

CONTESTED WATERFRONTS



Port Commerce and Urban Land Use: Economic Competitiveness in the 21st Century

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CMTS/TRB Diagnosing the Maritime Transportation System Conference

June 26-28, 2012

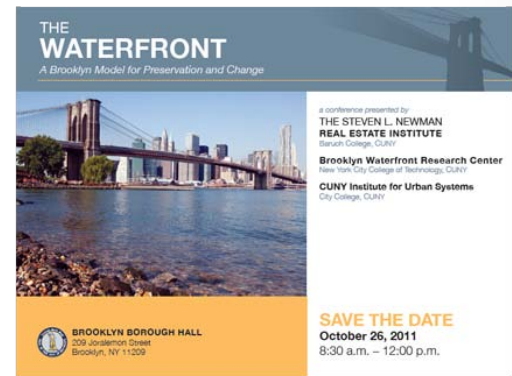
Washington, D.C.



This research was an outgrowth of a public policy paper sponsored by The Brooklyn Waterfront Research Center based at the New York City College of Technology.

The BWRC supports Research, Education and Public Outreach related to waterfront issues in the Borough of Brooklyn.

<http://bwrc.commonsgc.cuny.edu/>



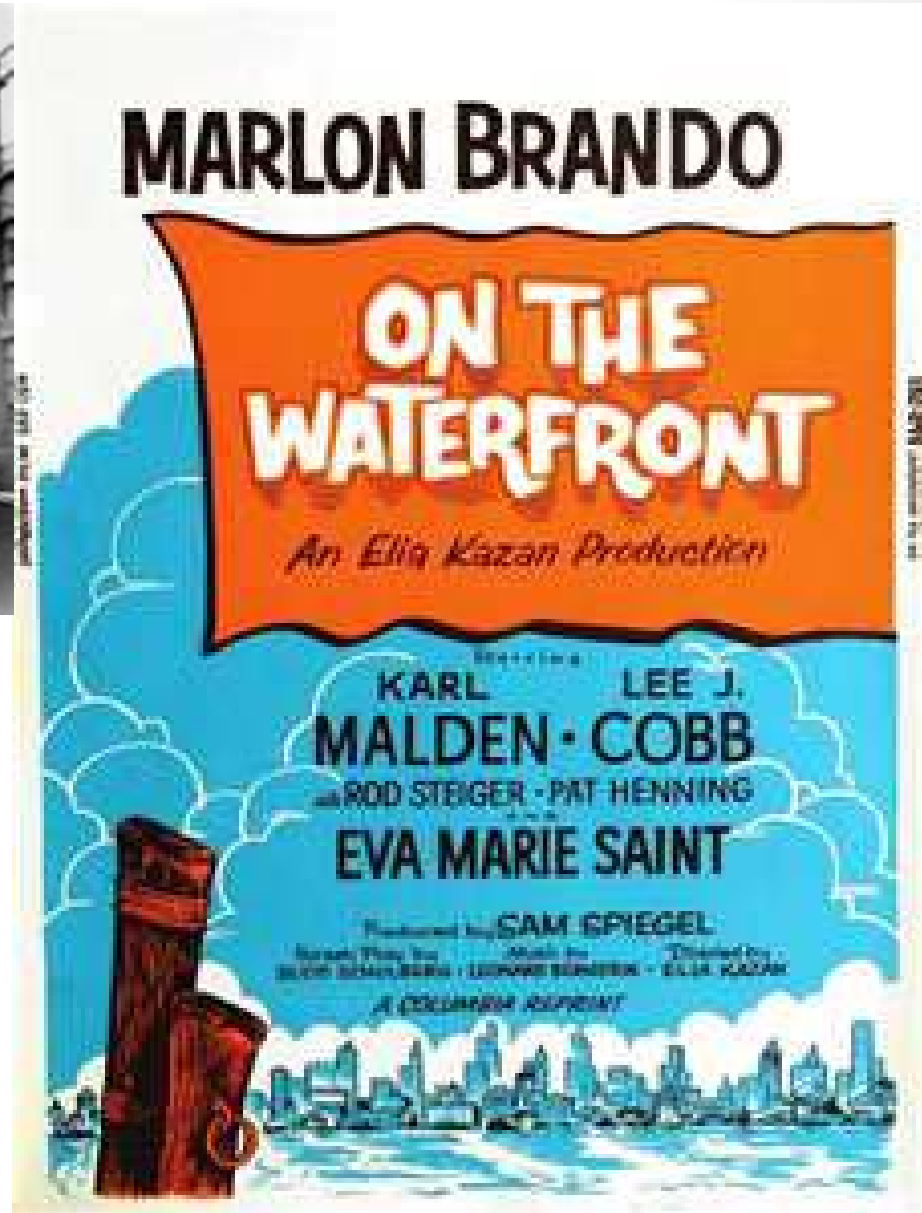
Presentation Overview

- Existing Conditions
- SWOT
- Contested Spaces
- Policies

- Questions:
 - Is there room for the maritime industry in Brooklyn?
 - Is the maritime industry still needed in Brooklyn?

- Why?
 - Brooklyn is part of a large city with an extensive waterfront and storied maritime history
 - Changes in shipping practices led to a disfavor of facilities
 - After years of disinvestment, the waterfront is becoming recognized for its recreational use

