth and access to the once-private navigation channel into the Basin (**Figure 8**). Moreover, it is adjacent to the primary navigation channel. Water depths range from 5 ft to 13 ft at MLW allowing for a range of large and small vessels, including deep keel sailboats. Bathymetry would need to be completed to verify depths; based upon the potential area deeper than 5 ft at MLW, approximately 60 to 100 SPM or 100 to 140 DPM moorings could be installed. The identified areas are recognized as recreational shellfishing areas (water-quality dependent) and are not leased shellfishing areas. Bottom composition would need to be surveyed to determine optimal placement of moorings and confirm that no SAV is present. The field could be serviced by water taxi from Lowndes Street, Manresa Basin, or the Point.

Advantages:	Adjacent to navigation channel
	Outside of leased shellfishing areas
Disadvantages:	Exposed from SW prevailing wind/waves
	Distance from downtown and Veteran's Park
	Adjacent to the navigation channel
	Wake affected
	In a charted recreational shellfishing area
	Not suitable for DPMD due to wave climate

C. Norwalk Islands

The true destination offshore at Norwalk are the islands – sandy beaches, clean waters, and copious lengths of shoreline (**Figure 10**). However, access to the islands via boat involves passing through significant ecosystems that are easily damaged by vessels. Currently, many boats simply anchor at the islands, many within shellfishing leases and sensitive habitat (refer to the historic areas in blue in Figure 10). Instituting a mooring program in the recommended areas (refer to red areas in Figure 10) with elastic rodes would reduce boating impacts.

These proposed moorings are farther out in the Long Island Sound, so exposure to environmental forces and storms require that fields be located in the lee of the islands to the maximum extent possible. There are also deepwater channels running into the areas from the south (between Chimon and Shea Island) and from the east (off Navigation Buoy #2) where boat traffic is commonly present. Each of the islands could be serviced by water taxi from Manresa, or the landings on the eastern shore.

- Area 7: Sheffield Island. The western shore of Sheffield Island has an area with adequate water depth for moorings and access to the island, while staying out of the leased shellfish areas. This area is well protected from all directions except west-southwest to southwest where a large fetch can generate significant waves. Proposed moorings at this location would be transient only.

Advantages:	Outside of leased shellfishing areas Access to Shea Island camp sites
Disadvantages:	Exposed from SW prevailing wind/waves Distance from downtown and Veteran's Park Adjacent to the navigation channel In a charted recreational shellfishing area Not suitable for DPMD due to wave climate

- Area 8: Chimon Island. Between Chimon and Shea Islands, there is a naturally deep area of water that could support well protected moorings away from the shellfishing areas. Proposed moorings at this location would be transient only.

Advantages:	Outside of leased shellfishing areas Access to both Shea and Chimon Island Well-protected cove
Disadvantages:	Distance from downtown and Veteran's Park Restricted geographic / navigable area In a charted recreational shellfishing area

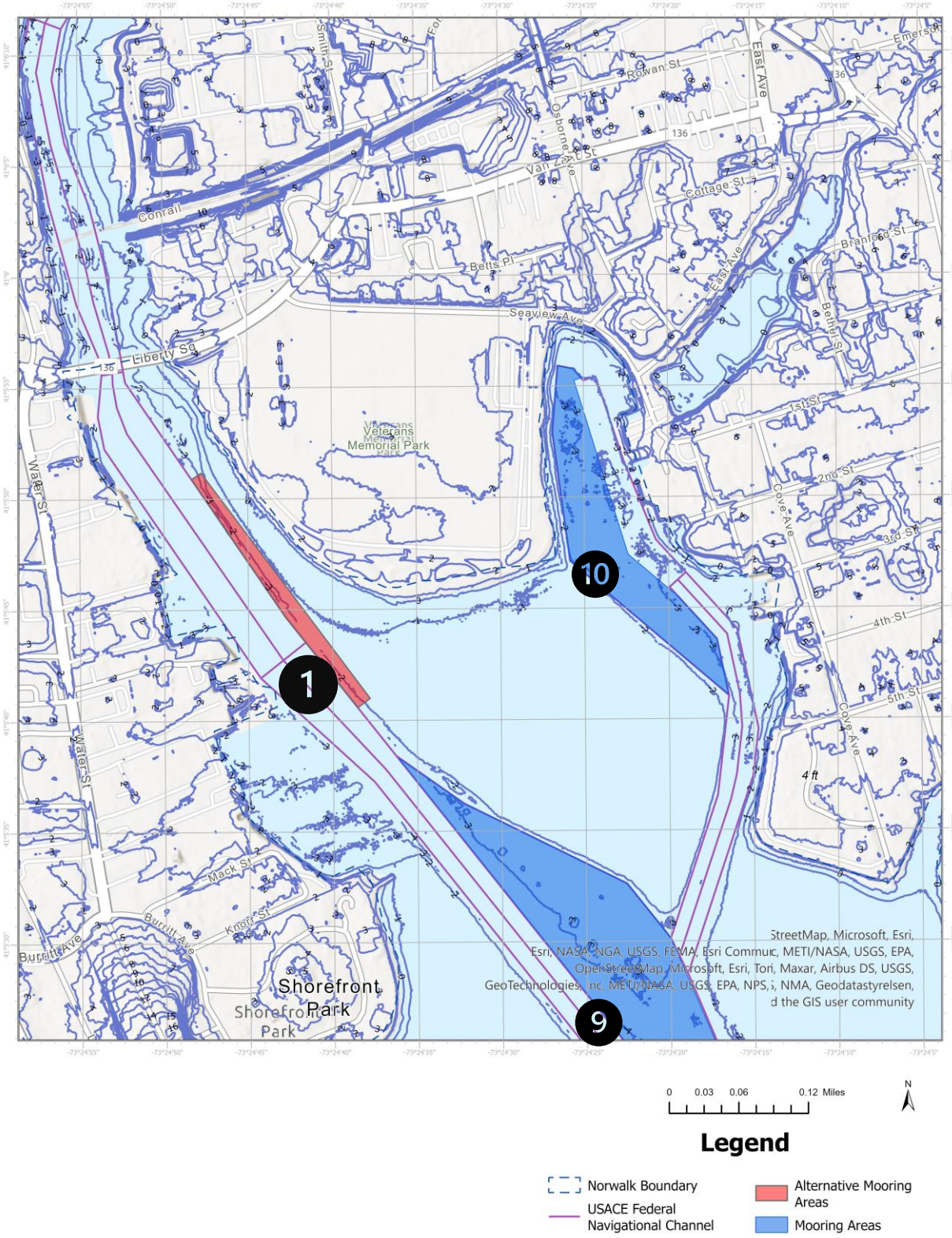


Figure 8: Veterans Park

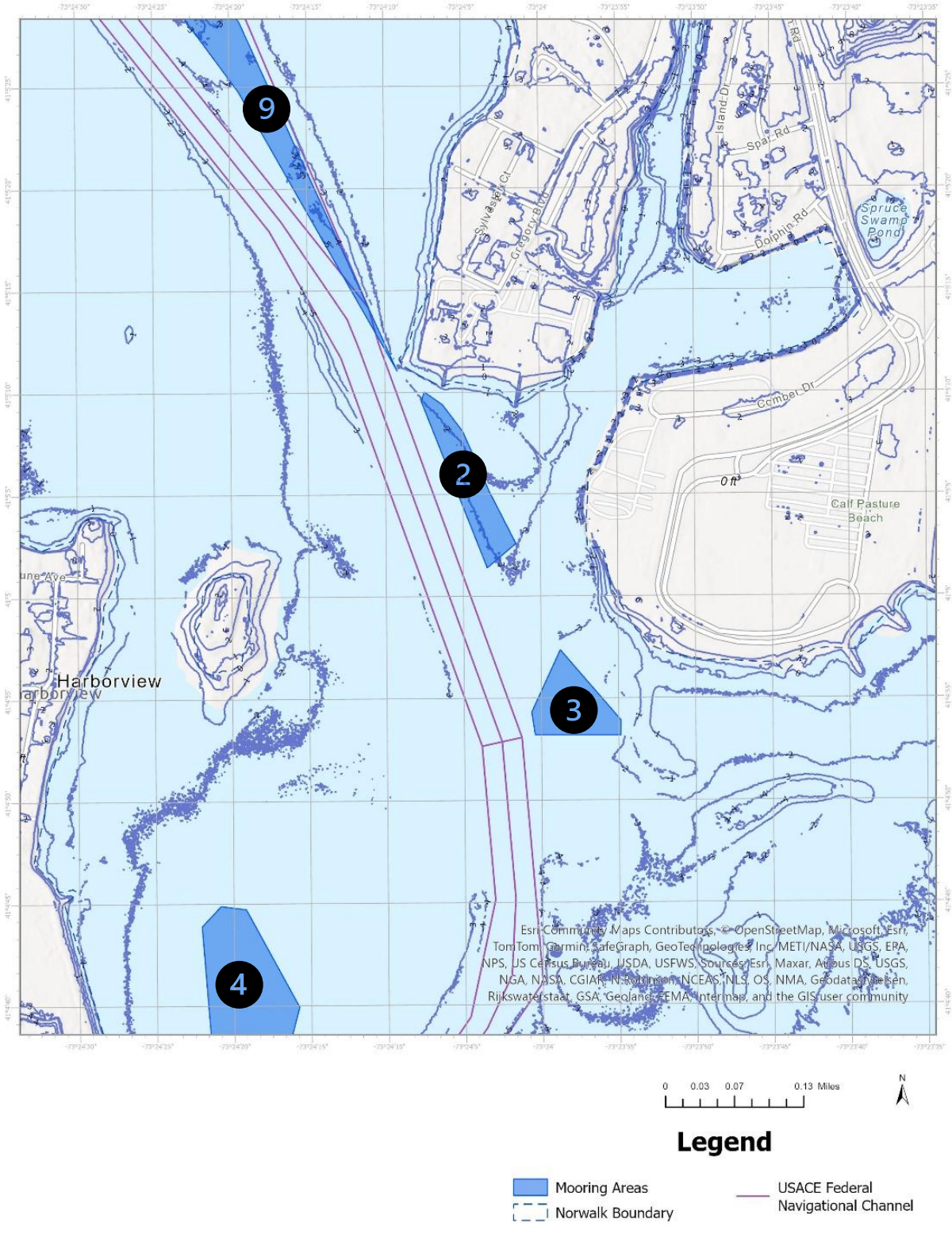
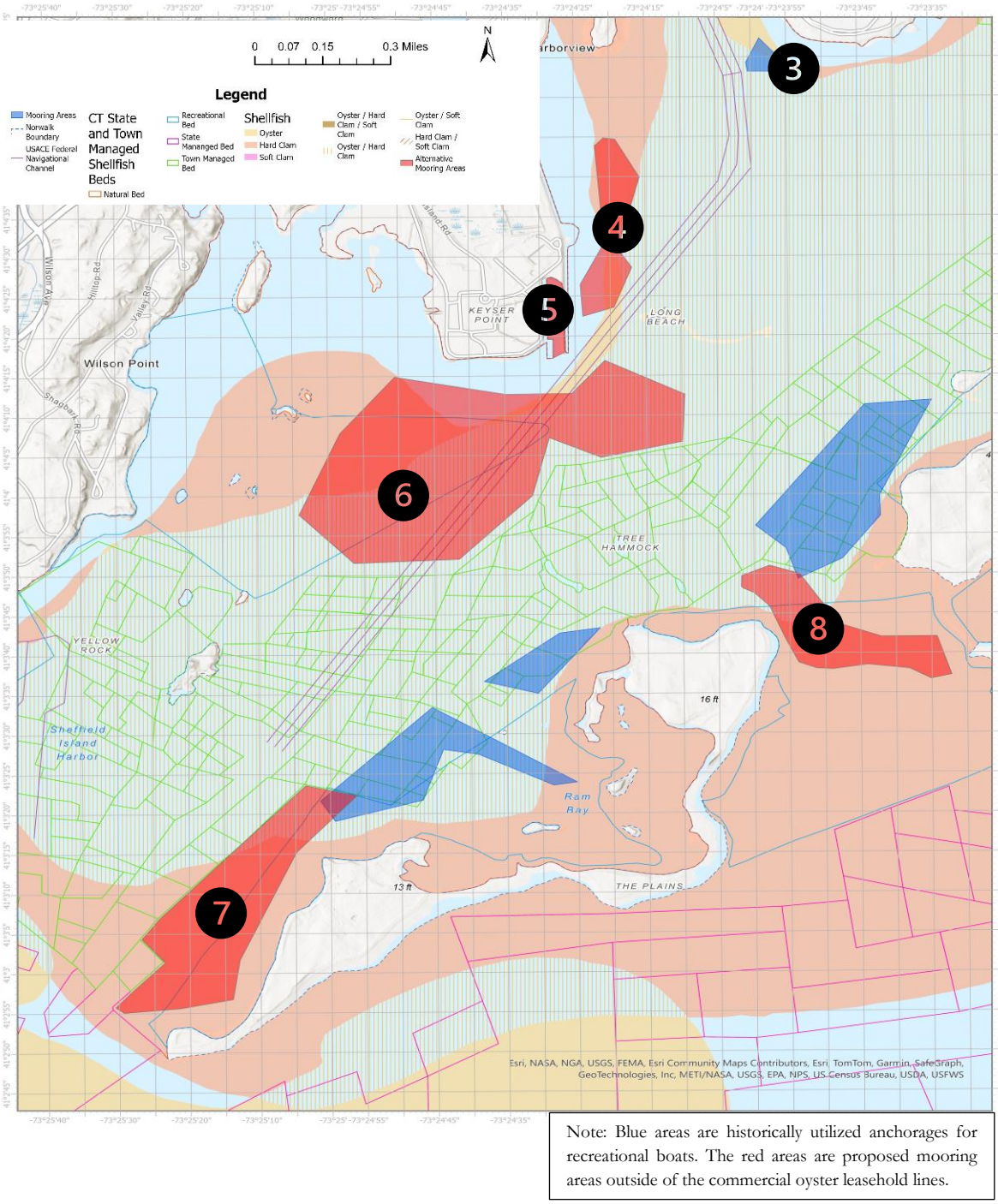


Figure 9: Calf Pasture Beach and Gregory Point



Note: Blue areas are historically utilized anchorages for recreational boats. The red areas are proposed mooring areas outside of the commercial oyster leasehold lines.

Mooring Areas and Critical Habitat

Legend
Alternative Mooring Areas
Mooring Areas
Norwalk Boundary
USACE Federal Navigational Channel
CT State and Town Managed Shellfish Beds
Natural Bed
Recreational Bed
State Managed Bed
Town Managed Bed
Shellfish
Oyster
Hard Clam
Soft Clam
Oyster / Hard Clam / Soft Clam
Oyster / Hard Clam
Oyster / Soft Clam
Hard Clam / Soft Clam

Figure 10: Manresa and Norwalk Islands

Table 3: Potential New Mooring Options

Area	Option 1 - SPM	Option 2 - DPM	Option 3 - DPMD	Option 4 - Hybrid
1 - Veterans Park	0	16	32	32
2 - Gregory Point	25	44	102	44
3 - Calf Pasture Park	10	18	41	18
4 - Manresa West	20	60	180	60
5 - Manresa Basin	0	0	0	0
6 - Manresa South	80	120	0	80
7. Shea Island	40	0	0	40
8. Chimon Island	40	0	0	40
9 - North Anchorage	59	59	59	59
10 - South Anchorage	110	110	0	110
Total Number of Moorings	384	427	354	483
# of Transient Slips	50	34	73	90

VII. Financial and Cost-Benefit Analysis

A. Current Fee Structure and Regulations.

Per Connecticut General Statute § 22a-113k, municipal mooring permit fees are limited to a maximum of $200 per year. This fee is intended to cover administrative and regulatory oversight, mooring field planning, recordkeeping, and permit processing. It does not cover installation, inspections, launches, pump-out boats and everything else to run a municipal program.

As such, in general, the Norwalk program is a permit-only service wherein installations, removals, and inspections are the responsibility of the permittee. Approximately only 20 moorings are installed and maintained by the City, a number that could be expanded some, but not without significant financial and management considerations.

Currently, Norwalk charges $200 (the maximum) for a permit, yielding a maximum revenue of between $30,000 and $40,000; transient moorings are charged at $45/night. Combined revenue is on the order of $46,000 per year. For the purposes of this study, and in the financial model below, Indigo River assumed that the transient moorings are occupied 25 percent of the time from May to October (~150 days).

The regulations do not restrict charging fees for mooring installations, maintenance or removal, inspections, launch services, parking, or concession, which could generate additional revenue and waterfront jobs for the City. Therefore, what develops are three (3) distinct models for mooring field expansion:

1) Continue the current model as a permit-based system.
2) Convert the system into a City-Managed harbor-wide mooring field to generate revenue and jobs
3) Implement a modified model with limited City owned and maintained moorings for transient vessels which provide the greatest possibility of revenue generation.

B. Analysis

As with any model, there are some data gaps, including what the current revenues are, utilization percentages for the transient moorings, number of seasonal days, maintenance costs, and amortization periods of capital costs. Indigo River's assumptions were as follows:

- The boating season runs from May 15 to October 15, and includes 150 days.
- Transient moorings are utilized 50 percent (50%) of the time.
- The launches can make any ride less than 15 minutes.
- The launches are utilized on 50% of the moorings 1 time per week, with 50% service daily for transient moorings.
- Parking is available at the launch locations, or, biking and walking is feasible.
- Amortization period for capital costs is 20 years.
- Administrative costs for the hiring, purchasing and other items needed to stand up the potential new division are excluded.

1. Model 1

Keeping the status-quo of the system, this would be a permit-based mooring field only, and the City would not provide a launch/water taxi, added pump-out boat, nor maintenance and inspection. Each of those costs would be privatized through an RFP process wherein the permittee pays for the services privately to a mooring field management company (such as Norwalk Cove Marina). Financially, this is the easiest plan to implement, apart from the RFP and how that is administered. This also assumes that transient moorings would be managed by the mooring field management company who would also receive the profits.

2. Model 2

Based upon the tabulated estimates in **Table 4**, the annualized cost to the City to run its own mooring program is approximately between $884,000 and $1.2 million, equivalent to a cost of approximately $5,900 to $8,000 per day or between $2,500 and $3,000 per mooring. This is against a projected maximum of approximately $341,000 in revenue; therefore, the model is unsustainable by a substantial amount without legislated funds, grants, or private capital influx (which could include sponsorships).

3. Model 3

Based upon the tabulated estimates in **Tables 7** and **8**, the annualized cost to the City to run a partially managed mooring field, wherein the City would establish more transient moorings and a single water taxi/launch without adding an additional pump-out boat, would be around $377,000 a year. This is against a projected maximum of $314,000 in revenue; therefore, the model is close to workable with minor subsidies.

Table 4: Capital Costs

Capital Costs (w/ 21% Overhead & Profit)					
Mooring Type	**Per Mooring**	**Option 1 Costs**	**Option 2 Costs**	**Option 3 Costs**	**Option 4 Costs**
SPM	$3,000	$1,032,000	$0	$0	$0
SPM - ER	$6,500	$0	$0	$0	$300,000
DPM	$5,000	$0	$1,690,000	$0	$300,000
DPMD	$9,500	$0	$0	$4,284,500	$560,500
DPMD - ER	$14,500	$0	$0	$0	$0
New Launch	N/A	$60,000	$60,000	$60,000	$60,000
New Pump-out Boat	N/A	$60,000	$60,000	$60,000	$60,000
New Water Taxi	N/A	$90,000	$90,000	$90,000	$90,000
	Totals	$1,242,000	$1,900,000	$4,494,500	$1,370,500
	Annualized Capital Cost	$124,200	$190,000	$449,450	$137,050
	COGS - Annual	$760,370	$760,370	$760,370	$760,370
	Expected Annual Cost	$884,570	$950,370	$1,209,820	$897,420
	Per Added Mooring	$2,571	$2,812	$2,683	$2,914
	Per Seasonal Day	$5,897	$6,336	$8,066	$5,983

Table 5: Costs of Goods and Services

Costs of Goods and Services (COGS)		
Launch		
Fuel	50 hp outboard at 6 knots, or 2 gph	$19,200
Labor	Launch captain, 16-hr service, $35/hr	$84,000
Maintenance	Materials, layup, consumables, insurance	$5,500
Water Taxi		
Fuel	150 hp outboard at 10 gph	$96,000
Labor	Captain, 16-hr service, $35/hr	$84,000
Maintenance	Materials, layup, consumables, insurance	$6,500
Maintenance Boat / PO		
Fuel	150 hp outboard at 10 gph	$48,000
Labor	Captain and Crew, 8-hr service, Avg $45/hr, year- round	$50,00
Maintenance	Materials, layup, consumables, insurance	$6,500
Subtotal		$399,900
	10% Admin and Overhead Costs	$39,990
	Total COGS	$439,890
	COGS per Seasonal Day	$2,933
	Break Even Trips at Average $15/ trip	$29,326
	Trips per Day	195.51
	Trips per Hour	12.22
	Per Boat/ Hour	6.11

Table 6: Revenue Projections

	Revenue By Mooring Options			
Area	**Option 1 - SPM**	**Option 2 - DPM**	**Option 3 - DPMD**	**Option 4 - Hybrid**
1 - Veterans Park	0	16	32	32
2 - Gregory Point	25	44	102	44
3 - Calf Pasture Park	10	18	41	18
4 - Manresa West	20	60	180	60
5 - Manresa Basin	0	0	0	0
6 - Manresa South	80	120	0	80
7. Shea Island	40	0	0	40
8. Chimon Island	40	0	0	40
9 - North Anchorage	59	59	59	59
10 - South Anchorage	110	110	0	110
Total Number of Moorings	384	427	354	483
# of Transient Slips	50	34	73	90
Revenue				
Existing Moorings	$46,000	$46,000	$46,000	$46,000
New Permanent Moorings	$29,250	$29,250	$29,250	$29,250
New Transient Moorings	$84,375	$57,375	$123,188	$151,875
Launch Revenue - Transients	$56,250	$38,250	$82,125	$101,250
Launch Revenue - Permanent Moorings	$107,357	$126,321	$90,321	$126,321
Total Projected Revenue	**$323,232**	**$221,946**	**$295,634**	**$379,446**

Table 7: Capital Costs

Mooring Type	Per Mooring	Option 4 Costs
SPM - ER	$6,500	$260,000
DPM	$5,000	$95,000
DPMD	$9,500	$60,000
New Pump-out Boat	$60,000	$60,000
New Water Taxi	N/A	$60,000
	Totals	$565,000
	Annualized Capital Cost	$56,500
	COGS - Annual	$439,890
	Expected Annual Cost	**$496,390**
	Per Added Mooring	$1,028

VIII. Conclusions and Recommendations

After review, there is a viable plan that could be implemented to expand mooring capacity in both the inner and outer harbors while also activating the street ends, Manresa Island, and the Norwalk Islands. However, further study is needed regarding how this would align with the City's administrative model.

New mooring fields could be developed at the identified locations if they are supported by adequate launch and water taxi service, as well as pump-out boats. Without these services, adding additional moorings may not generate the activity or revenue needed for the City of Norwalk to sustain operations.

The financial analysis conducted indicates that it is not cost-effective for the City to create a dedicated mooring division or hire a contractor for installations, removals, and inspections. These responsibilities should remain with the permit holders. Indigo River recommends implementation of a modified hybrid model (Model #3) in which permittees continue to maintain private moorings while the City expands transient moorings, contracts for harbor management services, and establishes a water taxi.

Based upon preliminary financial analysis, under a permittee-paid cost of the mooring infrastructure, the added costs of the launch/water taxi, installation and maintenance of transient moorings, pump-out boat and working expenses (Model #2) are not balanced by the revenue generated through a) charging for the launch and b) focusing on more available and accessible transient moorings at $45/night. The realized shortfall of approximately $170,000 is not unreasonable for what effectively is a municipal public service. This gap can be closed through the elimination of the launch as redundant (water taxi would service), the receipt of subsidies for pump-outs, sponsorship for the water taxi, or even lobbying to the State to increase the private mooring fee cost.

Water taxi and launch landings are most opportunistic at the Manresa Island Basin, Veteran's Memorial Park and at the existing harbor launch as shown in **Figure 11**. Within a maximum of 1.5 nautical miles and trips of under 15 minutes, the system would connect the inner harbor, outer harbor, the Norwalk Islands, and the east and west shores. Additionally, adding boat launches or water taxi landings at the street ends of 3rd Street, Lowndes Street, and Cove Street along with landings at Calf Pasture Beach, the Point, and potentially at Norwalk Yacht Club would help complete public access to inner harbor and the surrounding geographic area (refer to the Street Ends Study for additional information). To fund operations, a per-trip fee of $10 for the inner harbor, $15 for the outer harbor, and $20 for the Norwalk Islands would be required.

Of the proposed mooring installation options, only options 1 and 2 are financially feasible for new installations, apart from upgrading the inner harbor where Indigo River calculates that an additional nineteen (19) vessels could be moored. The initial capital expense of floating docks and mooring hardware, maintenance costs, and seasonal removals cannot be justified under a public program unless significant grants or private funding are received. For the inner and outer harbor, due to space constraints, moorings should be DPM with a standard chain system.

At the Norwalk Islands, Indigo River recommends the installation of forty (40) moorings strategically placed at both Shea and Chimon Islands. Additional mooring areas could be established for permittees to install their own moorings. Based upon the sensitive ecology of this area, these moorings should be pyramid anchors with elastic rodes to prevent chains sweeping the bottom.

In summary, Indigo River recommends implementing Model #3, wherein a water taxi is established in the harbor to service all moorings. Increased transient moorings would largely offset the cost of amenities and installations. While modest subsidies may be required, the model is substantially more feasible than a fully City-managed system.



Figure 11: Water Taxi – Potential Landing Points

Section 3

Street Ends & Public Access

Street Ends Study

Norwalk Strategic Harbor Study

Task 2.4 Study of City Owned Street Ends

June 2026

01

Introduction

BACKGROUND

As a component of Norwalk's broader Harbor Strategic Study, the Street Ends Study is a focused initiative aimed at improving public access to Norwalk Harbor while advancing the city's long-term goals related to environmental sustainability, equitable urban development, and climate resilience. The harbor remains a defining asset for Norwalk—historically, ecologically, and recreationally—and enhancing public engagement with this waterfront is essential to fostering a more connected and resilient city.

This study builds directly upon the foundational work of the Norwalk Harbor Management Commission, and in particular, the contributions of Chris MacDonnell, who played a key role in developing the initial street end matrix and grant materials. That early effort identified numerous street ends with potential for public access and served as a catalyst for this more detailed, implementation-focused evaluation. Our team has expanded on this foundation to assess conditions across the harbor and propose strategic, site-specific recommendations.

Despite Norwalk's proximity to the water, opportunities for public shoreline access are limited, inconsistent, or inadequately maintained. Many of the city's street ends—public rights-of-way terminating at the water's edge—remain underutilized or constrained by unclear jurisdiction, lack of visibility, or environmental degradation. This study views these locations as underrecognized public assets that, if thoughtfully improved, could serve as vital points of access for recreation, ecological education, and community engagement.



PURPOSE & OBJECTIVES

The urgency of this effort is underscored by increasing pressures on Norwalk's shoreline—from sea level rise and storm impacts to growing public demand for access and recreation. Improving the city's street ends is an opportunity to deliver multi-benefit public infrastructure that advances resilience, accessibility, and environmental stewardship. By investing in the transformation of these overlooked public spaces, Norwalk can create a more inclusive and resilient waterfront for current and future generations. This study is motivated by the following key objectives:

1. **Feasibility and Environmental Suitability:** Sites have been analyzed for right-of-way clarity, visibility, vulnerability to flooding, and potential for environmental enhancement. This includes the integration of nature-based solutions such as living shorelines, removal of invasive vegetation and planting of native vegetation, and stormwater management features.

2. **Geographic and Social Equity:** An essential consideration is the equitable distribution of access. The study evaluates whether the selected sites serve neighborhoods that have historically lacked meaningful access to the waterfront, applying both spatial and demographic criteria to help define and address underserved areas.

3. **Design and Policy Alignment:** Where appropriate, the study references best-practice frameworks such as the Waterfront Edge Design Guidelines (WEDG) and incorporates standards for ADA accessibility, coastal resiliency, and low-impact development. Recommendations aim to ensure that proposed improvements are not only feasible but aligned with regional and national standards for sustainable waterfront design.

Ultimately, the Street Ends Study reflects Norwalk's continued commitment to expanding equitable, sustainable, and culturally meaningful access to its waterfront. By investing in the thoughtful transformation of these overlooked public spaces, the city has the opportunity to create a more inclusive and resilient waterfront for current and future generations.

ALL IDENTIFIED STREET ENDS

A total of 21 public street ends terminating at the water were evaluated as part of this study. These sites were included in a preliminary assessment matrix that considered physical conditions, environmental context, and potential for public access improvements.

While all 21 were reviewed in the early phases of the analysis, the study ultimately focused on the 19 sites concentrated around Norwalk Harbor, where shoreline access demand, equity considerations, and implementation feasibility are most aligned with the project goals.

Two sites—Sammis Street and Yarmouth Road, located near Wilson Cove and the Rowayton area—were excluded from mapping and final capital project selection due to their geographic distance from the harbor and differing local conditions. The remaining 19 sites formed the core of the mapping analysis and informed the selection of five priority sites for potential improvements.

Figure 1. Norwalk Identified Street Ends



SELECTION CRITERIA FOR PRIORITY STREET ENDS

The following criteria, informed by the goals of the Harbor Management Plan, field assessments, stakeholder input, and data provided by the Harbor Management Commission, were used to select five street end sites to advance for detailed study and potential capital improvement.

Equity & Community Benefit

- **Geographic distribution:** Preference was given to sites that expand access across different parts of the harbor, particularly in areas with limited public shoreline amenities.
- **Environmental justice indicators:** Sites located within Environmental Justice Block Groups* were prioritized to help address historical disparities in access to open space and water-dependent recreation.

**As defined by the 2023 Connecticut DEEP data*

Feasibility & Legal Clarity

- **Public right-of-way (ROW) status:** Sites with confirmed or presumed public ROW access were favored. If ROW issues exist, feasibility of resolving them through coordination or clarification was considered.
- **Site visibility and physical access:** Priority was given to sites that are visible from nearby streets and accessible by foot, bicycle, public transportation, or vehicle.
- **Partnership potential:** Locations where collaboration with adjacent landowners or stakeholders (e.g., boat clubs, neighborhood groups) is feasible were viewed favorably.

