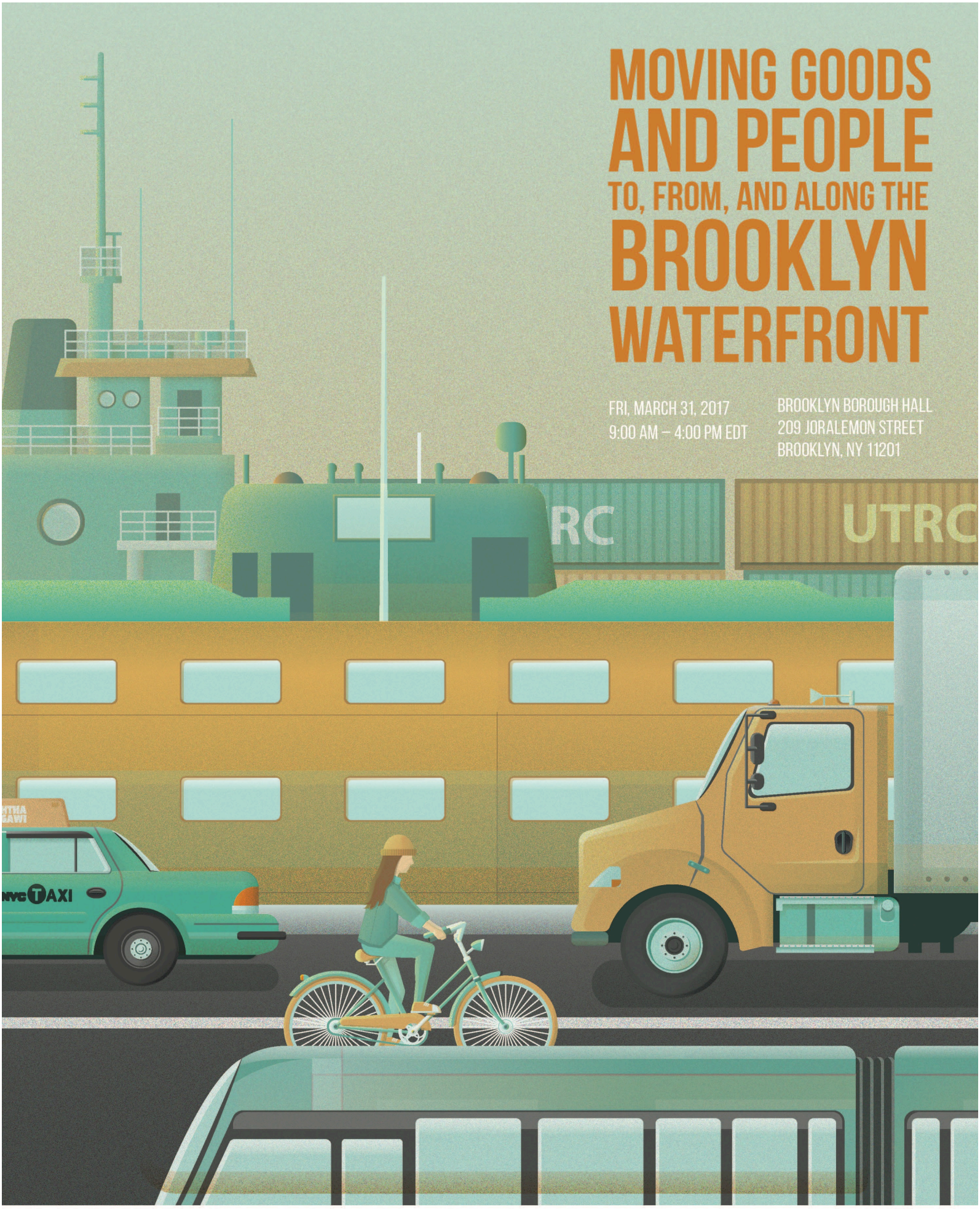

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University Transportation Research Center

NEW YORK CITY COLLEGE OF TECHNOLOGY

Draft 7, March 25, 2017

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@BKLYNWaterfront

MESSAGE FROM THE DIRECTOR

[font to 12] [replace with actual text soon...] Before we begin talking about Brooklyn, let us put the topic of today's conference in a national context. About a week ago, we saw two tumultuous national presidential primary campaigns arrive in New York. And with those campaigns have come what we have seen elsewhere in the country—expressions of frustration and discontent with a political and economic system that many middle and working class voters in both parties feel is working against them.

Part of that frustration and discontent among voters nationwide can be attributed to the disappearance of well-paying, substantial jobs for the country's vast working class, especially in the manufacturing sector. These jobs have been disappearing from communities all over the country for reasons that include technological innovation, globalization, and the policies of corporations and governments at the local, state, and federal level.

If we now switch our focus to Brooklyn, the history of manufacturing losses in this community stretches back to the mid-1950s. The declines continued into this century when, from 2000 to 2010, Brooklyn lost 55 percent (23,925) of its remaining manufacturing jobs. But, since the current decade began, the decline has stabilized, and Brooklyn is no longer seeing decreases in manufacturing employment. Of course, the manufacturing of today is not "your grandfather's manufacturing," when the waterfront was lined with warehouses, shipyards, and manufacturing—both light and heavy. Nevertheless, there is a new vibrancy at manufacturing locations along the Brooklyn waterfront's industrial corridor at places such as the Greenpoint Manufacturing and Design Center, the Brooklyn Navy Yard, Industry City, Liberty View Industrial Plaza, and the Brooklyn Army Terminal. Additionally, the current City administration has put forth an industrial action plan that could do much to help Brooklyn's industrial areas along the waterfront. It is a plan that has been applauded by many, even while others have continued to question the long-term viability of manufacturing in New York City.

BWRC's Fifth Annual Conference will examine whether these recent developments can lead to the growth of a new kind of manufacturing that will produce sustainable, well-paying jobs, or whether they are just a slight interruption in an inexorable march toward residential development and service sector employment along the Brooklyn waterfront.

Our featured speakers will address the current state of manufacturing along the waterfront and the prospects and visions for the future, while our panelists will

address important issues of land use, infrastructure, workforce development, environmental resilience, job creation, and services available to manufacturers.

While the issues we will be discussing today focus on one locale—the Brooklyn waterfront—they have national implications. So too, some of the creative and innovative ideas we will hear today can serve as national models of how to bring well-paying, sustainable jobs to the urban areas of our country.