Old Version



The Brooklyn Waterfront - 2012



Brooklyn is the Coolest City on the Planet: A Nightlife Guide

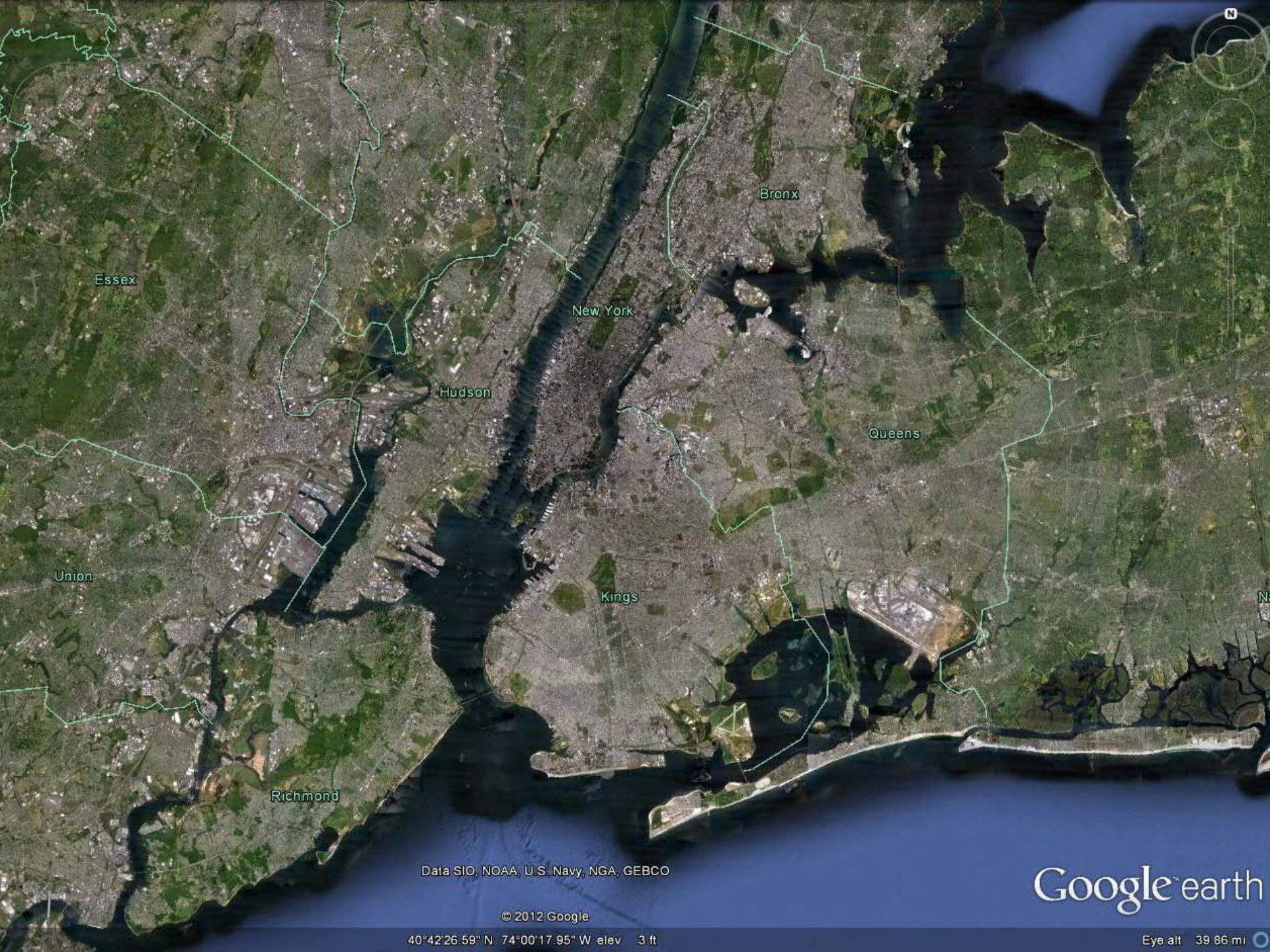
Don't take that as a knock on Manhattan, which is doing just fine. But for the first time since, well, ever, you can spend every New York minute of your trip on the far side of the East River and never feel like you're missing out.



DON'T DEMO DOMINO!
BAKE SALE AND Q&A
at The City Reliquary
SAT. 24 MARCH 7-9PM*



<http://www.gq.com/food-travel/travel-features/201111/brooklyn-new-york-guide-nightlife-bars->



Essex

Bronx

New York

Hudson

Queens

Union

Kings

Richmond

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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40°42'26.59" N 74°00'17.95" W elev 3 ft

Google earth

Eye alt 39.86 mi



Essex

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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40°42'26.59" N 74°00'17.95" W elev 3 ft