Environmental Opportunity

- **Ecological restoration potential:** Sites presenting opportunities for habitat restoration, invasive species removal, or the implementation of nature-based infrastructure were prioritized.
- **Flood risk and climate resilience:** Sites were assessed for their location within flood zones and their potential to integrate adaptive design features such as living shorelines or bioswales.

Infrastructure Potential

- **Availability of supporting features:** Sites with existing infrastructure (e.g., parking, utilities) or capacity to accommodate amenities like seating, ADA-compliant paths, signage, or kayak launches were deemed more implementable in the near term.
- **Compatibility with adjacent uses:** Sites that could complement or enhance existing community assets—such as trails, public parks, or water-dependent businesses—were seen as strong candidates.

02

Existing Conditions

EXISTING CONDITIONS OVERVIEW

The City of Norwalk is home to a variety of waterfront street ends that represent a diverse range of physical, environmental, and jurisdictional conditions. These sites—termini of public rights-of-way abutting the harbor or its tributaries—vary significantly in their current state, visibility, ecological value, and accessibility. As part of this initial analysis, a comprehensive review of site conditions was conducted to understand both the opportunities and constraints that these locations present. The comprehensive assessment matrix for all street ends is in the Appendix.



Physical Access & Visibility



Environmental Context



Shoreline Conditions & Remediation Needs



Zoning & Legal Status



Community Context & Equity Considerations

PHYSICAL ACCESS & VISIBILITY

Many street ends are physically accessible, though several lack clear public pathways, signage, or visual cues that would indicate their public status. A number of sites are adjacent to existing pedestrian, bicycle or public transit infrastructure—such as McKinley Street or Route 10—which could support improved connectivity in the future. However, others remain poorly connected, either due to lack of sidewalks, private encroachments, or inadequate visibility from the surrounding street network.

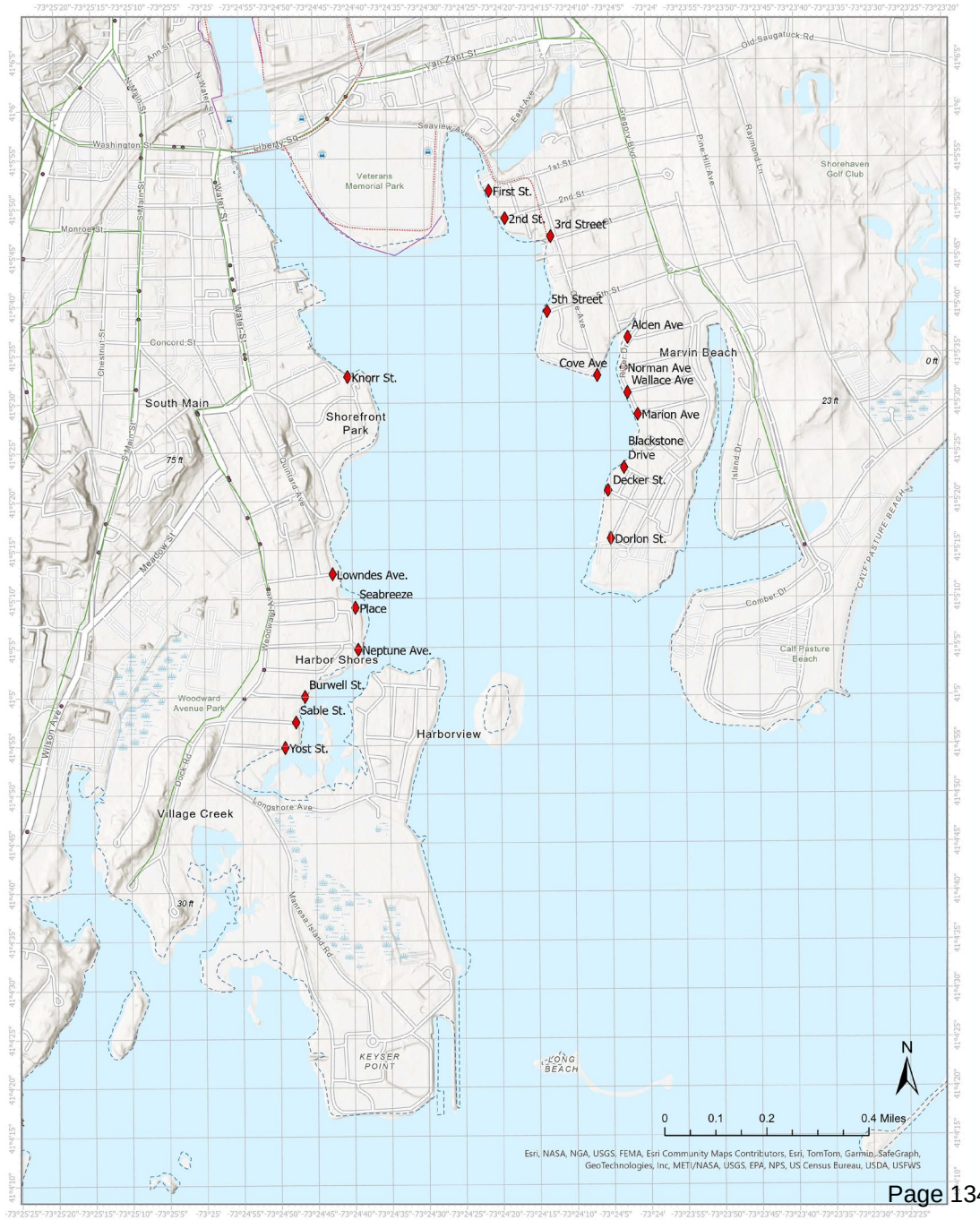


Figure 2. Transit and Access

- Norwalk Boundary
- Harbor Loop Train
- Public Parking
- Bus NTD Routes 2012 Norwalk
- Bus NTD Stops 2010 Norwalk
- Bus Routes Stamford 2018 Norwalk
- Bus Routes Stamford Norwalk
- Bus Stops Stamford 2018 Norwalk
- Bus Stops Stamford Norwalk
- Cross State Bike Routes
- Multi Use Trails
- Site Street-End Activation

ENVIRONMENTAL CONTEXT

Many sites intersect with critical ecological areas, including tidal wetlands and intertidal flats, underscoring the importance of environmental sensitivity and the potential for restoration or low-impact access strategies.



Figure 3. Tidal Wetlands

- Tidal Wetlands (Norwalk HMP 2009)
- Intertidal Flats (Norwalk HMP 2009)
- Norwalk Boundary
- Site Street-End Activation

ENVIRONMENTAL CONTEXT

Many also intersect with intertidal marshes and designated migratory waterfowl habitats. Several sites are adjacent to or within Municipal Protected Open Space and areas flagged for Natural Diversity.

Figure 4. Critical Habitat

Protected Open Space (DEEP 2011)

- Federal
- Land Trust
- Municipal
- Private

Critical Habitat (DEEP)

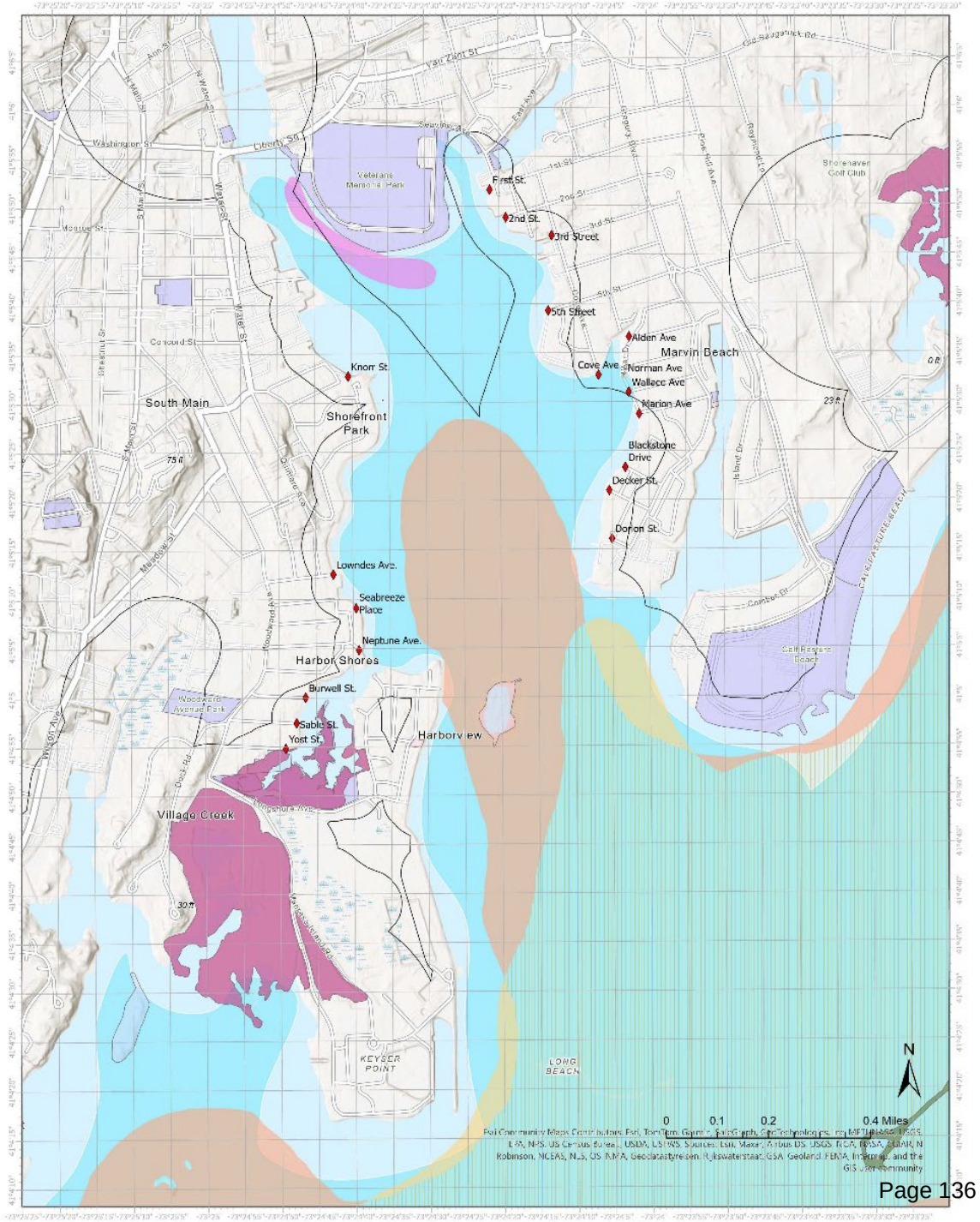
- Beachshore
- Intertidal Marsh

Natural Diversity Database Area

- Natural Diversity Area
- Important Bird Area
- Site Street-End Activation

Shellfish

- Oyster
- Hard Clam
- Soft Clam
- Oyster/Hard Clam/Soft Clam
- Oyster/Hard Claim
- Oyster/Soft Claim
- Hard Clam/Soft Clam



STABILITY CONDITIONS & NEEDS

A subset of locations exhibits signs of erosion risk, either due to surficial instability or exposure to tidal action. Some street ends contain accumulated debris or evidence of past neglect, pointing to the need for basic remediation and cleanup. While a few sites appear relatively stable and ecologically intact, others would benefit from invasive species removal, shoreline stabilization, or targeted habitat enhancement. The sites also presented a range of shoreline topography—some with steep drop-offs to –3m, others with shallower waters.

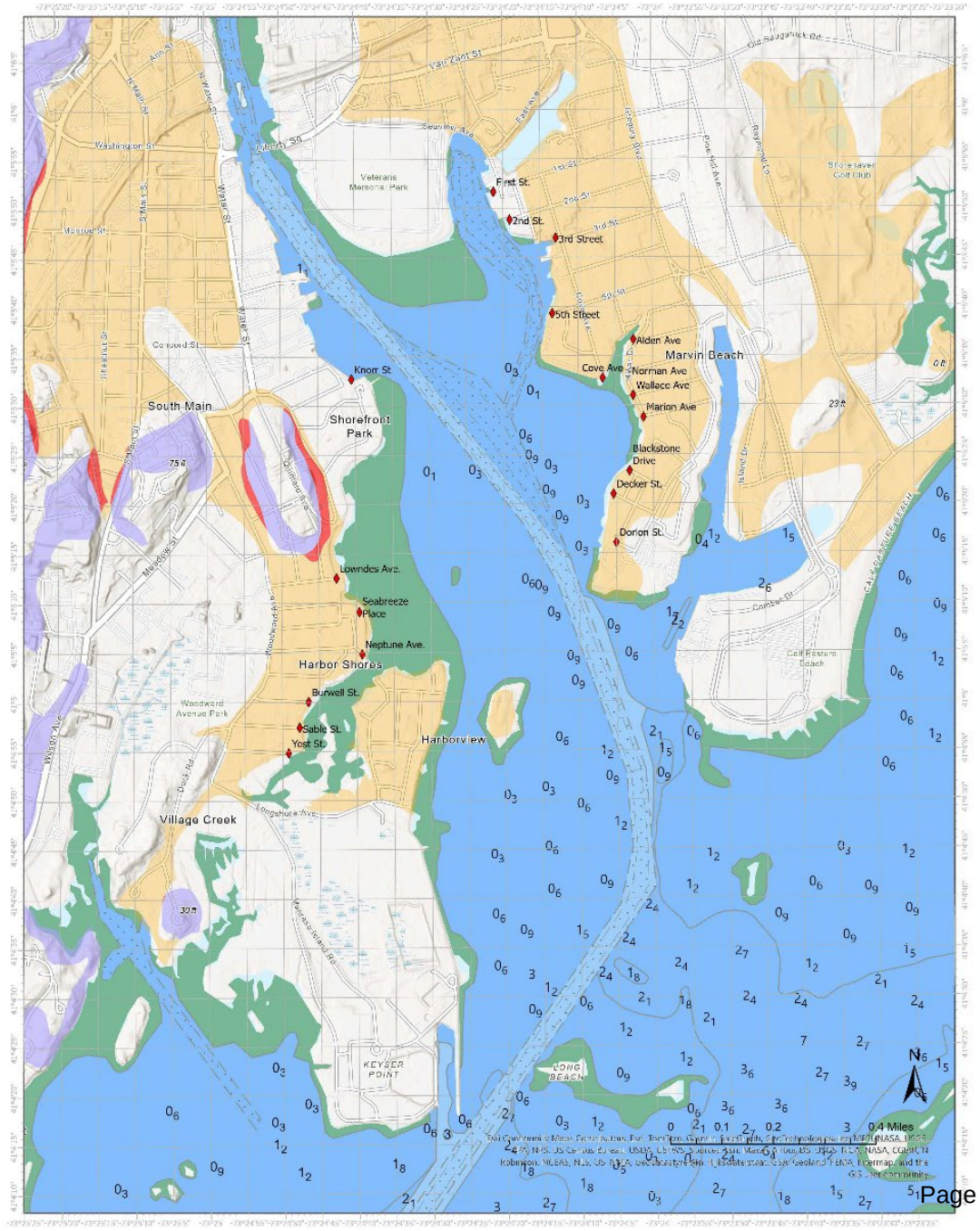


Figure 5. Water Depths and Erosion Risk

NOAA ENC Nautical Chart ECDIS Depths

- Foreshore
- Very Shallow Depth
- Medium Shallow Depth

Erosion Susceptibility

- Most Susceptible
- Highly Susceptible
- Surficial Materials Susceptible
- Soils Susceptible
- Site Street-End Activation

ZONING & LEGAL STATUS

Zoning designations across the street ends vary, with many falling under coastal village (CV) or residential (CD) classifications. Preliminary assessments have flagged right-of-way (ROW) uncertainties at several locations, though further investigation will be required to confirm specific public access rights and clarify any legal encumbrances.

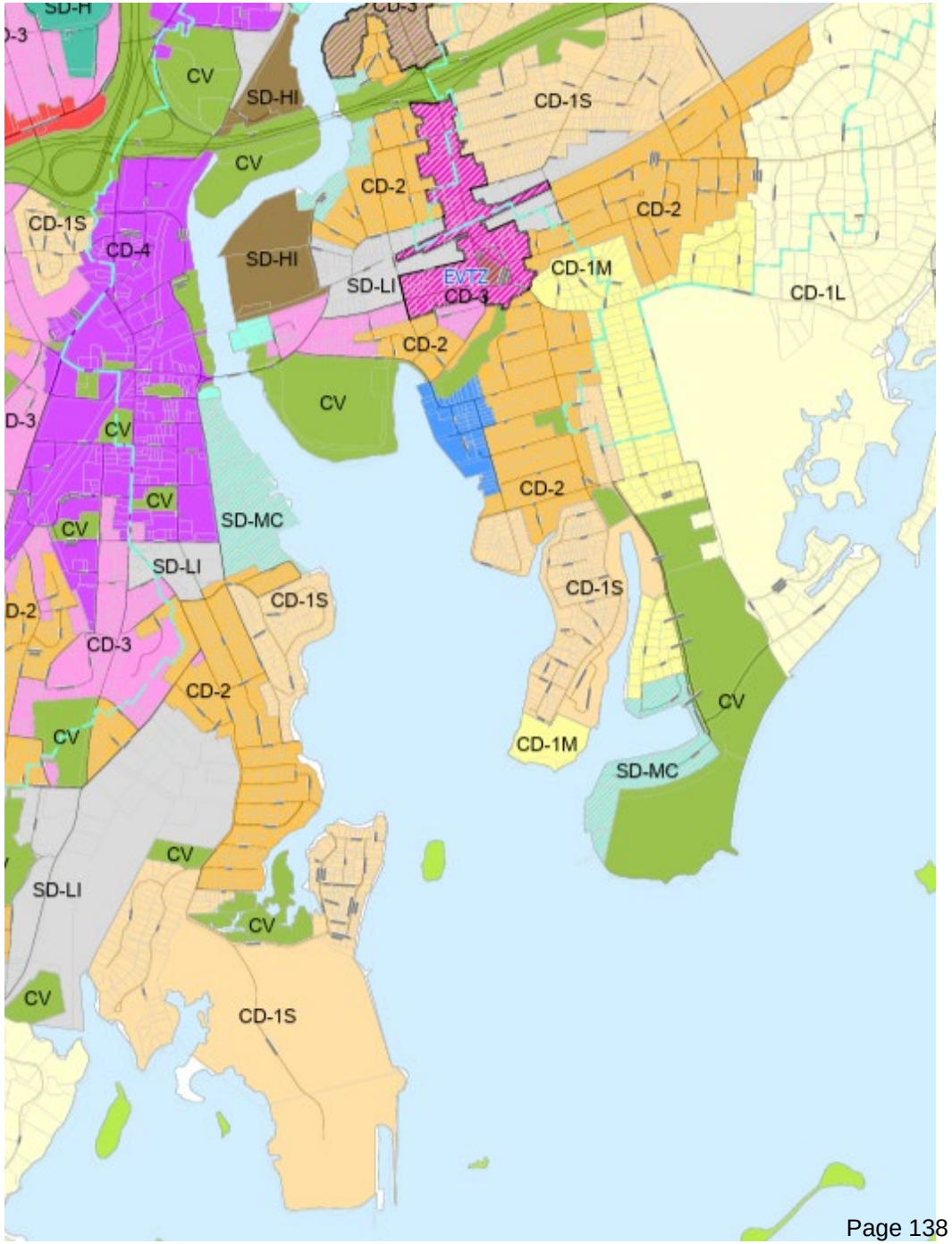


Figure 6. Norwalk Zoning Map

Source: City of Norwalk

COMMUNITY CONTEXT & EQUITY CONSIDERATIONS

Understanding the social context of each site is essential to ensuring that future public access improvements serve a broad and inclusive cross-section of Norwalk residents. Several street ends are located within or adjacent to neighborhoods identified as Environmental Justice (EJ) Block Groups, based on the 2023 American Community Survey and mapped by CT DEEP. These areas meet one or more state-defined thresholds related to poverty, minority population, or limited English proficiency, as outlined in Connecticut General Statute §22a-20a.

Lowndes Avenue and Knorr Street fall within EJ-designated areas. Prioritizing these sites for capital project recommendations will help address disparities in shoreline access and ensures that improvements are directed toward communities that have historically had fewer opportunities for meaningful engagement with the harbor. In addition to EJ status, the study considered related equity factors such as the geographic distribution of sites along the harbor and proximity to existing transportation infrastructure.

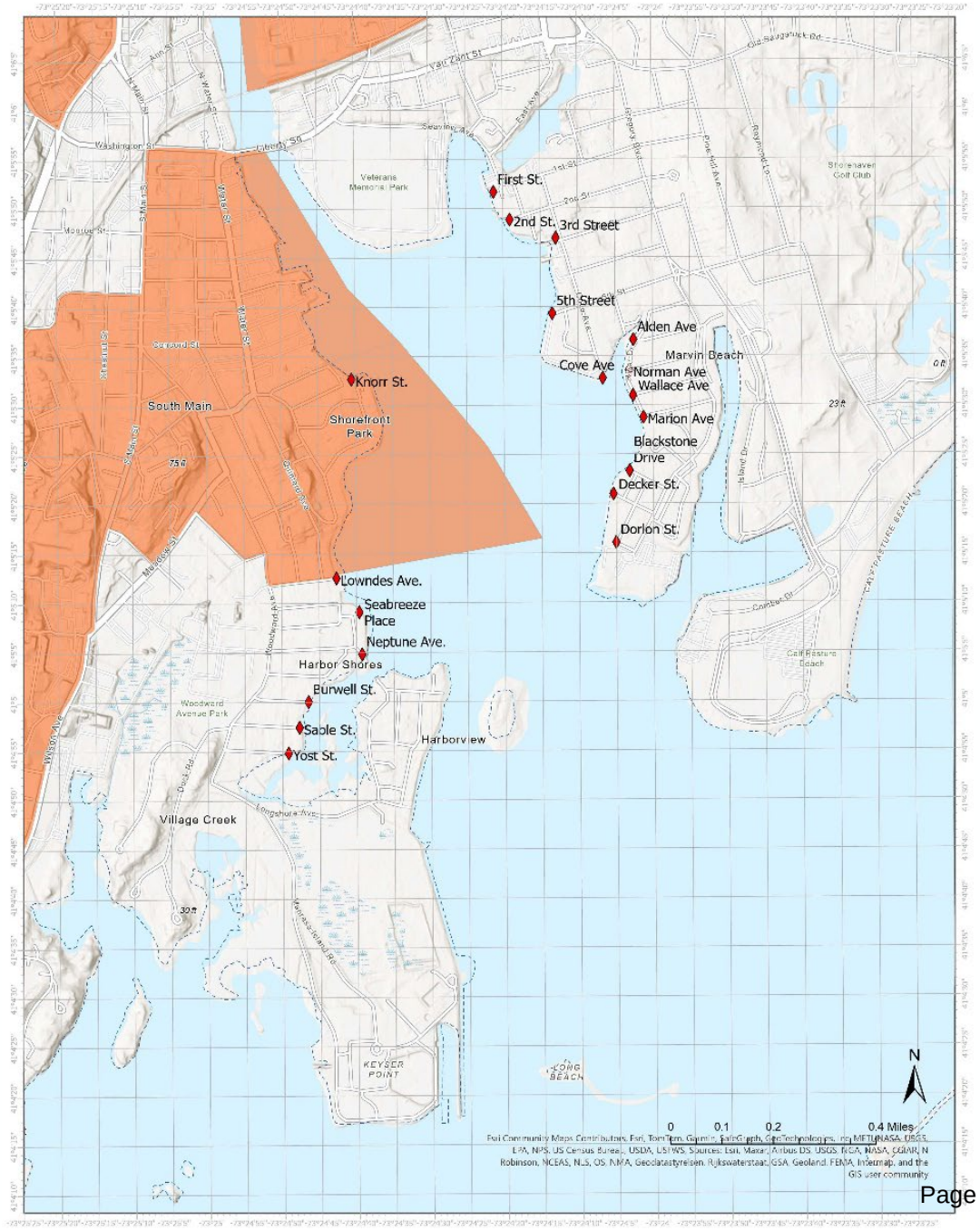


Figure 7. Social Vulnerability

03

Priority Street Ends

PRIORITY STREET ENDS

This study identifies five street ends as priority sites for potential capital improvement projects. These locations were selected through a process that balanced geographic representation, feasibility, public benefit, and ecological opportunity. The recommendations that follow are intended to support future implementation efforts, inform funding strategies, and foster community partnerships.

Five priority sites:

1. Lowndes Avenue
2. Knorr Street
3. 1st Street
4. 3rd Street
5. Cove Avenue

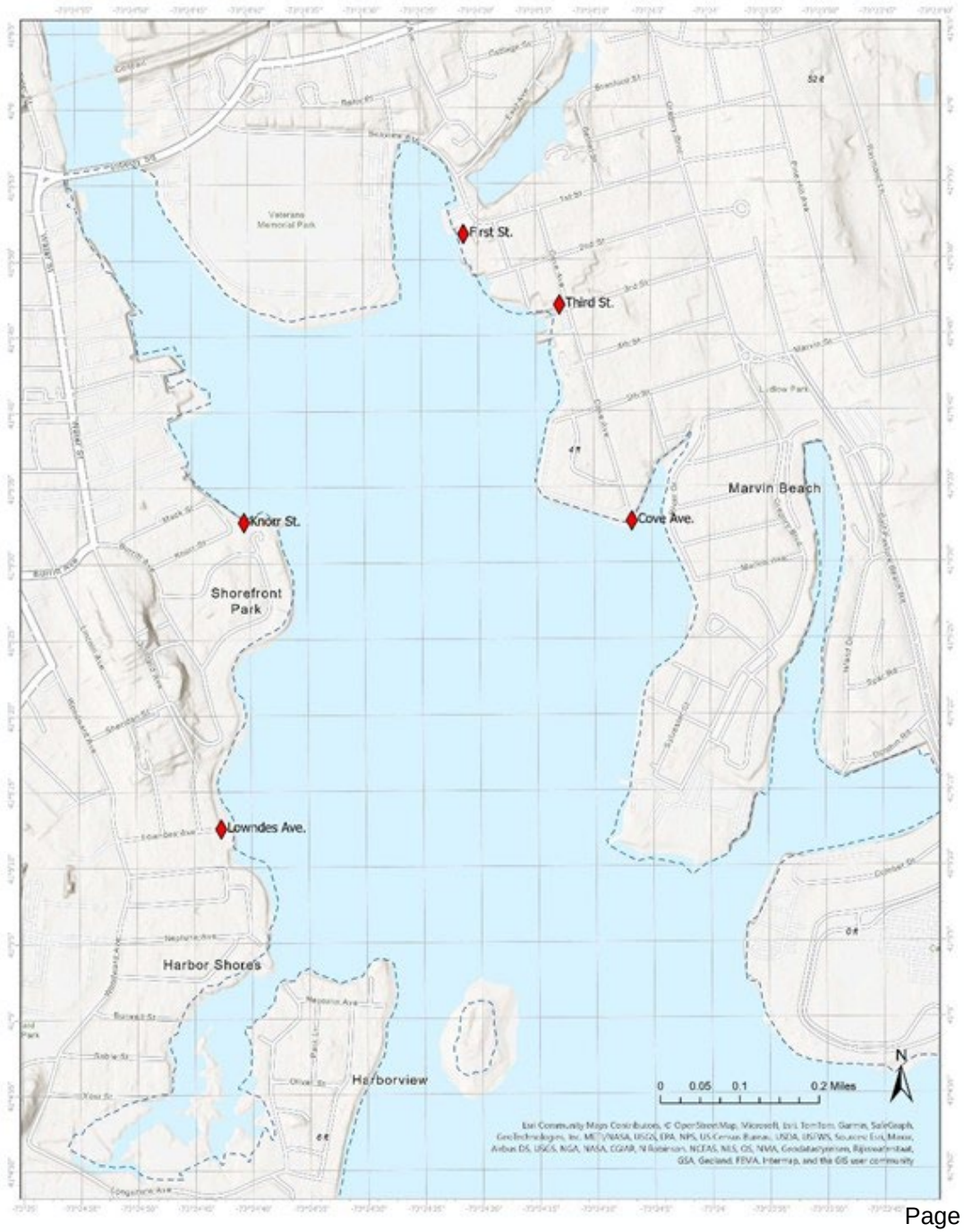


Figure 8. Selected Street Ends

LOWNDES AVENUE

- Lowndes Avenue represents a strong opportunity to enhance public waterfront access in a neighborhood at the edge of Norwalk's 2023-designated Environmental Justice Block Groups.
- The street end is within the Natural Diversity Database (NDDB) area and directly overlays tidal wetlands, with intertidal flats nearby, indicating high ecological value and sensitivity. The site also intersects with FEMA AE flood zones and has been flagged for invasive species, most notably Phragmites, reinforcing the need for environmentally thoughtful design.
- Despite these constraints, the location is currently underutilized and physically accessible, offering immediate potential for meaningful public benefit.





LOWNDES AVENUE

Recommended Improvements

- **Shoreline Restoration:** Continue maintaining the site to prevent Phragmites regrowth and implement a native planting plan to support pollinator habitat and marsh function. Stabilize the shoreline using low-profile living shoreline techniques that work with existing wetland contours.
- **Public Access:** Construct ADA-compliant pathways, with low seating or overlooks that offer safe views without compromising habitat. Due to ecological sensitivity, limit direct water contact or recreational launch facilities. **Interpretive Elements**: Install signage explaining the role of tidal wetlands, the significance of the NDDB designation, and the harbor's bird habitat. Include climate context and information about invasive species management.
- **Community Integration:** Given proximity to underserved areas, ensure inclusive design, with input from neighborhood stakeholders during later planning phases.



KNORR STREET

- Knorr Street is one of the most strategically located sites in terms of access equity, sitting squarely within a 2023-designated Environmental Justice Block Group. The site is also located within the Natural Diversity Database (NDDB) area and falls within the FEMA AE flood zone.
- The shoreline and bathymetry at this site, with a steep incline sloping down to –2 meters, provides adequate water depth for a potential boat launch structure. It features a large, existing paved area with relatively low ecological sensitivity, making it well-suited for light recreation and public access improvements with minimal disturbance.
- The surrounding context, however, introduces key coordination needs: the South Norwalk Boat Club lies directly to the north and shares adjacent water access, while a private residential parcel directly abuts the site to the south, with views over the proposed area. These relationships will need to be thoughtfully navigated as part of any design or implementation process.





