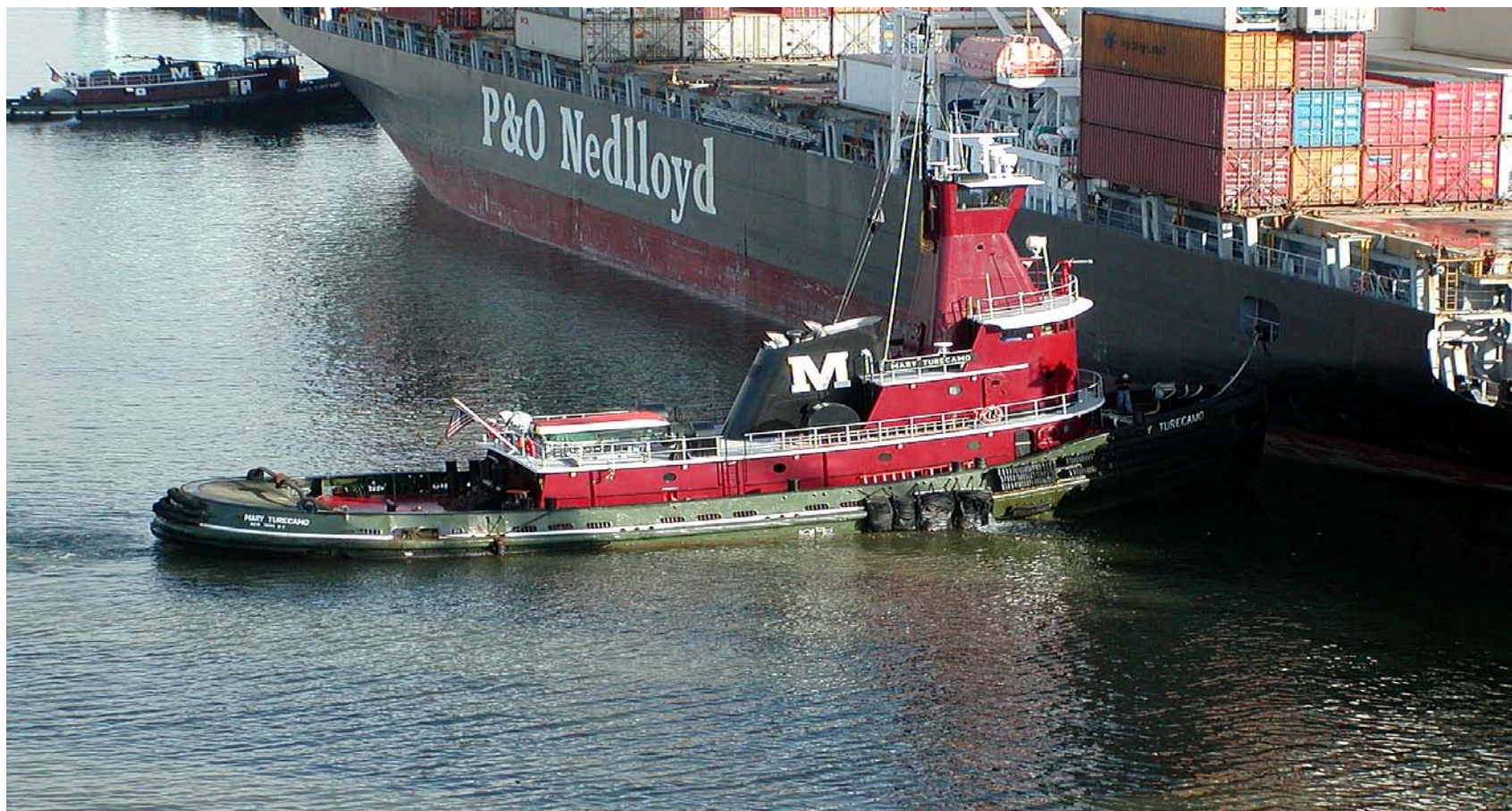


Maritime Support Services Location Study Phase I & II



Presented to the Transportation Research Forum

Agenda

- **Background, Purpose and Need**
- **Importance of Maritime Support**
- **Environmental Benefits of Maritime Support**
- **Phase I**
 - **Study Area and Industry Sectors**
 - **Findings**
 - **Recommendations and Implementation**
- **Phase II**
 - **Scope**
 - **Land Use Analysis**
 - **Water Strategies**
 - **Recommendations and Action Plan**