Google earth

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EXISTING CONDITIONS

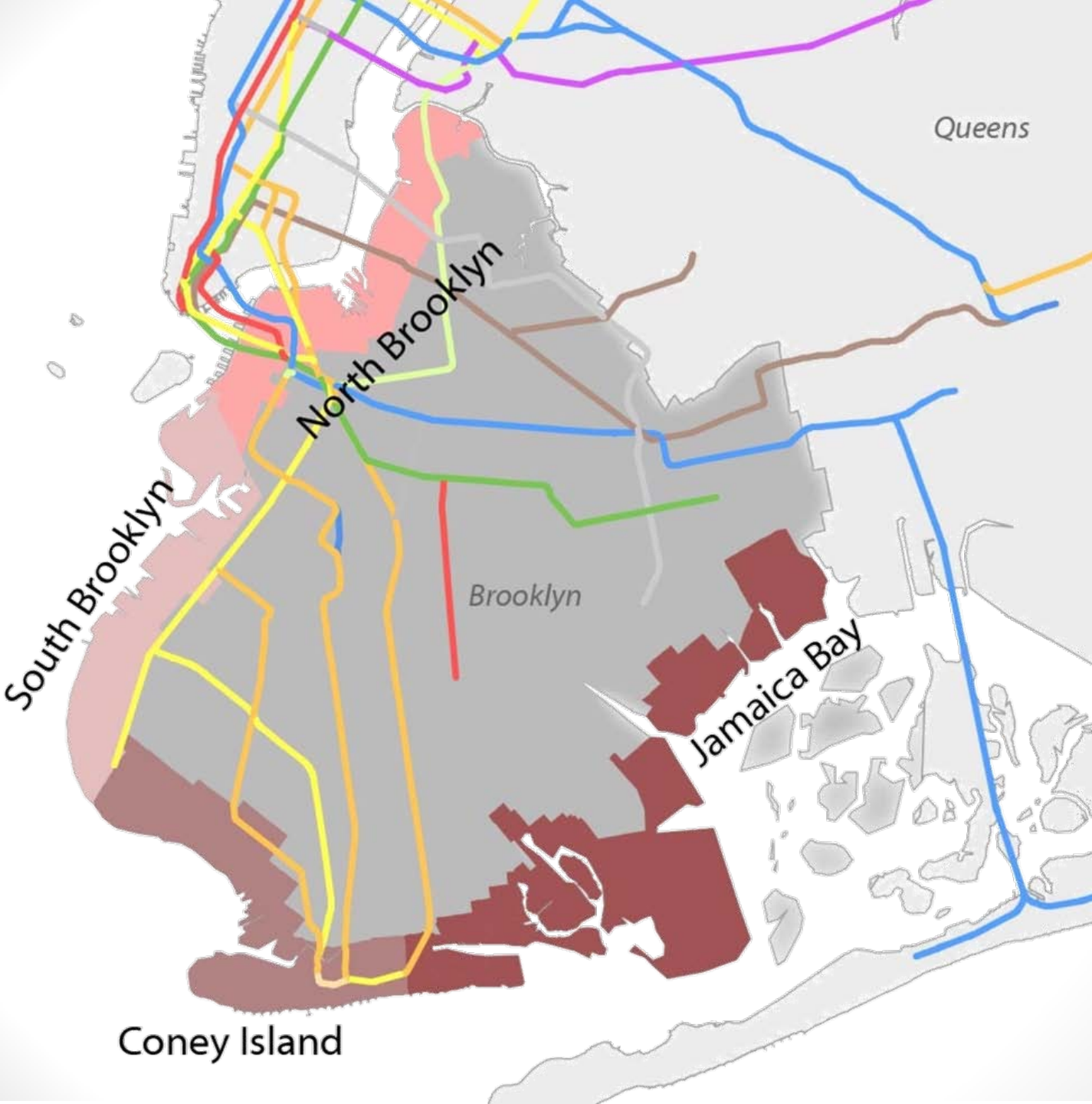
Data S1d, NOAA, U.S. Navy, NOAA, GEBCO

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40°42'26.50"N 74°00'17.95"W elev. 43ft

