

WELCOME TO  
**WORKING PORT**  
IDEA EXCHANGE



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@BostonHarborNow



**TOM GLYNN**

Chief Executive Officer

**Massachusetts Port Authority**

#MAWorkingPort

@BostonHarborNow





# **CAROLYN A. KIRK**

Deputy Secretary

**Executive Office of Housing and  
Economic Development for the  
Commonwealth of Massachusetts**

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# **BRUCE CARLISLE**

Director

**Massachusetts Office of Coastal  
Zone Management**

#MAWorkingPort

@BostonHarborNow

# Massachusetts Port and Harbor Planning Program

*Working Port Symposium  
January 24, 2018*





# Port and Harbor Planning Program

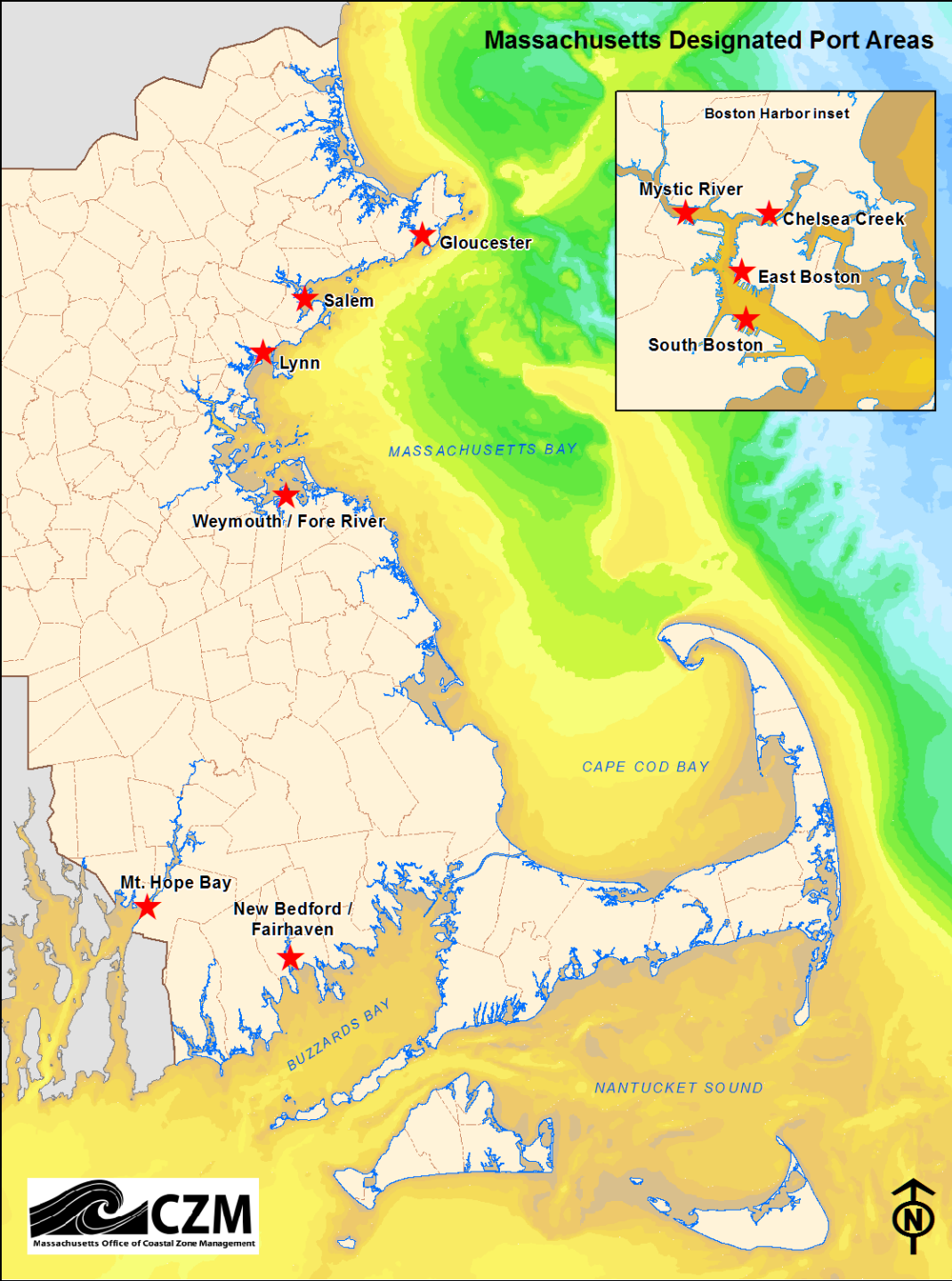
Work with municipalities, agencies and stakeholders to:

- Balance development and growth of waterfront areas while protecting and promoting public interest
- Protect Designated Port Areas (DPA) as geographic areas of particular state, regional, and national significance for water-dependent industrial uses

# DPA Regulatory Background

- 1978 – Formal establishment of Massachusetts Coastal Management Program
  - Policies to protect marine dependent industrial uses
  - DPAs are finite resources
  - Consistent with National statutory goals
- 1979 – Waterways Regulations include DPA provisions protecting water-dependent industrial uses for waterways
- 1984 – Legislature expanded Chapter 91 licensing authority (including DPA rules) to filled tidelands
- 1994 – Regulations codifying procedure and criteria for establishing and modifying DPA boundaries

## Massachusetts Designated Port Areas



- Gloucester Inner Harbor
- Salem Harbor
- Lynn
- Mystic River
- Chelsea Creek
- East Boston
- South Boston
- Weymouth Fore River
- New Bedford-Fairhaven
- Mount Hope Bay







# Boston Harbor DPAs

- Working waterfront is major economic driver:
  - \$4.6 billion annual impact
  - 50,000 total jobs
- Water-dependent industrial uses include:
  - marine terminals
  - bulk shipping
  - commercial passenger vessel operations
  - boatyards, dry docks, and port operations
  - commercial fishing and processing ...
- Four DPA areas comprise the Boston Inner Harbor DPA