KNORR STREET

Recommended Improvements

- **Flexible Access Infrastructure:** Repurpose the paved area with ADA-compliant paths, seating, and defined circulation zones, paired with permeable surfaces and stormwater features like bioswales to improve drainage and ecological performance
- **Public Amenities:** Install bike racks, trash receptacles, and possibly a shade kiosk or canopy for passive use. Lighting should remain low-impact and directional, to preserve nighttime views and minimize disruption to neighboring properties.
- **Waterfront Coordination**: This street end provides adequate water depth for a potential boat or kayak launch. Coordinate with the South Norwalk Boat Club to determine feasible access and shared use of the adjacent waterfront zone, including ROW rights, vessel maneuvering space, or dock infrastructure. Consult with the adjacent landowner to ensure buffering, privacy, and sightline considerations are integrated into any public-facing improvements.
- **Community Activation & Stewardship:** As one of the only large, publicly owned waterfront parcels in a vulnerable area, Knorr presents an opportunity to pilot community-driven programming, including public art, interpretive signage, or educational partnerships with local schools or organizations.
- **Wayfinding & Inclusion:** Ensure the site's public character is clearly communicated with entry signage, harbor trail integration, and multilingual access elements where feasible.



1st STREET

- 1st Street offers direct tidal access via a grassy street end and a gravel shoreline with a steep drop to navigable water. It is within the NDDB area, contains invasive Phragmites, and is flagged for erosion risk, suggesting both the need and opportunity for targeted shoreline rehabilitation.
- It is situated along the Harbor Loop Trail, making it a logical node within the city's existing waterfront access network. Though not in an Environmental Justice Block Group, it is easily accessible by foot or bike and sits within a diverse, residential neighborhood. Ecologically, the site contains invasive vegetation but otherwise appears relatively stable.



1st STREET

Recommended Improvements

- **Invasive Species Removal:** Launch an initial project to remove Phragmites and assess shoreline stability. Follow with native, salt-tolerant plantings for both erosion control and habitat restoration.
- **Public Access Infrastructure:** Add ADA-compliant crushed gravel or boardwalk paths leading to a small overlook. Avoid hardened surfaces and ramps unless shoreline stability improves.
- **Education & Ecology:** Feature signage focused on habitat restoration, the role of marsh plants in filtering runoff, and shoreline resilience. This could serve as a case study in ecological recovery for the broader community.
- **Low-Impact Infrastructure:** Due to the site's small footprint and habitat adjacency, limit new development to minimal infrastructure: one or two benches, interpretive panels, and a possible kayak pull-out zone for viewing or rest (if shoreline grade allows).



3rd STREET

- 3rd Street is a paved street end with an existing parking area that terminates at the water's edge. Although partially obstructed by adjacent private uses—most notably a dock associated with Copps Island Oysters—the site is publicly owned and offers a steep drop-off to approximately –2 meters, making it one of the few locations along Norwalk Harbor with natural conditions suitable for non-motorized boat launching.
- Located within the NDDB boundary and near a small patch of intertidal flats, the site is ecologically adjacent but not directly sensitive, making it a candidate for controlled, water-dependent recreation. Its proximity to the Norwalk Harbor Loop Trail and its zoning within a residential waterfront district further supports its potential as a public water access point. While currently underutilized and somewhat visually ambiguous in terms of public access, 3rd Street is physically well-positioned for meaningful activation. Additional coordination is necessary with stakeholders, including Copps Island Oysters.



3rd STREET

Recommended Improvements

- **Public Access Infrastructure:** Develop a formalized launch area for kayaks or other hand-carried watercraft, potentially using reinforced gravel or a modular ramp system to negotiate the steep grade. Include a clearly marked ADA-accessible path where feasible, and establish low-profile signage to reinforce the site's public status. Install benches or a shaded seating area near the water’s edge, and consider bike racks to encourage multimodal access.
- **Ecological Restoration:** Stabilize the slope with a mix of native vegetation and, if appropriate, a living shoreline edge treatment to soften the transition into the harbor and mitigate erosion. If there is stormwater runoff from the adjacent parking area, incorporate a bioswale or vegetated filter strip to manage water quality.
- **Interpretive & Cultural Elements:** Add signage describing the role of Norwalk’s working waterfront and shellfishing industry, particularly in the context of Copps Island Oysters and the broader harbor economy. Include QR codes connecting users to trail maps, harbor history, and stewardship resources. The site could also serve as a community engagement location, through interpretive art or youth-led coastal programming—there may be an opportunity to collaborate with Copps Island Oysters for education and public awareness.



COVE AVENUE

- Cove Avenue is a paved street end in a residential neighborhood in East Norwalk. Because Cove Avenue is a collector street that feeds neighborhood traffic to adjacent streets, it has adequate width (approximately 30 feet) to enable public access to the waterfront without negatively impacting the adjacent residential properties. Currently, the street end hosts two-hour street parking.
- The site is mapped with tidal wetlands and adjacent to mapped intertidal flats, so minimization of ecological impacts will be an important consideration for any planned programming.



COVE AVENUE

Recommended Improvements

- **Recreational Use for the Neighborhood:** Development of a small boat or car-top launch (launching of small boats such as a canoe or kayak which is then then transported on the roof of a vehicle).
- Establish low-profile signage to reinforce the site's public status. Install benches near the water's edge.
- Avoid hardened surfaces and ramps to minimize ecological impacts.



04

General Recommendations

GENERAL RECOMMENDATIONS FOR ALL STREET ENDS

Future street-end improvements along Norwalk Harbor should support safe, equitable public access while enhancing ecological health and shoreline resilience. The following recommendations, across the below categories, are intended to serve as a planning framework for future capital projects beyond the initial five priority sites. They reflect observed patterns across the 21 identified street ends, as well as best practices from national and regional sources such as the Waterfront Alliance's WEDG guidelines, FEMA coastal flood zone standards, and Norwalk's own Strategic Plan for Parks and Public Spaces and Harbor Management Plan.

Public Access Infrastructure

Ecological Restoration & Shoreline Resilience

Interpretive, Educational, & Cultural Elements

PUBLIC ACCESS INFRASTRUCTURE

- **Confirm ROW and Ownership:** All future projects should begin with a verification of public right-of-way status. Public access should be clearly delineated through permanent signage, pavement markings, or landscape design elements.
- **ADA-Compliant Design:** Access points should incorporate sloped walkways, handrails, and firm, stable surfaces that comply with ADA guidelines. Where full compliance is not feasible due to grade or site constraints, provide the highest level of accessibility achievable.
- **Seating and Gathering:** Include durable benches, overlooks, or modest shade structures that encourage passive use without overcrowding small or ecologically sensitive sites.
- **Signage and Wayfinding:** Install consistent, weather-resistant signage identifying the street end as a public access point. Incorporate interpretive elements or QR codes linking to the Norwalk Harbor Loop Trail, public access maps, and harbor ecology information.
- **Support for Active Transportation:** Provide bike racks and pedestrian connections where possible, particularly near existing greenways or transit stops.
- **Lighting and Security:** Consider solar-powered, low-glare lighting in higher-use locations to improve safety, particularly near residential areas or school routes. Ensure lighting is dark-sky compliant to minimize ecological disturbance.
- **Small-Scale Recreation Amenities:** Where shoreline conditions permit, provide low-impact infrastructure for kayaking, paddleboarding, or shoreline fishing. Avoid hardened edges unless necessary for safety or erosion control.

ECOLOGICAL RESTORATION & SHORELINE RESILIENCE

- **Living Shorelines & Natural Stabilization:** Prioritize living shoreline approaches using coir logs, native vegetation, shell beds, and small-scale rock sills in accordance with WEDG and CT DEEP guidelines. These techniques help buffer storm surge, reduce erosion, and support biodiversity.
- **Invasive Species Management:** Identify street ends with infestations of Phragmites, knotweed, or other non-native plants. Plan phased removal and replacement with native grasses, shrubs, and pollinator species to improve ecological integrity and aesthetics.
- **Stormwater Treatment:** Incorporate bioswales, rain gardens, and permeable pavements to intercept and filter runoff before it enters the harbor. Design these features to withstand coastal flood events (e.g., using salt-tolerant plantings and elevated overflow outlets).
- **Flood Zone Considerations:** Many sites fall within FEMA AE flood zones. Future improvements should use flood-resilient materials (e.g., recycled plastic decking, weather-resistant signage) and minimize the use of impervious surfaces.
- **Habitat Connectivity:** Where sites are adjacent to tidal wetlands, existing open space, or Natural Diversity Database (NDDB) areas, prioritize habitat continuity and avoid excessive lighting or human disturbance.

INTERPRETIVE, EDUCATIONAL & CULTURAL ELEMENTS

- **Educational Signage:** Install high-quality panels covering topics such as:
  - Norwalk's maritime and oyster industry history
  - Native and migratory species common to the estuary
  - Sea-level rise in Long Island Sound
  - Harbor stewardship and restoration efforts
- **Community Engagement Opportunities:**
  - Explore "adopt-a-site" programs for schools or civic groups to maintain and monitor street ends.
  - Encourage youth-led art installations, story maps, or environmental monitoring efforts.
- **Digital Integration:** Use QR codes, web maps, or augmented reality content to link physical spaces with digital resources. This could include the Norwalk Harbor Trail map, historic photos, or educational materials.
- **Harbor Identity and Wayfinding:** Design signage and materials to reinforce a cohesive visual identity for Norwalk's waterfront access network. Reference the Norwalk Harbor Management Commission's goals and city branding where applicable.
- **Cultural Representation:** Include public art or design elements that reflect the cultural and historical diversity of Norwalk, particularly in neighborhoods with strong community identities or Environmental Justice designations.

05

Appendix

STREET ENDS EVALUTATION MATRIX

Name of Site	Site Description/ Existing Conditions	HMC Priority Site	Vulnerability Assessment						Water Depth	Zoning	ROW Issues (from Preliminary Assessment document)	Existing Access & Connectivity	Potential Use	Other Notes
			FEMA flood zone	Erosion Risk	Critical Habitat	Wetlands & Tidal Flats	Remediation Needs	Social Vulnerability						
Sammis Street	Off walkpath ROW. Tidal flats of Farm Creek		AE		Municipal Protected Open Space				Slow drop off, too shallow for boat launch	CV and CD-1S		Near McKinley St - bicycle route and bus route 12	Could be access to non-yacht club moorings in Wilson Cove	
Yarmouth Road	Good access to Wilson Cove, limited parking. Neighborhood Street (very narrow width)		AE				Remove debris		Slow drop off to -1m	CV and CD-1S	Next to private dock	bus route 12	Tidal kayak and small boat launching	
Yost Street	Access to tidal creek, no open water at low tide. Neighborhood Street.		AE	Erodible surficial materials	Municipal Protected Open Space, Migratory Waterfowl, Natural Diversity Area	Intertidal Marsh			Slow drop off, too shallow for boat launch	CD-1S	Road barrier	Near Route 10, 166 Woodward Ave	Tidal kayak and small boat lauching	
Sable Street	Access to tidal creek, no open water at low tide (bog at low tide). Wider Street than Yost, Yarmouth Streets.		AE	Erodible surficial materials	Migratory Waterfowl, Natural Diversity Area	Intertidal Marsh			Slow drop off, too shallow for boat launch	CD-2		Near Route 10, 166 Woodward Ave	Tidal kayak and small boat launching	
Burwell Street	Access to tidal creek, no open water at low tide		AE	Erodible surficial materials	Migratory Waterfowl, Natural Diversity Area	Intertidal Marsh			Slow drop off, too shallow for boat launch	CD-2		Near Route 10, 166 Woodward Ave		
Neptune Avenue	Narrow ROW between two houses which are using the space		AE	Erodible surficial materials	Migratory Waterfowl, Natural Diversity Area, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed				Slow drop off, too shallow for boat launch	CD-2		Near Route 12, 151 Woodward Ave		
Seabreeze Avenue	Gated and contains signage of Harbor Shores Association, though it appears to be a publicly owned street end.		AE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed				Slow drop off to -1m	CD-2	Gated by Neighborhood Association	Near Route 12, 151 Woodward Ave		Investigate using property maps

STREET ENDS EVALUTATION MATRIX

Name of Site	Site Description/ Existing Conditions	HMC Priority Site	Vulnerability Assessment							Zoning	ROW Issues (from Preliminary Assessment document)	Existing Access & Connectivity	Potential Use	Other Notes
			FEMA flood zone	Erosion Risk	Critical Habitat	Wetlands & Tidal Flats	Remediation Needs	Social Vulnerability	Water Depth					
Lowndes Avenue	Small wall at street end, parking overgrown, mud flats, close to South Anchorage	Yes	AE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed	Within Tidal Wetland Area; adjacent to Tidal Flats	Stormwater Outflow, Remove phragmites, Collapsed wall	Falls within Environmental Justice Block Group 2023	Slow drop off to -1m	CD-2	Neighboring property very close	Near Bus route 9 and 136 Woodward Ave stop	Potential mid to high tide access to the harbor/moorings from South Norwalk. Potential for beached boat storage	
Knorr Street	Lots of parking on street, fences off and overgrown. Overgrown lot so space on top of sea wall, deep water close to anchorages. 50-foot street ROW. Close to South Norwalk Boat Club, far from neighbors.	Yes	AE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed			Falls within Environmental Justice Block Group 2024	Steep drop off to -2m, identified as appropriate for boat launch	CD-1S	Verify Property lines of SNBC and owner to south of wall	Near Bus route 9 and 165 Water Street	Use of land along wall for boat racks. Improve slope wall for boat ramp launch.	50' ROW. Will need to coordinate fairway with nearby boating club. No immediate neighbors.
1st Street	grass above water line, gravel intertidal, Overtons dock encroaches. Potential for programming due to proximity to commerical uses. Wide and slopes down.	Yes	AE		Natural Diversity Database Area, Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed		Remove phragmites		Steep drop off to -3m from street end	CD-3W	Overtons Dock	Near Harbor Loop Trail	Space for small boat rack, easy launching into East Basin	
2nd Street	Parking on street, gravel intertidal area, 3rd taxing abutter which includes Edgewater park		AE		Natural Diversity Database Area, Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed				Drop off to -1m	CD-3W		Near Harbor Loop Trail	Kayak small boat launching	

STREET ENDS EVALUTATION MATRIX

Name of Site	Site Description/ Existing Conditions	HMC Priority Site	Vulnerability Assessment							Zoning	ROW Issues (from Preliminary Assessment document)	Existing Access & Connectivity	Potential Use	Other Notes
			FEMA flood zone	Erosion Risk	Critical Habitat	Wetlands & Tidal Flats	Remediation Needs	Social Vulnerability	Water Depth					
3rd Street	Parking area at street end, Blooms dock blocks open water access		AE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed				Steep drop off to -2m, identified as appropriate for boat launch	CD-3W	Use by Copps Island	Near Harbor Loop Trail	Further investigation necessary on access potential	
5th Street	Sea wall with steps to intertidal area. Grass and hedge maintained by neighbor.		AE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed				Steep drop off to -2m	CD-1S	Appears to be maintained by someone	Near Route 8	Facilitiate fishing	
Cove Avenue	Gravel intertidal slopes to tidal wetland vegetation. Worn path from use to waters edge. Mud flats at spring tide. Access to south anchorage.	Yes	VE	Erodible surficial materials	Migratory Waterfowl, Important Bird Areas, CT State and Town Managed Shellfish Natural Bed	Within Tidal Wetland Area			Slow drop off to -1m	CD-1S		Near Route 8	Room for boat tie off use, car top launch	Wide street
Alden Avenue	Further up the inlet and therefore less desirable usage than the adjacent streets.		AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed				Slow drop off, too shallow for boat launch	CD-1S		Near Route 8	Kayak small boat launching	
Norman Avenue	Improved by Marvin Beach Association, existing benches and trash collection, gravel intertidal.		AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Natural Diversity Area				Slow drop off, too shallow for boat launch	CD-1S	Maintained by Neighborhood Association	Near Route 9	Kayak small boat launching	
Wallace Avenue	Improved by Marvin Beach Association, benches, gravel intertidal.		AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Natural Diversity Area				Slow drop off to -1m	CD-1S	Maintained by Neighborhood Association	Near Route 10	Kayak small boat launching	

STREET ENDS EVALUTATION MATRIX

Name of Site	Site Description/ Existing Conditions	HMC Priority Site	Vulnerability Assessment							Zoning	ROW Issues (from Preliminary Assessment document)	Existing Access & Connectivity	Potential Use	Other Notes
			FEMA flood zone	Erosion Risk	Critical Habitat	Wetlands & Tidal Flats	Remediation Needs	Social Vulnerability	Water Depth					
Marion Avenue	Improved by Marvin Beach Association, benches, gravel intertidal. Well maintained, very clean.		AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Natural Diversity Area				Slow drop off to -1m	CD-1S	Maintained by Neighborhood Association	Near Route 11	Kayak small boat launching	
Blackstone Drive	Large grass area between houses with seawall and steps to inter tidal gravel area		AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Natural Diversity Area				Slow drop off to -1m	CD-1S	Maintained by someone.	Near Route 12	Close to south anchorage, space for boat storage	
Decker Street	Large grass area between houses with seawall and steps to inter tidal gravel area. Maintained, very clean.	Yes	AE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Natural Diversity Area				Steep drop off to -1m	CD-1S	Maintained by someone.	Near Route 12	Close to south anchorage, space for boat storage	
Dorlon Street	Hedge planted across ROW and grass maintained by neighbor, seawall with gravel and seagrass intertidal		VE	Erodible surficial materials	Migratory Waterfowl, CT State and Town Managed Shellfish Natural Bed, Hard Clam & Oyster, Natural Diversity Area				Slow drop off to -1m	CD-1S and CD-1M	Appears to be part of neighbor's property, though publicly owned.	Near Route 12		

Section 4

Management & Funding Strategies

Harbor Management Strategy
Funding Opportunities Road Map

Norwalk Strategic Harbor Study

Task 2.3 Management Strategy Overview and Recommendations

June 2026

This Management Strategy Overview outlines current roles, identifies critical seams, and presents governance options to strengthen Norwalk Harbor's future."

Goals

1. **Clarify today's landscape:** Document existing roles and responsibilities across local, state, and federal actors to establish a common baseline.
2. **Diagnose challenges and seams:** Highlight potential gaps, overlaps, and coordination breakdowns across key operational categories (e.g., dredging, enforcement, permitting, programming, revenue reinvestment, etc.).
3. **Present future pathways:** Provide a spectrum of governance options and role allocations, drawing from best practices and peer examples, to guide informed decisions for the Norwalk Harbor.

Methodology

1. Reviewed 2009 Harbor Management Plan and 2021 Industrial Waterfront stakeholder notes.
2. Mapped current roles vs. statutory limits; identified key management functions.
3. Benchmarked peer models and best practices (New England focus).

MANAGEMENT STRATEGY | KEY STAKEHOLDERS

Public, private, and civic stakeholders play key roles in the management of the Norwalk Harbor.*

Stakeholder	Role Summary
Harbor Management Commission (HMC)	Provides local policy leadership and consistency review, coordinating City, State, and Federal actions to align projects with the Harbor Management Plan.
State-appointed Harbor Master	Administers moorings and anchorage (permits, placement, inspections) and supports on-water safety and traffic management in coordination with Police and DEEP.
Mayor & Common Council	Appoint HMC members, adopt and amend the Harbor Management Plan, approve harbor-related budgets and ordinances, and authorize agreements with State and Federal agencies for projects and funding.
Planning & Zoning / Zoning Commission	Leads coastal site plan and zoning decisions on the landside and consults the HMC to ensure approvals are consistent with harbor policies.
Economic & Community Development / Redevelopment	Steers waterfront economic strategy and shepherds public–private projects, working within coastal permitting and zoning constraints.
Public Works & WPCA	Plans, funds, and operates wastewater and stormwater systems and delivers resilience projects that directly affect harbor water quality and reliability.
Parks & Recreation	Operates City boating facilities (e.g., ramps and the visitor dock), waterfront parks, and manages public access amenities and activation along the waterfront.

** Compiled from the 2009 Harbor Management Plan and 2021 Industrial Waterfront stakeholder notes.*

MANAGEMENT STRATEGY | KEY STAKEHOLDERS *(continued)*

Public, private, and civic stakeholders play key roles in the management of the Norwalk Harbor.*

Stakeholder	Role Summary
Police Marine Unit & Fire	Provide on-water enforcement, emergency response, and spill coordination in partnership with the Harbor Master and state/federal agencies.
Shellfish Commission	Manages shellfish resources, seasons, and closures and coordinates with DEEP and operators to protect beds near active marine uses.
CT DEEP & USACE	Permit in-water work and dredging and review coastal consistency, with USACE responsible for maintaining federal navigation channels.
CT Port Authority	Provides small-harbor grants and technical support for local improvements but does not operate day-to-day harbor functions.
Private marinas, clubs, and boatyards	Operate berthing and marine services for members and visitors and often self-fund maintenance dredging along their bulkheads.
Industrial operators (oyster, materials, energy, marine contractors)	Depend on reliable depths, predictable bridge operations, and compatible land use to sustain marine commerce and staging activities.
Environmental/education NGOs (Harbor Watch, Maritime Aquarium)	Monitor water quality, educate the public, and partner on stewardship, habitat, and visitor programming across the harbor.
Utility owners (e.g., Eversource/Yankee Gas)	Hold critical waterfront parcels and infrastructure that can constrain or enable access, safety, construction staging, and redevelopment.

** Compiled from the 2009 Harbor Management Plan and 2021 Industrial Waterfront stakeholder notes.*

MANAGEMENT STRATEGY | KEY OPERATIONAL CATEGORIES OVERVIEW

We have identified the following 10 key operational categories to evaluate how roles and responsibilities are shared across the key stakeholders for the management of the Norwalk Harbor.

1. Policy & Governance

2. Operations / Maintenance / Security

3. Enforcement / On-Water Operations

4. Dredging & Sediment Management

5. Water Quality & Resilience

6. Land Ownership & Acquisition

7. Real Estate Development

8. Revenue Mgmt, Funding & Financing

9. Recreation & Public Access

10. Marketing & Visitor Services

MANAGEMENT STRATEGY | MATRIX A – CURRENT STATE OF ROLES & RESPONSIBILITIES

Matrix A below shows who leads each harbor function today and key notes on constraints, handoffs, and how it works in practice.

Function	Who Leads Today	Notes
1. Policy & Governance	**HMC** leads Harbor Plan consistency; **P&Z/ZC** lead zoning; **Council** adopts ordinances; **Harbor Master** ex-officio; **CT DEEP/USACE** hold in-water permitting authority.	35-day referral and 2/3 override for consistency; HMC is advisory (not operational); sensitivity about residential in floodplain and preserving marine-commercial intent.
2. Operations / Maintenance / Security	**Parks & Rec** (City facilities: ramps/visitor dock); **DPW** (City waterfront structures); **private marinas/operators** (their assets); **Police/Fire** for security; **Harbor Master** runs moorings.	City operates Veterans Park/visitor dock; private liability concerns about through-dock public access; SOPs for events/operations are informal.
3. Enforcement / On-Water Operations	**Police Marine Unit** + **Harbor Master**; **DEEP EnCon/USCG** share roles; **Fire** for incidents/spills.	Fragmented accountability; speed/no-wake and rowing traffic managed largely by voluntary coordination; event-day protocols vary.
4. Dredging & Sediment Management	**USACE** (federal channel); **DEEP/USACE** (permits); **HMC** coordinates priorities; **DPW** (City sites); **private operators** (like O&G) self-dredge along bulkheads.	Sediment deposition limits boat slips and rowing; silt buildup due to CSO; concern for shellfish beds; some private ad-hoc dredging assistance; no formal local program to bundle priorities/funding or schedule windows.
5. Water Quality & Resilience	**DPW/WPCA** (WWTP, stormwater, outfalls); **Health** (testing/closures); **Shellfish Commission** (resources); **HMC** convenes; **NGOs** monitor/educate.	Hypoxia in upper river; leaking/legacy pipes; large CSO outflow; WWTP berm/outfall elevation concerns; need an integrated, multi-dept capital list and cadence.

** Compiled from the 2009 Harbor Management Plan and 2021 Industrial Waterfront stakeholder notes.*

MANAGEMENT STRATEGY | MATRIX A – CURRENT STATE OF ROLES & RESPONSIBILITIES *(continued)*

Matrix A below shows who leads each harbor function today and key notes on constraints, handoffs, and how it works in practice.

Function	Who Leads Today	Notes
6. Land Ownership & Acquisition	**City** (where owns); **E&CD/Redev** (strategy/negotiation); **private owners/utilities** control key parcels; **State** may hold some ROWs.	Utility parcels/staging constrain options; acquisitions are opportunistic; easements/right-of-way design can unlock access/safety.
7. Real Estate Development	**P&Z/ZC** approvals; **E&CD/Redev** shepherd projects; **HMC** consistency review; **DEEP** for structures below HTL; private developers build.	Tension between residential and marine uses on Water St.; boardwalk interest; parking/flood rules bind; bridge staging limits near-term sites.
8. Revenue Mgmt, Funding & Financing	**Council** approves fee schedules; **HMC** recommends/oversees Harbor fund; **Comptroller** accounts; **City depts** and **CT Port Authority** pursue grants; private assets self-fund.	HMC collects mooring fees but does not deploy; mooring fee caps limit upside; transient/visitor revenue exists but modest; grants episodic; no true harbor enterprise approach; no Norwalk capital budget allocation to harbor works in FY26 (ex. Calf Pasture Beach).
9. Recreation & Public Access	**Parks & Rec** operates public launches/visitor dock; **HMC** sets policy; NGOs/community partners support.	Demand rising for kayak/SUP; liability limits public-through-dock routes; street-ends study underway by Indigo River.
10. Marketing & Visitor Services	**E&CD/Tourism** + **Parks**; **private marinas** and **NGOs** contribute.	No unified harbor brand/wayfinding; transient docking/services limited; event programming opportunistic (e.g., rowing/regattas potential).

** Compiled from the 2009 Harbor Management Plan and 2021 Industrial Waterfront stakeholder notes.*

MANAGEMENT STRATEGY | EXISTING CHALLENGES / SEAMS IN ROLES AND RESPONSIBILITIES

The review of existing roles highlights potential challenges and seams across harbor functions, suggesting areas where coordination and clarity could be improved.

Function	Challenges / Seams
1. Policy & Governance	**Permitting handoffs:** Applicants have to navigate HMC, P&Z, DEEP, and USACE, according to current framework. Timelines and expectations may not always be transparent or sequenced. **Data & KPIs:** Fragmented tracking of permits, incidents, dredging status, and water quality metrics may limit performance management, public reporting, and goal setting.
2. Operations / Maintenance / Security	**Standard operating procedures for public waterfront facilities:** Public facility operations (e.g., visitor dock, ramps, and event operations) are handled without formalized playbooks or checklists. **Private–public interfaces:** Liability and security concerns limit through-dock public circulation and coordination with private marinas/boatyards.
3. Enforcement / On-Water Operations	**Enforcement & on-water operations:** Speed/no-wake and traffic patterns vary by season and user group. Multiple agencies may dilute accountability, and no unified patrol/event incident command seem to exist.
4. Dredging & Sediment Management	**Coordination & funding:** Federal channel cycles vs. private berth shoaling; no local mechanism to bundle priorities and pursue funding (potentially federal USACE or state DEEP, with local matching). **Permitting cadence:** Case-by-case permits lack a shared schedule and dredge windows (e.g., shellfish conflicts).
5. Resilience & Water Quality	**Integrated capital needs:** WWTP berm/outfalls, tide-backflow, and street flooding fixes span multiple departments, and a unified capital program view could be beneficial. **Illicit discharge/hypoxia:** Legacy/broken pipes persist. Monitoring data may not be linked to enforcement or capital timing.

MANAGEMENT STRATEGY | EXISTING CHALLENGES / SEAMS IN ROLES AND RESPONSIBILITIES

The review of existing roles highlights potential challenges and seams across harbor functions, suggesting areas where coordination and clarity could be improved.

Function	Challenges / Seams
6. Land Ownership & Acquisition	**Key parcel constraints:** Utility and industrial holdings (e.g., Eversource, King Industries, Water St. private owners) and rail geometry limit access, staging, and safety buffers. **Street-end ROWs:** State- and city-owned rights-of-way often underdeveloped, encroached, or lacking signage/maintenance.
7. Real Estate Development	**Use compatibility:** Liability and operational conflicts between working waterfront and adjacent residential/recreational projects. Clear design/performance standards and buffers could be beneficial (as also referred to in the Task 4.2 City-Owned Street Ends Study). **Bridge operations & staging:** Ongoing construction and bridge openings affect commercial and recreation users.
8. Revenue Management, Funding & Financing	**Limited revenue**: Mooring fees capped by statute; visitor revenues modest. **Potential for an enterprise approach**: Harbor revenues aren't ring-fenced, limiting proactive maintenance, match funding, and reinvestment.
9. Recreation & Public Access	**Access routing & liability:** Lack of standardized through-routes and indemnification tools at private docks to enable public access. Pressure from growing kayak/SUP demand without protocols. **Wayfinding/amenities:** Signage, trash/pump-out info, and multimodal access (bike/parking) are inconsistent.
10. Marketing & Visitor Services	**Fragmented brand**: No unified harbor identity/branding or visitor information. Marinas and City communicate separately. **Visitor services gaps:** Limited transient docking information and support reduce visitation and dwell time. Event logistics do not seem to be standardized.

MANAGEMENT STRATEGY | POTENTIAL GOVERNANCE MODEL OPTIONS

There are several different governance models, rooted in best practices from peer harbors, that could inform improvements to processes, roles, and responsibilities and help address identified challenges.

	A. Tighten the Status Quo	B. City-Run Harbor Program	C. Strengthened HMC + Operating Agreements	D. Harbor/Port Authority	E. Nonprofit Conservancy + BID
What is it?	**Keep current structure** but codify through **MOUs**, shared permits/dredge tracker, annual Harbor Workplan + KPIs, standard event SOPs.	Staffed **municipal harbor office** (in a City dept.) for water-side ops, boater services, dredge/grant coordination, data.	**HMC** stays policy lead; **Council-approved OAs** assign tasks, SOPs, timelines, metrics to depts/Harbor Master.	**Quasi-public entity** runs harbor assets, leases/fees, dredging & on-water ops; retains/reinvests revenue; can hold easements.	**501(c)(3) + BID/SSD**; City **MOU** sets roles/standards.
What could it solve?	Permitting handoffs (clear sequence/owners); data/KPIs (single dashboard); event-day coordination; bridge comms/calendar.	Enforcement presence; dredging schedule & grant pipeline; resilience/WQ interface; visitor services/marketing; continuous metrics.	Permitting handoffs (who signs/inspects/notifies); access vs. working (standards + indemnity templates); bridge staging roles & handback; KPIs with owners.	Dredging + funding (bundle priorities, local match); enterprise revenue; unified ops/enforcement; bridge staging site control; land tools.	Public access & activation (Clean/safe, O&M, programming, through-routes, wayfinding); liability management (easements/indemnification); steady land-side funding; consistent branding/visitors.
Potential barriers	No new capacity/funding; relies on voluntary follow-through; fee/authority tools unchanged.	Needs FTEs/equipment/budget; align with state Harbor Master (MOU); avoid duplication with Police Marine.	Still advisory for some levers; effectiveness depends on disciplined renewal/monitoring.	Requires enabling + durable revenues; prevent overlap with HMC/P&Z; governance/transparency design matters.	Not a fix for dredging/enforcement; needs BID/SSD owner buy-in; strong MOUs, metrics, audits.