Background, Purpose and Need

- **1991 Maritime Support Study**
- **Resurgence of waterborne transportation**
- **Importance of the Port of New York**
- **Development pressure for waterfront properties by non-maritime sectors**
- **Importance of maritime support services to our economy**
- **Identify action agenda to address industry needs**

Importance of Maritime Support



■ Barges

- Move nearly 40 percent of the region's waterborne freight tonnage
- Provide ocean-going vessels with fuel, water, waste removal, and "lightering" (offloading of cargo) services
- Critical part of the region's strategy for moving municipal solid waste
- One barge can carry up to the equivalent of 60 tractor trailers resulting in the elimination of 3.1 million truck trips annually

■ Tugboats and Towboats

- Provide many different services, including assisting vessel navigation on approaches to berths, and pulling or pushing barges.

■ Ship Repair and Dry Dock Facilities

- All vessels periodically require repair and servicing. These activities take place in fixed facilities, such as rail lifts and graving docks; or they can be mobile or semi-mobile, such as crane lifts and floating dry docks

Environmental Benefits of Maritime Support

CARGO CAPACITY COMPARISON



ONE JUMBO
HOPPER CAR
(100 tons)

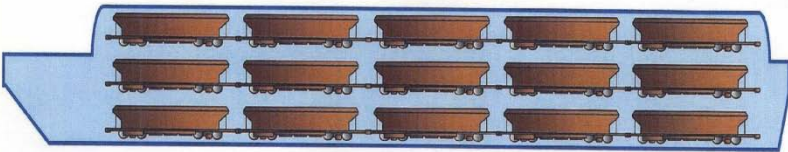


=

3.8 LARGE
SEMI TRUCKS
(26 tons each)



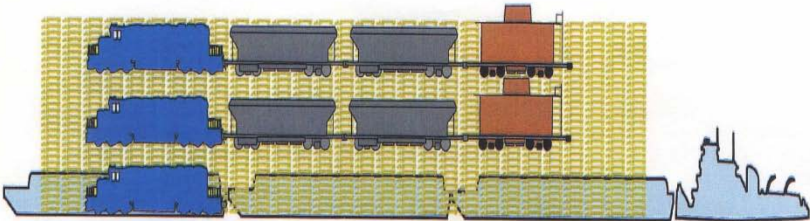
ONE BARGE (1,500 TONS) = 15 JUMBO HOPPER CARS