Google Earth

Year 1000m



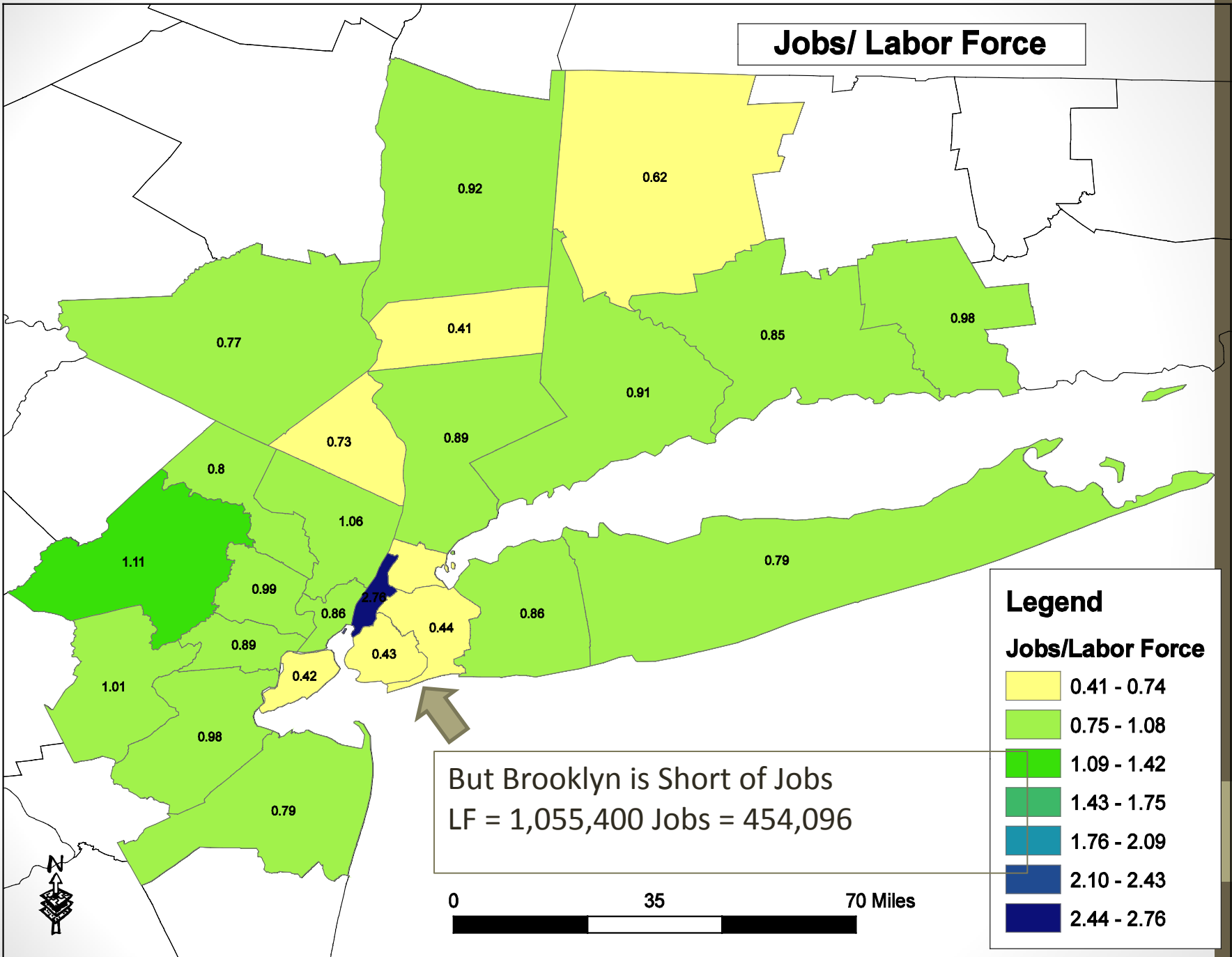
A post (?) manufacturing economy

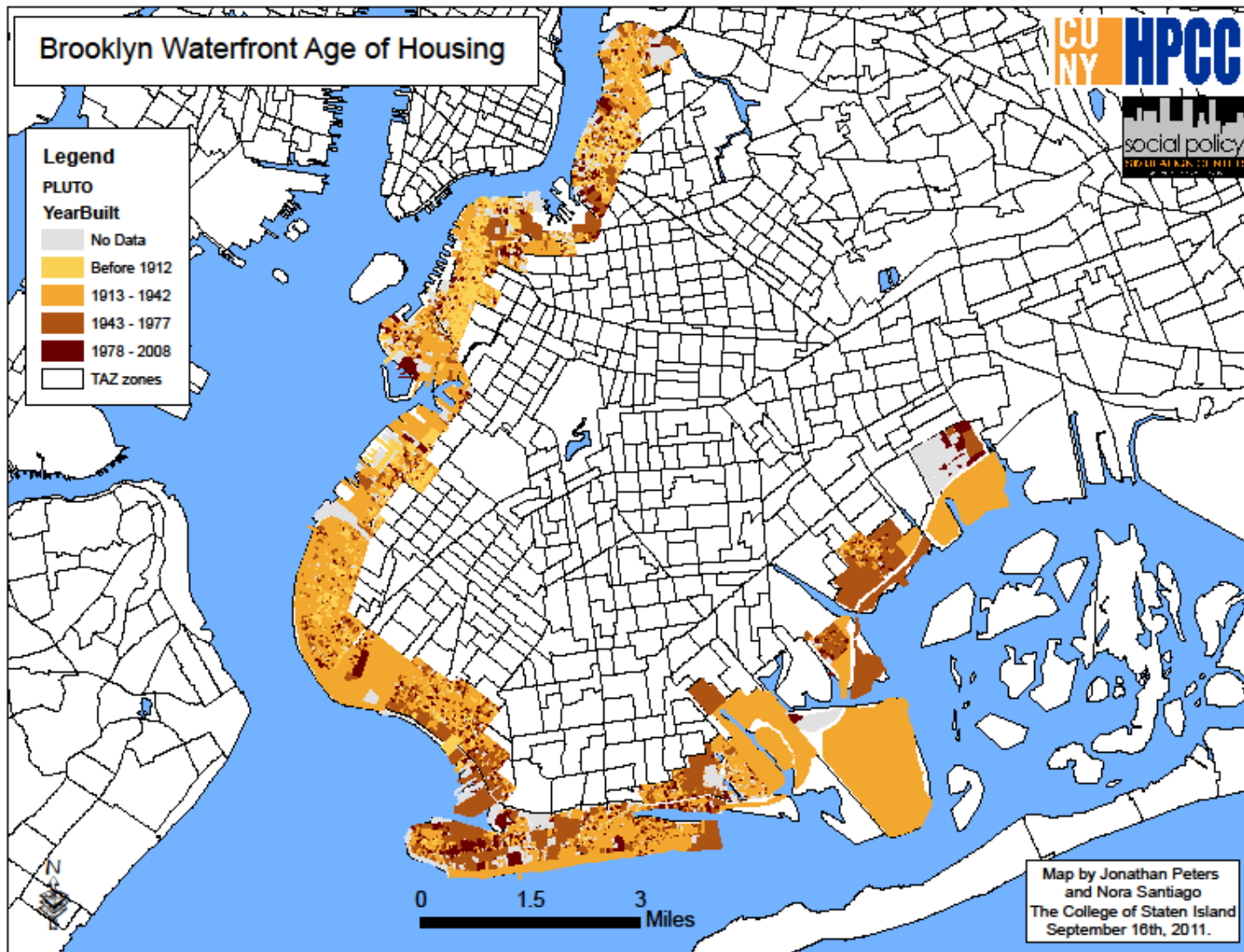
- In the mid 19th to the first part of the 20th century, Brooklyn developed a number of manufacturing centers and activities including:
 - Ship Building & Repair
 - Chemicals & Dyes
 - Manufacturing
- That base of jobs remains in some areas, with new growth in housing occurring in many traditional areas of industrial activity.

NY City Job Distribution – 2003

	Number of employees, 2003 - % DISTRIBUTION WITHIN BOROUGHES						Total Share
	BRONX	KINGS	NEW YORK	QUEENS	RICHMOND		
Total	100%	100%	100%	100%	100%	100%	
Forestry., Fishing	0%	0%	0%	0%	0%	0%	
Mining	0%	0%	0%	0%	0%	0%	
Utilities	1%	2%	0%	1%	1%	1%	
Construction	4%	5%	2%	9%	8%	3%	
Manufacturing	3%	8%	2%	8%	2%	4%	
Wholesale trade	4%	6%	6%	6%	2%	5%	
Retail trade	8%	12%	6%	11%	18%	8%	
Transportation & warehousing	2%	3%	1%	13%	5%	3%	
Information	2%	2%	8%	2%	3%	6%	
Finance & insurance	1%	4%	16%	3%	4%	11%	
Real estate & rental & leasing	3%	3%	3%	3%	2%	3%	
Professional, scientific & technical services	2%	3%	13%	3%	4%	9%	
Management of companies & enterprises	1%	1%	5%	1%	1%	4%	
Admin, support, waste mgt, remediation services	4%	5%	7%	5%	6%	6%	
Educational services	5%	5%	5%	3%	5%	5%	
Health care and social assistance	54%	32%	11%	20%	27%	19%	
Arts, entertainment & recreation	1%	1%	3%	1%	1%	2%	
Accommodation & food services	4%	5%	7%	6%	8%	6%	
Other services (except public administration)	3%	5%	5%	6%	5%	5%	
Unclassified establishments	0%	0%	0%	0%	0%	0%	
	100%	100%	100%	100%	100%		