MANAGEMENT STRATEGY | MATRIX B – POTENTIAL ROLES AND RESPONSIBILITIES

Matrix B aims to provide a comparative overview of how different governance models may distribute roles and responsibilities across key stakeholders and help improve existing challenges/seams.

Function	A. Tighten Status Quo	B. City-Run Harbor Program	C. Strengthened HMC + OAs	D. Harbor/Port Authority	E. Nonprofit Conservancy + BID
1. Policy & Governance	HMC continues advisory; MOUs clarify handoffs. Annual workplan + KPI dashboard.	Staff lead within City Harbor Program (execution); HMC still advisory (policy).	HMC; Council-approved Operating Agreements (OAs) assign tasks/timelines to depts.	Authority board (Mayor/appointments) unifies policy + ops.	Conservancy board for land-side input; policy via City/HMC.
2. Ops / Maintenance / Security	Parks/DPW keep roles; better facility SOPs + event playbooks.	Harbor Program staff run visitor dock, ramps, water-side ops.	Assigned by OA (Parks vs. DPW).	Authority operates harbor assets end-to-end.	Conservancy/BID maintain promenades/land-side amenities.
3. Enforcement / On-Water Ops	Police + Harbor Master continue; codified patrol hours/zones.	Harbor Program staff supplement (boater services, traffic mgmt) + Police; MOU with state Harbor Master.	OA assigns lead on who patrols, who issues notices (Police vs. Harbor Master).	Authority harbor unified patrol/contracted unit; single incident command.	Limited role: Coordinates event crowd mgmt/ambassadors.
4. Dredging & Sediment	HMC/DPW coordinate case-by-case with DEEP/USACE; shared dredge calendar.	Harbor Program owns studies, permit schedule, state/federal grant/match pipeline.	OA designates dredge lead (DPW) + timelines/ windows + match.	Authority bundles dredging priorities + financing; manages channel/berth windows.	No role; supports comms only.
5. Resilience & Water Quality	DPW/WPCA continue; single published capital list + milestones.	Harbor Program is shoreline/interface owner, in coordination with DPW/WPCA.	OA assigns single owner for capital list; KPI tracking across projects.	Authority + City deliver shoreline/harbor projects jointly.	Implements small green infrastructure/land-side stewardship.

MANAGEMENT STRATEGY | MATRIX B – POTENTIAL ROLES AND RESPONSIBILITIES

Matrix B aims to provide a comparative overview of how different governance models may distribute roles and responsibilities across key stakeholders and help improve existing challenges/seams.

Function	A. Tighten Status Quo	B. City-Run Harbor Program	C. Strengthened HMC + OAs	D. Harbor/Port Authority	E. Nonprofit Conservancy + BID
6. Land Ownership & Acquisition	City (E&CD/Redev) case-by-case negotiates easements/ROWs.	E&CD/Redev + Harbor Program coordinate with agencies/owners on access/staging.	OAs set template easements/ROWs and indemnity terms.	Authority can directly hold/lease parcels and easements.	May hold public-realm easements or manage land-side access; BID funds upkeep.
7. Real Estate Development	P&Z/ZC + Redev continue. HMC continue consistency review.	Same + Harbor Program shepherd economic projects at waterfront.	OAs embed compatibility/through-route public access standards.	Authority master-leases/PPPs on City waterfront assets.	Conservancy animates land-side projects/ amenities; supports design/wayfinding.
8. Revenue Mgmt, Funding & Financing	Council/HMC/Comptroller; status-quo with fees, episodic grants continue and remain limited.	Harbor pursue grants and match funds, and track mooring/visitor fees.	OAs clarify uses of revenues from fees. Statutory fee caps remain.	Authority retains leases/dockage/moorings /events; builds reserve for match.	BID assessments + philanthropy/sponsorships for land-side O&M/programming.
9. Recreation & Public Access	Parks manage ramps, docks; basic access; uneven street-end/ROW delivery.	Harbor Program expands boater services, transient docking.	OAs standardize access routes and ROW use, indemnification templates.	Authority develops and maintains public docks/launches.	Conservancy/BID maintain promenades/ through-routes, program public realm.
10. Marketing & Visitor Services	City (E&CD/Parks) leads; fragmented messaging improved via comms plan.	Harbor Program centralizes brand, boater info, wayfinding, events.	OA assigns owner (City) for brand/visitor comms.	Authority runs harbor marketing and customer services.	Conservancy/BID run unified brand, wayfinding, events, ambassadors, calendars, sponsorships.

- Option A: Minimal cost; uses MOUs, SOPs, and shared trackers to improve coordination and transparency; but adds little new capacity or revenue.
- Option B: Clear day-to-day accountability and better boater/visitor experience via dedicated staff; requires FTEs, equipment, budget.
- Option C: Keeps HMC as policy lead while binding roles, timelines, and metrics across departments; needs rigorously management.
- Option D: Most integrated and businesslike (under one roof). Heavier lift to establish and sustain, needing enabling authority and durable revenues.
- Option E: Professionalizes land-side activation, maintenance, and branding with predictable BID/philanthropy funds. Needs strong MOUs and owner buy-in.

NEXT STEPS | HARBOR ENHANCEMENT & DEVELOPMENT RECOMMENDATIONS

Building upon the Management Strategy, we will develop a summary report of harbor enhancement and development recommendations, drawing upon our baseline conditions analysis and the focus groups and interviews conducted with harbor users and stakeholders.

Summary of Stakeholder Feedback & Key Areas of Recommendation

1. **Unified Vision for Land Use & Development:** Everyone interviewed acknowledged the harbor's history, importance, and potential. However, harbor users noted a lack of unified vision for the harbor, and called for a cohesive strategy that unites industrial, recreational, environmental, and tourism interests. This vision statement will incorporate both traditional marine businesses, key to the functionality of the harbor, and more recent residential and recreational development trends.

2. **Transparency & Increased Coordination:** Stakeholders observed a lack of coordination among city departments, commissions, and harbor users, as well as a perceived lack of transparency in decision making. Drawing upon the management strategy findings, we will provide implementable recommendations for the city's marketing, public engagement, and agency coordination.

3. **Improving Resiliency, Access & Equity:** We heard a desire to democratize waterfront access and balance industry with environmental concerns. Utilizing the Mooring Plan and Street-Ends Study, we will provide clear next steps to increase access to the waterfront for all types of users. We will include recommendations tied to climate resiliency and adaptation, necessary for long-term harbor planning.

2.4 Funding Opportunities Roadmap

This memorandum is prepared by HR&A Advisors as a component of the **Strategic Harbor Study** and fulfills the brief for a **Funding Opportunities Roadmap** (Task 2.4). In alignment with the scope, it assembles a practical pathway for the City of Norwalk to pursue and sequence funding for the Plan's near-term capital priorities—namely, the **Street-Ends Access** improvements (Lowndes, Knorr, 1st, 3rd, Cove) and the **Mooring System** investments (Inner Harbor reconfiguration, Manresa Basin/outer field, Gregory Point extension, Calf Pasture transient field, and eco-moorings at Shea & Chimon).

The roadmap (i) summarizes potential projects to be funded, building on Indigo River's Study of Street Ends and Moorings Study, and summarizing the capital and operational gaps that need to be filled, (ii) surveys federal and state programs that may help close the gaps identified under Section 1; and (iii) presents a funding roadmap and timelines, with an illustrative approach to prioritizing programs and identifying steps necessary steps over a 12 month period.

A central organizing concept is to present Street-Ends and Moorings together as a unified **Land + Water Accessibility Plan**. Bundling these projects could help strengthen competitiveness (especially for programs like CT Community Investment Fund 2030) by tying equity, access, recreation, resilience, and local economic benefits into one coherent package; it also improves delivery by aligning design standards, permitting, and match across multiple sites.

As an important note on program dynamics, funding programs referenced here are current **as of October 2025**. There are uncertainties regarding the future of many programs. Federal and state programs regularly update eligibility, scoring criteria, funding levels, and application windows; some sources publish conflicting details across webpages during transitions. Accordingly, the City should (a) verify requirements with administering agencies prior to application, (b) treat dates and amounts as indicative, and (c) monitor updated deadlines, matches, and contacts as guidance and appropriations evolve. This roadmap should be revisited periodically and adjusted to reflect new legislation, appropriations, agency guidance, and City priorities.

1. Potential Project Portfolio to be Funded

As part of the Strategic Harbor Study, the Street Ends Study and Mooring Study together outline a cohesive capital program to expand equitable public access to Norwalk Harbor while advancing ecological restoration and long-term harbor resilience. The combined portfolio consists of **five priority street-end access projects** and **five prospective mooring-field investments**, each of which can be pursued individually or phased as part of a multi-year implementation program.

A. Street-End Access Projects

The Street Ends Study evaluated 21 public street ends and identified five priority locations for near-term capital investment based on equity, feasibility, ecological opportunity, and community benefit. All five sites are publicly owned, within coastal flood zones, and offer opportunities for low-impact waterfront access paired with habitat enhancement.

Site	Primary Investment Needs	Indicative Funding Themes
Lowndes Avenue	Shoreline restoration (living shoreline, native planting); ADA path and small overlook; interpretive signage	Coastal resilience, environmental justice, habitat restoration
Knorr Street	Flexible paved plaza and ADA paths; bioswales; seating and shade; potential small-craft launch coordinated with South Norwalk Boat Club	Public-access infrastructure, climate adaptation, community stewardship
1st Street	Invasive species removal; native plantings; accessible gravel/boardwalk path; small overlook and interpretive signage	Habitat restoration, trail connectivity, low-impact recreation
3rd Street	Modular kayak/hand-carry launch; seating and bike racks; signage on harbor history; slope stabilization and bioswale	Recreational boating access, working-waterfront heritage, non-motorized infrastructure
Cove Avenue	Small car-top/kayak launch; benches; signage; roadway safety measures	Neighborhood recreation, coastal access, nature-based shoreline design

Together, these projects form an accessible waterfront network that connects residential areas in South Norwalk and East Norwalk to the harbor and Harbor Loop Trail. Each requires moderate capital investment for design, permitting, and construction (primarily landscape, access, and signage improvements) and could be advanced as separate design packages or bundled into a single "Waterfront Access Initiative."

B. Mooring Field Investments

The Mooring Study identifies a system of **five geographic investment areas** where Norwalk can expand mooring capacity, improve public access to the water, and support a long-term harbor operations model. Together, these locations could add up to **175–390 new moorings**, depending on configuration, and anchor a sustainable, revenue-generating boating economy linked to the City's street-end access network.

1. Location-Specific Investment Areas

Location / Project Area	Depth Range (MLW)	Potential New Moorings	Primary Infrastructure Needs
Inner Harbor – North Anchorage (Reconfiguration)	3–6 ft	~19 DPM	Replace and re-align existing moorings with updated Double-Point Mooring (DPM) hardware; add pump-out capacity
Manresa Island Basin + Outer Field	5–13 ft	60 SPM – 107 DPM	New field adjacent to Manresa Basin; mooring hardware, water-taxi landing, pump-out boat
Gregory Point Extension	5–10 ft	25 SPM – 44 DPM	Mooring extensions between navigation channel and Peach Island; hardware and markers
Calf Pasture Beach Transient Field	5–12 ft	10 SPM – 18 DPM	Seasonal transient moorings, small floating dock, water-taxi link
Norwalk Islands – Shea & Chimon Islands	5–14 ft	40 SPM each	Mooring arrays with elastic rodes and pyramid anchors to protect seabed habitat

2. Capital Investment Options

The Mooring Study modeled **four capital cost options** representing different configurations of mooring types and supporting equipment. These total capital costs are then annualized across a 20-year timeframe, to enable high-level assessment of return-on-investment (ROI) later on.

*SPM = Single Point Mooring; DPM = Double Point Mooring; DPMD = Double Point Dock Mooring.

Option	Configuration Summary	Approx. New Moorings	Capital Components	Total Capital Cost (w/ 21 % OH&P)	Annualized (20-yr)
Option 1 – SPM* Field	Conventional chain + buoy moorings (no docks)	~215	SPM hardware + pump-out boat + launch + water taxi	**$ 1.24 M**	$ 124 k / yr
Option 2 – DPM* Field	Double-Point moorings (more compact spacing)	~169	DPM hardware + pump-out boat + launch + water taxi	**$ 1.90 M**	$ 190 k / yr
Option 3 – DPMD* Floating Dock Field	Moorings with floating docks for tie-up	~392	DPMD hardware + pump-out boat + launch + water taxi	**$ 4.49 M**	$ 449 k / yr
Option 4 – Hybrid Field	Mix of SPM, DPM, and DPMD; water-taxi-focused	~249	Mixed hardware + pump-out boat + launch + water taxi	**$ 1.37 M**	$ 137 k / yr

3. Operating Models and Financial Outcomes

Indigo River analyzed **three operational models** for managing and funding mooring expansion.
All estimates include fuel, labor, vessel maintenance, and program overhead (21 %), and assume 150-day boating seasons.

Model	Description	Annual Operating Cost (COGS + Overhead)	Projected Revenue	Annual Gap (Needs External Funding)	Feasibility Notes
Model 1 – Permit-Only System (Status Quo)	City issues permits; private operators handle installation, maintenance, and transient management.	Minimal City costs (~ $ 0.76 M COGS shared privately)	≈ $ 320 k in permit and transient fees	No direct City gap; limited public benefit; no capital expansion without grants	Easiest to maintain administratively; low visibility gain
Model 2 – City-Managed Full Program	City owns and operates all moorings,	$ 0.88 – 1.20 M / yr	≈ $ 341 k	$ 540 k – $ 860 k annual deficit	Unsustainable without major grant subsidies

Model	Description	Annual Operating Cost (COGS + Overhead)	Projected Revenue	Annual Gap (Needs External Funding)	Feasibility Notes
	launches, and pump-out boats.				or revenue diversification
Model 3 – Hybrid Managed Program (Preferred)	City manages transient moorings and a single water taxi; private permittees maintain others.	$ 0.38 M / yr	≈ $ 314 k	≈ $ 63 k annual gap	Financially near-break-even; scalable with modest grant support and user fees

4. Funding Gap Summary

Below we summarize the funding gap for which external funding and financing sources may be considered. These costs can be summarized as the one-time capital costs of the mooring hardware & water taxi fleet and the operational expenses associated with the different models.

Category	Capital Cost Range	Annual Operating Gap	Funding Need / Opportunity
Mooring Hardware & Water Taxi Fleet (Options 1–4)	$ 1.2 – 4.5 M (one-time)	–	Federal or state capital grants (NOAA Coastal Resilience, FTA Ferry Program, Boating Infrastructure Grant Program)
Hybrid Operations (Model 3)	—	≈ $ 60 k / yr	Operating subsidy from City Waterfront Fund, state tourism programs, or public–private sponsorships
Full City Program (Model 2)	—	$ 540 – 860 k / yr	Would require sustained grant or bond financing; not recommended without dedicated funding stream

In summary:

- **Capital Need:** For capital costs, Indigo River points out options 1 and 2 are financially feasible for new installations. Depending on configuration, total one-time costs range from **$ 1.2 M to $ 4.5 M**.
- **Operating Gap:** For operational expenses, Indigo River recommends **Model 3 (Hybrid Operations)** in their Mooring Study, due to its smaller feasibility gap. Under Model 3, the annual shortfall **(~ $ 60 k)** could be closed through federal/state operating grants or modest fee adjustments.
- **Funding Target:** Pair City funding and private contributions with external grants to cover initial capital **($ 1.2 M to $ 4.5 M)** and a **three-year operational bridge (~ $ 180 k total)**.

2. Funding Landscape

A. Street-End Access Projects

The five priority street ends, namely **Lowndes, Knorr, 1st, 3rd, and Cove Ave**, share a common investment profile: **small–mid-scale public access** improvements (ADA paths, overlooks, seating, shade, signage, small craft/hand-carry launches), **nature-based shoreline** treatments (living shorelines, native plantings, invasive removal), **stormwater and erosion** fixes (bioswales, stabilization), and **trail/wayfinding** connections to the Harbor Loop. The programs below collectively cover **planning, design, construction, and selective O&M** needs.

List of Potentially Relevant Programs

1) CT DEEP – Recreational Trails Program (LINK)

- **What it is**: State grants for **planning, design, and construction** of trail and water-trail facilities, including wayfinding and trailheads. 2025–26 round is **open**; applications due **Dec 18, 2025**.
- **Gap type**: Capital (design + construction).
- **Eligible Interventions**: Harbor Loop connections; accessible paths/boardwalks; wayfinding; trailhead amenities (bike racks, benches) at **3rd, Knorr, Cove**; interpretive signage at **Lowndes, 1st**.
- **$ / Match / Notes**: Up to **$1M**; **20% match**; design is explicitly eligible (great for closing pre-dev gaps). Deadline **12/18/2025**.

2) Land and Water Conservation Fund (LWCF) – State Side (via CT DEEP) (LINK)

- **What it is**: Federal LWCF dollars administered by CT DEEP for **recreation planning, land/water acquisition, and facility development**.
- **Gap type**: Capital (land/facility development), planning.
- **Eligible interventions**: ADA paths, overlooks, small waterfront recreation features, park-adjacent improvements at all five street ends (must be outdoor recreation and remain perpetually protected).
- **$ / Match / Notes**: Typically **50% match**; aligns well with equity/access framing at **Lowndes/Knorr**.

3) LWCF – Outdoor Recreation Legacy Partnership (ORLP) (LINK)

- **What it is**: **Nationally competitive** LWCF for larger urban recreation projects serving disadvantaged areas; **paused** for the next cycle as of Sept 22, 2025 (see here, monitor for restart).
- **Gap type**: Capital (major park/recreation investments).
- **Eligible interventions**: If reopened, could bundle multiple street-ends into a single urban access package (e.g., **Knorr + 3rd + Lowndes** improvements).
- **$ / Match / Notes**: 50% match; urban, EJ emphasis. State portal info remains posted while paused.

4) National Fish and Wildlife Foundation (NFWF) – National Coastal Resilience Fund (NCRF) (LINK)

- **What it is**: Funds **planning, design, and implementation** of **nature-based solutions** that reduce coastal storm/flood risk and improve habitat; 2025 RFP framework posted (2025 RFP closed, track next round).

- **Gap type**: Capital (design + build) for **living shorelines, marsh edges, plantings**.
- **Eligible interventions**: **Lowndes & 1st** (living shoreline, invasive removal, native plantings), slope stabilization at **3rd**, shoreline treatments at **Cove Ave**.
- **$ / Match / Notes**: Large awards possible; emphasize risk reduction + habitat. Land acquisition is **not** funded in 2025 RFP (must be secured elsewhere).

5) NFWF – Long Island Sound Futures Fund (LISFF) (LINK)

- **What it is**: Grants for projects that **restore the health of Long Island Sound**, habitat, water quality, community resilience; managed by NFWF with EPA/LISS. 2025 RFP posted **May 29, 2025** (closed); next round expected spring 2026. FY2025 grants ranged **$50k–$1.5M.**
- **Gap type**: **Planning/design** and **capital** for LIS-connected habitat/water-quality and community access tied to mooring sites.
- **Eligible interventions**: Habitat restoration, green infrastructure and **stormwater** practices at **Lowndes/1st**, education/signage at all sites.
- **$ / Match / Notes**: Competitive; strong LIS nexus helps Norwalk. Pair with Trails/LWCF for access elements.

6) CT Clean Water Fund / CWSRF (Stormwater & Green Infrastructure) (LINK)

- **What it is**: **Low-interest loans** (with possible **principal forgiveness**) for water quality, including **green stormwater infrastructure**; state program details (grant + 2% loan mix) in CT's priority list; EPA CWSRF "Green Project Reserve" guidance supports GI eligibility.
- **Gap type**: Capital **financing** for bioswales, permeable surfaces, erosion control tied to water quality at **Knorr, 3rd, Lowndes, 1st, Cove**.
- **Eligible interventions**: Bioswales, floodable landscapes, infiltration at parking/approaches to the street-ends, shoreline stabilization with water-quality benefit.
- **$ / Match / Notes**: CT Clean Water Fund typically **20% grant + 80% 2% loan** (per FY24–25 draft); confirm current terms with DEEP each cycle.

7) CT Port Authority – SHIPP (Small Harbor Improvement Projects Program) (LINK)

- **What it is**: State grants for **municipal harbor/marina** improvements (small ports/harbors). SHIPP re-established/active in 2025; statute and program pages updated. Norwalk has applied and won this award this year with $3.5M grant to upgrade the marina (LINK).
- **Gap type**: Capital for **water access** facilities at/near street-ends (small craft landings, dinghy tie-ups, signage, minor shoreline protections where navigational/access benefits).
- **Eligible interventions**: **3rd & Knorr** small launches; wayfinding/harbor access furnishings; minor public floats where appropriate.
- **$ / Match / Notes**: Municipal program; coordinate with Harbor Management Commission for alignment.

8) CT Office of Policy and Management (OPM) – LoCIP (Local Capital Improvement Program) (LINK)

- **What it is**: Formula **state aid** to municipalities for eligible **capital projects** (roads, **sidewalks**, public buildings, **parks**, flood control, etc.).
- **Gap type**: **Local match** and fill-in capital for basic access (sidewalks to street-ends, lighting, small park amenities).
- **Eligible interventions**: ADA paths/sidewalk tie-ins; small park-like site work at all five locations.
- **$ / Match / Notes**: Annual entitlement; project must be **authorized** by OPM and City legislative body; LoCIP is flexible and ideal as **match**. Norwalk's FY2025 is $859K. (LINK)

9) CT DECD – Urban Act Grant Program (LINK)

- **What it is**: State **bond-funded** capital grants for **urban** community development and public realm improvements; open to **distressed municipalities/PICs/urban centers**, with pathways for others via Bond Commission/TOD.
- **Gap type**: Capital "big push" (bundling multiple street-ends as an **Urban Waterfront Access Initiative**).
- **Eligible interventions**: Comprehensive access improvements (ADA, lighting, plazas), water's-edge public space, supportive restrooms/shelters if included in scope.
- **$ / Match / Notes**: Rolling/bond-commission timing; coordinate with DECD/OPM delegation. Useful as a **local share** or primary capital source.

10) USDOT – Safe Streets and Roads for All (SS4A) (LINK)

- **What it is**: Federal competitive grants for **roadway safety**—**Implementation** grants can fund pedestrian safety improvements near street-ends (crossings to the water, lighting). FY2025 NOFO closed **June 26, 2025**; next round expected 2026.
- **Gap type**: Capital for **approach-side** safety—crosswalks, lighting, speed management to reach street-ends safely.
- **Eligible interventions**: High-visibility crossings, RRFBs, lighting, traffic calming around **Knorr/3rd/Cove/Lowndes/1st** approaches (with Action Plan compliance).
- **$ / Match / Notes**: ~$**982M** nationally in FY25; counties/municipalities eligible; must align to an **Action Plan**. Use for upland approach safety, not in-water work.

11) CTDOT – LOTCIP (via WestCOG/COG) (LINK)

- **What it is**: **State-funded** municipal transportation capital for **sidewalks, multi-use trails, intersections** on eligible facilities; administered via Councils of Governments with CTDOT.
- **Gap type**: Capital for **approach connections** to street-ends; multimodal safety/ADA to reach access points.
- **Eligible interventions**: Sidewalk infill to **Cove Ave/Knorr/3rd**, intersection treatments, spur multi-use trail links to Harbor Loop.
- **$ / Match / Notes**: Coordinate with **WestCOG**; projects must meet functional class/eligibility standards.

12) FEMA Hazard Mitigation (BRIC / HMGP) – Nature-Based & Flood Mitigation (LINK)

- **What it is**: **Pre-disaster (BRIC)** and **post-disaster (HMGP)** grants for hazard mitigation; **nature-based solutions** are emphasized (living shorelines, floodplain restoration). FY2024 BRIC had ~$750M–$1.35B; next cycles expected annually.
- **Gap type**: Capital for **flood risk reduction** components (living shoreline segments, erosion control) that can be packaged with access.
- **Eligible interventions**: **Lowndes/1st** shoreline stabilization; flood-resilient paths/materials; drainage retrofits where tied to risk reduction.
- **$ / Match / Notes**: Requires **FEMA-approved Hazard Mitigation Plan**; competitive BCA; coordinate with **CT DEMHS** for HMGP/BRIC pipeline. Program **currently halted**; monitoring needed.

B. Mooring Field Investments

The interventions & cost types identified in the Mooring Study can be grouped as follows, which will guide the identification of relevant funding sources:

- **Mooring infrastructure:** SPM/DPM hardware; selective floating/transient docks & utilities.
- **Support vessels/services:** pump-out boat(s); water taxi (capital only; ops gap remains).
- **Access landings & aids:** small landings, dinghy docks, wayfinding, nav aids.
- **Navigation/dredging tweaks:** targeted anchorage/channel adjustments where justified.
- **Eco-moorings & habitat:** elastic rodes + pyramid anchors at Shea/Chimon with habitat protection.

Below, programs that may help support one or more of the intervention/cost categories as listed, with a brief description of the program, eligible intervention the program may support, and how the program may or may not help cover Norwalk's gaps.

List of Potentially Relevant Programs

1) U.S. Fish & Wildlife Service (USFWS) – Boating Infrastructure Grant (BIG) (LINK)

- **What it is:** Federal grants for **transient recreational boats ≥ 26 ft**, funding **tie-up facilities** and many shoreside amenities; Tier I (state-run) and Tier II (national).
- **Gap type: Capital** (transient docks, moorings, utilities, amenities).
- **Eligible interventions (fit to Norwalk):** Transient moorings/docks at Calf Pasture and Gregory Point; dockside utilities (water/electric), restrooms/showers, nav aids, dinghy docks; (state page lists eligible items explicitly, incl. mooring buoys, floating docks/piers, breakwaters, utilities).
- **$ / Match / Notes:** Tier I-State (CT DEEP) up to ~$290k annually statewide; Tier II competitive nationally (multi-million pool). Competitive apps need strong match and transient-use justification (≤15 days). Coordinate early with **CT DEEP Boating**.

2) CT DEEP / USFWS – Clean Vessel Act (CVA) (LINK)

- **What it is:** Grants for **pump-out stations and boats** to reduce sewage discharges; **CT DEEP** administers in CT.
- **Gap type: Capital** (pump-out boat purchase/equipment) and limited **O&M offset** (via capitalized spares).
- **Eligible interventions:** New/expanded **pump-out boat** capacity to support expanded fields (Inner Harbor + Manresa/Islands).
- **$ / Match / Notes:** Up to **75%** grant; CT typically has ~**$1M/yr** available. Great to pair with BIG-funded transient docks.

3) Federal Transit Administration (FTA) – Passenger Ferry Grant Program (Section 5307(h)) (LINK)

- **What it is:** Competitive **transit capital** for **ferry vessels, terminals, and related facilities** in **urbanized areas**. Capital only (no operating).
- **Gap type: Capital** for **water-taxi vessel** and **minimal landings** if the service is structured as public transit (with MPO/TIP/STIP alignment).
- **Eligible interventions:** A small **water-taxi** vessel and **basic terminal/landing** improvements at **Veteran's Memorial Park/Manresa** if framed as transit access.
- **$ / Match / Notes:** Applicants must be eligible **FTA recipients** (or work through one). Prep a transit use case (ridership, integration). **Operating costs are not eligible.**

4) U.S. Army Corps of Engineers (USACE) – Section 107 Small Navigation Projects (LINK)

- **What it is:** Corps authority to improve **navigation** (dredging channels/anchorages, breakwaters, jetties/groins) with a **non-federal sponsor**; projects must be **economically justified, environmentally sound, technically feasible**. Capped **federal share** at **$15M** per project (incl. feasibility/design/construction).
- **Gap type: Capital** for **navigation tweaks** that enable Inner Harbor reconfiguration (e.g., anchorage layout/dredge adjustments).
- **Eligible interventions:** Targeted **anchorage/channel** improvements near **North Anchorage** to unlock spacing/clearances.
- **$ / Match / Notes:** Cost-share varies by phase; start with a **USACE feasibility determination**. Earlier district pages still reference **$10M**, but an April 2025 fact sheet confirms **$15M** current cap. (LINK)

5) National Fish and Wildlife Foundation (NFWF) – National Coastal Resilience Fund (NCRF) (LINK)

- **What it is:** Funds **planning, design, and implementation** of **nature-based solutions** that reduce coastal storm/flood risk and improve habitat; 2025 RFP framework posted (2025 RFP closed, track next round).
- **Gap type: Capital** (and pre-dev) for **eco-moorings** and **shoreline/habitat** elements tied to risk reduction.
- **Eligible interventions: Elastic-rode/pyramid-anchor eco-moorings** at **Shea/Chimon**; living shoreline/stabilization that protects access and moorings.

- **$ / Match / Notes:** Large awards possible; emphasize **risk reduction + habitat**; coordinate with CZMA consistency.

6) NFWF / EPA – Long Island Sound Futures Fund (LISFF) (LINK)

- **What it is:** Grants for projects that **restore the health of Long Island Sound**, habitat, water quality, community resilience; managed by NFWF with EPA/LISS. 2025 RFP posted **May 29, 2025** (closed); next round expected spring 2026. FY2025 grants ranged **$50k–$1.5M.**
- **Gap type: Planning/design** and **capital** for LIS-connected habitat/water-quality and community access tied to mooring sites.
- **Eligible interventions: Island access** stewardship, **green infrastructure** at landings, and **community engagement** for new eco-mooring zones.
- **$ / Match / Notes:** Strong LIS nexus and partnerships score well; stack with NCRF/CVA/BIG.