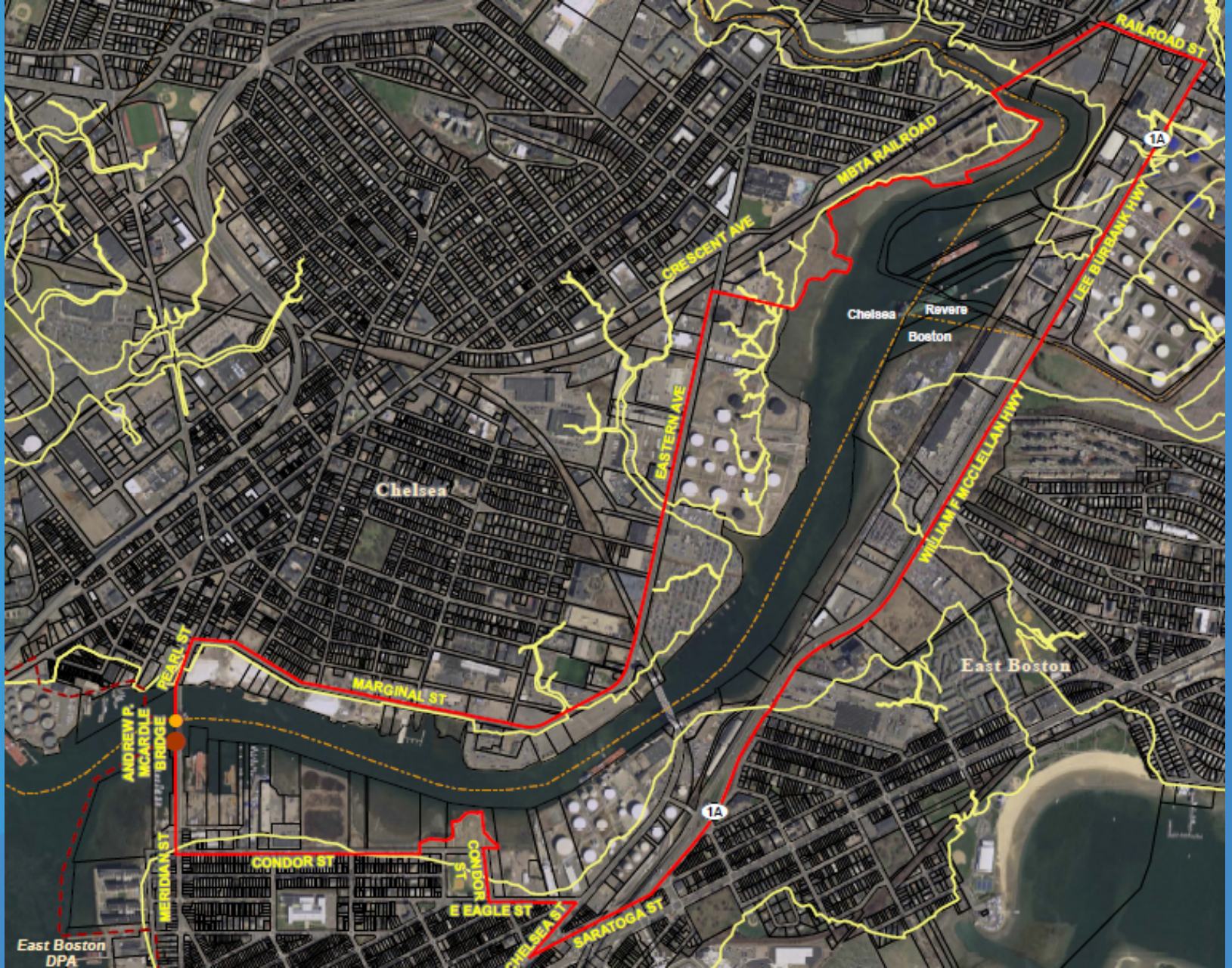
# South Boston DPA





# East Boston DPA





# Chelsea Creek DPA





# Mystic River DPA



# Waterways Program

- Administered by MassDEP, the Public Waterfront Act (MGL Chapter 91) is the public trust statute and protects the public's rights in waterways and filled tidelands
- C. 91 regulations promote the preservation of tidelands for water-dependent uses and provide for public use and enjoyment when privately developed
- Projects seeking license must ensure that they:
  - do not unreasonably interfere with navigation,
  - provide a proper public purpose,
  - do not interfere with public rights or rights of adjacent property owners,
  - will not adversely affect natural resources, and
  - preserve DPAs for maritime industrial use

# Port and Harbor Planning

- Municipal Harbor Plans
  - Establish a community's objectives, standards, and policies for public and private use of tidelands under Public Waterfront Act (Chapter 91)
  - Plans may include alternative siting and design criteria for projects or amplify certain c. 91 provisions
- DPA Master Plans
  - Identify measures to preserve and enhance capacity to accommodate water-dependent industrial use
  - Municipality may request flexibility for certain use standards but must balance that flexibility with elements that ensure that DPA interests are still protected

# DPA Boundary Reviews

- CZM regulations containing procedure and criteria for establishing and modifying the boundaries of DPAs
- Reviews may be initiated by:
  - CZM
  - Request of municipality
  - State or regional agency with authority over proposed area
  - Owner of proposed area
  - Any ten citizens of the Commonwealth
- Process includes public hearings, comments, meetings and consultations, review of available plans, permits, and licenses
- Two step process: eligibility and application of criteria
- CZM looks at groups of parcels that form coherent planning units rather individual parcels or project sites

[www.mass.gov/port-and-harbor-planning-program](http://www.mass.gov/port-and-harbor-planning-program)









# **KATHY ABBOTT**

President & CEO

**Boston Harbor Now**

#MAWorkingPort

@BostonHarborNow







January  
2018

BOSTON  
HARBOR  
NOW

# BOSTON'S WORKING PORT: A FOUNDATION FOR INNOVATION



*Through conversations with expert stakeholders, we are convinced that viable public policy and collaborative investment opportunities exist to increase innovation and profitability in Boston's maritime industrial waterfront.*