Richard E. Hanley, Director
Brooklyn Waterfront Research Center

PROGRAM SCHEDULE

8:30 – 9:00 **Registration and Continental Breakfast**

9:00 – 9:15 **Welcoming Remarks and Introductions**

Richard Hanley, Director, Brooklyn Waterfront Research Center
Russ Hotzler, President, New York City College of Technology (CUNY)
Camille Kamga, Director, Urban Transportation Research Center

9:15 – 9:25 **A Historical Perspective**

Inna Guzenfeld, Project Coordinator, Brooklyn Waterfront Research Center

9:25 – 9:40 **Setting the Context**

Diana Reyna, Brooklyn Deputy Borough President

9:45 – 10:00 **Coffee Break**

10:00 – 10:15 **A Perspective on Moving Goods**

Christopher Clott, ABS Chair of Marine Logistics and Transportation,
SUNY Maritime College

PANEL ONE:

10:15 – 12:00 **Moving Goods Along the Brooklyn Waterfront**

Moderator:

Edward J. Kelly, Executive Director, Maritime Association of the Port of New York/New Jersey

Panelists:

Carlos Menchaca, Council Member, New York City Council, District 38

Robert J. Hughes Jr., President, Hughes Marine Firms, VP/General Manager, Erie Basin Bargeport

Louis Pernice, President, Local 1814, International Longshoremen's Association

Michael Stamatis, CEO, Red Hook Container Terminal

Greg Brayman, Former Vice President of Operations, Phoenix Beverages

Patrick Thrasher (invited), Manager of the Port Rail Program, Port Authority of New York and New Jersey

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12:15 – 1:30 **Lunch and Keynote Address:**

Congressman Jerrold Nadler

PANEL TWO:

1:35 – 2:45 **Moving People Along the Brooklyn Waterfront:**

Moderator:
Robert Paaswell, Distinguished Professor at the Grove School of Engineering, The City University of New York (CUNY)

Panelists:
Alan Minor, Board Member, Neighbors Allied for Good Growth

Ryan Chavez, Infrastructure Coordinator, UPROSE

Elliot Matz, Executive Vice President and COO, Brooklyn Navy Yard

Andrew Hoan, President and CEO, Brooklyn Chamber of Commerce

Dani Simons, Director of Communication and External Affairs, Motivate

Matthew W. Daus, Distinguished Lecturer, The City College of New York (CUNY)

Franny Civitano, Director of Community Development and Guest Services for Hornblower's Citywide Ferry Service

Adam Giambrone, Director, Brooklyn Queens Connector Streetcar Project

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2:45 – 3:00 **Break**

3:00 – 4:00 **Open Discussion with and among Panelists**

Moderator:
Roland Lewis, President and CEO, Waterfront Alliance

The Last Word:

Richard Hanley, Director of the Brooklyn Waterfront Research Center

NYCEDC and The Port Authority of NY & NJ Present:

New York Harbor Container and Trailer-on-Barge Service

[This white paper is adapted from a 2015 press release that summarized the successful application for designation under the American Marine Highway Program]

Introduction

In New York Harbor freight barge services have existed in many forms for decades. These include railcar-on-barge, container-on-barge, and trailer-on-barge. Currently, railcar-on-barge has proven successful via the Trans-Hudson Freight Connector Project between Greenville, New Jersey and Sunset Park, Brooklyn.[1] This white paper summarizes the approved application designates existing and future container and trailer-on-barge services which will thereby greatly enhance the region's ability to move a variety of cargo via multiple modes of transportation. With the new designation, the Port of New York and New Jersey will be well positioned to become a marine highway hub for barge services, and provide value added services to shippers in the Northeast and beyond all while reducing traffic on regional roads and the associated environmental impact. The designation of these marine highway projects would directly support the five waterborne options included in the Port Authority's Draft Environmental Impact Statement (DEIS) related to increasing freight movement east of the Hudson River.

[1] The Trans-Hudson Rail Barge is operated by New York New Jersey Rail (NYNJR) and owned by the Port Authority. The Brooklyn side of the barge service is located at the 65th Street Rail Yard in Sunset Park, Brooklyn.

Together the Port Authority and EDC are committed to increasing the use of America's marine highways as an efficient, effective and sustainable link to our nation's surface transportation system.

Figure 1: Map of Proposed Marine Highway

Purpose and Need

New York City is at the center of a large and affluent consumer market, importing vast quantities of goods. As the third largest port complex in the country, the Port of New York and New Jersey provides goods to an estimated 65% of the nation's consumers. The majority of goods arrive west of the Hudson River (West of Hudson) at New Jersey's container terminals, and are then trucked from their adjacent warehousing and distribution centers across several congested bridges and highways to consumers east of the Hudson River (East of Hudson). This "last mile" delivery, while somewhat flexible and efficient, is becoming increasingly less so. With freight volumes in the Port projected to increase 35% by 2035, landside (or surface road) congestion, already some of the worst in the US, will continue to deteriorate forcing shippers to look for innovative alternatives to trucking.

Once a thriving industry, freight movement by barge has fallen off over time, particularly as the nature of goods distribution and the types of goods transported has evolved. Lighterage operations related to the movement of rail-bound cargos across the harbor, state of the art in the mid-20th century, gave way to trucking in response to the construction of bridges and tunnels and the interstate highway system. As trucks have largely replaced railcars and barges as the primary mode of moving cargo, roadway congestion, air, and noise pollution have grown in and around the New York City region. Currently a mere 2% (by volume) of containerized cargo moving in or out of the Port moves by barge. In contrast, over 85% of freight currently moves by truck.

Given current landside congestion and the projected increase in freight volumes, it is imperative to identify and develop alternative freight movement mechanisms. The Port Authority and EDC believe the time is right to leverage the Marine Highway Program. The first step to creating a robust barge network in New York Harbor is the designation of the hub and spoke cross-harbor freight services discussed within this designation request.

To grow such a service, shippers and carriers need the confidence that such service options are identified and backed by policymakers. The newly designated east-west bound service routes would complement the parallel railcar-on-barge Trans-Hudson Freight Connector Project. Additionally, the newly designated service would complement the three north-south bound marine highway routes, the M-87, M-95, and M-295, thereby creating a web of marine highways capable and ready to support future projected maritime growth by barge.

Historical Context

New York Harbor is home to an expansive network of rivers, creeks, and channels making the region particularly suited for waterborne commerce. While other regions are forced to use trucks to move freight, the New York/New Jersey region is set apart by the opportunity to use what has traditionally been a very reliable, sustainable, and efficient mode of transportation: barge service. With its approximately 600 miles of coastline, the region boasts four designated marine highways allowing shippers throughout the Northeast to move cargo by water rather than roadway. Each marine highway has its own distinct route and is designated as such, but when combined, these routes form a vast, integral web of waterways capable of

handling cargo. This visibility helps to market the region's waterways as "open for business" and encourages commercial shippers and carriers to support additional cargo movement by water.