7) CT Port Authority – SHIPP (Small Harbor Improvement Projects Program) (LINK)

- **What it is:** State grants for **municipal harbor/marina** improvements (small ports/harbors). SHIPP re-established/active in 2025; statute and program pages updated. Norwalk has applied and won this award this year with $3.5M grant to upgrade the marina (LINK).
- **Gap type: Capital** for municipal harbor improvements (small landings, dinghy docks, ramps) at **Manresa/Gregory/Calf Pasture**.
- **Eligible interventions: Harbor access hardware**, modest **public floats**, **ADA ramps**, and small **dredging** tied to access.
- **$ / Match / Notes:** Coordinate with Harbor Management Commission; good state companion to BIG/CVA.

8) MARAD – Port Infrastructure Development Program (PIDP) *(aspirational, if terminal assets qualify)* (LINK)

- **What it is:** Large federal capital for **port/terminal infrastructure**; FY2025 NOFO extended to **Sep 10, 2025** with resilience priorities.
- **Gap type: Capital** for terminal/landing infrastructure **if** framed as port access (public terminals, resilience).
- **Eligible interventions:** Only if landings/terminals meet **port** definitions and regional goods movement/tourism resilience benefits can be shown.
- **$ / Match / Notes:** Very competitive; keep as a **future/aspirational** if terminal assets are scaled up.

9) NOAA – Marine Debris Program (Removal & Interception) (LINK)

- **What it is:** Competitive funding for **large marine debris removal** and **interception technologies** (FY2025 up to **$54M** across two competitions; individual awards often **$250k–$1M**).
- **Gap type: Capital** for **debris removal** around landings/anchorages and **debris capture** at high-use mooring corridors.
- **Eligible interventions:** If needed, pre-installation cleanup at **Manresa/Gregory/Calf Pasture/Islands**; debris interception at harbor pinch-points.

- **$ / Match / Notes:** Relevant only if needed/useful. Align with resilience/ecosystem benefits and community volunteers/education. Recent FY2025 awards announced. (LINK)

10) EDA – Public Works & Economic Adjustment Assistance (PWEAA) (LINK)

- **What it is: Rolling** federal capital for **public works and infrastructure** that spur jobs/tourism; also flexible **EAA** funding for resilience/economic change.
- **Gap type: Capital** for **waterfront access facilities** and **tourism-supporting infrastructure** tied to mooring expansion (job/visitor spend nexus).
- **Eligible interventions: Landings**, public realm connections to mooring fields, utility upgrades where they support local economic activity.
- **$ / Match / Notes:** No deadline (rolling); must align with **WestCOG CEDS** and show quantifiable **jobs/visitation** impacts.

11) CT Community Investment Fund 2030 (CIF 2030) (LINK)

- **What**: State program funding **capital improvement programs** (infrastructure, public facilities, placemaking) and **planning for capital projects**; **Round 8** application window **Oct 27 – Dec 5, 2025**
- **Gap**: **Capital** (and **planning** tied to capital) for municipal waterfront access/amenities; **not** an operating subsidy.
- **Interventions (mooring-relevant)**:
    - **Public access landings** and small **terminal-like improvements** (e.g., Manresa/VMP landings) supporting water-taxi and transient access;
    - **Dinghy docks**, **wayfinding**, site lighting, circulation, and ADA access at harbor edges;
    - **Placemaking** and public-realm upgrades at waterfront nodes that serve the mooring system.
- **$ / Match / Notes**:
    - CIF encourages **leveraged stacks**; we can bundle **mooring landings + transient amenities** with street-end links as an "Urban Waterfront Access Initiative." Guidance indicates capital/public-facility/infrastructure eligibility; Round 8 timetable confirmed on state portal and board packet.
    - Norwalk benefits from this program regularly, as a designated "Public Investment Community and Alliance District". In the recent past rounds, Norwalk stakeholders have won grants for various projects. (LINK, check Funded Projects)

3. Funding Roadmap & Timelines

Opportunity to Develop a Bundled Narrative on Street Ends- and Moorings-Related Projects

As a potential guiding narrative for the Funding Roadmap, there could be an opportunity to bundle the investments identified so far as part of the Strategic Harbor Study on **street-end access** (ADA paths, overlooks, launches, signage, stormwater fixes) and **mooring system upgrades** (transient tie-ups, pump-out, water-taxi landings, eco-moorings) into a single, multi-site **Urban Waterfront Access Initiative.** Such a unified vision could help these investments be more competitive in funding search and easier to deliver, because it:

- **Ties outcomes to multiple policy goals at once** (equity access + recreation + resilience + economic vitality), which **CIF 2030** and several federal programs explicitly reward.
- **Packages readiness**: land-side elements (design/permitting is faster) can be shovel-ready while water-side items advance permitting—this "two-track" shows near-term impact and credible phasing.
- **Creates leverage and helps with matching funds**: one CIF 2030 request can underwrite the **land-side** public-realm/landing components and matching funds for **water-side** programs (BIG, CVA, NCRF/LISFF, USACE 107).
- **Simplifies O&M**: coordinated design standards, wayfinding, and launch/water-taxi interfaces reduce future operating friction under **Model 3 (Hybrid)**.

Funding Roadmap and Timelines

The Funding Roadmap and Timelines below present a suggested pathway around this vision, for illustrative purposes. The prioritization of programs and investments may change based on City of Norwalk and other relevant stakeholders' preferences. While the Funding Roadmap and Timelines below assume a Q4 2025 start, that may be unrealistic/impractical, and this plan may need to start next year in 2026.

The information presented in this roadmap and timelines relies on publicly available information as of October 2025. Federal and state funding landscape changes dynamically, which may impact program and funding availability and eligibility criteria. There are also some mismatches between information across different pages on the same program, due to lack of updates or maintenance, or unclarity about the future of programs. The information below notes such discrepancies when possible. This roadmap may need to be adapted as new decisions on programs are made by federal and state authorities.

For the sake of simplicity of following along the roadmap below, we propose to categorize projects into packages as follows:

- **Package A — Street-Ends Access (Bundle 1 & 2)**
  Lowndes, Knorr, 1st, 3rd, Cove Ave: ADA access, overlooks/amenities, hand-carry launches, wayfinding, living shorelines, bioswales.
- **Package B — Mooring Access & Services**
  Calf Pasture & Gregory Point transient docks/utilities, pump-out boat, water-taxi vessel + minimal landings at Veteran's Memorial Park/Manresa (if framed as transit), Inner Harbor reconfiguration start (North Anchorage).

- **Package C — Eco-Moorings & Habitat**
  Shea & Chimon Islands eco-moorings (elastic rodes/pyramid anchors), stewardship access, debris removal (if needed).

Phase 1 (0–6 months: Q4-2025 → Q1-2026) — Launch & early submissions

Goal: CIF 2030 can serve as the "capital anchor" and help lock in the land-side funding. It could also help serve as matching funds for other programs and facilitate applying for other quick-turn programs, while initiating long-lead navigation work.

- **CIF 2030 application – "Urban Waterfront Access Initiative" (Packages A+B land-side)**
  - *Why now:* Capital + planning tied to capital; bundles street-ends + land-side mooring landings/amenities; good fit for equity, placemaking, small-business/tourism impacts.
  - *Owner:* Economic Development (lead) + Harbor/Parks; Technical support may be needed.
  - *Prep checklist:* scope sheets & costings by site, concept plans, equity & small business narrative, tourism visitation logic, match stack (LoCIP, Trails, SHIPP), letters of support, 3-year operating bridge plan for Model 3 (non-grant O&M sources).
  - **Oct 27–Dec 5, 2025** window (Round 8)
- **CT Recreational Trails (Package A)** – Harbor Loop connections & water-trail touchpoints at 3rd/Knorr/Cove; interpretive signage at Lowndes/1st.
  - *Owner:* Parks/DPW; Technical support may be needed.
  - *Prep:* 30% concepts, quantity takeoffs, maintenance plan, partner letters.
  - **Apps due Dec 18, 2025**
- **USACE Section 107 initiation (Package B)** – North Anchorage reconfiguration feasibility.
  - *Owner:* DPW/Harbor; *Prep:* problem statement, bathymetry, mooring layout constraints, benefits (safety/capacity), environmental pre-screen, CZMA/SHPO coordination path.
  - Feasibility request (**rolling**)
- **BIG (Tier I pre-app) & CVA (Package B)** – Calf Pasture/Gregory transient + pump-out capacity.
  - *Owner:* Harbor + Parks; *Prep:* transient demand & berthing plan, utilities plan, O&M responsibility matrix, pump-out service plan.
  - BIG – Tier 1 (state) rolling; Tier 2 annual (monitor 2026 NOFO); CVA – CT program rolling / annual
- **LoCIP set-asides + design kick-off (Package A)** – lock local match; start 30% design on Bundle 1 street-ends.
  - *Owner:* DPW/Finance; *Prep:* council authorization, internal project IDs, procurement schedule.
  - Annual entitlement. Flexible, ideal as match.

Phase 2 (6–12 months: Q2-2026 → Q3-2026) — Federal stacks & permitting

Goal: Building on Phase 1, layer federal/state sources and de-risk permitting to hold construction schedules.

- **NCRF (Package A/C)** – living shorelines at Lowndes/1st, eco-moorings at Shea/Chimon.
    - *Owner:* Parks/Harbor. Technical support may be needed; *Prep:* risk-reduction metrics, habitat lift, design basis memo, monitoring plan, CZM consistency.
- **LISFF (Package A/C)** – LIS habitat/water quality + island access stewardship & education.
    - *Owner:* Parks. Technical support may be needed; *Prep:* LIS benefits, community partners, youth/education programming.
- **SHIPP (Package B)** – municipal harbor hardware (dinghy docks/ADA ramps, minor dredge for access).
    - *Owner:* Harbor/DPW; *Prep:* detailed layouts, costs, match commitments (CIF/LoCIP).
- **FTA Passenger Ferry (Package B, if transit-eligible)** – small vessel + minimal landings.
    - *Owner:* Transit/Harbor with MPO. Technical support may be needed; *Prep:* FTA eligibility path (apply through eligible sponsor), TIP/STIP inclusion, ridership/ops plan (capital-only), Title VI/ADA.
- **CWSRF/Clean Water Fund financing (Package A)** – bioswales/shoreline stabilization/green stormwater.
    - *Owner:* DPW/Finance; *Prep:* readiness documentation, benefits, integration with Trails/LWCF contracts.
- **Permitting & compliance (cross-cutting)** — DEEP, USACE, CZMA, SHPO, floodplain; align specs across street-ends & landings to standardize details and shorten review cycles.
    - *Owner:* DPW/Harbor/Parks; *Prep:* one consolidated permit matrix & submittal calendar.

Summary of funding gap closure

As a summary of the above Funding Roadmap, capital and operational costs identified under Section 1. Potential Project Portfolio to be Funded can be closed in the following way. There will be other sources needed, especially on the operational side, since operational expenses are not eligible to be covered by many of the programs.

- **Capital:** Use **CIF 2030** to anchor land-side costs and matching shares; stack **BIG** (transient), **CVA** (pump-out), **NCRF/LISFF** (eco/living shoreline), **SHIPP/LoCIP/CWSRF** (state + financing) and, where justified, **USACE 107** for navigation components.
- **Operating (Model 3 ≈ $63k/yr, first 3 years):** cover via **sponsorships/PPPs**, fare policy tuning, and small City set-aside; the roadmap targets **utilization growth** and **lower unit costs** by standardizing equipment and concentrating demand at improved landings.

Appendix

Norwalk Strategic Harbor Study | Stakeholder Engagement Plan -

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Introduction

This Stakeholder Engagement Plan details Indigo River and HR&A Advisors' ("the Team") proposed efforts to engage stakeholders in support of the Norwalk Harbor Strategic Study ("the Study"). Indigo River will be responsible for implementing the Stakeholder Engagement Plan alongside the City of Norwalk Planning and Zoning Office.

The stakeholder engagement will span the following categories of engagement throughout the project:

- **Five Focus Groups** with community members living near and working in and around the Harbor will inform an understanding of the status of and potential opportunities for the recreational and commercial uses of the Harbor and current public access, including possibilities to increase public access.
- **Three rounds of interviews** will be held with relevant stakeholders, including industry representatives, agencies, committees, and commissions who have jurisdiction over the operation of the Harbor. The purpose of these interviews will be to inform initial Existing Conditions Analysis, vet findings from the Focus Groups and initial analysis, and discuss preliminary recommendations with respect to the feasibility of regulatory alternatives and non-regulatory pathways for realizing City and stakeholder goals for the Plan.
- A **Steering Committee** of local experts will oversee development of the Study, ensuring it meets the stated goals of the RFP, and will regularly engage with the Team to oversee progress, provide feedback, and approve materials before they are made public.
- A **project website,** developed and managed by the City, where the public can go to get updates on the project, see deliverables, and submit comments.

Please note that final agendas and discussion guides for the Focus Groups will be delivered to the City one week in advance of when they will occur, currently projected to take place in April. We will leverage our Existing Conditions Analysis and Industrial Analysis and the first round of interviews, to take place in February and March, to draft the finalized agendas and discussion guides for the Focus Group discussions. The Appendix in this Stakeholder Engagement Plan includes a Focus Group Working Questions bank, which is meant to provide a sample of the topics and questions we intend to cover in the Focus Groups, but these questions should not be considered as final agendas or discussion guides. Following the completion of the Focus Groups, the Team will compile the findings into a "Synthesis Memo," to be presented to the City in June.

Engagement Objectives

- Ground-truth emerging findings from baseline conditions analysis against the lived experience and expertise of local stakeholders and decision-makers.
- Confirm and socialize the primary goals of the Study.
- Identify priorities of different stakeholder groups and understand the reasons for and possible solutions to any disagreements.

Engagement Strategy

Key Stakeholder Groups

- **Local community members**, including both those living near the Harbor, who access it for recreation and leisure activities, and those living and working in and around the Harbor, such as marina and boat club operators, shellfish business owners, rowing club representatives, and additional for profit and non-profit entities with interests in the Harbor.
- Employees and owners of both **recreational businesses and nonprofits** including boat clubs, rowing clubs, the Maritime Aquarium, and the Seaport Association, and **business enterprises** related to the oyster industry, marine construction, marinas, as well as other waterfront industrial and commercial businesses.
- **Public agencies, departments, commissions, and committees** including the Connecticut Department of Energy & Environmental Protection (CTDEEP), U.S. Army Corps of Engineers (USACE), Norwalk Harbor Management Commission, Mayor's Water Quality Committee, Norwalk Shellfish Commission, Norwalk Marine Police Unit, Norwalk Marine Fire Unit, Norwalk Recreation and Parks, and the Norwalk Water Pollution Control Authority, Norwalk Department of Health, Norwalk Department of Public Works, and the Five Mile River Commission.

Summary of Key Engagement Strategies

Focus Groups

- **Who is engaged:** Norwalk residents, avid Harbor users, Harbor employees, and local business owners.
- **Engagement process:** The Focus Group conversations will pertain to strengths and weaknesses of recreational and commercial uses of the harbor as well as public access to the Harbor and Norwalk waterways.
- **Number of touchpoints:** There will be five total Focus Groups.
- **Goal & Outcomes:** The Focus Groups will help inform takeaways from both the Existing Conditions Analysis as well as the Industrial Economic Analysis, including for water-dependent uses, and preliminary recommendations.

Stakeholder Interviews

- **Who is engaged:** State and local stakeholders, including agencies, committees, commissions, and industry representatives.
- **Engagement process:** There will be three rounds of interviews. To the extent possible, each round will consist of one group interview. The first round will focus on orienting stakeholders to the Study and addressing questions related to the Harbor baseline conditions and opportunities analysis. The second round will inform stakeholders of the findings of the initial analyses as well as the Focus Groups. The third round will focus on sharing and discussing preliminary recommendations.
- **Number of touchpoints:** There will be at one group interview per round, with an emphasis on bringing together as many stakeholders as possible to maximize cross-sector discussion.
- **Goal & Outcomes:** The interviews will orient agency stakeholders on the project, vet findings, and assess recommendations with respect to the feasibility of regulatory alternatives and non-regulatory pathways for realizing City and stakeholder goals for the Study.

Steering Committee

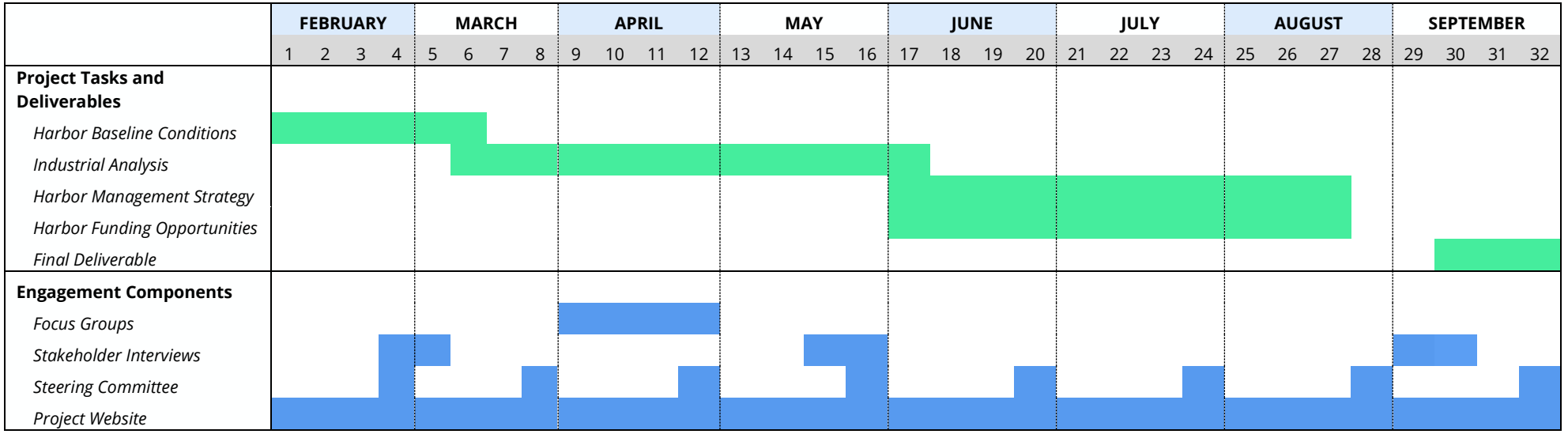
- **Who is engaged:** A committee comprised of local experts including representatives from the Harbor Management commission and waterfront businesses.

- **Engagement process:** The Steering Committee will meet monthly with the Team to discuss progress, and review deliverables.
- **Number of touchpoints:** There will be approximately eight Steering Committee meetings.
- **Goal & Outcomes:** The Steering Committee will provide feedback, be a voice for the public, and ensure the Study aligns with the goals laid out in the RFP.

Project Website

- **Who is engaged:** The public.
- **Engagement process:** The public page is currently active on the Norwalk Tomorrow website and will be updated accordingly. The public will be able to review published materials and submit input.
- **Number of touchpoints:** Ongoing.
- **Goal & Outcomes:** Keep the public informed of the progress and outcomes of the Study as well as opportunities to provide input.

Engagement Timeline



Appendix

Focus Group Details

Indigo River will facilitate five Focus Group interviews with support from the City of Norwalk Planning and Zoning Office. In particular, the Planning and Zoning Office will help identify Focus Group participants. The Focus Groups will consist of:

- Two in person or remote Focus Groups with Norwalk residents and avid harbor users.
- One in person or remote Focus Group with workers employed in water-dependent industries at or associated with the Harbor.
- Two in person Focus Groups with property owners and water-dependent business owners, both industrial and recreational, like marina and rowing club operators.

Proposed Focus Groups

Focus Group	Discussion Topics
Norwalk residents and avid harbor users	Recreational harbor uses, public access
Harbor workers	Commercial and recreational harbor uses, economic conditions and opportunities
Harbor business owners	Commercial and recreational harbor uses, economic conditions and opportunities, public access, water quality

Representativeness Thresholds

The Team used 2023 American Community Survey 5-year estimates for the Census Tracts that border the Harbor to determine reasonable representativeness thresholds. This baseline will serve as a reference point against which the Team will assess the demographic makeup of our Focus Groups, ensuring that they authentically capture the richness and diversity of the Harbor community:

- 5% Asian American and Pacific Islander,
- 20% Black, and
- 30% Latino/Hispanic

In addition, the Team will ensure that for the harbor employees and business owner conversations there is adequate representation across all kinds of business including those that are representative of the blue economy, as that is of particular focus.

The Team will work with the City of Norwalk as well as local community-based organizations to identify those interested in participating in the Focus Groups.

Location

In-person Focus Groups will be held in the Planning and Zoning conference room at Norwalk City Hall.

Focus Group Run of Show

Indigo River will facilitate the Focus Groups, with both a facilitator and notetaker, with support from Norwalk Planning and Zoning office. Focus Groups will take place via Zoom or in-person and should not exceed 2 hours. At

least 48 hours prior to each Focus Group, Indigo River will email participants a Focus Group discussion guide with discussion questions and suggested ground rules.

- **Introductions and Ground Rules (5 min)**
- **Project Overview (10 min)**
- **Questions & Discussion (60-90 min)**
    - Preliminary list of questions outlined on page 10 of this document
- **Conclusion (5 min)**

Sample Ground Rules for Focus Group Discussion

1. Treat everyone in a dialogue as an equal: leave role, status, and stereotypes at the door.
2. Search for assumptions and biases (especially your own).
3. Be open and listen to others, even when you disagree, and suspend judgment. (Try not to rush to judgment).
4. Listen with empathy to the views of others: acknowledge you have heard the other, especially when you disagree.
5. Look for common ground.
6. Express disagreement in terms of ideas, not personality or motives.
7. Keep dialogue and decision-making as separate activities. (Dialogue should always come before decision-making.)
8. All points of view deserve respect.

Stakeholder Interview Details

The Team will conduct stakeholder interviews in three rounds. For each round the Team's intent is to hold one virtual group interview. We believe that this format will facilitate important cross-sector discussion. The first round will focus on orienting stakeholders to goals and process of the Study as well as addressing any uncertainties resulting from the baseline conditions analysis. In the second round the Team will present on findings from the initial analysis as well as the Focus Groups. In the third round, the Team will present on preliminary recommendations and discuss feedback with stakeholders.

List of Stakeholders and Connection to the Harbor

Stakeholder(s)	Relevance to Harbor
Harbor Management Commission	Overall implementation
City of Norwalk	Overall implementation
City of Norwalk Director of Sustainability and Resilience	Harbor resilience
Connecticut Department of Energy & Environmental Protection (CT DEEP)	Harbor management, harbor development
U.S. Army Corps of Engineers (USACE)	Harbor management, harbor development
Norwalk Harbor Management Commission	Harbor management, harbor development
Mayor's Water Quality Committee & Norwalk Shellfish Commission	Water quality, commercial uses
Norwalk Marine Police Unit & Norwalk Marine Fire Unit	Recreational uses, public access
Norwalk Department of Recreation & Parks, Water Pollution Control Authority, Department of Health & Department of Public Works	Water quality
Environmental Non-Profits	Water quality, public access
Devine Brothers, Crystal Ice, King Industries, etc.	Water-dependent industrial uses
Oyster industry (e.g., Copps Island Oysters)	Aquaculture industry
Boat Club (e.g., Sprite Island Yacht Club) or Rowing Club (e.g., Maritime Rowing Club)	Boating industry

Round One (February/March) Interview Agenda

The Team expects to facilitate interviews with at minimum two team members—a facilitator and a notetaker—and the interview stakeholder. Interviews will take place via Zoom or in-person and should not exceed 1 hour. At least 24 hours prior to each interview, Indigo River will email participants an agenda.

- **Introductions (10 min)**
- **Project Overview (15 min)**
- **Q+A on baseline Harbor conditions and opportunities (30 min)**

- **Conclusion (5 min)**

Round Two (May) Interview Agenda

- **Introductions (5 min)**
- **Overview of Findings from Work to Date (25 min)**
    - **Baseline conditions analysis**
    - **Industrial analysis**
    - **Focus Groups**
- **Group Discussion on Findings (25 min)**
- **Conclusion (5 min)**

Round Three (August/September) Interview Agenda

- **Introductions (5 min)**
- **Overview of Preliminary Recommendations (25 min)**
    - **Industrial analysis**
    - **Management strategy**
    - **Funding opportunities**
    - **Harbor enhancement and development**
- **Group Discussion and Feedback on Preliminary Recommendations (25 min)**
- **Conclusion (5 min)**

Steering Committee Details

The Strategic Harbor Study Steering Committee consists of local representatives, including the City of Norwalk, Harbor Management Commission, and recreational, commercial, and industrial businesses. The Team will meet with the Committee on a monthly basis to share work and receive feedback. The Committee will hold the Team accountable to producing a Study that aligns with the stated goals of the RFP. Below is the list of Steering Committee members.

Steering Committee Members

Member Name	Member Association
Steve Kleppin	City of Norwalk
Amelia Williams	City of Norwalk
Robert Stowers	City of Norwalk
Alan Kibbe	Harbor Management Commission
Chris MacDonnell	Harbor Management Commission
Jeff Mangels	Harbor Management Commission
Matt Gifford	Harbor Management Commission + Sprite Yacht Club
Steve Bartush	Shellfish Commission
Roman Vengerovskiy and Sharon Kriz	Maritime Rowing Club
Jason Paltis	Maritime Aquarium
Jerry Toni	Seaport Association
Norm Bloom	Copps Island Oysters
Kelly Bloom	Copps Island Oysters
Gary Wetmore	Marine Services
Dick Harris	Water Quality

Focus Group Working Questions

Norwalk Residents and Avid Harbor Users

- How do you think the area around the Harbor has changed in recent years demographically and economically? What are the factors driving that change?
- What recreational uses of the Harbor are thriving? What is struggling?
- What is your experience with public access of the harbor? What are the barriers to increasing access?
- What are the community's biggest unknowns and concerns regarding planning efforts for the Harbor?

Harbor Workers

- How do you think the area around the Harbor has changed in recent years in terms of economic opportunity? What are the factors driving that change?
- Are there particular industries that are thriving or struggling from the perspective of attracting workers? Are there specific skills and/or educational barriers preventing workers from accessing the jobs available?
- What are other big, up-and-coming economic opportunities on your radar? Are there gaps that local workers need to overcome to access these opportunities?
- What recreational, commercial, and/or industrial businesses of the Harbor are thriving? What is struggling?

Harbor Business Owners

- How do you think the area around the Harbor has changed in recent years in terms of recreational, commercial and industrial uses? What are the factors driving that change?
- What are the specific challenges and needs for recreational and transient boating, aquaculture and fisheries, and industrial water-dependent businesses?
- Are there any challenges your business faces in terms of attracting skilled workers?
- How is water quality affecting current Harbor uses?
- How is the current state of public access affecting business health?

Strategic Harbor Study Steering Committee – Introductory

Meeting Monday, February 24, 2025 6:00 PM

Attendees:

Indigo River Team:

- Shea Thorvaldsen, Laura Kenny, Alix Pauchet

HR&A:

- Anna Messer

Steering Committee Members:

- Steve Kleppin – City of Norwalk
- Amelia Williams – City of Norwalk
- Robert Stowers – City of Norwalk
- Alan Kibbe – Chair, Norwalk Harbor Management Commission
- Chris MacDonnell – Harbor Management Commission
- Jeff Mangels – Vice Chair, Norwalk Harbor Management Commission
- Matt Gifford – Norwalk Harbor Management Commission + Sprite Yacht Club
- Jerry Toni – Executive Director, Norwalk Seaport Association
- Norman Bloom – Copps Island Oysters
- Gary Wetmore – Marine Services
- Jason Patlis – Maritime Aquarium

Meeting Summary

1. Project Overview – Indigo River

- The Waterfront Industrial Study focuses on in-water activity.
- IR will review existing studies and conduct an audit on current harbor uses and share findings by the end of March. This audit will include physical and economic analyses

2. Defining Water-Dependent Uses

- The Steering Committee is needed to help define water-dependent uses to guide HR&A's study.
- A memo on water-dependent uses was shared; feedback is requested within a week.
- Zoning & NAICS Code Considerations
    - Chris MacDonnell emphasized the importance of Marine Commercial Zoning in the updated code.
    - NAICS Codes will be used to classify harbor-related businesses at a six-digit specificity for accurate data analysis.
    - Jerry Toni asked about zoning implications—IR confirmed this study may recommend additional harborside use opportunities which could be incorporated into future zoning re-writes but this study is not a zoning re-write.
    - Jason Patlis noted missing environmental and educational jobs in NAICS classifications—these will be included in future iterations. Examples include conservation biologists and environmental educators, specifically in coastal policy.

    - Alan Kibbe highlighted the historical shift in Norwalk's harbor and the opportunity to repurpose underutilized infrastructure like Manresa Island.

4. Stakeholder Interviews & Public Comments

- Steering Committee members will assist with community outreach by providing feedback on existing materials based on their own expertise and sitting in on interviews in relevant scenarios.

5. Open Discussion

- Chris MacDonnell will share past Port Authority grant materials on Street Ends Study to avoid duplicating efforts.
- No additional public comments.

Next Steps

- Indigo River to send a poll for recurring Steering Committee meetings.
- Committee members to review the memo shared by HR&A and submit feedback within a week.
- Chris MacDonnell to share relevant materials through Amelia.

Meeting Notes: Norwalk Strategic Harbor Study - Stakeholder Committee
Meeting Date: March 18, 2025
Time: 1:00 PM

Attendees:

- Indigo River: Annie Boggs, Alix Pauchet, Athena Unroe
- HR&A Advisors: Anna Messer, Erman Eruz
- City of Norwalk: Steven Kleppin (Amelia Williams absent due to jury duty)
- Stakeholders: Representatives from Norwalk Police Marine Unit, Harbor Management Commission, Sustainability Office, Oyster Industry, King Industries, Harbor Master, Army Corps of Engineers, Save the Sound, Harbor Watch, and Norwalk Parks Dept.

1. Purpose of Meeting

- First stakeholder meeting for the Norwalk Strategic Harbor Study, led by Indigo River in collaboration with HR&A Advisors and the City of Norwalk.
- Establish baseline conditions, gather input on harbor use, and identify key challenges and opportunities.
- Engage key stakeholders to ensure the Study reflects both commercial and recreational needs of the harbor.

2. Project Overview & Timeline

- Goals: Improve harbor functionality, enhance economic impact, optimize public access, expand tourism, and activate underutilized spaces.
- Phases of Work:
    - Task 1 (Ongoing): Audit of current harbor uses, including employment and industry trends, infrastructure conditions, and economic activity.
    - Task 2: Develop recommendations based on stakeholder input and best practices.
    - Task 3: Stakeholder engagement through committee meetings, focus groups, and public forums.
    - Task 4 & 5: Studies on city-owned sites and mooring infrastructure to support harbor use and management.
- Engagement Plan:
    - April: Focus groups with harbor users, residents, and businesses.
    - May: Stakeholder follow-up meeting to review findings and preliminary recommendations.
    - August/September: Final review of recommendations and Study completion.