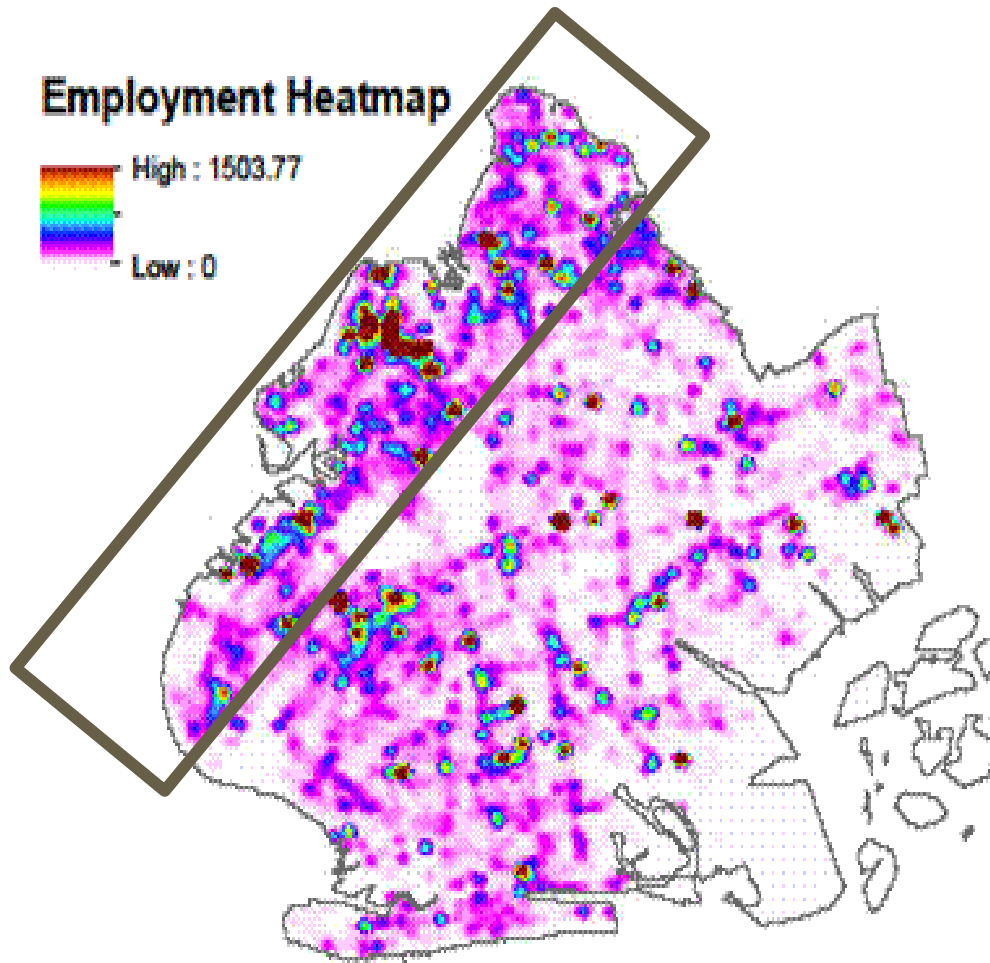
Jobs/ Labor Force





Patchwork of Development

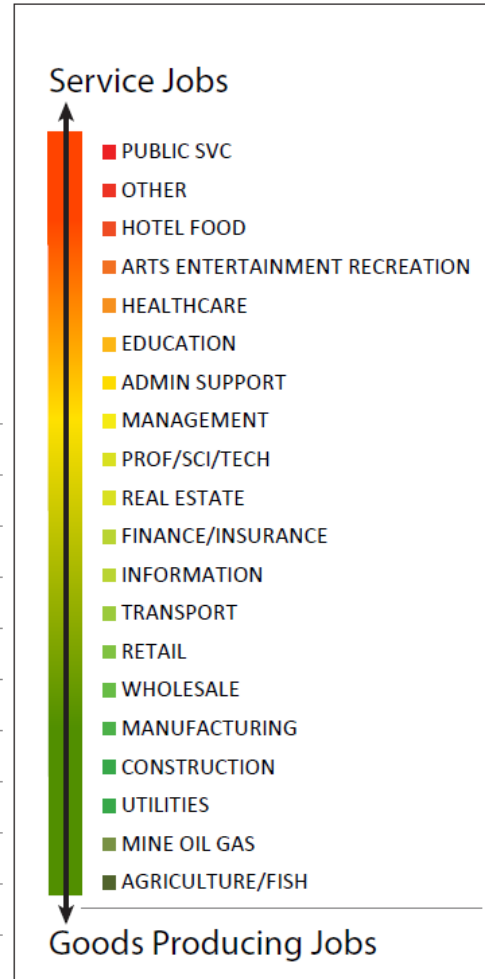
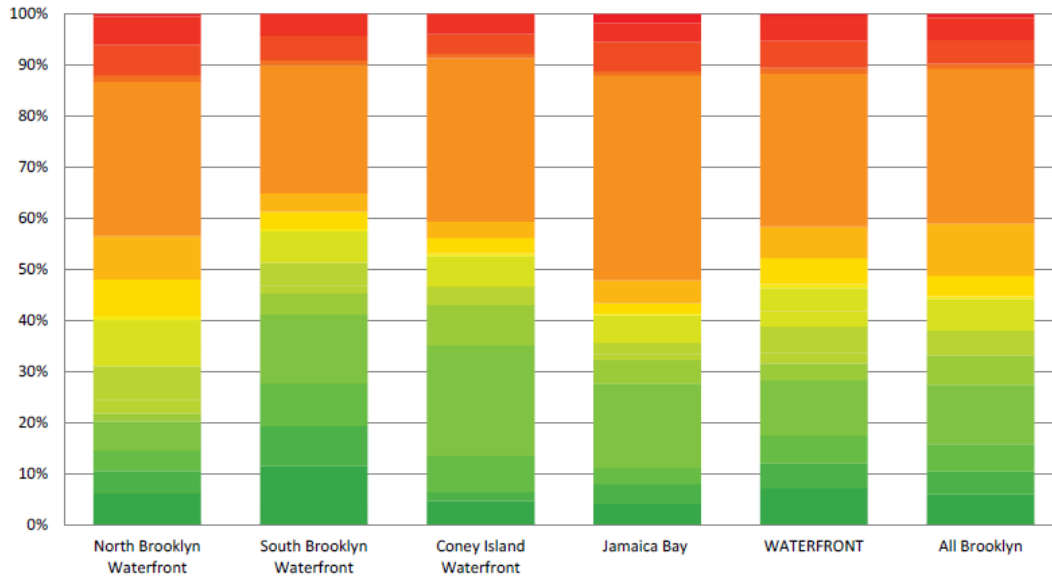
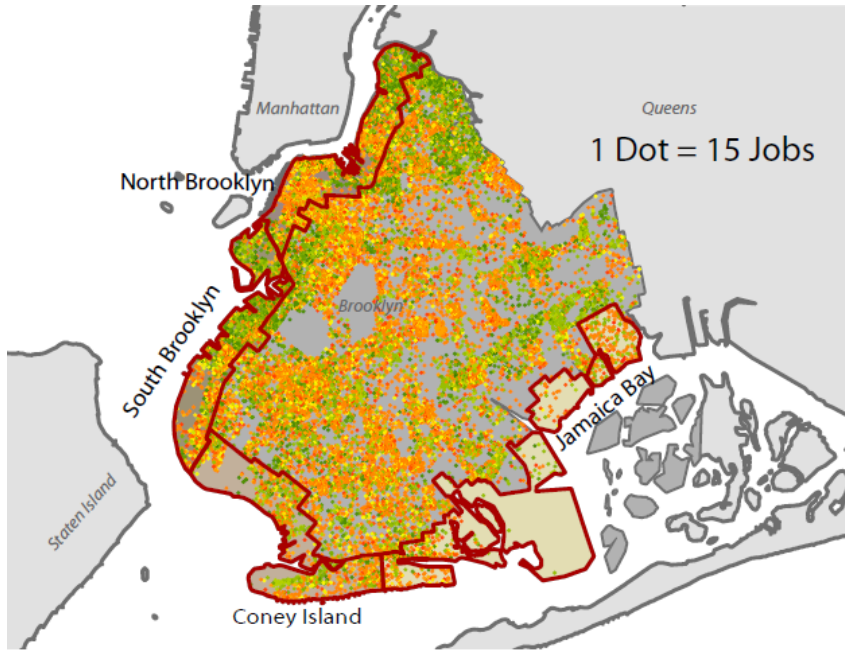
The Waterfront has mostly old building stock pockmarked with new “luxury” development