In 1994, the Port Authority instituted the Red Hook Barge Service to mitigate impacts resulting from the reconstruction of the Gowanus Expressway. The reconstruction project reduced the highway's carrying capacity, all but eliminating the conveyance of truck traffic from Red Hook Container Terminal (RHCT). During construction, the need for an alternative freight route was established and funded by the states of New York and New Jersey, the Port Authority, and from Federal grants for the purchase of barges and initial operating costs. Total costs from Federal and State sources between 1991 and 2001 were $11.73M. In addition to those grants, the Port Authority added an additional $39.8M in capital and operating costs. During the first decade of service, the barge transported 362,566 containers (or 616,362 Twenty Foot Equivalent Units—TEUs) for an average cost of $164.77. From 2001 to present, the service continued to operate; however cargo volumes dropped when six of the ten shipping lines that called at both Newark and Brooklyn terminated their dual call services. Specifically, instead of vessels calling both on the Brooklyn and Port Newark facilities, business decisions were made to limit calls to the Port Newark terminals, reducing the container thru-put annually thereafter.

It is important to note that once the operation was running efficiently, specifically the last three years of service, the cost of a cross-harbor container move was just over $116/container. This cost is less than the highway tolls for a truck to move the container the same distance and that does not account for less congestion, air or noise pollution, wear and tear on the infrastructure, and lessened risk to citizens having the cargo on the road versus on water transport. While subsidies continue for RHCT, they are provided to the terminal for general operating expenses and are not specifically provided to the cargo barge operations.

In approximately 2005, $100M was earmarked by FHWA to redevelop Greenville Yards in New Jersey in an effort to expand intermodal freight movement and remove trucks from regional roads. Additionally, the Port Authority Board approved $133 to build an additional float bridge two new rail

float cars, construction for new support track and three new locomotives. Once complete, this project will support the region's marine highways.

Existing Container Barge Services: Red Hook Container Terminal (RHCT) to Red Hook Barge Terminal (RHBT), Newark

The 20-year old barge service satisfies the objectives of the Marine Highway program. Currently, two barges operated by Red Hook Container Terminal, LLC make two weekly round trips between Pier 9A of RHCT and its sister facility, the Red Hook Barge Terminal in Newark, NJ[2]. One barge has a capacity of 450 TEUs while the other has a capacity of 590 TEUs. Serving the only East of Hudson container terminal within the Port of New York and New

Jersey, the RHCT barge service shifts freight from congested highways and terminal gates to open, inland waterways, thus avoiding excessively long dwell times and ensuring cargo meets ocean vessel schedules. Once in New Jersey, the containers are offloaded for local distribution and warehousing. Over the last few years, RHCT has become dependent on the barge to attract shipping lines to Red Hook because it allows for cost-competitive access to New Jersey distribution centers.

In 2014, the existing barge service transported 16,051 TEUs from RHCT to RHBT and 19,213 TEUs, in the opposite direction, from RHBT to RHCT. In total, 35,264 TEUs were transported via barge for an average of 2,938 per month. This is separate and in addition to the 40,814 TEUs that were shipped directly to RHCT for 2014. Despite its relatively low volume compared to other marine terminals in the Port, RHCT still sees more activity than the Port of Boston[3]

[2] The Red Hook Barge Terminal is a 30-acre site with 2,000' of berth space, and 36' water draft.

[3] In 2012, the Port of Boston imported 20,599 TEUs. In the same year, RHCT handled 106,309 TEUs.

Figure 2. Barge loaded at RHCT in Brooklyn, Existing Service Route

GCT Bayonne to GCT New York

Although not the focus of this conference and this white paper, it is important to highlight the other barge route, if only briefly. In March of 2014, the GCT - Bayonne began providing shippers with container-on-barge service to the

Global Container Terminal on Staten Island, NY due its location next to an ExpressRail intermodal rail yard.[4] This highly successful barge service has moved approximately 28,050 TEUs since it began. Global Container Terminals receives no subsidy to operate this service. It remains a reliable, sustainable, and efficient means of moving cargo between the two terminals.

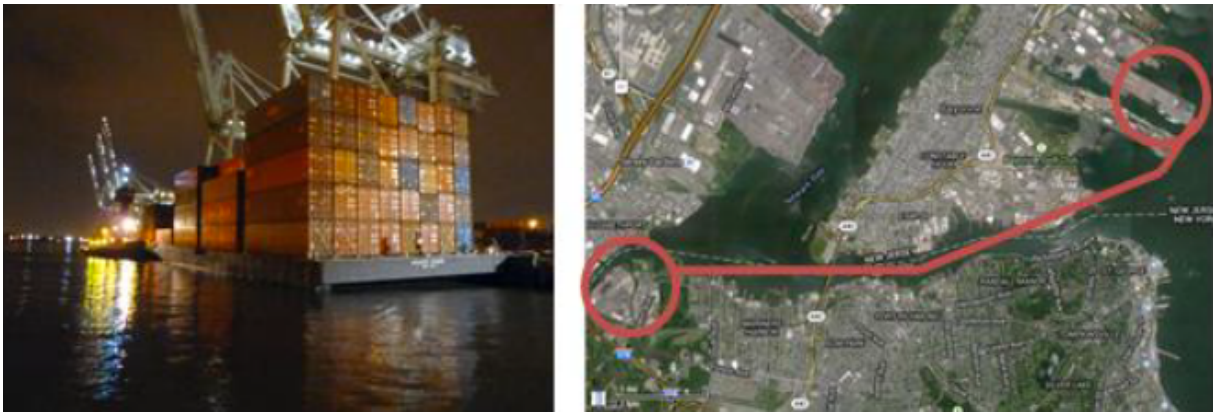


Figure 3: Barge at night, Route of Existing Service Proposed Container Barge Services

[4] GCT-NJ is a 100-acre facility with 1,800' of continuous berth. The New York Container Terminal at Howland Hook has been renamed the Global Container Terminal – NY. The 190-acre facility has 2,500' of berth space and an on-dock rail facility.

Port Newark Container Terminal (PNCT) to Brooklyn Marine Complex

In 2014, RHCT signed an agreement with Mediterranean Shipping Company (MSC) and PNCT to expand barge service, primarily eastbound, from the Port Newark Container Terminal (PNCT) RHCT. Beginning in 2015, MSC will provide a Bill of Lading with a Brooklyn port of discharge for shippers with cargo destined to East of Hudson markets. Thanks to an anticipated agreement with US Customs and Border Protection (CBP), cargo arriving at PNCT will be able to clear Customs inspection in Brooklyn rather than New Jersey. This added service will reduce the number of "touches", streamline operations, and reduce the cost of moving containers.