ONE BARGE (1,500 TONS) = 58 LARGE SEMI TRUCKS



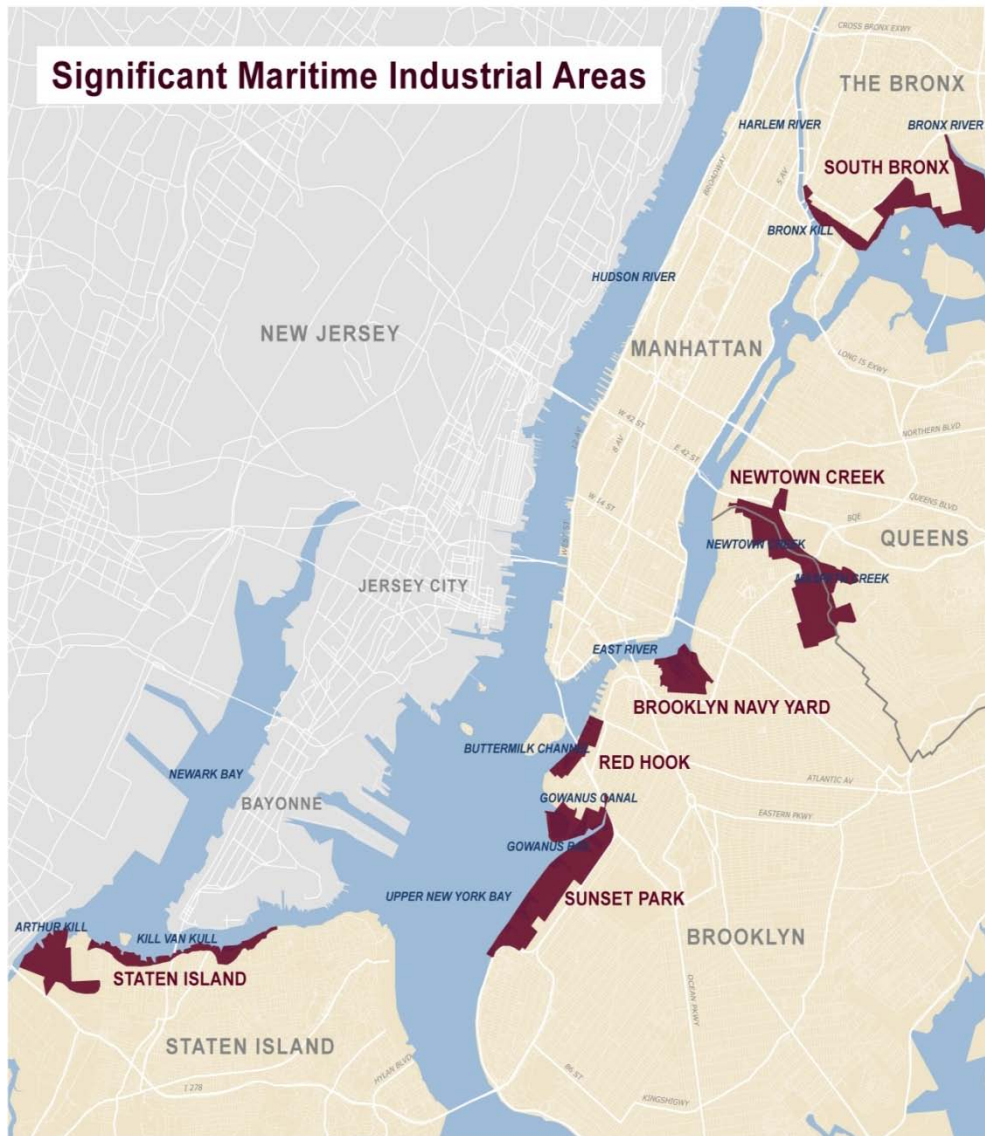
15 BARGE TOW = 225 RAILROAD CARS OR 870 TRUCKS



Port of Pittsburgh Commission - 425 Sixth Avenue Suite 2090 Pittsburgh PA 15219 www.port-pittsburgh.com



Phase I – Study Area and Industry Sectors



■ Six SMIA's

- South Bronx
- Newtown Creek, Brooklyn Navy Yard
- Red Hook
- Sunset Park
- Staten Island North Shore

■ Industry Sectors Analyzed:

- Tugs and barges
- Ship Repair/ Dry-dock
- Government Sector

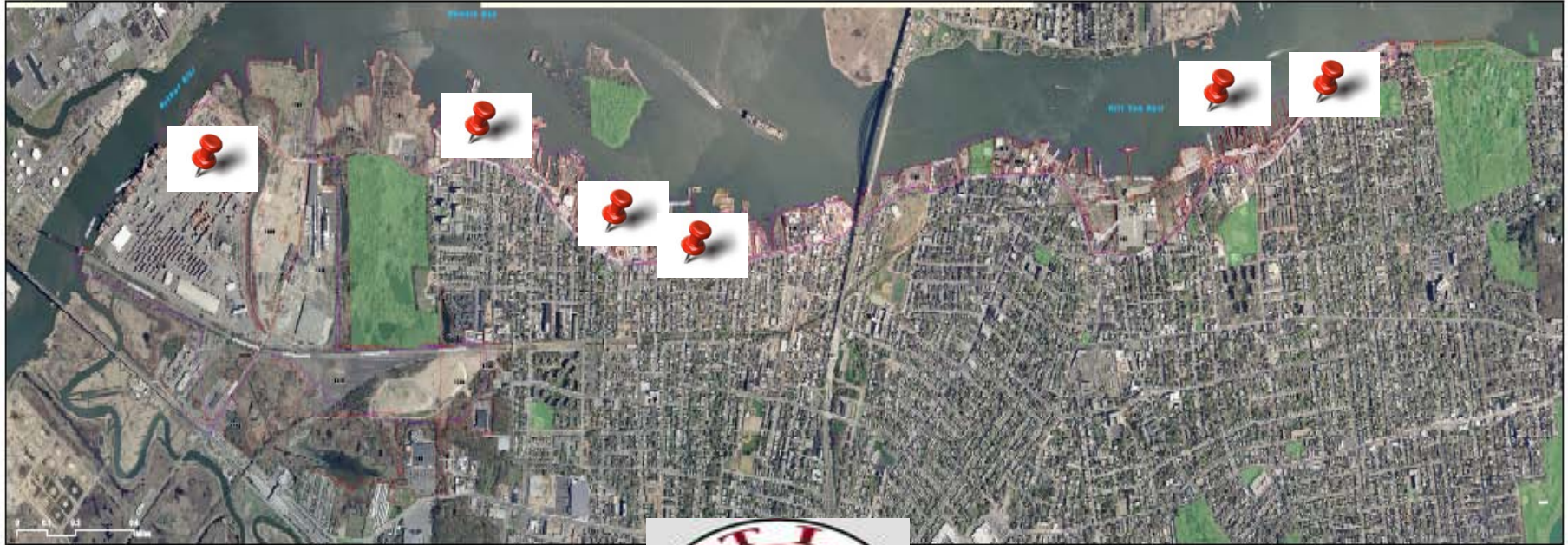
Phase I - Findings

- 205 tug boats are home-based in NYC
 - 37% increase since 1991
- 1200 barges are home-based in NYC
 - 20% increase since 1991
- 11,870 people employed by the industry in NYC
 - 7,100 positions are directly waterborne in NYC
- \$1.1 billion in annual income
- \$2 billion in economic activity
- 7 double occupancy dry-dock shortage
- 40% of total demand for tie-up met by SMIA's



Maritime Central Staten Island

Maritime Support Services Location Study - Staten Island



Caddell Dry Dock and Repair Co., Inc.
100 Years of Service



Recommendations / Next Steps

- **Develop maritime centers in NYC**
 - Included in SUNY Maritime College development plan

- **Establish mooring zones for additional tie-up space**
 - EDC is in process of releasing an RFP for mooring buoys

- **Address dry-dock shortage in the Port**
 - BNY extended lease w/ GMD; facility upgrades will be made

- **Reinforce protection for maritime zoning resolution as part of the Waterfront Revitalization Program**
 - Integrate findings with North and West Shore studies

- **Commence Phase II**



Goals of the Phase II Study

- Update demand forecast to reflect current market conditions
- Expand maritime industry sectors analyzed:
 - private ferries,
 - sightseeing/excursion vessels,
 - recreational craft,
 - commercial fishing
- Expand geographic focus:
 - Port Mobile,
 - Fresh Kills
 - GATX
 - Homeport
 - Coney Island Creek
 - Sheepshead Bay
 - Jamaica Bay/Mill Basin
 - SUNY Maritime College
- Investigate feasibility of “Maritime Hubs”
- Provide navigational water use mapping and analysis

Current Market Conditions

- 15% to 30% drop in cargo volume since Phase I was completed
- Phase I did not consider Panama Canal expansion
 - Direct affects demand for maritime support services
 - Largest driver of maritime demand
- Phase I found 18 dry dock/ship repair facilities in the region (4 graving docks and 14 floating dry docks)
 - Since then, three floating dry docks were taken out of service at Union Dry Dock (due to unmet dredging needs)
 - One floating drydock was added at the Erie Basin.
 - Currently there are 16 dry docks in the region

Ship Repair / Dry-Dock Needs

- Immediate Opportunities to bring inventory back to 18 dry-docks
 - Brooklyn Navy Yard – reactivation of graving dock # 4
 - Caddell Shipyard – additional floating dry-dock

- Estimated future dry-dock needs:

	Current Facilities	Plus Near-Term Additions	Low Forecast (Two Percent Growth)	High Forecast (Four Percent Growth)
2009			18	18
2010			18	19
2011			19	19
2012			19	20
2013			19	21
2014			20	22
2015	16	18	20	23
2016			21	24
2017			21	25
2018			22	26
2019			22	27
2020			22	28

Passenger / Recreational Boating Industry Needs

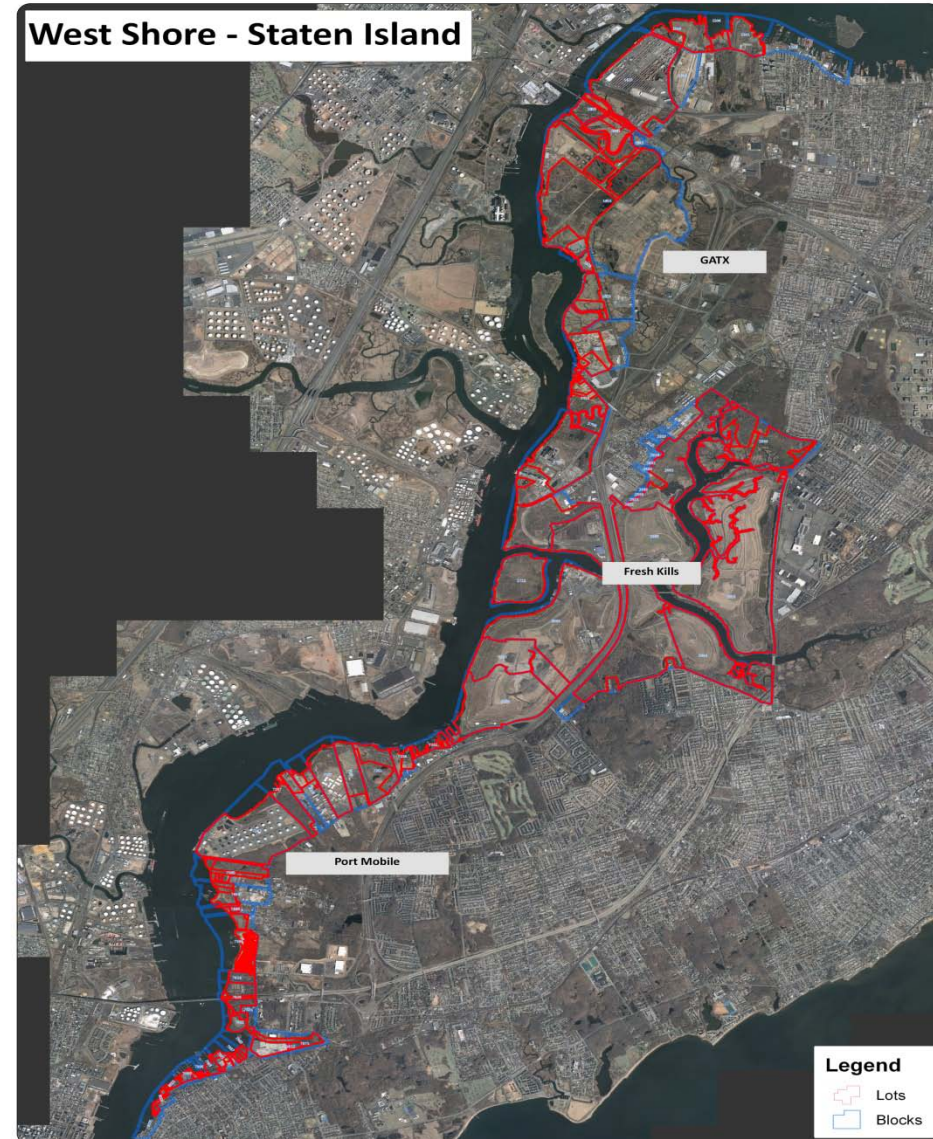
- Demand for recreational tie-ups for personal watercraft
- Increase in passenger/recreational fleet is not expected in near future – vessels (i.e. ferries, sightseeing cruise ships) have adequate tie-up space
- Access to pump-outs, preferably on site and other utilities such as water and electricity is a must
- Location desired to be in high visibility and high traffic area