PLANNING A 21<sup>ST</sup>-CENTURY HARBOR



GROWTH



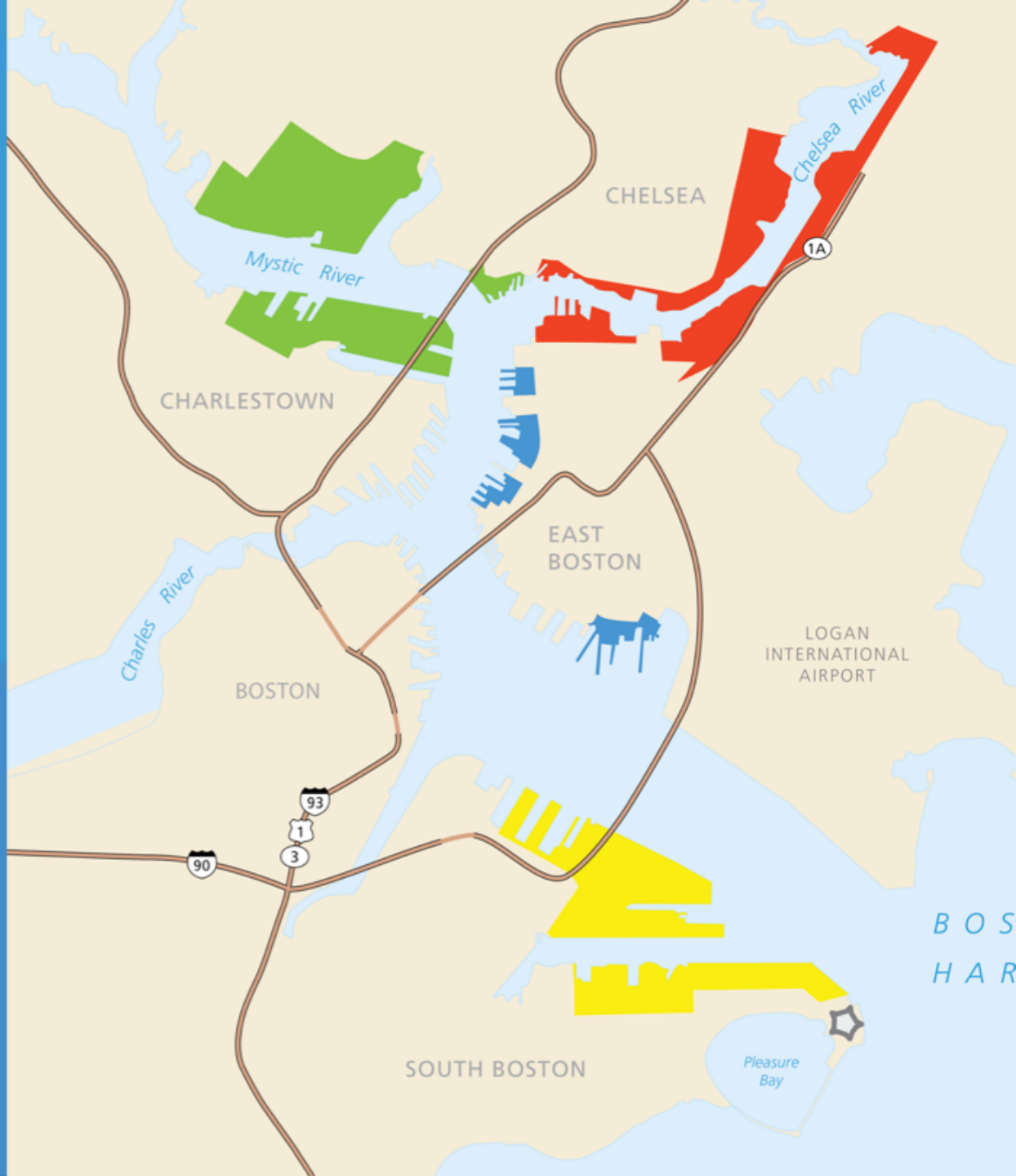
CHANGE



SYNERGY



FLEXIBILITY

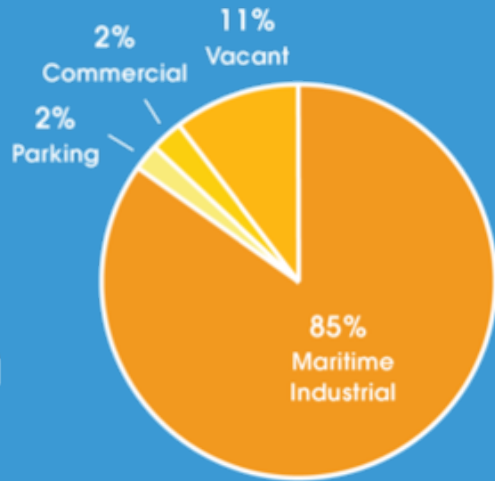




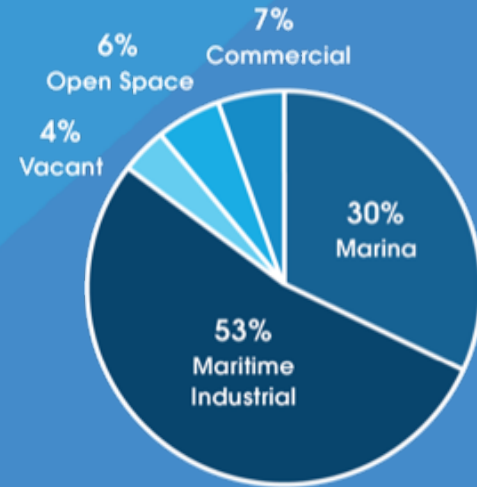


GROWTH

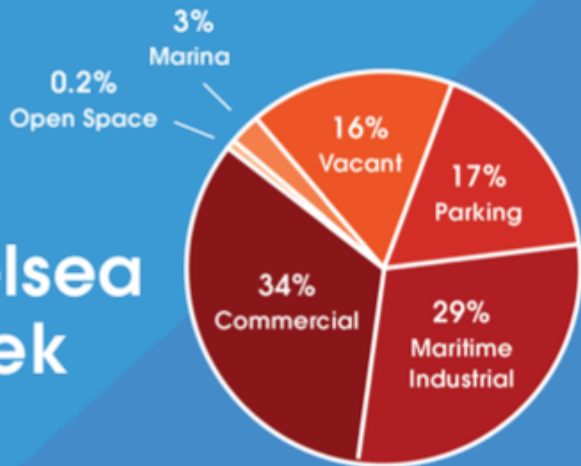
# South Boston DPA



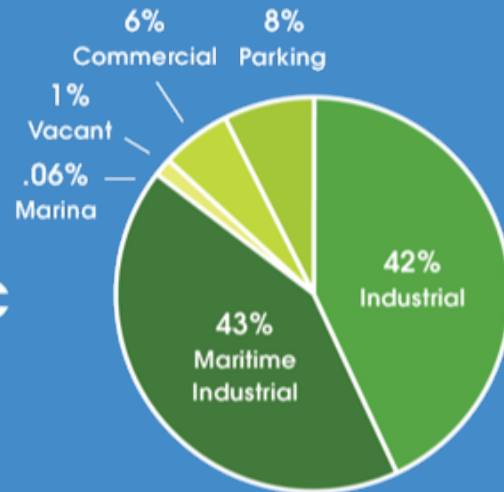
# East Boston DPA



# Chelsea Creek DPA



# Mystic River DPA



CHANGE





*JASON*

WOODS HOLE  
OCEANOGRAPHIC INSTITUTION