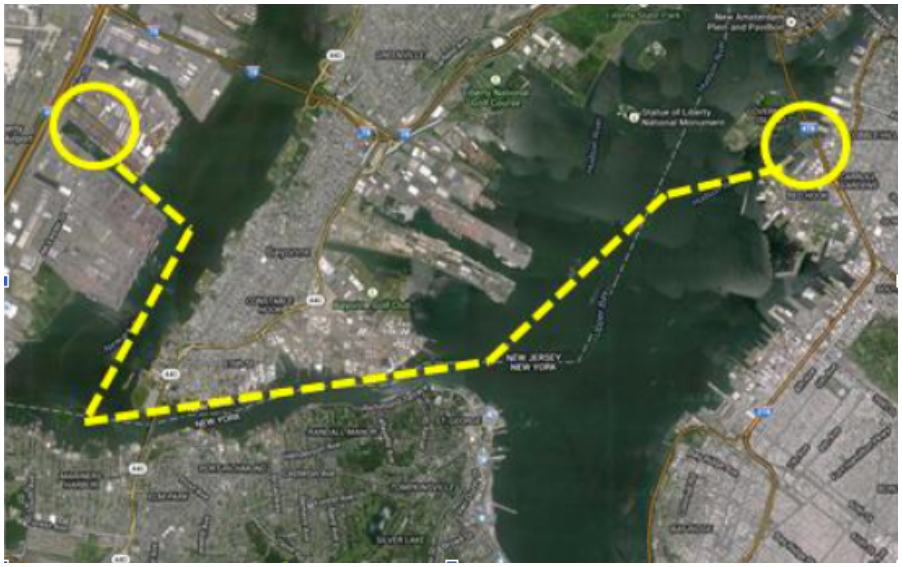


Figure 4: Proposed PNCT to Brooklyn Marine Complex Service

MSC's added service is expected to result in up to an additional 400 loaded containers (680 TEUs) one-way per week. Some containers are also expected to move westbound back to PNCT and benefit from its adjacent intermodal rail facility. Given the need to move truck trailers, trailer-on-barge service is also being considered. As additional shippers learn of the barge service, the "intra-terminal" barge model strengthens and the likelihood for more partnerships may emerge. Given the barge's expected growth in service, its utilization rate and cost competitiveness with trucks will ensure its long-term viability.

M-95 Corridor

The USDOT-designated M-95 Marine Highway Corridor runs parallel to Interstate 95 along the coasts of 15 States. The M-95 Corridor has been viewed as a potential freight corridor for heavy, low value commodities such as food or bottled beverages. Use of the corridor could remove up to 500 diesel trucks per voyage from this heavily trafficked region. The most promising section of service would transport cargo between Portland, Maine and RHCT. With the introduction of the PNCT to RHCT service, RHCT would benefit as a

gateway to New England. In fact, the Port Authority and EDC are not alone in the desire for these additional container on barge services. In October 2014, the Maine Port Authority in cooperation with McAllister Towing and MARAD

unveiled the design for a 900 TEU, purpose built articulated tug and barge (ATB) that would potentially be used for this service.

Public Benefits

The Port Authority and EDC are committed to the public benefits of citizens in the New York and New Jersey region. This starts by limiting the number of trucks on local streets and highways, thereby reducing harmful air pollutants such as carbon dioxide (CO2), carbon monoxide (CO), and particulate matter (PM). Moreover, reducing the number of truck trips greatly improves public safety, roadway maintenance costs, fuel savings, noise pollution, and congestion.

In recent years, the Port Authority and EDC have assisted the port community in the purchase of clean diesel locomotives that operate in the region, and have worked to convert or purchase cleaner trucks that access marine terminals as well as the repowering of tugboats. These programs enhance the environmental sustainability of railcar-on-barge and trailer-on-barge services.

Given that the New York Metropolitan Area has long been classified as "Non-Attainment" under US EPA guidelines, more work is required. It is estimated that trucks in the Port of New York and New Jersey area emit approximately 7.9 million tons of CO2 each year.[5] These services will take large steps to remove additional trucks from local roadways, further reducing air pollution.

Service between West of Hudson and East of Hudson

With its Brooklyn location, RHCT is well positioned to serve East of Hudson shippers and receivers, and the existing and future barge services offset, to some extent, RHCT's inherent disadvantage in serving West of Hudson shippers and receivers.

Given its inherent environmental and economic efficiencies, the existing barge service has provided numerous public benefits by reducing landside congestion, reducing air and noise pollution, and enhancing safety. For example, since the existing barge operation began in 1994, an estimated 1,794,639 containers have moved by barge. Using a formula of 1.5-truck moves/container delivery, that equates to 2,691,995 truck trips that have historically been removed from the region's roadways.[6]

Table 1: Reduction in VMT, Existing and Expanded Service to Brooklyn Marine Complex[7]

	2014	2015
Total TEUs	35,265	61,785
# of Truck Trips per Year (Containers x 1.5)	31,116	54,516
Driving Distance between RHCT and PNCT (using designated est. truck route)	25 miles	25 miles
Total Reduction in VMT (# of Truck Trips*Driving Distance)	777,900	1,362,900

[5] According to the 2005 Comprehensive Port Improvement Plan (CPIP), Port trucks make up less than 4% of all trucks. Those trucks emit 316,000 tons of CO2 each year. Therefore, all trucks that drive into, out of, and through the Port of New York and New Jersey region emit 7.9M tons of CO2 each year.

[6] 1,794,639 TEUs (loaded and discharged) since 1994, with 1 Container= 1.5 truck trips.

[7] 2014 represents the existing barge service, while 2014 represents the total reduction in VMT with the new MSC service (PNCT to RHCT)

In 2014 alone, 35,265 TEUs moved between RHCT in Brooklyn and RHBT in Newark by barge. That service equates to over 31,000 truck trips each year. With the new MSC service projected to add up to 680 TEUs per week in 2015, an additional 26,520 TEUs are projected to be barged between the terminals (using conservative estimates), eliminating roughly 55,000 total truck trips. In total, the region will see a reduction of nearly 1,400,000 vehicle miles travelled.

The attached Exhibit 1, "Benefit Cost Analysis-RHCT" highlights that there are significant public benefits realized after 25 years with the added MSC service. Table 2 below lists total savings. The BCA spreadsheet used for this analysis was provided by MARAD.

Table 2: Public Benefit Savings, Existing and Expanded Service to Brooklyn Marine Complex[8]

Public Benefit	
Congestion	$10,284,461
CO2 Savings	$1,628,090
Noise Reduction	$1,536,268
Fuel Savings	$2,162,002
Maintenance Savings	$13,741,065
Safety Benefits	$18,271,349
Total Savings	*$47,623,234*

As noted in Table 2 above, there are significant cost savings related to congestion, roadway maintenance, and safety. Adding savings related to fuel, noise, and CO2 equates to approximately $47M over 25 years of service.