Extended Geographic Analysis

■ Staten Island

- Fresh Kills DSNY site – suitable for barge tie-up
- Rossville – feasible for vessel tie-up or for bulk/break-bulk development
- Homeport – ideal for recreational / passenger vessel and personal watercraft tie-up



Extended Geographic Analysis

■ Brooklyn:

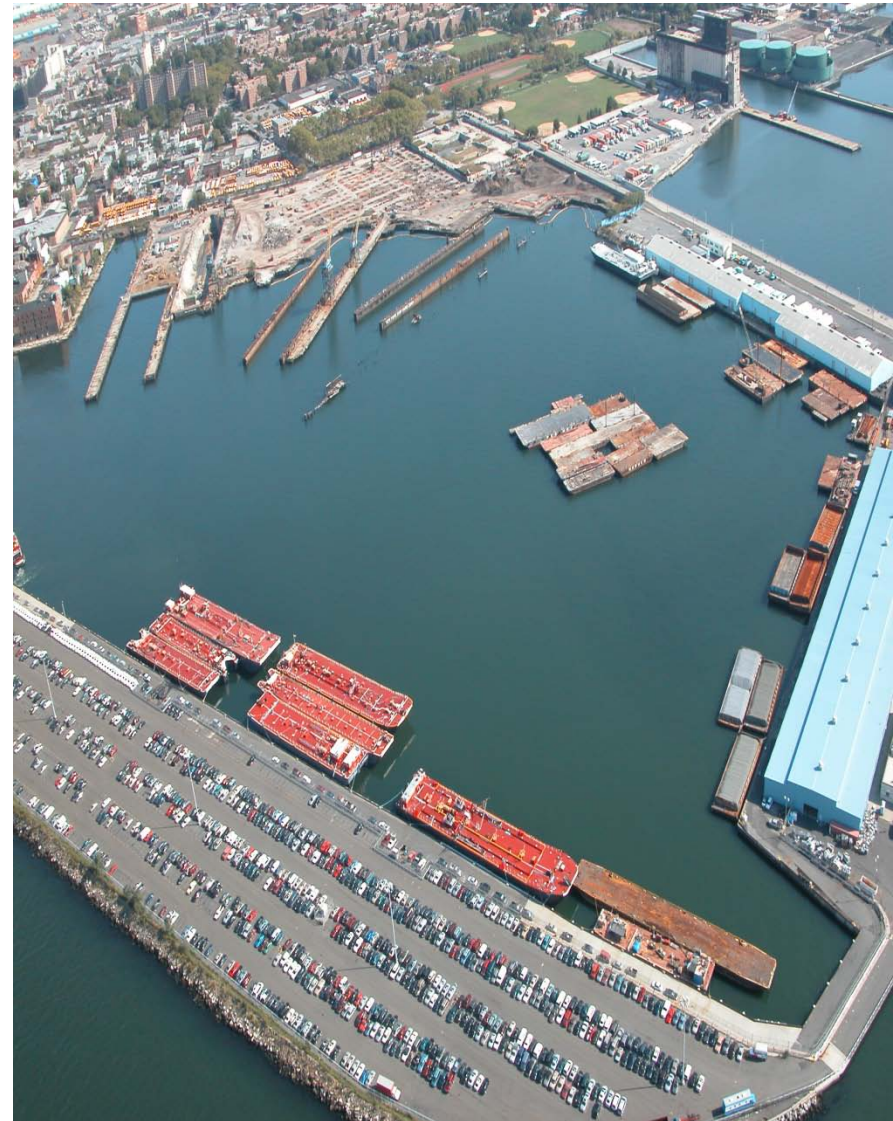
- Sheepshead Bay/Kingborough Community College – preserve and expand existing recreational and fishing boats servicing; develop DEP sludge wharf for recreational use
- Jamaica Bay/ Mill Basin – preserve existing use by recreational vessels and ship repair yards
- Rockaway – preserve fish boat mooring piers and repair yards