SYNERGY





FLEXIBILITY





WORKING

PORT:

A 21ST-CENTURY HARBOR

A two-day idea exchange  
on Boston's working port

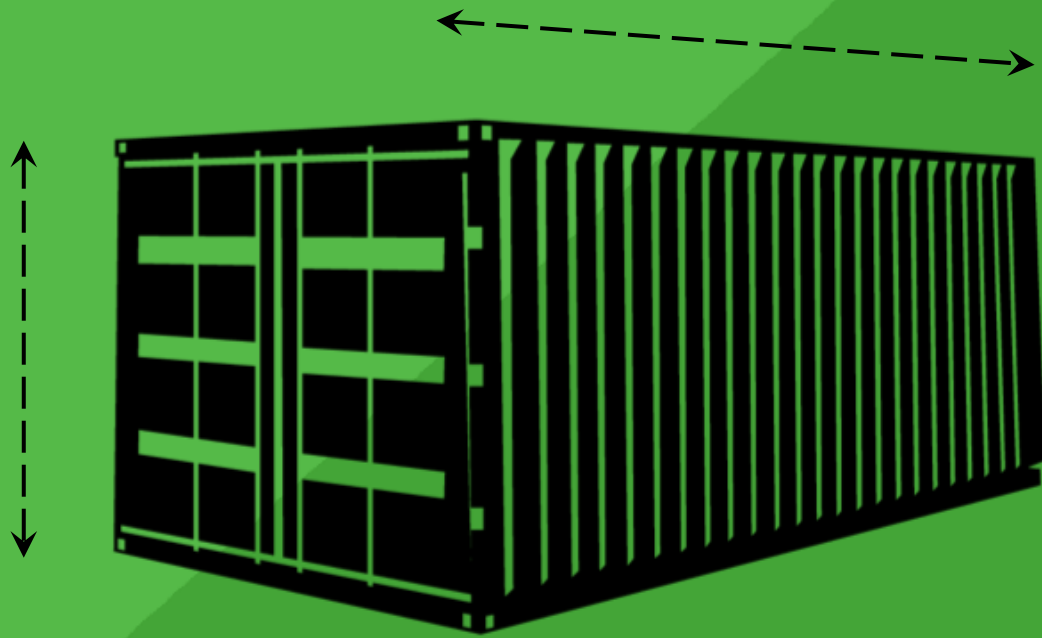


# JAMIE FAY

Founder & President  
**Fort Point Associates**

#MAWorkingPort

@BostonHarborNow



**8 x 40**



# **ANDREW HARGENS**

Deputy Director

Real Estate Development

**Massachusetts Port Authority**

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# Massport's Maritime Business Lines