The barge service has received funding on the basis of truck diversion and can expand its role as a long term solution to chronic air quality issues both in the New York area as well as other regions where barge service is expanded. It is

[8] All values are net Present Value. A 7% discount rate was used.

also an excellent mode to promote resiliency and redundancy in the region's goods movement system. By ensuring that terminals and equipment are available in the event of a reduction to highway capacity resulting from a natural or man-made event, including these existing and proposed container and trailer on barge services into the AMH will provide crucial strategic capacity for freight movement over the long term.

Barge Utilization

Given that both existing barge services (RHCT to RHBT, GCT- Bayonne to GCT-New York) are needed to maintain normal operations and attract business at their respective terminals, it is unlikely either service would end abruptly if service were to decline. Both terminal operators, as well as the Port Authority, have stated that operating the barge service is vital to maintaining market share. Therefore, to best gauge the services' viability long-term, barge utilization rates are used.

Service between West of Hudson and East of Hudson

Given that the barge service transported 35,265 TEUs in 2014, and each barge is currently used for one round trip per week, (450 TEUs capacity/New Jersey, 590 TEUs capacity/New York)[9] the service has a total capacity of 108,160 TEUs per year, or 2,080 TEU's per week, representing a current utilization rate of 33%. (See Table 5)

Table 5: Barge Utilization, Existing and Expanded Service to Brooklyn Marine Complex[10]

Barge Utilization	Total TEU's	TEU's/ Week	Barge Utilization
2014 Barge Traffic (Actual)	35,265	678	**33%**
2015 Barge Traffic (Projected)	61,785	1,188	**57%**

[9] One barge is named "New Jersey" and the other is named "New York"
[10] Source: PANYNJ, 2014

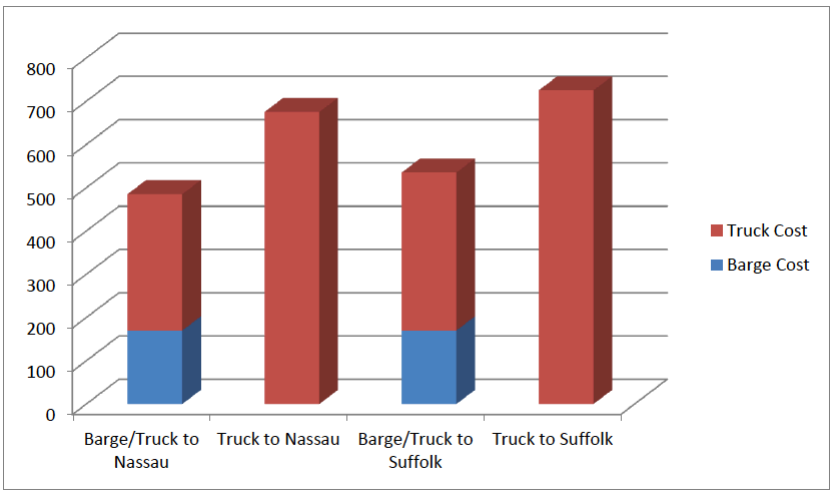
With the recent commitment of MSC to provide up to an additional 680 TEUs per week (510 TEUs/week for above conservative calculations) the utilization rate increases to an estimated 57% without increasing the frequency of barge trips. Cost estimates were calculated using the service's 2014 operating budget of $3,516,000. Adding barge transits to the service would dramatically increase the capacity.

Cost of Truck Service versus Barge Service

Based on the latest figures gathered by RHCT, LLC, moving one container by barge, on average, is more cost-effective than moving that same container by truck for both westbound and eastbound moves. To move that same box via truck it would cost $550.00. Although this cost is borne by the trucker rather than absorbed by RHCT, LLC, it nonetheless increases the total cost of the container move for the shipper.

Similar efficiencies are realized with the new MSC service from PNCT to RHCT. Currently, moves by barge from New Jersey to destinations East of Hudson, are, on average, more cost-effective than moves by truck. Due to economies of scale, the more containers moved via barge, the more cost-effective. One barge can carry approximately 200 40' containers, while a truck can carry no more than one container, a major difference in fuel efficiency.

Cost of Barge Service versus Traditional Truck Service



Costs above show estimated truck costs to destination vs. a combination of barge/truck to destination from PNCT to RHCT. Source: RHCT Management

Community Improvements

With an expanded marine highway network and more frequent use of short sea shipping, communities throughout the region will benefit both directly and indirectly. The significant reduction in the use of trucks to transport cargo will lower the cost of doing business, boost economic activity, and improve the lives of many residents as outlined the seven following summary of improvements:

1. **Environment**
   As trucks become increasingly displaced by barge service, carbon emissions and noise pollution will decrease. Assuming that over 95,000 truck trips will be replaced in 2015, for both services, approximately 2,500 tons of CO2 will be saved. Over 25 years, this savings equates to approximately $2M.

2. **Resiliency**
   Given climate change and its adverse effects on marine infrastructure, measures should be taken to fortify, strengthen, and expand modes of transportation that are flexible during storms and their impacts on bridges and tunnels. With a significant population living near and being serviced by goods entering the Port of New York and New Jersey, it is critical to have alternative freight movement options such as barge operations. Container and trailer-on-barge service strengthens the supply chains of many goods consumed in the region. These additional supply chain options will facilitate a quicker return to normalcy in the event of a manmade of natural disaster.

3. **Mobility**
   The expanded barge services will reduce congestion at marine terminals and lead to improved operating efficiencies. Marine terminals with finite lay down space will be better-positioned to offload vessels during peak hours if barges are used to move containerized cargo, rather than relying on trucks, particularly to East of Hudson destinations. This will ensure more on-time, reliable service for shippers. Similarly, a shift to barge service would create new roadway capacity for the city.

4. **Public Safety**
   Removing several hundred thousand heavy trucks from the region's roadways will also have an impact on public safety. Assuming a fatality rate of 3.66 deaths per billion truck miles, the two services prevent 1 statistical death in their first five years of operation.

5. **Maintenance Savings**
   Additionally, there will be a savings to the wear and tear on surrounding roadways and infrastructure. Assuming that it costs $.32 to repave an urban road for every vehicle mile travelled, the expanded barge services will save a total of approximately $16M over 25 years. State and local Departments of Transportation will be able to invest in innovative transportation solutions rather than filling potholes or focusing on bridge repair.

6. **Fuel Savings**
   When comparing emissions with fuel costs between trucks and barges, it is evident that transporting cargo via barge from terminals results in lower fuel consumption and lower CO2 emissions, a smaller carbon footprint. Fuel cost comparisons suggest that transporting cargo by barge is a more fuel-efficient and cost-effective mode of transport. The fuel cost to transport the same number of containers by truck is 160% higher than the fuel costs for a barge operation.