3. Key Discussion Points

Employment & Industry Trends

- Healthcare & Education: Comprise approximately 1/3 of jobs in the harbor area, likely due to Maritime Aquarium, a new elementary school, and expanded medical offices.
- Administration & Waste Management: Notable increase in employment, potential connections to harbor-related operations, but requires further analysis.

- Fishing & Aquaculture: Shellfishing industry is significant, with year-round operations, but commercial fishing presence is minimal. Employment data may underrepresent the sector.
- Dredging & Mooring: Shallow waters hinder mooring capacity and economic activity. Federal dredging data is limited, though a local survey identified needs for additional dredging outside the federal channel.

Public Access & Infrastructure

- Gaps in Public Access:
    - Street-end access in East Norwalk (1st, 2nd, 5th St.), Harbor View, and Village Creek missing from public records.
    - Oyster Shell Park: Planned kayak access not implemented.
    - Woodward Ave. Park: Wetland access limited due to overgrowth of phragmites.
    - Fitch Point (Seaside Place): Previously public, now gated off, raising concerns about lost community access.
    - Norwalk Islands: City-owned campsites exist but need significant repairs and maintenance.
- Waterfront Businesses: Many marinas, oyster farms, and waterfront restaurants offer informal public access and contribute to harbor activity.
- Obsolete Infrastructure: Some docks, piers, and access points require rehabilitation or better signage to ensure usability.

Challenges & Opportunities

- Limited kayak and small boat launch sites, despite strong community demand.
- Coastal erosion & extreme weather impacts require long-term resilience planning and infrastructure adaptation.
- Declining commercial waterfront activity presents an opportunity for expanded recreational boating, tourism, and public waterfront spaces.
- Mooring field underutilization due to shallow depths. Limited anchorage for mid-to-large-sized vessels.
- Eco-tourism potential (e.g., Sheffield Island Lighthouse tours, Maritime Aquarium programs, and expanded harbor tours).
- Manresa Island redevelopment represents a major opportunity for public waterfront access and green space.
- Comparison with best practices from other waterfront communities (e.g., Northport, NY) to identify successful models of waterfront activation.

4. Additional Stakeholder Feedback

- Harbor Tour Opportunity: Deputy Harbormaster Owen Lee offered to take the project team on a Norwalk Marine Police vessel tour of the harbor to provide a firsthand understanding of site conditions.
- Refinement of Harbor Use Maps: Stakeholders noted that marinas in Norwalk are commercial businesses but primarily serve recreational vessels. Future mapping efforts should distinguish between commercial marina operations and the number of recreational vessels supported, including those in slip versus rack storage.
- Marina & Marine Business Engagement: Stakeholders suggested incorporating insights from:
    - Cove Marina (largest marine in Norwalk)

Norwalk Harbor Strategic Study

Recreational Harbor Users Focus Group – Compiled Notes:

Focus Group 1: May 20, 2025, 1:00PM-2:00PM
In Attendance: Matt Gifford, Jim Cooper, Sue Powers
Focus Group 2: May 28, 2025, 5:00PM-6:00PM
In Attendance: Sue Powers, Brad Craighead, Tracy Craighead

Takeaways

1. Access & Equity

- There is a strong desire for equitable, safe, and affordable access to the harbor for all residents, including those who don't own boats.
- Public access points are limited, especially for residents living in neighborhoods like South Norwalk.
- Several participants emphasized a lack of ADA-compliant infrastructure and poor sidewalk and bike access to the water.
- Participants expressed that water-based recreation is often perceived as elite; there is a desire to democratize access for a wider range of residents.

2. Infrastructure & Maintenance

- Multiple docks, piers, and access points are in disrepair or underutilized, with specific concern for long-standing neglect at rowing and public launch facilities.
- Suggestions included better signage, lighting, maintenance, and restroom access at key sites.
- The need for a harbor-wide maintenance strategy was raised, including dredging coordination and bulkhead repair.

3. Recreation & Programming

- Participants advocated for expanded programming (kayak rentals, environmental education, boat tours) to draw broader community engagement.
- There was support for the idea of a water taxi service that would help connect harbor users and residents. Some community members also expressed interest in paddle share or rental programs similar to bike share models.
- Highlighted the importance of youth programming, swimming instruction, and field trip opportunities to increase familiarity and comfort with the water.
- Importance of closing gaps in the Norwalk River Valley Trail, so there is a connecting walkway all the way along the river.

4. Environmental Concerns

- Strong concern for water quality, particularly after rainstorms due to combined sewer overflows and stormwater runoff, particularly along the river.
- Participants mentioned the presence of trash and oil slicks, and expressed frustration with limited enforcement around polluting boats.
- Advocated for ongoing monitoring, education, and stewardship, especially through partnerships with local environmental organizations.

5. Coordination & Communication

- There was a repeated call for greater transparency and coordination among harbor stakeholders—e.g., NHMC, city departments, private marina operators.

- Suggested the creation of a “Harbor User Group” or shared calendar to align events, maintenance schedules, and dredging efforts.
- Some confusion remains over which city departments are responsible for specific harbor functions.

Business Owner Focus Group One Summary

Attendees:

- Norwalk Cove Marina – Mike Garvey, Jon Wilkins, Rob Gardella
- G&C Marine Servies – Gary Wetmore
- O&G Industries – TJ Oneglia, Richard Warren
- Maritime Aquarium – Jason Patlis
- King industries – Robert King

Takeaways

1. **The Harbor's Water-Dependent Industry is Essential and Vulnerable**
    a. O&G, Gary Wetmore, and Norwalk Cove emphasized that water-dependent businesses are vital to Norwalk's economy and infrastructure.
    b. These businesses rely on barge access, contractor yards, and marine infrastructure to deliver services that support both commercial and recreational waterfront uses.
    c. Gary's marine construction company is at risk of closure due to the loss of leased yard space to condo development.
2. **Loss of Industrial Space = Loss of Services**
    a. Condos, rowing clubs, and recreational development are replacing industrial uses, often without consideration for the services that support them (e.g., dock maintenance, barge deliveries, marine repairs).
    b. If local businesses like Gary's close, prices for marine construction and maintenance will rise, and services will have to come from outside the region (e.g., New York), increasing costs and emissions.
    c. Maintaining dredging and harbor access is critical for all users (O&G does this at the top of the Harbor and the marinas benefit).
    d. Tourism and recreation depend on a healthy, functional waterfront—boats, marinas, and access to the islands. These uses are interdependent with industrial services that maintain infrastructure and ensure safety.
3. **Infrastructure & Material Supply Chain**
    a. Barge transport is the most efficient, cost-effective, and environmentally friendly way to bring in construction materials like sand, stone, and asphalt.
    b. Loss of the local asphalt plant and lack of local quarries mean materials must come from farther away, increasing truck traffic on I-95, emissions, and costs.
4. **Workforce Development & Retention**
    a. There is a shortage of skilled tradespeople (carpenters, electricians, marine techs), and businesses are struggling to find and retain qualified workers.
    b. A barrier to attracting qualified workers is housing affordability and cost of living.
    c. There are some career exposure programs, such as the maritime pathways program at the aquarium, but connections between these programs and the businesses does not exist.
5. **Business Ecosystem and Policy Disconnect**
    a. Stakeholders feel that zoning and planning decisions celebrate Norwalk's industrial past but fail to protect its industrial future.
    b. There's a disconnect between recreational development and the services that support it—without marine contractors, dredging, and barge access, the waterfront cannot function.

        - G&C Marine (Marine Construction company)
        - Additional local marinas, business owners, and other harbor users to further refine the Strategic Harbor Study.
- Expanding Comparative Research: Stakeholders recommended visiting other harbors with similar characteristics to Norwalk's but with different development approaches. Northport, NY, was suggested as a useful case study.

5. Next Steps

- Refining public access maps based on stakeholder feedback.
- Engagement with additional stakeholders (Cove Marina, G&C Marine) for further insights.
- April: Conduct focus groups with residents, businesses, and recreational harbor users.
- May: Stakeholder committee follow-up meeting to review findings and preliminary recommendations.
- Ongoing: Collaboration with CT DEEP, Harbor Watch, Norwalk River Watershed Association, and other key organizations to align harbor planning efforts.
- Exploring models from other Long Island Sound communities to inform final recommendations.
- Coordination of Harbor Tour: the project team will reach out to Owen Lee to schedule the harbor tour.

Comments on the Strategic Harbor Study
October 10, 2025
Comments prepared by Jason Patlis, Sarah Crosby, Nicole Rosenfeld

DRAFT MOORING STUDY (August 5, 2025 Version) Comments
Specific Comments:

- Page 1: With regards to the framing and description of the intent here: The City is "*interested in expanding access to the waterfront through public mooring fields*…" Mooring fields do not necessarily expand access to the waterfront. To own a boat that would make use of these mooring fields presumably requires existing waterfront access elsewhere.
- Page 3: Is New York Harbor a reasonable proxy for Norwalk Harbor in terms of boat wake? Some areas of the proposed mooring fields will experience significant boat wakes regularly.
- Page 13: This is critical: "Access to parking and/or biking and walking paths, including activating underutilized street ends." There is an opportunity here to serve more residents, not only those with the means to own a boat.
- Page 13: Agree with "mandatory" designation of requirement for addition of more pump out boats (Norwalk Harbor water quality remains impaired and sewage pollution prevention should be a priority)
- Page 25: Additional water taxi locations to serve neighborhoods, Washington Street business, the Aquarium, Oyster Shell Park, Wall Street, etc. should be considered, which would serve the dual purpose of providing mooring access *and* expanding waterfront access to all residents (not just those who already have access to the Sound by virtue of owning a boat)

General Comments:

- The Aquarium partnered with the City on a feasibility study for shoreline restoration at Veterans Memorial Park, and a broader analysis of potential changes to the park is under way; we request that the City prioritize the ecological and community benefits planned through that restoration planning (already underway) should a water taxi station at Vets Park be included in service of the mooring fields.
- The Study should consider the recent trend toward converting working waterfront to residential, which may serve to erode the network of businesses and infrastructure that allow for a thriving boating community and vessel-based industry/blue economy.
- Potential impact on commercial shellfishing industry and recreational shellfishing are not adequately addressed by this report and must be considered due to their economic, social, and historical importance in Norwalk.
- What is the current use of the proposed sites for additional moorings? What are the ecological, social, and economic considerations?
- Protection of the unique ecology of the Norwalk Islands should be given far more consideration in this decision-making process than is reflected in this report. Would this reduce damage from anchors OR increase visitation overall, thus promoting a net increase in habitat destruction? The Norwalk Islands have been found to be critical bird habitat by our partners at Audubon; how will increased boat traffic

and increased human presence impact the ecological function of the islands near the mooring fields? The islands are also known resting areas for Harbor Seals and other fauna, which are disrupted by boats even at distance; how will negative impacts on these species be prevented? We express particular concern about Chimon and Shea.

- How will these mooring areas impact vessel traffic overall and the flow of vessel traffic; the Harbor is already dangerous to navigate due to the abundance of rowers (rowing clubs are not addressed in this report). How will potentially dangerous conflicts be prevented or mitigated?
- Expanding the mooring fields and encouraging more boaters and traffic is in potential conflict with a goal identified in the strategic documents of supporting more kayak and SUP usage due to increasing demand. When these are launched, due to the shape of the harbor and its two primary channels, if kayakers and SUPers are headed toward the islands they will inevitably need to cross a main channel. Higher volume of boat use can pose safety challenges, with increased risk of collisions. Perhaps having a kayak/SUP "trail" could encourage use of those personal watercraft in particular areas that could be identified to boaters.
- The Study should consider currents, particularly after our now-regular storms where we can experience multiple inches of rain in a few hours.
- The Study should consider the potential opportunity for a mooring field for transient visitors at Manresa Island.

City Owned Street Ends Comments (Task 2.4, August 2025 Version)

- This is a commendable effort well aligned with TMA's strategic plan. I am pleased to see the care taken to consider both ecological and social factors. There is a great opportunity here for shoreline restoration and multi-use living shorelines; we would welcome the opportunity to partner with the City on these efforts. There may be an opportunity for partnership on the interpretive signage proposed for the priority sites as well as habitat restoration.
- The City's goals and prospective plans as described are well aligned with the goals of the Long Island Sound Partnership, which oversees multiple federal funding programs that would seem a likely good fit for this work.

Strategic Harbor Study (Task 2.3, September 2025 Version)

- No comments on this

Park Norwalk
P: 203-831-9063
Maritime Garage
11 N. Water St
Norwalk, CT 06854

TO: **Economic and Community Development Committee**

FROM: Bryan Lutz – Assistant Director of Parking
James Travers – Director of Transportation, Mobility and Parking

CC: Jay Habanksy -Chief of Economic and Community Development
Sabrina Godeski -Director of Economic and Community Development
Alex Cross -Business Development Manager
Christopher McCauley -Purchasing Officer

REF: July 6, 2026 Special Meeting Agenda Item –NPA2026-02, Repairs and Improvements at Yankee Doodle Garage.

DATE: June 25, 2026

Memorandum

Background:

Park Norwalk has prepared the documentation necessary to award NPA2026-02, the next phase of concrete and structural repairs at the Yankee Doodle Garage. In coordination with the City's Purchasing Department, the project was publicly advertised and competitively bid. A bid opening was held on April 2, 2026, and after evaluating all submissions, staff recommended awarding the contract to Frank Capasso & Sons, Inc.

This recommendation was presented to the Park Norwalk Board at its June 24, 2026 meeting, where it was unanimously approved. The project will be funded through Park Norwalk capital funds.

As parking activity in the Wall Street District continues to rise-particularly during midday and evening peak periods-completing this structural phase now will minimize operational impacts and ensure the garage remains fully available as demand becomes more consistently high.

Project Scope

NPA2026-02 represents the structural repair and improvement phase of the Yankee Doodle Garage enhancement program. The work includes partial-depth and full-depth concrete repairs, overhead and vertical concrete restoration, and replacement of deteriorated curbs and accessibility ramps. The project also includes required safety controls, mobilization, and bonding.

The scope also includes the application of a new waterproof sealant system to protect repaired concrete surfaces, reduce water infiltration, and slow future deterioration.

In addition to structural repairs, the project includes ADA-related improvements to designated accessible parking stalls, incorporated as part of the concrete and ramp reconstruction work.

These repairs address active areas of deterioration and are necessary to restore structural integrity, improve accessibility, protect the garage from moisture-related damage, and extend its service life.

Request

Park Norwalk respectfully requests that the following items be added to the agenda for the July 6, 2026 Special Meeting for the Economic and Community Development Committee of the City Council.

Authorization for Contract Execution
Authorize the Mayor, Barbara C. Smyth to execute a contract agreement with Frank Capasso & Sons, Inc. in the amount of $2,777,000 for project NPA2026-02, Repairs and Improvements at Yankee Doodle Garage.

Authorization for Contingency Authority
Authorize the Director of Transportation, Mobility, and Parking, James Travers to execute change orders and modify the contract with Frank Capasso & Sons, Inc. up to $277,700 (10%) for contingencies with project NPA2026-02: Repairs and Improvements at Yankee Doodle Garage.

Account Numbers:

- 0920 4095 5777 C0303
- 0921 4095 5777 C0303
- 0923 4095 577 7 C0303
- 0926 4095 5777 C0303
- 0927 4095 5777 C0303

AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:
(Name, legal status and address)
Frank Capasso & Sons, Inc.
1011 Middletown Avenue
Northford, CT 06472

SURETY:
(Name, legal status and principal place of business) Nationwide Mutual Insurance Company
One W Nationwide Blvd 1-14-301
Columbus, OH 43215

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:
(Name, legal status and address)
City of Norwalk
125 East Avenue
Norwalk, 06851

BOND AMOUNT: TEN PERCENT OF AMOUNT BID (10% OF BID)

PROJECT:
(Name, location or address, and Project number, if any)
NPA2026-2; Repairs and Improvements at Yankee Doodle Garage

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 31st day of March, 2026

(Witness)

(Witness) Steven M. Hardy

Frank Capasso & Sons, Inc.
(Contractor as Principal) *(Seal)*

(Title) Anthony Capasso, Vice President

Nationwide Mutual Insurance Company
(Surety)

(Title) Jeffrey P. Deldin, Attorney-in-Fact

Init.
/

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ACD4307d810

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

Jeffrey P. Deldin

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of: **Unlimited**

Surety Bond Number: N/A- BID BOND
Principal: Frank Capasso & Sons, Inc.
Obligee : City of Norwalk

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 20th day of August, 2021.

Antonio C. Albanese, **Vice President** of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF NEW YORK COUNTY OF NEW YORK: ss
On this 20th day of August, 2021, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.

Stephanie Rubino McArthur
Notary Public, State of New York
No. 02MC6270117
Qualified in New York County
Commission Expires October 19, 2024

Notary Public
My Commission Expires
October 19, 2024

{Expiration of Notary Appointment does not invaildate this instrument}

CERTIFICATE

I, Laura B. Guy, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 31st day of March, 2026.

Assistant Secretary

BDJ 1(08-21)00

NATIONWIDE MUTUAL INSURANCE COMPANY AND SUBSIDIARIES AND AFFILIATES

Consolidated Statutory Statements of Admitted Assets, Liabilities and Surplus

(in millions)	December 31, 2024	2023
Admitted assets		
Invested assets		
Bonds	$ 20,744	$ 20,643
Stocks	11,138	9,812
Mortgage loans, net of allowance	1,771	1,816
Owner occupied real estate, at cost (less accumulated depreciation of $350 and $394 as of December 31, 2024 and 2023, respectively)	263	282
Cash, cash equivalents and short-term investments	134	510
Other invested assets	6,889	7,085
Total invested assets	$ 40,939	$ 40,148
Premiums in course of collection	4,069	4,501
Corporate-owned life insurance	1,655	1,600
Deferred federal income tax asset	1,690	1,926
Other assets	1,639	1,652
Total admitted assets	$ 49,992	$ 49,827
Liabilities and surplus		
Liabilities		
Losses and loss expense reserves	$ 16,890	$ 17,821
Unearned premiums	7,792	8,488
Accrued expenses and taxes, other than federal income taxes	657	725
Agents' security compensation plan reserve	637	723
Other liabilities	3,084	3,099
Total liabilities	$ 29,060	$ 30,856
Surplus		
Surplus notes, net of unamortized issue discount of $7 and $8 as of December 31, 2024 and 2023, respectively	$ 3,147	$ 3,546
Unassigned surplus	17,785	15,425
Total surplus	$ 20,932	$ 18,971
Total liabilities and surplus	$ 49,992	$ 49,827

See accompanying notes to the consolidated statutory financial statements.

Certification

I, Jamie Train, VP, Controller, do hereby certify that the foregoing is a true and correct statement of the statutory balance sheet of said Corporation as of December 31, 2024 and 2023 to the best of my knowledge and belief.

Jamie Train

Jamie Train

STATE OF OHIO
COUNTY OF FRANKLIN

Sworn to (or affirmed) and subscribed before me this 5th day of MAR, 2025 by JAMIE TRAIN

Notary Public's Signature

RYAN LAMB
Notary Name

Personally Known X OR
Type of Identification Produced

Ryan James Lamb
Notary Public, State of Ohio
Commission #: 2024-RE-883431
My Commission Expires 10-30-29

Acknowledgment by Corporation

STATE OF Connecticut

COUNTY OF New Haven

On this 31 day of March, 2026, before me personally appeared Anthony Capasso, to me known, who being by me duly sworn, did acknowledge and say that (s)he is the Vice President of Frank Capasso & Sons, Inc., the corporation that executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office in the above County, the day and year written above.

Elsie Santana
, Notary Public

State of CT
County of New Haven
My Commission Expires:

ELSIE SANTANA NOTARY PUBLIC REPUBLICÆ CONNECTICUTENSIS SIGILLUM MY COMM. EXP. 7/31/2030 STATE OF CONNECTICUT

Elsie Santana
NOTARY PUBLIC
State of Connecticut
My Commission Expires 7/31/2030

Acknowledgment by Surety

STATE OF New York

COUNTY OF Putnam

On this 31st day of March, 2026, before me personally appeared Jeffrey P. Deldin, to me known, who being by me duly sworn, did acknowledge and say that she is the Attorney-in-Fact of Nationwide Mutual Insurance Company, the corporation that executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office in the above County, the day and year written above.

, Notary Public

State of
County of
My Commission Expires:

CHRISTOPHER P. GREENE
Reg #01GR6110634
Notary Public, State of New York
Qualified in Putnam County
My Commission Expires 6/01/2028

CITY OF NORWALK
PURCHASING DEPARTMENT
BIDDER'S INFORMATION AND ACKNOWLEDGMENT FORM

FRANK CAPASSO & SONS, INC.
Bidder's Name

1011 MIDDLETOWN AVENUE
Street Address

NORTHFORD	CT	06472
City	State	Zip

Business Telephone: 203-234-2355

Email Address: mo@frankcapassosandsons.com

Anthony Capasso, Vice President
Printed Name and Title of Individual Submitting Bid

The undersigned acknowledges that the terms, conditions and specifications of this bid are understood and unconditionally accepted.

	3/31/2026
Anthony Capasso Signature Vice President	Date

CITY OF NORWALK
PURCHASING DEPARTMENT

Exceptions: Note any vendor(s) responding to this proposal shall indicate any/all exceptions (if any) taken to language in this proposal. BIDDERS MAY NOT TAKE EXCEPTION TO SUBSTANTIVE TERMS OF STANDARD CONTRACT FORMS PROVIDED IN THE RFP/RFQ/ITB. Exceptions must be declared below in order to be considered by the City:

NONE

CITY OF NORWALK
PURCHASING DEPARTMENT

1.1 RESPONSE FORM

Vendor Name - FRANK CAPASSO & SONS, INC.		
Address - 1011 MIDDLETOWN AVENUE, NORTHFORD, CT 06472		
Phone - 203-234-2355	**Fax -** 203-234-0031	**Email -** mcapfrankcapassoandsons.com
Manager - Anthony Capasso		**Fed ID#** 06-1303965

The undersigned hereby declares that they have carefully examined the plans, specifications and project site and has satisfied themselves as to all the quantities and conditions and understands that in signing this proposal they waives all right to plead any misunderstanding regarding the same.

The undersigned further understands and agrees that they will furnish and provide all the necessary material, machinery, implements, tools, labor, services, and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to carry out the contract and to accept in full compensation therefore the amount of the contract as agreed to by the Contractor and the City.

The undersigned further agrees, in case of variations of quantities from those shown or specified, the following unit prices will be used in adjusting the contract price. If quantities are authorized by the City, the following amount will be added to the contract as required. Unless otherwise noted, each UNIT PRICE shall include all equipment, tools, labor, permits, fees, etc., incidental to the installation and completion of the work involved.

It is further understood and agreed that all the information included in, and attached to, or required by the Request for Bid shall become public record upon delivery to the City.

1. The following prices shall apply to this project: **BELOW BID FORM**

BID FORM

REPAIRS & IMPROVEMENTS
AT THE
YANKEE DOODLE PARKING GARAGE

TRANSPORTATION, MOBILITY & PARKING
CITY OF NORWALK
NORWALK, CONNECTICUT

Frank Capasso & Sons, Inc.
BIDDER'S NAME

March 31, 2026
DATE

TO: **TRANSPORTATION, TRAFFIC & PARKING**
CITY OF NORWALK
125 East Avenue
Norwalk, CT 06851

The undersigned, having inspected the site and familiarized ourselves/myself with the local conditions affecting the cost of the work and the Bid Documents dated December 2025 as prepared by DESMAN and on file with the City of Norwalk, hereby propose to provide all labor, materials, tools, equipment and transportation necessary to complete the **Repairs and Improvements at the Yankee Doodle Parking Garage**, as defined in the Bid Documents for the Bid Price of:

Two Million Seven Hundred Seventy Seven Thousand ——— DOLLARS

($ 2,777,000.00).

This Bid Price shall include all charges such as overhead, profit, insurance, permits, etc.

Submitted herewith is the Bid Price Itemization including an amount for all project components required by the Bid Documents. The sum of all listed components shall equal the Bid Price.

Submitted herewith are all the forms as listed in Section 5 of the Instructions to Bidders, in accordance with these Instructions to Bidders.

We/I acknowledge that should conditions make it necessary to revise the scope of the project, the Bid Price Itemization shall serve as the basis for adjustments to the Bid Price.

Note: Reference Technical Specification Section 013200, Measurement and Payment, Paragraph 1.03.D: No payment shall be made for stored materials or equipment. Payment shall be made only for materials and equipment in-place and accepted by Owner, less applicable retainage.

Frank Capasso & Sons Inc.
BIDDER'S NAME

REPAIRS & IMPROVEMENTS
AT THE
YANKEE DOODLE PARKING GARAGE

TRANSPORTATION, MOBILITY & PARKING
CITY OF NORWALK
NORWALK, CONNECTICUT

BID PRICE ITEMIZATION

Bid Item 1 - General Provisions:

A. General Mobilization/Demobilization:

This line item shall consists of all labor, materials, tools and equipment required for setting-up general plant, storage/staging areas and facilities required to facilitate construction or as otherwise required by applicable Federal, State and Local laws; and the general mobilization of equipment required for the completion of the work as shown within the Bid Documents and all expenses for de-mobilization off the site upon completion of all work as shown within the Bid Documents.

Electricity (power) and water required for the completion of the work shall be furnished by the Owner at existing fixtures or outlets (The Owner will not provide any temporary pipes, cables, etc.). If the capacity of existing utilities is insufficient for the contractor's use, the Contractor shall be responsible for supplementing this capacity as required at no cost to the Owner. The contractor shall provide temporary lighting within designated work areas, as required.

The Contractor shall furnish, install, maintain, relocate and remove all signs, barricades, cones, warning lights, and other safety control devices and temporary signage required for the proper execution of the project. The Engineer and the Owner shall review the safety control device placement before work begins and prior to the beginning of work on any subsequent construction stages. Any deficiencies in the location or arrangement of devices shall be corrected by the contractor before starting work or as the work progresses towards completion. **Contractor shall note that while this Bid Item 1.A shall include the procurement and installation of all applicable safety & traffic control devices (i.e. barricades, etc.) as well as the coordination and installation of temporary signage, the material procurement of the temporary signage shall be included in Bid Item 8.**

The Contractor shall provide and maintain adequate protection of all preexisting architectural, structural mechanical, electrical, plumbing components and/or features within the confines of in the work areas that are to remain in-place. The work shall include the dismantling of any preexisting architectural, structural, mechanical, electrical, plumbing components and/or features within the confines of in the work areas which might be required in order to perform the work specified. The temporarily dismantled installations shall be reinstalled as soon as possible to a condition equal to or better than the condition existing prior to the commencement of construction.

Work shall also include the provision of an effective ventilation system to safely remove all dust and hazardous fumes generated from demolition and any surface treatment applications. Contractor shall be required to remove any and all loose/spalled overhead or vertical concrete from the structure (concrete framing elements or deck) prior to the start of any demolition activities to prevent any deteriorated

concrete from being jarred loose in an uncontrolled fashion. Contractor shall be required to coordinate all aspects of his work with management and operations staff as well as facility security personal throughout construction.

The contractor shall submit to the Owner/Engineer documentation of all pre-existing non-functioning electrical/mechanical systems within the entire work area. This documentation should be based on the contractor's condition survey performed immediately prior to the scheduled mobilization. The contractor shall not start the mobilization until the Owner approves of this submittal.

This work consists of items not otherwise specifically indicated or shown on the plans but which are ancillary to the specified scope of work being performed, or part of the overall Scope of Work or otherwise not noted or assigned to other Bid Items.

Contractor shall note that payment for this item shall be distributed in proportion to the total amount of all contract work complete in place unless otherwise approved in writing by the Owner.

Lump Sum = $ 56,400.00

B. Provision of Bonds, Permits, and Insurance.

Work shall consist of the costs associated with the procurement of all bonds, permits, and insurance necessary for this project. Provision of bonds shall include, but not be limited to, Labor & Material Bonds, Performance Bonds, etc. It shall be the contractor's sole responsibility to obtain all necessary permits to perform the work.

Lump Sum = $ 28,500

SUB-TOTAL BID ITEM 1: = $ 84,900.00

Bid Item 2 - Concrete Repair Work:

A. Partial Depth Concrete Repair:

Work shall consist of the partial-depth repair of spalled/delaminated concrete throughout the parking garage. Work shall include marking out all areas of repair for review by Engineer prior to commencement of demolition activities, saw-cutting around repair areas, partial depth removal of all delaminated/spalled concrete, debris removal, preparation of concrete substrate, sandblasting clean all exposed reinforcing steel, placement of concrete repair material, tooling and sealing of all control/construction joints, as well as cove joints that may surround the applicable repair area, finishing and curing along with all other work required for the satisfactory performance of this work item.

Frank Capasso & Sons, Inc.
BIDDER'S NAME

Contractor shall perform a chain-drag survey of the garage in its entirety, prior to start of work; Contractor shall provide scaled field notes depicting the locations of all anticipated repair work for review and verification by the Engineer.

Contractor shall note that the provision of and placement of new and/or supplemental reinforcing steel which is required or as otherwise directed to be performed by the Engineer shall be considered as being included within this item of work

Prior to start of demolition affecting a work area, Contractor shall locate and identify all existing, embedded post-tension tendons, by appropriate methods (ground penetrating radar, or approved method), as approved by Engineer/Owner. Upon locating the tendons, Contractor shall mark the locations for verification by the Engineer; Contractor shall note that the location work shall coincide with the anticipated demolition work and that location work shall not be necessary where demolition is not anticipated to occur. Demolition activities, as required for designated concrete repairs, shall not be started until locations of tendons have been verified by the Engineer.

If demolition activities are started before Engineer verifies the located tendons as identified by the Contractor, Contractor shall proceed at Contractor's own risk. Should post-tension tendons be damaged (or any other applicable unforeseen conditions arise) while Contractor is performing at Contractor's own risk, then Contractor shall repair all damaged tendons or perform other applicable work (inclusive of any costs associated with provision of shoring, traffic control, etc.) at no additional cost to Owner.

Contractor shall note that should the depth of the repair work prompt a full-depth approach to the repair, Contractor shall review and coordinate with the Engineer. As directed by the Engineer, Contractor shall combine the partial-depth repair with Bid Item 2.B for the balance of the depth, resulting in a full-depth repair.