The Brooklyn Waterfront is a major zone for Jobs in the County

North & South Brooklyn is key

Job Distribution by NAICS Code Classification



Waterfront Changes

Columbia St Waterfront ~1982



Brooklyn Bridge Park





Brooklyn Bridge Park, Pier 1

Today



Container Port

Red Hook, Brooklyn



Brooklyn Navy Yard – 6 Graving Docks – 3 Inactive



"The Edge"

Converted Lofts

Utilities/
Manufacturing

Domino Sugar
Factory
(vacant)

Williamsburg, Brooklyn



SWOT

Data S1a, NOAA, US Navy, NGA, GEBCO

©2012 Google

40°42'26.50"N 74°00'17.95"W elev. 43ft

Google Earth

Earth 10000m

Strengths

Brooklyn

- Access to a large population
 - 8 million on Long Island
 - (Brooklyn, Queens, Nassau, Suffolk)
 - East of Hudson (NYC, New England)
- Naturally large waterfront
 - 520 Miles in NYC
- Historical land use patterns supportive of maritime-based industry

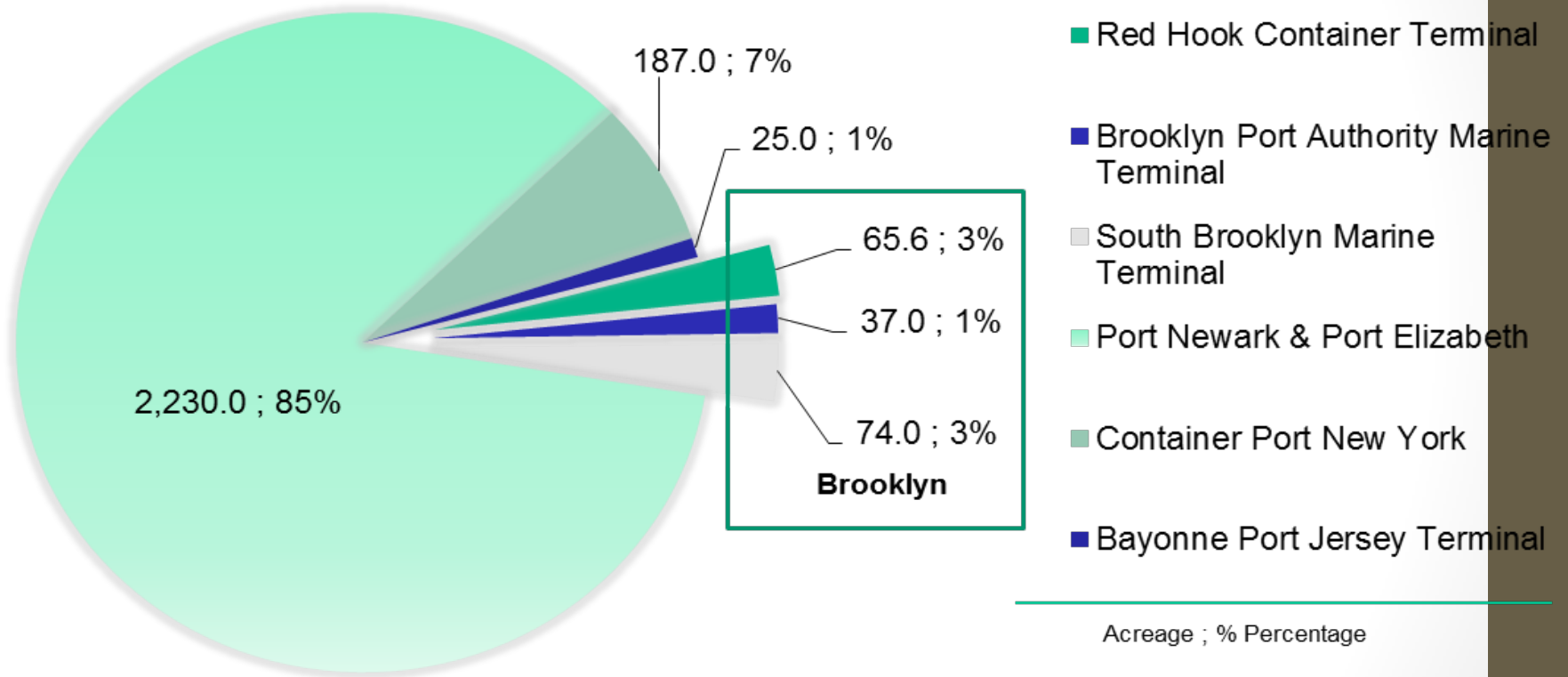
Maritime

- Generally good paying jobs.
- Has strong fundamental demand for their services and products.
- Brooklyn and Staten Island are home to many of the “back office” operations of the maritime sector in New York City.