7. **Jobs**
   Lastly, the addition of these various "hub and spoke" trans-harbor container, railcar, and trailer-on-barge services will increase freight handling capacity moving between West of Hudson and East of Hudson markets. Increased freight activity will result in new blue collar, quality job opportunities for local residents.

CONCLUSION

The long-term viability and numerous public benefits associated with the Marine Highway designation are evident: as larger ships with greater volumes call to New Jersey's terminals, trucks alone will not be able to efficiently move cargo to east of Hudson River consumers. Barges can offer much needed redundancy in a region associated with chronic surface road congestion.

BIOGRAPHIES

Keynote Speaker: Congressman Jerrold Nadler:

Congressman Jerrold “Jerry” Nadler represents New York’s 10th Congressional District, one of the most dynamic and diverse districts in the country. The district includes Manhattan’s Upper West Side, Morningside Heights, Hell’s Kitchen, Chelsea, Greenwich Village, Soho, Wall Street, and Battery Park City, as well as the Brooklyn neighborhoods of Borough Park, Kensington, and parts of Bay Ridge, Bensonhurst, Dyker Heights, Red Hook, Sunset Park and Midwood.

Rep. Nadler began his career in public service in 1976 in the New York State Assembly. Representing the Upper West Side, he served as a Democratic Assemblyman for 16 years and played a significant role in shaping New York State law concerning child support enforcement and domestic abuse, as well as making major contributions to housing, transportation and consumer protection policy in the state. In 1992, Rep. Nadler was elected to the U.S. House of Representatives in a special election and has served in Congress ever since. He was re-elected to his twelfth full term in 2014, receiving a resounding 88% of the vote.

The second-most senior member on the House Judiciary Committee, Congressman Nadler served as Chairman or Ranking Member of its Subcommittee on the Constitution, Civil Rights, and Civil Liberties for 13 years and now serves as the Ranking Member of the Subcommittee on Courts, Intellectual Property, and the Internet. He is also the highest-ranking Northeastern member of the House Transportation and Infrastructure Committee, and serves as an Assistant Democratic Whip.

Rep. Nadler is a graduate of Crown Heights Yeshiva, Stuyvesant High School, Columbia University and Fordham Law School. He lives on the Upper West Side of Manhattan with his wife, Joyce Miller. They have one son, Michael.

Gregory Brayman

Gregory Brayman served as Vice-President of Operations for Phoenix Beverages, a 64 year-old privately held company, until 2015. Phoenix Beverages distributed beer, wine, spirits, and other beverages in New York City, Long Island, and the Mid-Hudson Valley. In 2015, Phoenix Beverages combined with Manhattan Beer Distributors to create one of the largest beverage distributors in the US.
Prior to joining Phoenix Beverages, Gregory held several positions at Heineken N.V. working in The Netherlands, United Kingdom, and China.
Currently, Gregory runs his family's business interests focusing on transportation, beverage & real estate assets.

Ryan Chavez

RyanChavez has served as Infrastructure Coordinator at UPROSE since 2013. In this capacity, he manages several local planning, research, and public policy initiatives across such fields as transportation, energy, economic development, climate resilience, land use, and community health. Ryan holds a M.S. in City and Regional Planning from Pratt Institute.

Franny Civitano

Franny Civitano is Hornblower's Director of Community Development and Guest Services for Citywide Ferry Service, launching in summer of 2017. Before joining the Hornblower team, Franny worked for the past five years with NY Waterway's East River Ferry as their Social Media, Community Outreach, and Operations Manager. Franny is passionate about connecting communities and creative problem solving. She's excited about the expansion of ferry service which will bring together more waterfront communities and offer more options to those underserved by traditional public transportation. Visit citywideferry.nyc for more information on our routes, initiatives, and jobs.

Christopher Clott

Christopher (Chris) Clott is the ABS Chair of Marine Logistics and Transportation at SUNY Maritime College in New York City. His research interests are in Port and Intermodal freight transportation and employment. Recent research has focused on shipping alliances, port trucking, and congestion alleviation. He is also researching effects upon the supply chain with the advent of mega-containerships. Dr. Clott has had administration and faculty roles at the California Maritime Academy, Saint Xavier University, Elmhurst College, and the University of St. Francis (IL) prior to Suny Maritime. Prior to academia, he was an Account Executive for OOCL (USA) Inc. and Lykes Lines in the ocean transportation field. He has a Ph.D. from the University of Illinois Chicago, an MBA from Saint Xavier University and a BA from Fordham University.

Matthew W. Daus

Matthew W. Daus, Esq. currently serves as a Distinguished Lecturer at the City University of New York's (CUNY) Transportation Research Center of The City College of New York. Professor Daus conducts research and is extensively published as an expert on ground transportation regulation and technology. He teaches courses on transportation history, policy, sustainability, for-hire regulation and technology. Mr. Daus also continues to serve as President of the International Association of Transportation Regulators (IATR), a non-profit educational and advocacy peer group of government transportation regulators from around the world promoting best regulatory practices. Mr. Daus is the longest serving Chairman of the New York City Taxi and Limousine Commission (TLC), serving for 8 ½ years. Prior to his tenure as Commissioner, Mr. Daus served in executive and other positions in NYC government for almost 20 years at several agencies including as General Counsel to the TLC and the NYC Community Development Agency, as Special Counsel to the TLC and NYC Trade Waste Commission, as a NYC Human Rights Prosecutor, and as Commissioner of the NYC Civil Service Commission. Mr. Daus is a partner and currently chairs the Transportation Practice Group at Windels Marx Lane & Mittendorf, LLP.

Adam Giambrone

Adam Giambrone is the Director of the Brooklyn Queens Connector (BQX) a fourteen mile plus urban LRT/streetcar running along the Brooklyn Queens Waterfront. He holds an MBA with a specialization in Transportation Management and has 15 years of experience in the transportation sector. He is the former President/Chair of the Toronto Transit Commission, the second largest transit agency in the US and Canada and largest operator of streetcars in North America. He led the agency's development of the Transit City Light Rail Plan which involved 7 lines (75 miles) of new urban LRT in the City of Toronto, 3 of those lines are currently under construction with the first one opening in 2021. He has also served as the Director of Planning for Montreal's regional transit authority and consulted on projects in Nairobi, South Africa, Mexico City, and across the United States including on streetcar projects in Milwaukee and Savannah.

Andrew Hoan

Andrew Hoan is President and CEO of the Brooklyn Chamber of Commerce, a position he has held since December 6, 2016. In that role, he manages the strategic, fiscal and programmatic goals for the Brooklyn Chamber of Commerce and the Brooklyn Alliance. He also serves as a spokesperson for economic development and business in Brooklyn. Before becoming president, Andrew served as Executive Vice President and Chief of Staff. With over 2,100 members, the Brooklyn Chamber is one of New York's largest business advocacy and economic development organizations. He previously served in the Office of Brooklyn Borough President Marty Markowitz as Director of Capital Budgets and Economic Development. In that role, he managed the allocation of over $250 million in city capital. Hoan has also raised corporate support for Volunteers of America, the city's largest provider of homeless services, and worked with the New York Legal Assistance Group as an AmeriCorps VISTA volunteer.