1. Chain-drag of floor surfaces throughout garage,

   Lump Sum = $ 5,000.00

2. Locating and Identifying all Embedded Post-Tension Tendons, prior to start of demolition activities:

   35,000 SF @ .25 /SF = $ 8,750.00

3. Performance of Partial-Depth Concrete Repairs:

   35,000 SF @ 21.50 /SF = $ 752,500.00

B. Miscellaneous Overhead and Vertical Concrete Repair:

Work shall include repair of miscellaneous vertical and overhead concrete areas throughout the garage. Work shall include marking out all areas of repair for review by Engineer prior to commencement of demolition activities, removal of all delaminated/spalled concrete by approved methods, debris removal, preparation of concrete substrate, sandblasting clean all exposed reinforcing steel, placement of polymer-modified concrete repair mortar, finishing and curing, along

with all other work required for the satisfactory performance of this work item, including, but not limited to, application of architectural coatings to match existing surface treatment and colors; Contractor shall note that the existing coating system on the soffit of the first supported slab (i.e. the ceiling of the ground level) consists of Loxon XP Waterproofing Masonry Coating, as manufactured by Sherwin Williams.

5,000 SF @ 68.00 /SF = $ 340,000.00

C. Miscellaneous Concrete Curb Repair:

Work shall include the repair of selected concrete curb locations throughout the garage. Work to consist of marking out repair areas for review by the Engineer prior to demolition, concrete removal by approved method, surface preparation, debris removal, placement of approved polymer modified concrete repair mortar, finishing and curing, tooling and sealing of all applicable control/construction/cove joints, along with all other work required for the satisfactory performance of this work item.

Contractor shall note that all sealant work shall consist of the installation of non-sag polyurethane sealant (use of self-leveling polyurethane sealant shall be prohibited) and shall be incidental to the concrete repairs.

Contractor shall note that Work shall also include the installation of new handicap ramps at designated locations, including the placement and installation of applicable tactile warning devices. Contractor shall verify the extent of work with the Engineer prior to start of work.

1. Curb Repair:

1,200 SF @ 50.00 /SF = $ 60,000.00

2. Installation of New Detectable Warning Surface.

7 EA @ 485.00 /EA = $ 3,395.00

D. Post Tensioning Tendon Repair:

This work is indeterminate at this time, and shall only be performed as directed by the Engineer as conditions warrant. In the performance of partial depth concrete repairs it is possible that repairs to post tensioning tendons and/or their anchorages may be identified which will need to be addressed, as directed by the Engineer.

Depending on the conditions identified during the implementation of the partial depth concrete deck repairs, Work shall include the provision and installation of required materials for review and approval by the Owner/Engineer. Work shall be performed as a draw on the associated unit pricing:

Frank Capasso & Sons, Inc.
BIDDER'S NAME

1. Installation of Twisted Ring Anchors (Dog Bones):

30 EA @ 2,030.00 /EA = $ 60,900.00

2. Installation of Splices and Couplers:

60 EA @ 1,000.00 /EA = $ 60,000.00

3. Installation/Replacement of End Anchors:

30 EA @ 1,815.00 /EA = $ 54,450.00

4. Installation of Tendon/Cable:

2,000 LF @ 13.65 /LF = $ 27,300.00

5. Mobilization/Demobilization of P.T. Repair Vendor (assumed sub-contractor)

4 EA @ 5,075.00 /EA = $ 20,300.00

E. Miscellaneous Concrete Repair throughout the Stairs:

Work shall include the miscellaneous tread/landing repair, typically related to the Stair/Elevator Towers and Lobbies. Work shall consist of marking out all deteriorated concrete which needs to be repaired for review by Engineer, removal of failed material and the preparation of concrete/metal substrate per manufacturer's application procedures as approved by the Engineer, followed by the installation of a polymer-modified concrete repair mortar as specified by the manufacturer as approved by the Engineer finishing and curing, tooling and sealing of all applicable control/construction/cove joints, along with all other work required for the satisfactory performance of this work item. including, but not limited to, application of architectural coatings to match existing surface treatment and colors.

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500 SF @ 50.00 /SF = $ 25,000.00

F. Miscellaneous Bituminous Concrete (Asphalt) Repair and Surface Treatment:

This work shall include the furnishing of all labor, materials, equipment, supervision and incidentals necessary to repair/replace the bituminous concrete (asphalt) pavement as required, following the performance of other related work. Work shall include marking out all areas of repair for review by Engineer prior to commencement of demolition activities, saw-cutting around the areas, removal of all designated asphalt, debris removal, preparation of substrate and provision of compacted fill as required, placement of asphalt pavement material, provision of bituminous sealer and tack coat, along with all other work required for the satisfactory performance of this work item. The Contractor shall provide a 5-year warranty for all quality workmanship and materials.

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BIDDER'S NAME

Following completion of "spot" repair, work shall include the furnishing of all labor, materials, equipment, supervision and incidentals necessary to treat all remaining cracking, throughout the ground level of the garage, followed by the application of asphalt sealer throughout the ground level in its entirety, all in accordance with applicable municipal specifications as approved by Owner/Engineer, along with all other work required for the satisfactory performance of this work item.

1. "Spot" Repair of Bituminous Asphalt,

500 SF @ 25.00 /SF = $ 12,500.00

2. Treatment of Cracks and Application of Sealer to Grund Level in its entirety.

Lump Sum = $ 28,600.00

SUB-TOTAL BID ITEM 2: = $ 1,458,615.00

Bid Item 3 – Exterior Masonry Repair Work:

Work shall consist of miscellaneous masonry repairs throughout the exterior of the garage. Work shall include the Contractor coordinating with applicable parties to access and properly identify the scope of the work required, following a visual survey of the exterior of the garage to identify all potential work, typically consisting of re-pointing of existing mortar joints that are deteriorated or damaged, and replacement of deteriorated bricks with new bricks, all associated with the exterior of the garage, followed by the Contractor providing a written proposal for the required repairs for review and approval; Contractor shall note that a graphic of the elevations shall be provided along with the proposal, depicting the locations of the proposed work for review and approval.

New bricks and mortar shall match existing brick and mortar in composition, texture and color; prior to start of work, Contractor shall provide samples of the brick and mortar for review by the Owner/Engineer, and work shall not start until acceptable samples are provided. Contractor shall be responsible for providing all necessary equipment to access the upper reaches both for the survey and the repair work, as well as any necessary temporary removal of surface mounted items and reinstallation of such items.

Upon approval of Contractor's proposal by the owner; payment for this item of work shall be made on a time and material basis at cost plus 15% verified by appropriate backup documentation, or alternately by acceptable lump sum as approved by the Owner. If the work is performed by a subcontractor, the General Contractor will be allowed to add an additional 5% to the time and material costs of the subcontractor.

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1. Survey of the Exterior of the Garage; Provision of Report with Cost Proposal & Samples,

Lump Sum = $ 5,000.00

2. Allowance for Repairs to the Exterior

Allowance = **$30,000.00**

SUB-TOTAL BID ITEM 3: = $ 35,000.00

Bid Item 4 - Waterproofing Work:

A. Application of Corrosion Inhibitor

This work shall consist of the provision of all labor, material and equipment required for the surface preparation and installation of an approved topically applied corrosion inhibitor over designated areas of exposed supported concrete deck. Installation shall be performed by a manufacturer-certified installation contractor and shall be installed in strict accordance with manufacturer's installation instructions as approved by the Engineer.

Contractor shall be required to protect all adjoining surfaces and any vehicles which may be parked in close proximity to the areas where surface preparation work is being performed or corrosion inhibitor is being applied.

105,000 SF @ $ .68 /SF = $ 71,400.00

B. Waterproofing Membrane Repair/Recoat/Installation:

Work shall consist of the provision of all labor, material and equipment required for the repair/recoat and/or otherwise installation of a new waterproofing membrane system, throughout the parking garage, in accordance with the drawings and specifications.

Prior to start of Work, Contractor shall review all pre-existing waterproofing membrane with Engineer to determine the extent which may require repair. Contractor shall be responsible for verifying with membrane manufacturer the acceptability of any existing materials to remain and the new compatibility of materials and shall submit manufacturer's recommended preparation and application procedures to the Engineer for review and approval prior to the implementation of the repair. If the existing materials are not acceptable to remain, Work shall include the removal of any existing materials as required prior to installation of new materials. ***Contractor shall note that regardless of whether or not existing materials may be acceptable to remain, the final warranty provided upon close-out shall include proper bond and adhesion to the concrete substrate and not solely to the existing materials remaining.***

Traffic bearing waterproofing membrane installation shall be performed by a manufacturer-certified waterproof membrane installation contractor and shall be installed in strict accordance with manufacturer's installation instructions as approved by the Engineer.

Contractor shall note that application of the new traffic bearing membrane shall be based upon the horizontal projection of the work; all vertical surfaces shall be incidental to the work, and therefore, included in the Contract Price. Membrane shall turn up vertical surfaces (i.e. perimeter walls, columns, curbs, etc.) a minimum of 6"; Contractor shall coordinate all terminations in the field with the Engineer.

Contractor shall note that Work shall also consist of replacing all control/construction joint sealants as well as replacing all cove joint, all as required by the manufacturer or otherwise directed by the Engineer, as it becomes exposed during the work, for the subsequent installation of the new membrane; Contractor shall note, however, that where cove joints are found lacking (upon exposure), work shall include installation of new cove joint regardless. Joints shall be tooled and/or routed as necessary to provide the profile required for installation of an approved two-component polyurethane sealant material in strict accordance with manufacturer's recommendations as approved by the Engineer.

Contractor shall note that all sealant work shall consist of the installation of non-sag polyurethane sealant (use of self-leveling polyurethane sealant shall be prohibited) and shall be incidental to the installation of the membrane system.

Contractor shall note that, in addition to all warranty requirements noted in the applicable specification sections, Contractor shall also arrange for and/or provide for all snow removal services during the winter seasons for the duration of the warranty period; should any damage occur to the membrane system as a result of the snow removal services, the Contractor shall repair the membrane system at no cost to Owner.

105,000 SF @ 6.45 /SF = $ 677,250.00

C. Installation and Replacement of Expansion Joints

Work shall consist of the installation of new watertight expansion joint seals at existing locations and new locations, typically associated with the stairs, as shown on the Drawings and in accordance with the specifications. Work shall include the removal of existing expansion joint seals, concrete demolition/removal as required by approved methods, provision of new concrete blockout as depicted on the drawings, supplemental epoxy-coated reinforcing steel, tooling and sealing of all control/construction joints, as well as cove joints that may surround the applicable repair area, finishing and curing, installation of new expansion joint seals, as shown on drawings and in accordance with manufacturer's recommendations as approved by the Engineer, along with all other work required for the satisfactory performance of this work item. All transitions of expansion joint seal between vertical and horizontal shall be mitered in accordance with manufacturer's instructions and installation details as well as any bends, turns or vertical surface interfaces as approved by the Engineer.

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BIDDER'S NAME

The joint elements shall be a continuous, factory extruded unit for the entire straight run length of the joint, continuing through curbing as required. The seal element shall not be mitered/jointed. Changes in direction or elevation shall be accomplished by factory splicing and factory molded elbows, tees, crosses and the like, and shall not be performed in the field, unless approved by the Engineer. The seal shall be turned up a minimum of 6 inches (vertically) unless otherwise shown on plans.

Contractor shall note that work shall include all miscellaneous repair to existing portions of the blockouts, as may be required, to accommodate and receive the new glands.

1. Replacement/Installation of New Epoxy-Adhered, Air-Pressurized Neoprene Joint Seal in designated Horizontal Openings

Lump Sum = $ 17,750.00

2. Installation of New Pre-compressed Impregnated Foam Expansion Joint Seal in designated Vertical Openings,

Lump Sum = $ 9,500.00

D. Sealant Installation/Replacement throughout the Façade,

Work shall consist of the installation of new sealant throughout the façade. Work shall include the removal of existing materials as required, cleaning and prepping all substrates, installation of backer rod as required, installation of new non-sag, two-component polyurethane caulking material inclusive of, but not limited to, all vertical and horizontal joints related to the columns and stair/elevator towers, as well as other elements as may be required, such as the railings, fencing connections, stair tower curtainwall systems, along with all other work required for the satisfactory performance of this work item.

Contractor shall be responsible for reviewing existing conditions prior to start of work, and confirming the extent of work. Contractor shall note that details shown in the Contract Drawings are schematic-in-nature, and do not depict full field conditions and installation requirements, and therefore, additional sealant work, resulting from the Contractor's lack of reviewing and confirming the existing conditions prior to start of work, shall be performed at no additional cost to Owner. Contractor shall note that color of caulking shall match that of surrounding elements, as directed by the Owner/Engineer.

Lump Sum = $ 22,000.00

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BIDDER'S NAME

E. Wet-Sealing of Curtainwall/Storefront Windows

Work shall consist of the removal of all caulking from the windows throughout the stair/elevator storefronts (both interior and exterior surfaces of the storefront systems), and the installation of new caulking. Work shall include the removal of all existing caulking, cleaning of all debris and foreign materials, installation of a new non-sag, two-component, polyurethane caulking material along the perimeter of the windows, along with all other work required for the satisfactory performance of this work item. Contractor shall note that color of caulking shall match that of existing adjacent framing.

Lump Sum = $ 22,000.00

F. Replacement of Roof Systems, Stair/Elevator Towers

Work shall consist of the provision of all materials, labor and equipment required to install new roofing systems on the tops of the Stair and Stair/Elevator Towers, in their entirety. Work shall include review of existing conditions prior to start of work, removal of all existing materials including, but not limited to, grout and sealant, flashing materials, ballast materials, wood blocking and drainage components, as well as noted abandoned mechanical equipment, followed by the subsequent installation of all new materials and components for a complete roofing system, all in accordance with the manufacturer's recommendations and approved by the Engineer, along with all other work required for the satisfactory performance of the work.

Lump Sum = $ 103,950.00

SUB-TOTAL BID ITEM 4: = $ 923,850.00

Bid Item 5 - Finishes:

A. Striping/Application of Traffic Markings.

Work shall consist of re-striping all parking stalls, directional arrows, crosswalks, curbs, centerlines and other traffic markings located throughout the garage (both upper and lower levels), as well as applying designated new markings as directed by the Owner/Engineer. Contractor shall remove all existing markings (by method approved by the Engineer) that are in conflict with the new markings and as otherwise required by the manufacturer. Application of striping shall be performed to match existing conditions or as otherwise directed by the Engineer; Contractor shall note that handicap parking stalls are to be updated accordingly. Owner/Engineer shall be required to review striping layout prior to this work being performed.

Lump Sum = $ 18,745.00

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BIDDER'S NAME

B. Painting of Soffit of Parking Deck (ceiling of Ground Level).

Work shall consist of the painting of the soffit of the first supported parking deck (ceiling of the Ground level), following the completion of all other work. Work shall include surface preparation as required, followed by the painting of designated surfaces all as scheduled per the drawings and specifications. Coatings shall be compatible with the substrate encountered. Each coat application shall be contrasting color with final coat color as scheduled or as directed by the Owner/Engineer to be submitted for verification prior to application.

Contractor shall note that this Item of work pertains to the balance of the work not included in Item 2.B; Contractor shall note that the existing coating system on the soffit of the slab (i.e. the ceiling) consists of Loxon XP Waterproofing Masonry Coating, as manufactured by Sherwin Williams.

Lump Sum = $ 82,950.00

SUB-TOTAL BID ITEM 5: = $ 101,695.00

Bid Item 6 - Plumbing Work & Drainage Improvements:

A. Flushing of the Entire Deck Drainage System

Work shall consist of the cleaning and flushing out (hydro-jet cleaning) of the facility's entire deck drainage system. This work shall be inclusive of any and all joint breaking and reconnection as required to properly clean the entire system and to assure unencumbered storm water flow. Cleaning of the facility's drainage system, inclusive of the drywells, shall be performed prior to the commencement of any concrete demolition work and at the completion of any and all concrete repair work. Work shall include the removal and proper disposal of all foreign materials and debris from within this facility's drywells.

Payment for the flushing shall be payable as a percentage of the work completed as stipulated here (50% upon completion of initial drainage system cleaning, 50% upon completion of final drainage system cleaning).

Lump Sum = $ 12,600.00

B. Installation/Replacement of Floor/Supplemental Drains and Piping:

Work shall consist of the provision of all materials, labor and equipment required to locate and install supplemental floor drains and/or replace existing floor drains with new drains, as depicted on the Drawings and/or as directed by the Engineer. This work will include identifying areas requiring drains for verification by Engineer (typically those associated with existing drains and/or areas of ponding water), modification of concrete deck around drains and placement of new concrete repair mortar, tooling and sealing of all control/construction joints, as well as cove joints that may surround the applicable repair area, finishing and curing along with all other work required for the satisfactory performance of this work item.

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BIDDER'S NAME

Work shall also consist of providing new drain piping to replace all existing piping as well as supplemental piping as required, along with all associated pipe fittings and supports, to connect new drains with the drainage system, all as shown on the drawings and directed by the Engineer. Contractor shall be responsible for verifying required height clearances to facilitate installation of new piping, and shall note that contrary to existing piping, all new piping shall be PVC; Contractor shall further note that installation of new PVC piping shall include rotating/positioning the piping to minimize visibility of the text and markings, followed by cleaning of the piping, all as reviewed and accepted by Owner/Engineer.

Contractor shall note that replacement of the floor drains on the first level (SOG) shall include limited excavation to expose and replace up to 5 feet of buried piping, followed by replacement of the exposed piping (with proper connection to existing to remain), placement of compacted fill as required, followed by placement of concrete and finishing as appropriate.

1. Installation of New/Supplemental Drains.

15 EA @ $ 2,500.00 /EA = $ 37,500.00

2. Installation of New/Supplemental Piping.

1,250 LF @ $ 68.00 /LF = $ 85,000.00

C. Allowance for Repair of Drainage System.

Work shall also include an Allowance for additional miscellaneous repairs that are identified during the Work. Contractor shall provide an itemized proposal with a cost break-down, inclusive of labor and materials, for the miscellaneous repairs. Following review of the Contractor's proposal, Owner/Engineer shall authorize the repair and/or replacement of designated items. Contractor shall not proceed with the additional miscellaneous repairs until written authorization is received.

Allowance = **$5,000.00**

SUB-TOTAL BID ITEM 6: = $ 140,100.00

Frank Capasso & Sons Inc.
BIDDER'S NAME

Bid Item 7 – Repair of Flagpole and Provision of New Rope:

Work shall consist of the cleaning and re-securement of the flagpole, followed by the provision and installation of a new rope for future use. Work shall include the replacement of existing mounting hardware with new stainless steel hardware (with epoxy adhesive), repair of the block wall as required, cleaning of the flagpole system, along with all other work required for the satisfactory performance of this work item. Upon completion of Work, Contractor shall provide and install a new rope on the flagpole for future use by the Owner.

Lump Sum = $ 7,760.00

Bid Item 8 - Provision of Temporary Traffic Control Signage and Related Graphics:

Work shall consist of the provision of any and all temporary signage and traffic control devices for use during construction, as well as related miscellaneous and/or unique graphics to be placed at the site, as may be directed by the Owner. Work shall include coordination with applicable parties to organize temporary work areas both inside and outside of the facility, followed by the proposing of associated temporary signage.

All temporary signage shall be of a professional nature, as approved by Owner prior to procurement and prior to its installation, and shall consist of specified materials, along with all other work required for the satisfactory performance of this work item. All temporary signage required for the successful execution of the repair work shall become the property of the Owner unless otherwise approved.

Contractor shall note that while this Allowance shall solely pertain to the procurement of the applicable material cost of the temporary signage (based upon provision of an itemized proposal with a cost break-down for review by Owner/Engineer), all required coordination with applicable parties and labor to organize the temporary work areas both inside and outside of the facility, followed by the proposing and installation of associated temporary signage, along with the procurement and provision of temporary traffic control devices, barricades, etc. shall be included in Bid Item 1.A, General Mobilization/Demobilization.

Allowance = **$5,000.00**

Bid Item 9 - Miscellaneous Contingency Allowance:

This contingency allowance shall pertain to any and all necessary repairs that may arise due to unforeseen conditions not covered by the Bid Documents and performed at the direction of the Engineer. Payment for this item of work shall be made on a time and material basis at cost plus 15% verified by appropriate documentation or by acceptable lump sum proposal at Owner's option. If the work is to be performed by a subcontractor, the General Contractor will be allowed to add an additional 5% to the time and material costs of the subcontractor. Work shall be performed as a draw on the specified allowance indicated.

Allowance = **$20,000.00**

Frank Capasso & Sons, Inc.
BIDDER'S NAME

SUB-TOTAL BID ITEM 1:	=	$ 84,900.00
SUB-TOTAL BID ITEM 2:	=	$ 1,458,695.00
SUB-TOTAL BID ITEM 3:	=	$ 35,000.00
SUB-TOTAL BID ITEM 4:	=	$ 923,850.00
SUB-TOTAL BID ITEM 5:	=	$ 101,695.00
SUB-TOTAL BID ITEM 6:	=	$ 140,100.00
SUB-TOTAL BID ITEM 7:	=	$ 7,760.00
SUB-TOTAL BID ITEM 8:	=	$ **$5,000.00**
SUB-TOTAL BID ITEM 9:	=	$ **$20,000.00**
TOTAL BID ITEMS 1 THROUGH 9 (THE "BID PRICE")	=	$ 2,777,000.00

Frank Capasso & Sons, Inc.
BIDDER'S NAME

BID GUARANTEE

The information in this Bid is correct to the best information, knowledge and belief of the undersigned. It is submitted without collusion with any person, individual or corporation.

Frank Capasso & Sons, Inc.
Contractor

Signature

Anthony Capasso
Name

Vice President
Title

1011 Middletown Avenue
Address

203-234-2355, 203-234-0031, mc@frankcapassoandsons.com
Telephone/Fax/E-mail Address

Witness

State of Connecticut, County of New Haven

On this 31 day of March, 2026 before me personally

came Anthony Capasso, to me known who did depose and say

that he is Vice President,

of Frank Capasso & Sons, Inc.,

the Corporation/Partner/Individual described in and which executed the foregoing instrument and

that such instrument is duly submitted on behalf of

Frank Capasso & Sons, Inc.

ELSIE SANTANA NOTARY PUBLIC REPUBLICAE CONNECTICUTENSIS SIGILLUM MY COMM. EXP. 7/31/2030 STATE OF CONNECTICUT

Elsie Santana
Notary Public

Elsie Santana
NOTARY PUBLIC
State of Connecticut
My Commission Expires 7/31/2030

CITY OF NORWALK
PURCHASING DEPARTMENT

Bid Security in the form of a (check one) is attached.	X	**Bond**		**Certified Check**
Cost for performance bond <u>included in lump sum</u>	**$** 9.40		**per thousand dollars**	

Submitted by:

Print Name of Authorized Agent of Company	Anthony Capasso
Signature of Authorized Agent of Company	
Date	March 31, 2026

The above signatory acknowledges receipt of the following addenda issued during the bidding period and understands that they are a part of the bidding documents (if applicable):

Addendum #	1	Dated	3/3/26	Addendum #		Dated	
Addendum #	2	Dated	3/10/26	Addendum #		Dated	
Addendum #	3	Dated	3/18/26	Addendum #		Dated	

CITY OF NORWALK
PURCHASING DEPARTMENT

1.2 STATEMENT OF BIDDERS QUALIFICATIONS

Please answer the following questions regarding your company's past performance. Failure to reply to this instruction may be regarded as justification for rejecting a bid.

1.	**Number of years in business:**	33 Years	
2.	**Number of personnel employed:**	**Part Time**	**Full Time**
			70

3. List projects of this type/size your firm has completed within the last three (3) years:

Project	Date	Contact Person	Phone No.
Please See Attached			

4. SUBCONTRACTORS: If subcontractors are to be used, please list firm name, address, name of principal, and phone number below or on a separate sheet. Also, indicate the portion or section of work a subcontractor will be performing.

COMPANY NAME	ADDRESS	PRINCIPAL	PHONE	PORTION/SECTION OF WORK
Rvotolo Mechanical	29 Printers Lane New Haven, CT	Ron Rivotolo	203-772-1563	Plumbing
Parksco	3315 Centennial Rd. Sylvania, OH	Alex Parks	419-476-5970	Post Tension
Greenwood	30 Leonardo Dr., North Haven, CT	Michael Beaulieu	203-234-2041	Roofing

CITY OF NORWALK
PURCHASING DEPARTMENT

5. ORGANIZATIONAL STRUCTURE OF BIDDER (check which applies)		general partnership
		limited partnership
		limited liability corporation
		limited liability partnership,
		corporation doing business under a trade name
		individual doing business under a trade name
	✓	other (specify) Corporation Operating under it legal name

6. STATUS OF THE BUSINESS AND ITS CURRENT STANDING WITH THE SECRETARY OF STATE'S OFFICE; e.g., are all required filings current and in good standing or has the entity been withdrawn or canceled	Connecticut corporations - Will the Secretary of State be able to issue a Certificate of Good Standing within 30 days of the bid opening?	Yes ✓	No
	Out-of-State corporations - Do you have a valid license to do business in the State of Connecticut? (Evidence in the form of a Certificate of Authority from the Connecticut Secretary of State will be required within 30 days of the bid opening.)	Yes	No

7. Provide CT eLICENSE (https://www.elicense.ct.gov) and Business Registration (https://business.ct.gov/?language=en_US)	MCO.902179 7825045-000

8. Is your local organization an affiliate of a parent company? If so, indicate the principal place of business of your company and the name of the agent for service if different from what has been indicated on the response form:

Business Name	NA				
Address					
City		State		Zip	
Name of Agent					

CITY OF NORWALK
PURCHASING DEPARTMENT

NOTE: In the case of a Limited Liability Corporation or a Limited Liability Partnership a certified copy of the Articles of Organization certified as valid and in effect as of the date of the bid opening will be required within 30 days of the bid opening. A listing of the corporate officers, in the case of a corporation; the general or managing partners, in the case of a partnership; or the managers and members in the case of either a limited liability partnership or company will be required within 30 days of the bid opening.

9. The awarded contractor may be required to submit one copy of the following information relative to its company's financial statements prior to contract signing. This information must represent the current circumstance which surrounds the financial position of the bidding organization. Note: This information will be kept confidential if provided in a separate envelop from your bid pricing.

All information should be supported with appropriate audited financials.

a. Book Value (Total Assets (-) Total Liabilities)

b. Working Capital (Current Assets (-) Current Liabilities

c. Current Ratio (Current Assets/Current Liabilities)

d. Debt to Equity Ratio (Long Term Debt/Shareholder's Equity)

e. Return on Assets (Net Income/Total Assets)

f. Return on Equity (Net Income/Shareholder's Equity)

g. Return on Invested Capital (Net Income/Long Term Debt = Shareholders' Equity)

All responses to this questionnaire are understood to be proprietary to the vendor, and will be considered confidential. Additional information may be requested subsequent to your responding to this bid request.

1.3 CITY OF NORWALK VENDOR RECORDS

If you have not done business with the City of Norwalk as a vendor, your business information needs updating or your vendor record has not been updated over three (3) years. Please complete and include the **latest version of Internal Revenue Service (IRS) W-9 Form** with your submission. Here is the URL to the IRS website: https://www.irs.gov/forms-pubs/about-form-w-9

1.4 INSURANCE

Insurance Agency Name: World Insurance Associates, LLC	**Tel:** 860-372-4106 ext. 335
Agency Address: 29 S Main Street, #308, West Hartford, CT 06107	**Email:** chrisgreene@worldinsurance.com

Frank Capasso & Sons, Inc.
Restoration Contractors

COMPLETED CONCRETE/WATERPROOFING PROJECTS

PROJECT/OWNER	*REFERENCE*	*CONTRACT*	*COMPLETION DATE*	*SCOPE OF WORK*
TEMPLE MEDICAL GARAGE REPAIRS	Desman Assoc. Kenneth Sugarman (860) 563-1117	$2,573,887.00	November 2024	Decorative Overlay Waterproofing Expansion Joints Bumper Guards Drainage Repairs Concrete Repairs Masonry Repairs Epoxy Overlay
CROWN STREET GARAGE & TEMPLE STREET GARAGE REPAIRS	Desman Assoc. Kenneth Sugarman (860) 563-1117	$5,374,421.00	November 2024	Exp. Joints Concrete Repairs Sealant Replacement Waterproofing Drainage Repairs Storefront Install Line Striping

1011 Middletown Avenue · Northford, CT 06472
Phone (203) 234-2355 · Fax (203) 234-0031

Frank Capasso & Sons, Inc.
Restoration Contractors

COMPLETED CONCRETE/WATERPROOFING PROJECTS

PROJECT/OWNER	*REFERENCE*	*CONTRACT*	*COMPLETION DATE*	*SCOPE OF WORK*
MOHEGAN SUN INDIAN SUMMER GARAGE	Glen Almeida Mohegan Sun 860-961-9240	$213,980.00	August 2024	Sealant Replacement, Full Concrete Repair, Partial Depth Repair, Expansion Joint Replacement, Waterproofing
CONNECTICUT SCIENCE CENTER GARAGE	Robert P. Houlihan CRDA rhoulihan@crdact.net	$256,340.00	March 2024	Vertical Concrete Repairs, Epoxy Injection,Fireproofing Shoring, Steel Framing Install
CONNECITUCT FINANCIAL CENTER GARAGE REPAIRS	Chase Enterprise Rob Cirinna	$307,351.00	November 2023	Full Depth Concrete Exp. Joint Repl. Sealant Replacement Curb Repair
ANSONIA POLICE DEPT PARKING GARAGE	Tener Construction Hastings on Hudson, NY Paul Sekas (203) 530-7665	$1,212,857.00	December 2023	Full Depth Concrete Partial Depth Repair Sealant Replacement Epoxy Overlay

1011 Middletown Avenue · Northford, CT 06472
Phone (203) 234-2355 · Fax (203) 234-0031

Frank Capasso & Sons, Inc.
Restoration Contractors

COMPLETED CONCRETE/WATERPROOFING PROJECTS

PROJECT/OWNER	*REFERENCE*	*CONTRACT*	*COMPLETION DATE*	*SCOPE OF WORK*
360 STATE ST GARAGE REPAIRS	Beachwold Nicolas Kapp New Haven, CT (201) 602-1347	$500,565.00	July 2023	Concrete Repairs Caulking, Waterproofing
UNION STATION GARAGE- NEW HAVEN	Desman Associates Rocky Hill, CT Kenneth Sugarman (860) 563-1117	$104,525.00	February 2022	Trench Drain Replacement Concrete Repairs & Sealants Repairs
STAMFORD COURTHOUSE GARAGE	Desman Associates Rocky Hill, CT Kenneth Sugarman (860) 563-1117	$519,222.00	February 2022	Expansion Joints, Concrete Repairs & Sealants Repairs, Drainage Repairs
270 STATE STREET GARAGE- NEW HAVEN	Desman Associates Rocky Hill, CT Kenneth Sugarman (860) 563-1117	$700,136.00	November 2021	Drainage System Replacement Concrete Repairs & Sealants Repairs, Traffic Coating, Roof Replacement

1011 Middletown Avenue · Northford, CT 06472
Phone (203) 234-2355 · Fax (203) 234-0031

Form **W-9**
(Rev. March 2024)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See ***Specific Instructions*** on page 3.