Acreage of Major Facilities

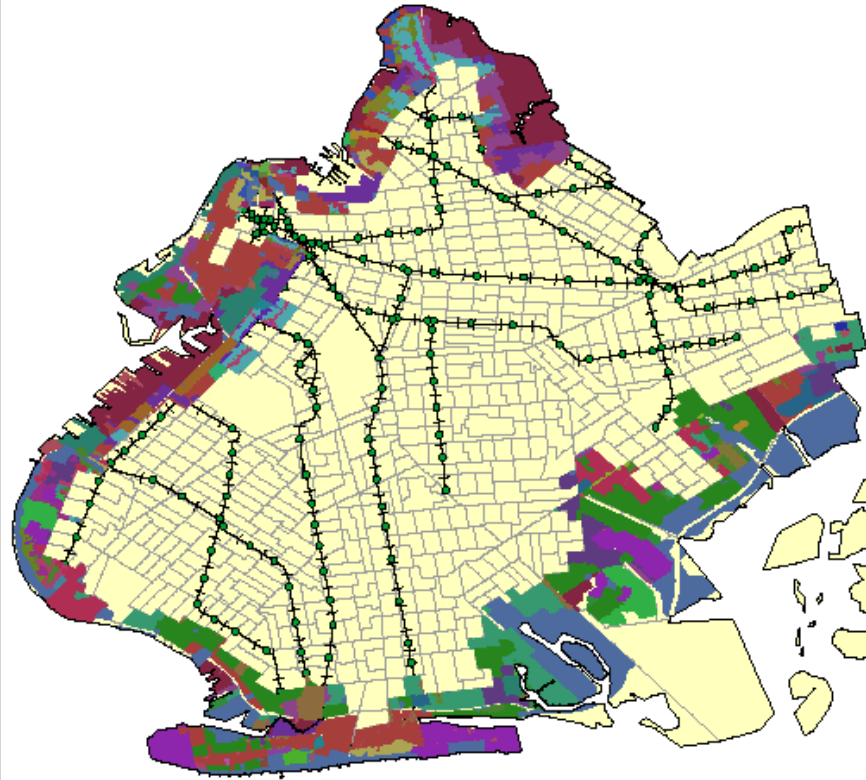
Port of NY & NJ



Zoning within 1/2 mile of Brooklyn Shoreline



- Legend**
- Brooklyn Waterfront PLUTO
- all other values
- ZoneDist**
- CO
 - CO-1
 - CO-2
 - CO-3
 - CO-3A
 - CO-3A
 - CO-2A
 - CO-1
 - CO-2
 - CO-2A
 - CO-4
 - CO
 - CO-1
 - CO-2
 - M1-1
 - M1-1RS
 - M1-1D
 - M1-2
 - M1-2RS
 - M1-2RBA
 - M1-2RBB
 - M1-2RTA
 - M1-2RB
 - M1-2RBA
 - M1-2D
 - M1-4RT-2
 - M1-4RTA
 - M1-4RBA
 - M1-6RS-1
 - M1-6
 - M2-1
 - M3-1
 - PARK
 - PARK20Y
 - R2
 - R3-1
 - R3-2
 - R3X
 - R4
 - R4-1
 - R4A
 - R4B
 - R5
 - R5B
 - R5D
 - R6
 - R6A
 - R6B
 - R7-1
 - R7-2
 - R7-3
 - R7A
 - R7B
 - R7D
 - R7X
 - R8
 - R8A
 - R8B
- NYC Subway Stops
- NYC Subway Routes
- Brooklyn 2010 Census Tracts



0 1.5 3 6 Miles

Map by Jonathan Peters
and Nora Santiago
The College of Staten Island
September 15th, 2011.

Opportunities

Brooklyn

- Access to a large population
- Underutilized maritime facilities
- Worker attraction – quality of life

Maritime

- Generally good paying jobs
- Has a very mixed relationship with Regional, State and National Government.

Threats

Brooklyn

- Costs
- Competing residential demand
- Continual growth in size of ships

Maritime

- Maritime sector Has a very mixed relationship with Regional, State and National Government.
- LULU

Westerhaven- 712 TEU (Launched 2000)

Brooklyn Port Commerce of Today
300 to 600 Foot Ships
300 - 1300 40' Boxes



Vessel type:	Cargo
Gross tonnage:	7,541 tons
Summer DWT:	8,430 tons
Length:	127 m
Beam:	20 m
Draught:	6.6 m

CMA CGM L'ETOILE - 2556 TEU (Launched 2010)



© Andrew Mackinnon
MarineTraffic.com

Vessel type:	Cargo
Gross tonnage:	tons
Summer DWT:	tons
Length:	210 m
Beam:	30.2 m
Draught:	M

MOL Innovation – 4434 TEU – Now APL Tourmaline (Launched 1996)

NY/NJ Port Commerce of Today
900 Foot Ships
2200 40' Boxes



Vessel type:	Container Ship
Gross tonnage:	52,086 tons
Summer DWT:	60,323 tons
Length:	293 m
Beam:	31 m
Draught:	11.6 m

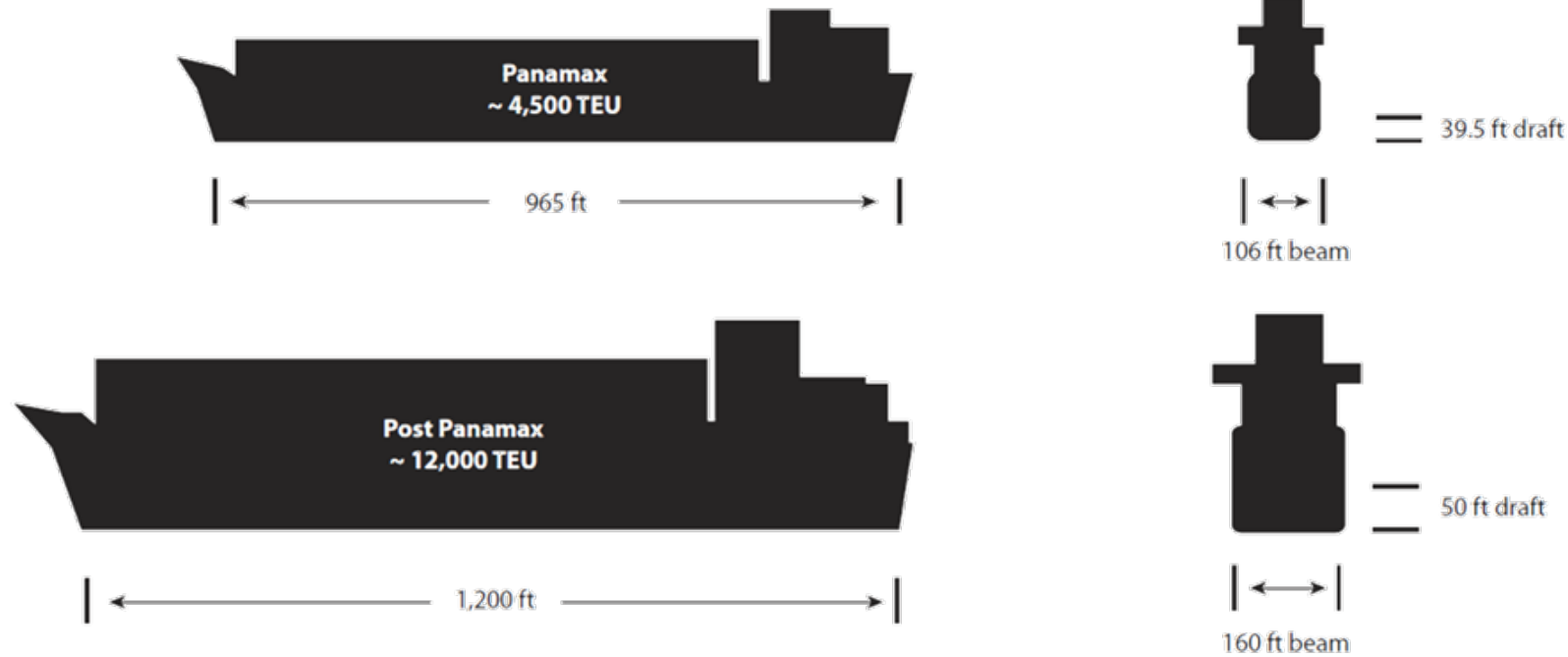
Emma Maersk – 14,777 TEU (Launched 2006)



Vessel type:	Container Ship
Gross tonnage:	170,794 tons
Summer DWT:	156,907 tons
Length:	398 m
Beam:	56 m
Draught:	11.5 m

NY/NJ Port Commerce of Tomorrow
1300 Foot Ships
7500 40' Boxes

Figure 2: Panamax Versus Post-Panamax



This diagram illustrates the relative dimensions of current Panamax versus Post-Panamax containerships. The larger Post-Panamax vessels will be able to fit through the expanded Panama Canal, which the Panama Canal Authority has scheduled for completion in 2014.