Hoan has served as a board member for a variety of civic and government organizations, He was appointed to the boards of the New York City Economic Development Corporation and the Coney Island Development Corporation by Mayor Michael Bloomberg. He also serves on the boards of Friends of the Brooklyn-Queens Connector and the Bed-Stuy Campaign Against Hunger.

Russ Hotzler

In 2004 Russ Hotzler became the eighth president of New York City College of Technology/CUNY. A native New Yorker, Dr. Hotzler holds degrees in Metallurgical Engineering and a PhD in Physical Metallurgy from the Polytechnic Institute of Brooklyn.

Dr. Hotzler has served as University Vice Chancellor for Academic Planning and as Interim President at several CUNY Colleges before joining City Tech. During his tenure at City Tech enrollments have risen by over 50% to 17,400 and the number of full-time faculty has also risen by 50% to 425. Major facilities have been renovated and work is near completion on the College's first major construction project in over 30 years - a 355,000 sf academic complex – new home to the College's science and clinical health programs. City Tech is seen today as a significant source of the highly educated technical workforce necessary to the economic vitality of New York.

Robert J. Hughes Jr.

Robert J. Hughes Jr. is currently VP and Property manager of the Erie Basin Bargeport, Red Hook Brooklyn NY.
The Hughes and Reinauer families purchased the Erie Basin Bargeport as a homeport for their growing fleets in 1992.

The property has 56 acres of navigable water and 30 acres of upland. It is the homeport to over 200 tugs and barges, with numerous maritime tenants and a shipyard. There are 6 warehouse and office buildings totaling approximately 200,000 sf. There are approximately 780 employees among the 22 companies that call Erie Basin home.

Edward J. Kelly

Edward J. Kelly is the Executive Director of the Maritime Association of the Port of New York/ New Jersey. Founded in 1873, the Maritime Association has a proud history of serving as a Maritime Exchange, industry association, and general advocate of the Maritime-related activities of the tri-state Port. In his current position, Ed is responsible for managing the diverse activities of the Association and helping to develop the enhanced safety, security, ecological sustainability, and economic viability of the many maritime –related industries in our Port.

Prior to joining the Maritime Association, Ed had held a series of senior executive level positions in the Liner business. His prior positions include: President and CEO of Cho Yang (America), Inc.; Senior Vice President of Inchcape Shipping Services; President and CEO of Nippon Liner Systems (USA); and Executive Vice President of Y.S. Line (USA). He has also provided executive level consulting services to such notable firms as Maher Terminals, Inc.; The Port Authority of New York and New Jersey; Deutche Afrika Line; Paul F. Richardson Associates; the Maritime Association of the Port of New York; and Strachan Shipping Agency.

Elliot S. Matz

Elliot S. Matz is Executive Vice President and Chief Operating Officer. Since 2002, he has overseen property maintenance, construction, security and technology for BNYDC's 3.5 million square foot industrial and commercial waterfront space.Mr. Matz came to BNYDC having served as Managing Director, Corporate Real Estate for CBS Corporation where he directed acquisitions, dispositions, management and strategy for a 29 million square foot portfolio. During an 11-year tenure with Chemical Bank Corporate Real Estate, he integrated real estate portfolios of Chemical Bank and Manufacturers Hanover Trust following their 1991 merger. He worked for the New York City Public Development Corporation in its infancy, gaining experience in the use of real estate development as a tool for business and job retention. Mr. Matz holds a Bachelor's degree in Architecture from the University of Pennsylvania, and a Master of Business Administration from Harvard.

Carlos Menchaca

New York City Council Member Carlos Menchaca is Chair of the Committee on Immigration and a member of the LGBT Caucus. He authored, introduced, and passed legislation to create the first municipal identification card program in New York City and worked to secure funding for the largest public defender program for undocumented immigrants in the nation. Menchaca represents an incredibly diverse district of front-line communities in New York: a large Chinese and Latino immigrant population, the second-largest public housing development in the City, and a waterfront community heavily affected by Hurricane Sandy. After a successful first round of participatory budgeting last fiscal year, Menchaca plans to bring a broader vision of participatory democracy to this diverse district by encouraging community involvement in the entire budget, legislative, and policy-making process.

Alan Minor

Alan Minor is an urban planner residing in Williamsburg, Brooklyn. For the last six years, he's been a community organizer, formally and informally, in Bushwick, Greenpoint and Williamsburg. He co-founded Curb Your Litter: Greenpoint, a litter and waste-reduction initiative sponsored by the Greenpoint Chamber of Commerce and funded through the Greenpoint Community Environmental Fund. Alan has organized over local transportation issues for the last several years: including advocacy for re-opening closed subway entrances and staircases and mitigating the

impact of the L Train shutdown. He anticipates receiving his Master of Science in City and Regional Planning from Pratt Institute this May. Alan has been a board member of Neighbors Allied for Good Growth since 2014.

Robert E. Paaswell

Dr. Robert Paaswell is a Distinguished Professor of Civil Engineering at the City College of New York, the flagship institution of The City University of New York (CUNY). He served as its Interim President from 2009-2010. He is the emeritus Director of the College's University Transportation Research Center, Region II and the founding Director (2001-present) of the CUNY Institute for Urban Systems (CIUS). He is also Site Director of the new NSF sponsored Industry/University Cooperative Research Center: Sustainably Integrated Buildings and Sites Center. A civil engineer and former CEO of the Chicago Transit Authority, Dr. Paaswell is an internationally recognized expert in public transportation issues and consulting. Dr. Paaswell is a Distinguished Member of the American Society of Civil Engineers.

Diana Reyna

Since 2001, Deputy Brooklyn Borough President Diana Reyna has demonstrated an outstanding commitment to communities across Brooklyn through government service and advocacy. As a New York City Council Member representing the 34th District that includes the neighborhoods of Williamsburg and Bushwick in Brooklyn as well as Ridgewood, Queens, she garnered citywide attention for her efforts in championing affordable housing and economic development; improving equity in education, park space and waste; and expanding youth and senior services.

As the first woman of Dominican descent elected to office in New York State, she focuses on ways she can advocate for the over 2.6 million residents of New York City's most diverse borough. Reyna supports innovation and high-tech job creation, investing in women or minority-owned small businesses, and promotes business incubators that facilitate the critical work of entrepreneurs in creating start-up companies. She focuses on knocking down barriers in the paths of men and women who hope to take a chance and follow a dream.