1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)

Frank Capasso & Sons, Inc.

2 Business name/disregarded entity name, if different from above.

3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor ☐ C corporation ☒ S corporation ☐ Partnership ☐ Trust/estate

☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) . . . . .

Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.

☐ Other (see instructions)

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any)

Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any)

(Applies to accounts maintained outside the United States.)

3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions . . . . . ☐

5 Address (number, street, and apt. or suite no.). See instructions.

1011 Middletown Avenue

6 City, state, and ZIP code

Northford, CT 06472

Requester's name and address (optional)

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			-			-				

or

Employer identification number

0	6	-	1	3	8	3	9	6	5

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** Michael O'Neill **Date** 3/31/2026

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

CITY OF NORWALK
PURCHASING DEPARTMENT

1.5 CITY OF NORWALK VENDOR QUESTIONNAIRE – IT INFORMATION SECURITY

City of Norwalk Vendor Questionnaire
IT Information Security

Rev 8.4.22

1. **Third-Party Contact Information (please provide the POC for follow-up questions to this questionnaire):** Vendor Name, Address, Point-of-Contact Name, Phone Number and Email

Frank Capasso & Sons, Inc.
Michael O'Neill
203-234-2355 mo@frankcapassoandsons.com

2. **Description of Services/Products:** Please provide a detailed description of services/products your organization aims to provide to the City?

General Contractor - Perform restoration services to the Yankee Doodle Parking Garage

3. **System and Equipment Access:** Will your organization use your own systems and equipment to perform the services, or will your organization need access to the City's systems, equipment and network? (Yes or No, If Yes, please explain)

YES ☐ NO ☑

4. **Description of Data:** Are you using data from the City in order provide the services/product to the City (Yes or No, if Yes proceed to 3.1)
   a. What data is needed to provide the services/products to the City?

Example: Name, Social Security Number, Trade Information, Source Code, Payroll or Accounts Payable data, student or patient data, Law Enforcement data, any Personally Identifiable Information (PII), etc.

YES ☐ NO ☑

If your answers to Questions 3 and 4 are BOTH "*NO*", thank you for completing the IT Information Security Questionnaire.

If one or both questions are "*YES*", please complete the remaining questions.

---

5. **Office Locations:** How many office locations does your organization have? *Please include the locations of your organization.*

6. **Data Center Locations:** How many data centers does your organization utilize to provide services/products to the City? *Please include the locations of the data centers utilized by your organization.*

7. **Business Entity:** What is your business entity type?
**Example: Sole Proprietorship, Partnership, C Corporation, S Corporation, Limited Liability Corporation (LLC), Limited Liability Partnership (LLP)*

8. **How many employees and contingent workers do you have in your organization**?

1-10 ☐ 10-50 ☐ 50-100 ☐ 100-500 ☐ 500-1000 ☐ 1000 or more ☐

9. **Physical Access:** Does your organization need to be onsite or offsite to provide services/products to the City?

YES ☐ NO ☐

10. **Access to Data:** How is your organization accessing City data?
**Example: Is the data supposed to be sent to your organization via email or will the data need to be uploaded to an application?*

**Note: For third-parties that are providing an application to perform the services, please specify whether the application will be an internally hosted solution, cloud-based solution (i.e. SaaS, IaaS, PaaS), or a traditional web-based application (i.e. eBay, WebEx, online banking application)*

11. **Data Storage:** Does your organization outsource data storage or does your organization utilize its own databases to store data? Does your organization store data outside of the United States?

YES ☐ NO ☐

12. **Segregation of Data:** Does your organization's database structure allow segregation of sensitive client data?

YES ☐ NO ☐

13. **Independent Attestations:** Does your organization have independent attestations such as (i.e. ISO 27001, SSAE-18 SOC-1, SOC-2, PCI- DSS, ISO 9001)?

14. Information Security

a. Does your organization have written information security policies and procedures (WISP)?

YES ☐ NO ☐

b. How often are the information security policies and procedures reviewed and updated?

c. Who in the organization is responsible for reviewing and updating the information security policies and procedures?

d. Does your organization have privacy policies and procedures?

YES ☐ NO ☐

e. How often are the privacy policies and procedures updated?

f. Who in the organization is responsible for reviewing and updating the privacy policies and procedures?

g. What methods of encryption are utilized for data at rest and in transit?

h. Are the encryption methods utilized FIPS 140-2 approved?

YES ☐ NO ☐

i. Does your organization utilize firewalls to filter incoming data and information from the internet into your company network?

YES ☐ NO ☐

j. Does your organization perform penetration testing at least once per year to determine if unauthorized access to the computer network and malicious activity is possible externally?

YES ☐ NO ☐

k. Does your organization perform vulnerability testing at least once per year in order to identify vulnerabilities within the internal network?

YES ☐ NO ☐

l. Does your organization perform background checks on employees and contingent workers prior to onboarding them? Describe the nature of these background checks (i.e., criminal, credit, international, etc.).

YES ☐ NO ☐

m. Does your organization utilize multi-factor authentication?

YES ☐ NO ☐

n. Does your organization utilize scan cards or biometric scans to grant employees and contingent workers access to the building and data centers where data is stored?

YES ☐ NO ☐

o. If offering a technology product, does the organization utilize software development life cycle (SDLC) or Agile to build and maintain technological product?

YES ☐ NO ☐

p. Does the technological product undergo information security testing and quality assurance testing prior to deployment?

YES ☐ NO ☐

q. Does the Vendor provide annual Cybersecurity Awareness training to their employee?

YES ☐ NO ☐

r. Does the Vendor provide annual phishing simulations for their employee?

YES ☐ NO ☐

s. Have users been educated on how to report suspected security violations or vulnerabilities?

YES ☐ NO ☐

t. Does the Vendor have an employee identified as the Chief Information Security Officer?

YES ☐ NO ☐

u. Are all the Vendor laptops encrypted?

YES ☐ NO ☐

v. Are all Vendor computers (workstations, notebooks) required to join the Company's domain and receive Group Policies?

YES ☐ NO ☐

w. Does the Vendor meet the NIST 800-63 password guidelines?

YES ☐ NO ☐

15. Risk Management

a. Does your organization have an enterprise risk management framework implemented at your organization?

YES ☐ NO ☐

b. Does your organization have documented enterprise risk management policies and procedures?

YES ☐ NO ☐

c. Who in the organization is responsible for reviewing the enterprise risk management policies and procedures?

d. Does your organization utilize an outside third-party to provide services/products to the client?

YES ☐ NO ☐

e. Does your organization have a third-party risk management program (TPRM)?

YES ☐ NO ☐

f. Does your organization include right-to audit clauses in contracts with third parties?

YES ☐ NO ☐

g. Does your organization have a certificate of insurance (COI)? *Please attach a copy of your COI.*

YES ☐ NO ☐

Business Continuity/Disaster Recovery

a. Does your organization have a business continuity plan?

YES ☐ NO ☐

b. How often is the business continuity plan updated?

c. Does your organization conduct business continuity tests once per year?

YES ☐ NO ☐

d. Does your organization have a disaster recovery plan?

YES ☐ NO ☐

e. How often is the disaster recovery plan updated?

f. Does your organization conduct disaster recovery tests once per year?

YES ☐ NO ☐

g. Does your organization have business continuity and/or disaster recovery sites?

YES ☐ NO ☐

h. Are the business continuity/disaster recovery sites located in the United States or outside the United States? *Please include the locations of business continuity/disaster recovery sites?*

YES ☐ NO ☐

Transportation Mobility & Parking

CITY OF NORWALK
Transportation Mobility & Parking
Norwalk City Hall
125 East Avenue, PO Box 5125
Norwalk, CT 06856-5125

To: Economic and Community Development Committee of the City Council

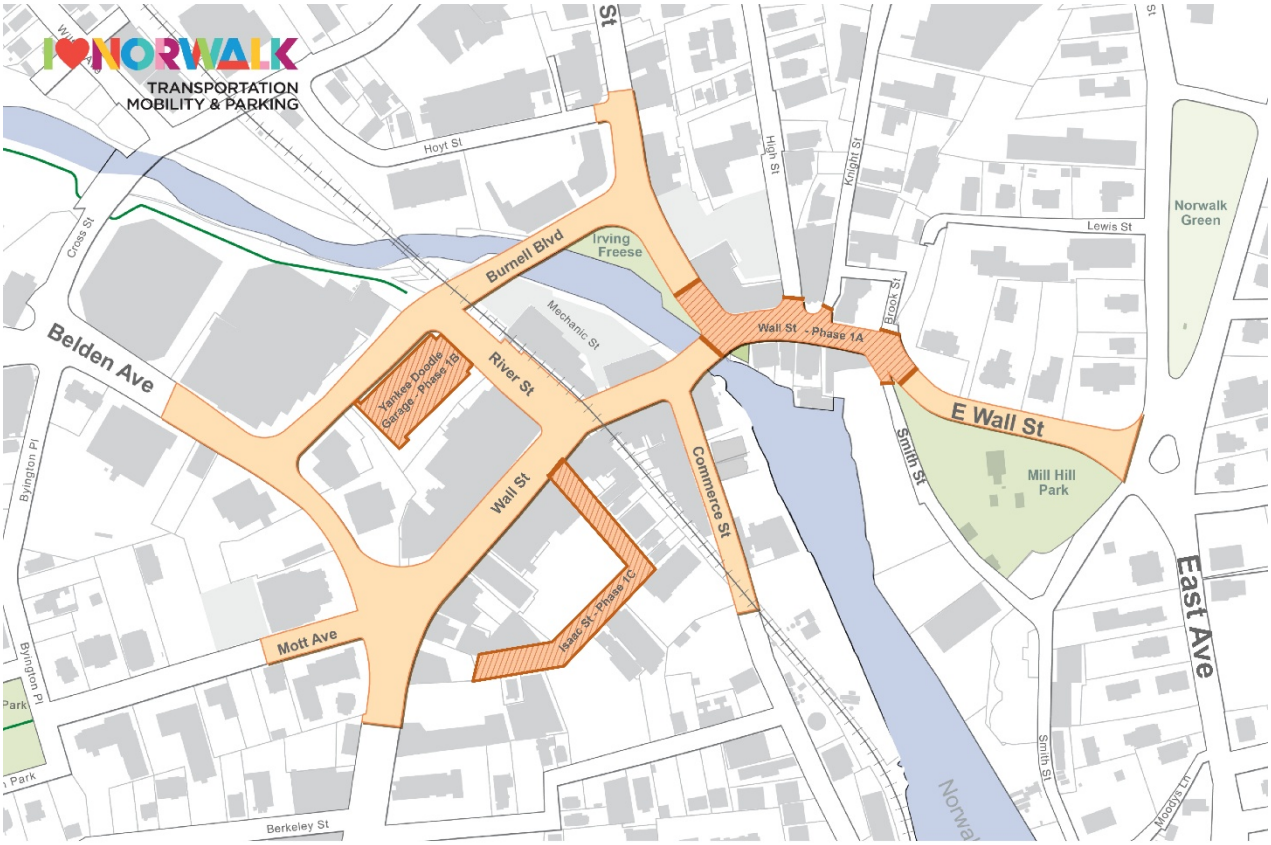
From: Nell Blaszkiewicz – Traffic Analyst, Transportation, Mobility, & Parking

CC: Sabrina Godeski, BS, MPL, AICP – Director of Business Development & Tourism
Alex Cross, MPPA – Business Development Manager
James Travers – Director of Transportation, Mobility and Parking
Garrett Bolella, P.E., PTOE, RSP1 – Assistant Director, Transportation, Mobility and Parking

Subject: **July 6th ECD Meeting Agenda Item – Authorize the Mayor, Barbara C. Smyth, to enter into any and all documents and agreements required by the Connecticut Department of Transportation (CT DOT) or the Federal Highway Administration (FHWA) to accept funding related to Phase 2A of the Wall Street District Improvement Project under state project numbers 0102-0379 and 0102-0373.**

Date: June 24th, 2026

The Department is excited to share that that Parking Authority has completed Façade Improvements to the Yankee Doodle Garage (Phase 1C) and that the Wall Street/East Wall Street Streetscape Improvements, between Main Street and Brook Street (Phase 1A) and Isaac Street Streetscape Improvements (Phase 1B) will also be completed by the end this Summer. The illustration below shows the locations of the various Phase 1 projects currently under construction.



District Improvements to continuum the momentum of construction into Spring 2027.

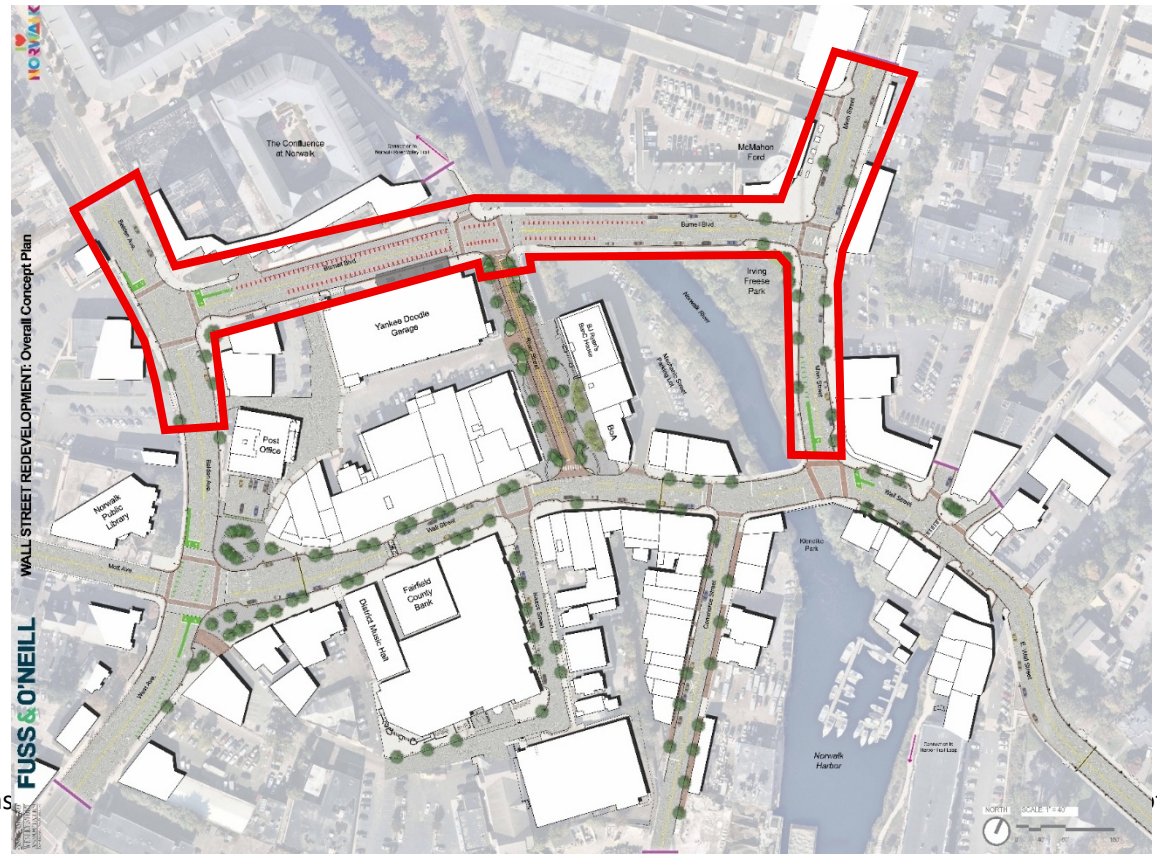
Phase 2A of the Wall Street District Improvements include, generally, streetscape and roadway improvements to:

- Main Street, from Wall Street to just north of Hoyt Street;
- The entirety of Burnell Boulevard (including the Bus Transit Hub); and,
- Belden Avenue, from the approach to Burnell Boulevard to the Norwalk Public Library and Post Office.

This phase of the project expands upon Phase 1 bicycle and pedestrian, streetscape and roadway improvements by:

- Right-sizing of travel lanes;
- Increasing the width of sidewalks to include streetscape, decorative brick paver banding, pedestrian level lighting, street trees and landscaping;
- Implementing pedestrian friendly features including curb extensions, raised intersections, stamped crosswalks and flashing pedestrian beacons;
- Providing ADA compliant sidewalks;
- Improving access and mobility to the Bus Transit Hub
- Reconstructing roadways to provide a consistent driving surface and improved pavements markings and signage;
- Creating opportunities for unique placemaking features to be decided by the community.

The limits for Phase 2A are graphically illustrated below:

Phas 

f the

Community Project Funding (CPF) Program. This funding is administered by the Connecticut Department of Transportation (CTDOT) and has been assigned State Project No. 0102-0379.

In addition, the City will leverage approximately $1.75 MM of the $3.5MM State appropriation secured by Senator Bob Duff through the Urban Action Grant (UAG) Program to satisfy the federal funding match requirements and advance necessary streetscape and roadway improvements on Belden Avenue required for the future realignment of Wall Street at Belden Avenue. This funding is also being administered through the CTDOT under State Project No. 0102-0373.

Approval of these two grant funding sources will allow the City to Advertise Phase 2A for Bid, return to the Council with the results of these Bids and ultimately enter in a construction contract for the commencement of Phase 2A, Spring of 2027. Time is of the essence as the federal funding must be obligated by September 30th, 2026. In order to meet this deadline, the Department respectfully requests that the council approve the following action items:

Authorize the Mayor, Barbara C. Smyth, to enter into any and all documents and agreements required by the Connecticut Department of Transportation (CT DOT) or the Federal Highway Administration (FHWA) to accept funding related to Phase 2A of the Wall Street Corridor Improvement Project under state project number 0102-0379.

Authorize the Mayor, Barbara C. Smyth, to enter into any and all documents and agreements required by the Connecticut Department of Transportation (CT DOT) to accept funding related to Phase 2A of the Wall Street Corridor Improvement Project under state project number 0102-0373.

CITY OF NORWALK
Transportation Mobility & Parking
P: 203-854-7260
Norwalk City Hall
125 East Avenue, PO Box 5125
Norwalk, CT 06856-5125

TO: Economic and Community Development Committee of the City Council

FROM: James Travers – Director of Transportation, Mobility and Parking

CC: Garrett Bolella, P.E., PTOE, RSP1 – Assistant Director, Transportation, Mobility and Parking
Greg Pacelli – Transportation Planner, Transportation, Mobility and Parking

REF: July 6th Meeting Agenda Item – Authorize the Mayor, Barbara C. Smyth, to execute a permanent easement to construct and maintain a new block retaining wall and enter into temporary Right of Entry Agreement to go in a certain portion of the properties of 40 Lowe Street and 44 Lowe Street for construction of a new block retaining wall.

DATE: June 26th, 2026

Memorandum

The TMP Department is currently under design for the replacement of the existing block wall adjacent to the intersection of Dr. MLK Drive and Lowe Street. The existing block retaining wall has greatly deteriorated over time, is in poor condition, and offers no visual appeal to the South Norwalk neighborhood.

The block wall replacement will utilize a portion of the MLK Corridor Initiative funds, which the city was previous awarded and spread across various city departments for investments within the South Norwalk neighborhood. The MLK Corridor Initiative Funds are administered by the CT Department of Economic and Community Development (DECD).

Based on feedback from the community, along with the support of the MLK Corridor Initiative Committee, TMP has received support to move forward in the removal of the existing concrete block retaining wall and construction of a new precast modular block retaining wall west of the intersection of Martin Luther King Drive and Lowe Street, adjacent to the properties located at 40 and 44 Lowe Street.

Given the limitations of the existing Right of Way, based on the completed boundary survey of the 40 Lowe Street and 44 Lowe Street properties, permanent easements for both properties will be

necessary to enable the construction of the new wall as well as maintenance in the future, if needed. TMP has had discussions with the property owner, who owns both properties and the owner has expressed full support for the project and the associated easements.

Upon completion of the wall, the city may opt to utilize the new block wall for a future mural, under a different contract, to provide more aesthetically appealing wall that is unique to the South Norwalk neighborhood.

The block retaining wall replacement is expected to be advertised for construction in the summer of 2026 with the anticipated construction slated to begin in the Fall of 2026.

The TMP Department would like to request the following item to be included on the agenda for the July 2026 Economic and Community Development.

A. **Authorize the Mayor, Barbara C. Smyth, to execute a permanent easement to construct and maintain a new block retaining wall and enter into temporary Right of Entry Agreement to go in a certain portion of the properties of 40 Lowe Street and 44 Lowe Street for construction of a new concrete block retaining wall.**

ATTACHMENTS:

- **EXHIBIT 1**
- **EXHIBIT 2**

EXHIBIT - 1

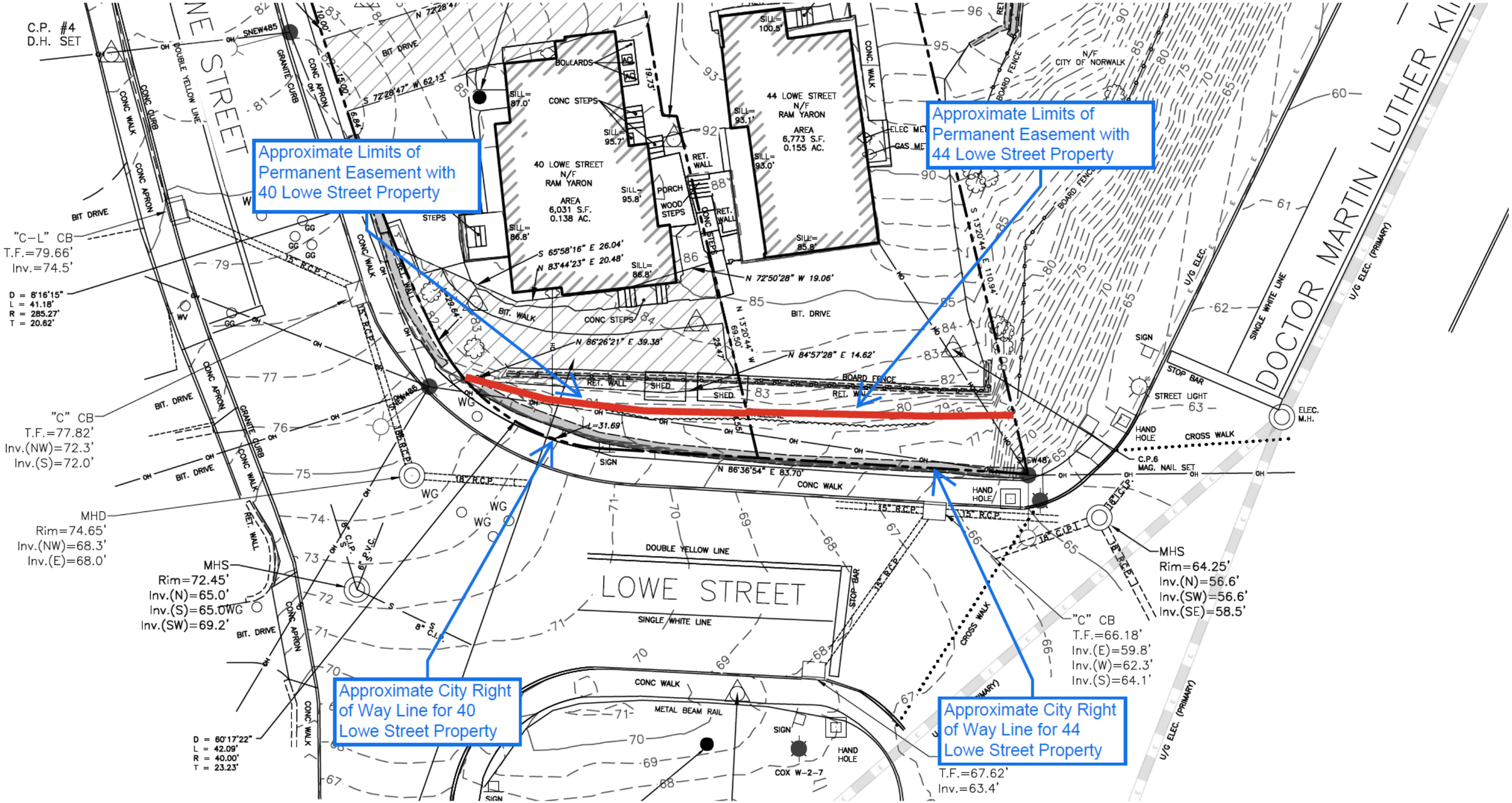
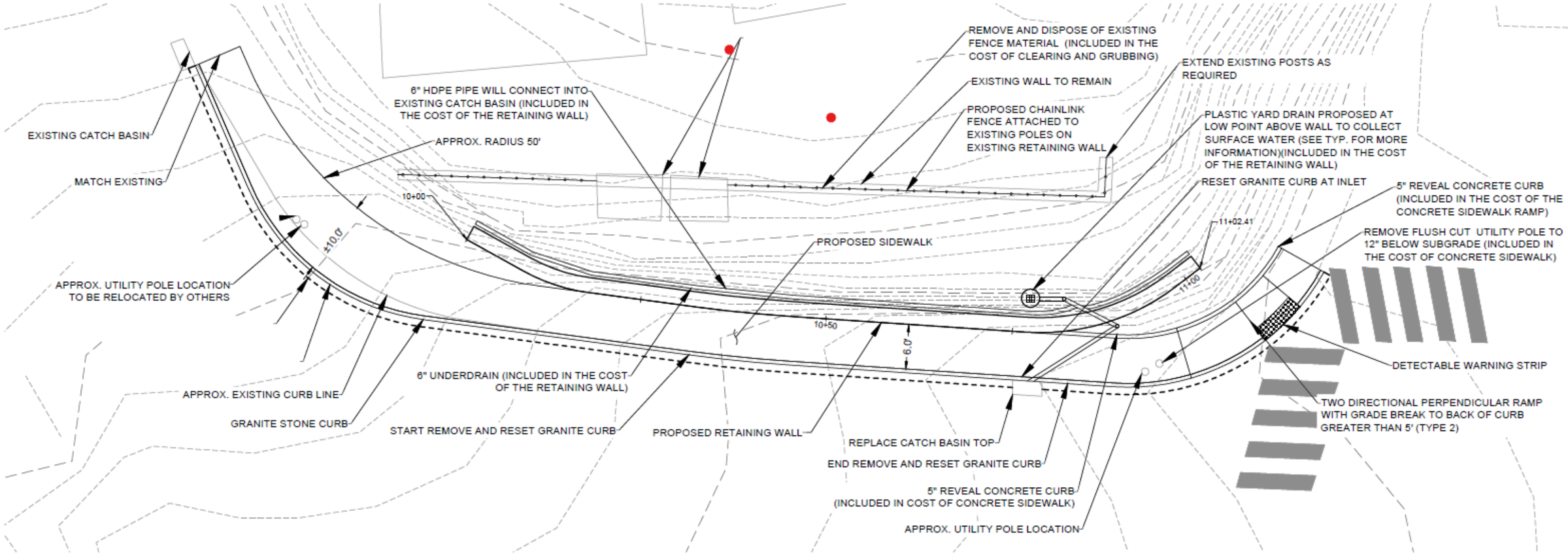

Approximate Limits of Permanent Easement with 40 Lowe Street Property
Approximate Limits of Permanent Easement with 44 Lowe Street Property
Approximate City Right of Way Line for 40 Lowe Street Property
Approximate City Right of Way Line for 44 Lowe Street Property
LOWE STREET
DOCTOR MARTIN LUTHER KI
40 LOWE STREET
N/F
RAM YARON
AREA
6,031 S.F.
0.138 AC.
44 LOWE STREET
N/F
RAM YARON
AREA
6,773 S.F.
0.155 AC.
N/F
CITY OF NORWALK
C.P. #4
D.H. SET
"C-L" CB
T.F.=79.66'
Inv.=74.5'
"C" CB
T.F.=77.82'
Inv.(NW)=72.3'
Inv.(S)=72.0'
MHD
Rim=74.65'
Inv.(NW)=68.3'
Inv.(E)=68.0'
MHS
Rim=72.45'
Inv.(N)=65.0'
Inv.(S)=65.0WG
Inv.(SW)=69.2'
MHS
Rim=64.25'
Inv.(N)=56.6'
Inv.(SW)=56.6'
Inv.(SE)=58.5'
"C" CB
T.F.=66.18'
Inv.(E)=59.8'
Inv.(W)=62.3'
Inv.(S)=64.1'
T.F.=67.62'
Inv.=63.4'
D = 8°16'15"
L = 41.18'
R = 285.27'
T = 20.62'
D = 60°17'22"
L = 42.09'
R = 40.00'
T = 23.23'
L=31.69'
N 72°28'47" W 62.13'
S 72°28'47" W 62.13'
N 72°50'28" W 19.06'
S 65°58'16" E 26.04'
N 83°44'23" E 20.48'
N 86°26'21" E 39.38'
N 84°57'28" E 14.62'
N 86°36'54" E 83.70'
S 13°20'44" E 110.94'
N 13°20'44" W 69.90'
BOLLARDS
CONC STEPS
PORCH
WOOD STEPS
RET. WALL
BIT. DRIVE
BIT. WALK
CONC WALK
CONC APRON
CONC CURB
GRANITE CURB
DOUBLE YELLOW LINE
SINGLE WHITE LINE
METAL BEAM RAIL
STOP BAR
STREET LIGHT
SIGN
HAND HOLE
CROSS WALK
BOARD FENCE
SHED
ELEC. M.H.
C.P.6
MAG. NAIL SET
U/G ELEC.
U/G ELEC. (PRIMARY)
15" R.C.P.
18" R.C.P.
8" P.V.C.
8" C.I.P.
COX W-2-7

EXHIBIT - 2



LOWE STREET RETAINING WALL PROPOSED PLAN

PLAN