SOURCE: Diagram based upon Panama Canal Authority, *Proposal for the Expansion of the Panama Canal: Third Set of Locks Project* (April 24, 2006). Figure 30. Available at <http://www.pancanal.com/> as of August 2010.

Emma Maersk

L'Etoile

MOL Innovation

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Imagery Date: 6/2/2011



1978

40°41'09.08" N 74°00'41.85" W elev -1 ft

Eye alt 3247 ft



Singapore
Port

1200
Acres

© 2011 Google
Image © 2011 GeoEye
Gray Buildings © Urban Redevelopment Authority
© 2011 Tele Atlas

©2010 Google

Imagery Date: 10/18/2009 2000 1°16'55.67" N 103°45'51.99" E elev 0 ft

Eye alt 8922 ft



CONTESTED SPACES

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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40°42'26.50"N 74°00'17.95"W elev. 43ft

Google Earth

Year 2012.01.12

Land-side Space Needed for Large-Ship Operations



© 2011 Europa Technologies

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Imagery Date: 6/17/2010

40°40'03.63" N 74°05'50.53" W elev 26 ft

Eye alt 10.01 mi

Red Hook – Transitioning from this...



... to this: IKEA Parking Lot



Imagery Date: 6/17/2010



1978

40°40'19.13"N 74°00'46.88" W elev -1 ft

Eye alt

752 ft





YORK SHIP YARD COPP





POLICY

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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40°42'26.50"N 74°00'17.95"W elev. 43ft

Google Earth

Year 2012.01

Options

- If we want container ships – then we should prepare for the next round of ship technology – not what we currently handle either in Brooklyn or in Port Newark/Port Elizabeth.
- If we want Maritime support/back-office than we need to preserve key assets and prepare to accommodate individual large ships
- If we want residential/entertainment than we let the high-bidder/market and neighborhood concerns take precedence

Economic Impacts

- The creation of new jobs in the transportation sector would have a macroeconomic multiplier effect on the regional economy.
- That impact can be estimated using Census Bureau Economic Analysis Multipliers for the particular industry.
- The general range is 1.5-3.0 times the initial job creation as the total impact.

Brooklyn Shipbuilding and Water Support Jobs - 2012

- Today – 414 Jobs in these sectors
- Peak (1940's) – Over 10,000 Jobs
- Macro Effect – Roughly 2-3 times initial job impact – or 30,000 jobs at peak related to shipbuilding and water support jobs.
- Historical Changes – Loss of Brooklyn Navy Yard as federal facility.
- Loss of historic shipyard facilities.

Port of New York Graving Yards						
Location	Name	Status	Length (Feet)	Width	Active Feet	Constructed
Brooklyn Navy Yard	#1	Active	280	40	280	1851
Brooklyn Navy Yard	#2	Inactive	660			?
Brooklyn Navy Yard	#3	Inactive	450			?
Brooklyn Navy Yard	#4	Inactive	720			?
Brooklyn Navy Yard	#5	Active	1,092	150	1,092	1941
Brooklyn Navy Yard	#6	Active	1,092	150	1,092	1941
IKEA Red Hook	-	Filled In	612			1866
			Total		Active	
Total Graving Linear Feet			4,906		2,464	
Percentage Active - Brooklyn					50.2%	
New Jersey						
GMD Bayonne	-	Active	1,092		1,092	1941

Is Brooklyn Competitive?

- In 2009, the \$71.5 million dollar - five year contract for maintenance of the Staten Island Ferry was won by a firm in Norfolk, Virginia.
- this represents the loss of \$180 million dollars in economic activity from NY region
 - GMD Shipyards at the Brooklyn Navy Yard was only 1.35% higher
- Due to the use of 50% federal funding for the maintenance contract, national bidding was required.

Need for regional industries to be truly nationally competitive.

Area:	Kings County, New York				
Industry:	Ship Building + Water Support				
Owner:	Private				
Size:	All establishment sizes				
Type:	Employees & Total Wages				
				Annual	Weekly
Year	Employees		Total Wages	Average Wage	Average Wage
2010	414		\$18,871,380	\$45,583	\$876.60
2010 Kings	449,961		\$ 24,017,118,336	\$ 53,376	\$ 1,026.46
Transport	0.09%		0.08%	85.4%	85.4%
Multiplier	3		3	3	
Total Maritime Impact - Kings	1,242		\$ 56,614,140	\$ 136,749	
Navy Yard Peak	10,000		\$ 455,830,435		
Macro Effect	30,000		\$ 1,367,491,304		



www.brooklynnavyard.org/available.html

Google Maps: NYC | lifehackernightschool | Craigslist: NYC | Add to list | Bike Sharing PDF | Reading List

- HOME
- ABOUT THE NAVY YARD
- AVAILABLE SPACE
 - LIST OF VACANCIES
 - BROCHURES
 - INCENTIVES
 - FILM SHOOTS

BUILT ON A HISTORY OF SUCCESS

Available Space
 Spread out over 300 acres on the scenic Brooklyn waterfront, the Navy Yard encompasses 40 buildings, three fully functioning dry docks, four active piers and plenty of square footage to facilitate all of your business needs.

[Building 293](#)

Harmonious Usage?

What can be done?

- Nothing? Let the ‘invisible hand’ reign?
 - No. There are public policies which can help restore balance to the region’s economic growth and development.
- Infrastructure investments, especially in transportation
- Coordinated and systematic economic development policies
- Institutional reforms leading to more equalization of powers and finances across the region.
- Improved land-use policy
- Coordination across all policy areas and policy-making bodies.

What are the Barriers?

- Deciding on what issues need to be addressed?
 - Infrastructure?
 - Taxes?
 - Region Development Assistance?
 - Tolls? Congestion?
-
- No decision is a decision. Inaction is action.

Are there Metrics?

- **Incident Value**
 - Value of asset while in use
- **Systemic Value**
 - Value to system in robustness/resilience
 - Freight – Environment – Jobs – Congestion – Quality of Life
- **Substitution Value**
 - What are your alternatives?

**No decision is a decision.
Inaction is action.**