Reyna believes that Brooklyn has many great success stories and is at the forefront of culture, education, the arts, and diversity. She has said, "Brooklyn has become a terrific global brand, but it is so much more than that. Brooklyn holds our future, our children, our neighbors, our artists, our entrepreneurs, our schools, and our businesses. I am inspired and excited to champion Brooklyn."

Reyna was born and raised in Williamsburg's "Southside," and now lives in Bushwick with her husband, a sergeant in the New York City Police Department, and two boys. She attended the Transfiguration School in Williamsburg and Pace University in Pleasantville, New York.

Dani Simons

Dani Simons is the Director of Communications & External Affairs for Motivate, the nation's largest bike share operator, and the parent company of Citi Bike, New York's bike share program. She was part of the launch team for Citi Bike and served as their Director of Marketing & External Affairs for the first two years of the program. Prior to joining bike share Dani was the Director of Strategic Communications for the New York City Department of Transportation under Commissioner Janette Sadik-Khan. There she started New York's Summer Streets program which closes over 7 miles of city streets to auto traffic and opens them up to tens of thousands of people to walk, bike and play for three Saturdays each August. She also managed projects ranging from the Agency's online communications to advertising and marketing campaigns that were seen by millions of New Yorkers. She has a Masters of Environmental Science from the Yale School of Forestry and the Environment. She is a Brooklynite and a daily bike commuter.

Patrick Thrasher

Patrick Thrasher is the Manager of the Port Rail Program in the Port Department of the Port Authority of New York and New Jersey (PA). Before re-joining the PA in this position in October 2016, Patrick worked in New York City Economic Development Corporation (NYCEDC)'s Asset Management group, overseeing maritime, freight rail, and aviation facilities owned by the City of New York. Prior to joining NYCEDC, Patrick held several positions at the Port Authority, including at New York Marine Terminals and in the Cross Harbor Freight Program. Patrick has a Masters in Public Policy and Urban Planning from Harvard University's Kennedy School of Government.

BWRC/UTRC CONFERENCE PLANNING STAFF

Nadia Aslam

Nadia Aslam is the Assistant Director for Technology Transfer at the University Transportation Research Center (UTRC). Ms. Aslam manages the center's technology transfer programs. She is responsible for the Center's outreach efforts; preparing reports in accordance with USDOT guidelines; disseminating UTRC information; assisting in the production of quarterly newsletters and final reports, annual report, summaries and other requests for information; handling the logistics of the Center's conferences, training programs, and maintaining of the UTRC Website. She holds a master in Public Administration (MPA) from the City College of New York.

Kristin Cassidy

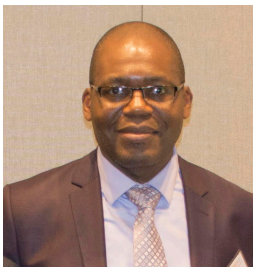
Kristin Cassidy, a project coordinator at BWRC, is working on her PhD in psychology at The Graduate Center of the City University of New York.

Inna Guzenfeld

Inna Guzenfeld, a project coordinator at BWRC, is a historian and consultant to waterfront and water-based organizations. Inna received master's degrees in historic preservation and urban planning at Pratt Institute. She is an advocate for ferry service, the working harbor, and manufacturing.

Richard E. Hanley

Richard E. Hanley, the director of the Brooklyn Waterfront Research Center, is a professor of English at New York City College of Technology/CUNY. He is the founding editor of the *Journal of Urban Technology* (*JUT*), an international academic journal devoted to the study of the effects of technologies on cities and of the ways cities shape and employ technologies. Hanley, who holds a PhD in English and American literature from Binghamton University, is also the chairman of the board of the CUNY Institute for Urban Systems, whose mission is to shape the next generation of urban infrastructure through studies of financing options, technology integration, and management innovations. The Institute's Building Performance Laboratory has been a major undertaking towards these ends.



Camille Kamga

Dr. Camille Kamga is Director for the University Transportation Research Center (UTRC) and an Assistant Professor of Civil Engineering at The City College of New York. As a consortium of 18 major U.S. academic institutions, UTRC asserts a significant role in the Federal Region 2 and nationally, conducting research and projects on surface transportation, carrying out training and educational programs and actively disseminating the results of its work. It is one of the few such Centers in the U.S. federally designated since 1987. Dr. Kamga is leading UTRC in innovative research, education, and technology transfer programs; addressing issues of urban mobility and sustainability; as well as concepts and technologies related to Big Data applications to transportation and traffic engineering.

Dr, Kamga is a member of the TRB's Urban Transportation Data and Information Systems Committee (ABJ30). He serves on the Board of Director of the Intelligent Transportation Society of NY – a professional group providing education and outreach to foster the understanding of ITS applications and technologies. He is also a member of Education and Research Committee of the International Association of Transportation Regulators. He holds a Ph.D. in Civil Engineering from the Graduate Center of the City University of New York, specializing in Intelligent Transportation Systems (ITS). He is the 2006 recipient of the National Pikarsky Award for Outstanding Dissertation in Science and Technology from the Council of University Transportation Center.

Dr. Kamga research interests include: intelligent transportation system; modeling and traffic simulation; analysis of very large transportation networks; use of real-time information for travel; transportation modeling using mobile sensors; transportation planning and policy, transportation operations; sustainability and environment; and transportation safety.

Robin Michals

Robin Michals is a photographer specializing in urban landscape with a focus on the de-industrialized waterfront. Since 2010, she has been developing *Castles Made of Sand,* a series about low-lying areas that are being impacted by sea level rise. She was a visiting artist at the Brooklyn Navy Yard in 2015. Her work has been seen at St. Peter's Church, the Alice Austen House, the Hudson Valley Center for Contemporary Art, the Brooklyn Historical Society, and the Davis Orton Gallery among other venues. She teaches photography at New York City College of Technology, City University of New York. She lives in Brooklyn, NY.

Marlon Palmer

Marlon Palmer is a senior at New York City College of Technology where he is studying Graphic Design. He's been a design intern at NYCCT's Faculty Commons since 2014 where he has worked on many projects including Scholars Exchange and *Nucleus*.

Sean Scanlan

Sean Scanlan is a senior fellow at the Brooklyn Waterfront Research Center. He is an assistant professor of English at New York City College of Technology/CUNY. Scanlan's teaching and research interests include: global homesickness, New York City history and literature, and the effect that technology has on reading and writing. He has published on nostalgia, homesickness, and globalization in the journal *Style* and in the collection *The City Since 9/11*. He received his PhD from the University of Iowa (English) and is the founder and editor of the online, interdisciplinary, peer-reviewed journal *NANO: New American Notes Online* (www.nanocrit.com).

NOTES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