Concept of Maritime Hubs

- Maritime Hubs would play a key role in:
 - Removal of sludge and gray water – ‘no discharge zone’ by 2012
 - Removal of bilges
 - Fuel, water and utility supply
 - Provisioning
 - Crew change

- Based on the current distribution of vessel operations and berthing/tie-up areas, there could be as many as four Maritime Hubs developed in the region:
 - North Shore of Staten Island – Atlantic Salt property
 - East River between Sunset Park and Newtown Creek – BAT Pier 4 or Erie Basin
 - Ft. Schuyler/Throggs Neck in the Bronx – SUNY Maritime College
 - Hudson River between Upper Manhattan and Yonkers – DEP sludge facility at 135th Street



Navigational Water Use Mapping and Analysis

- Promote safe and efficient use of the region's waterways
- Preserve and expand maritime support services in New York City
- Support New York State certification for recreational vessel operators.
- Support the Harbor Operations Committee of MAPONY
 - The committee should recommend deep-water traffic lanes and consider identification of additional areas for safe navigation of passenger and recreational to promote safety
- Consider expanded Security Zones in areas of concentrated commercial use i.e., shipyards, barge/scow ports, ship terminals, etc., similar to the Port Elizabeth and Port Newark.
- Increase the number of deep-draft anchorages and ensure dredging of the region's critical shallow draft waterways.



Phase II Recommendations

- Preserve existing maritime support service locations through appropriate zoning and area land use planning.
- Restore adequate water depths to existing and potential future dry dock facility locations. Deepen channels to provide access to new tie-up areas. Perform regular maintenance dredging.
- Support training programs for welders, mechanics, crew, service personnel, and other skilled labor in the maritime industry.
- Support private efforts to secure Federal funding for facility improvements, and consider providing assistance in meeting local match requirements.
- Coordinate with local and Federal agencies to improve safe use of the City's waterways.
- Coordinate with: NYCEDC's Staten Island North Shore Land Use Study; NYCEDC's Staten Island West Shore Land Use Study; and NYCEDC's Marine Cargo System Plan for the City of New York.

Action Plan

- Pursue development of City-owned properties for Maritime Support Services.
 - Issue RFP for workboat berthing at BAT Pier 4. The RFP would provide an opportunity for tugboats to tie-up at the pier to conduct crew changes, provision, or conduct topside repairs.
 - Proceed with Atlantic Basin plans to create a dynamic maritime center, including opportunity for long- and short- term tie-ups, cultural vessels and dinner boat cruises.

- Pursue coordinated redevelopment of the Staten Island North Shore and West Shore.
 - Support expansion of Caddell ship yard capacity and explore the use of adjacent property for this expansion.
 - Explore the potential for relocating a North Shore aggregate terminal to the Rossville site on the West Shore, enabling a possible Maritime Hub on the North Shore site.

Action Plan (*continued*)

- Pursue dredging to maintain safe access to facilities
 - Dredge at the Brooklyn Navy Yard to allow access for deeper draft vessels.
 - Initiate partnership with NJ to establish a grant program to assist smaller firms with their dredging needs.
 - Explore mechanisms to advance dredging in the Newtown Creek and Gowanus Canal to address existing navigation impediments.

- Advance Maritime Support Services as part of City-wide planning.
 - Commence planning for grey water discharge facilities that are geographically dispersed to meet the needs of workboats throughout the harbor.
 - Work with City Planning to strengthen zoning protections for maritime businesses in established Special Maritime Industrial Areas.

Action Plan/ Recommendations of Phase II

- Develop City-owned properties for Maritime Support Services
- Coordinate redevelopment of the Staten Island North Shore and West Shore
- Dredge to maintain safe access to support facilities
- Integrate the maritime support services into Citywide and region-wide planning.
- Improve boater safety and interactions between workboats and recreational boaters

Action Plan (*continued*)

- Improve boater safety and interaction between workboats and recreational boaters
 - Support NYS legislation to mandate boater safety classes for recreational boaters
 - Establish a Port Safety Grant Program/increase funding for boater safety education
 - Port signs at recreational boat launch and landing sites to provide awareness of the shared waterway with commercial vessels.

Questions and Discussions