**Andrew Hargens, AICP | LEED AP**  
Deputy Director, Real Estate Development  
Real Estate & Asset Management Department  
Massachusetts Port Authority  
January 2018



# The Port of Boston:




## *A Major Contributor to the Regional Economy*

- \$4.6B economic impact
- 50,000 total jobs (7,000 direct jobs)
- Federal tax revenues of \$203M
- State & local tax revenues of \$136M
- 1,600 NE businesses use the port

# The Port Compared to Boston's Largest Employers

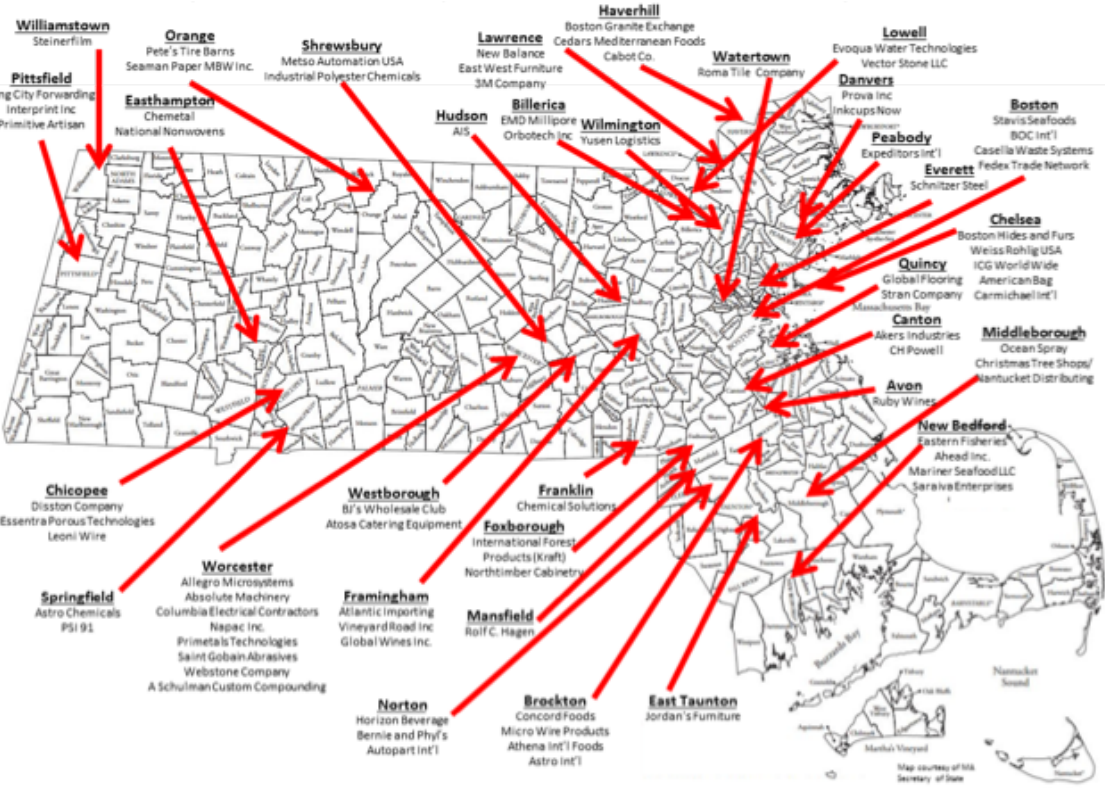
Entity	Employees
Mass. General	14,752
Brigham&Women's	11,229
Boston University	9,783
Children's Hospital	7,903
State Street	7,800
<b>Port of Boston</b>	<b>7,091</b>
Beth Israel	6,695
Fidelity	5,500
Harvard Graduate Schools	5,132
Northeastern	4,484



	Massport Property
	Other Public (USCG & BRA)
	Private Port Facilities

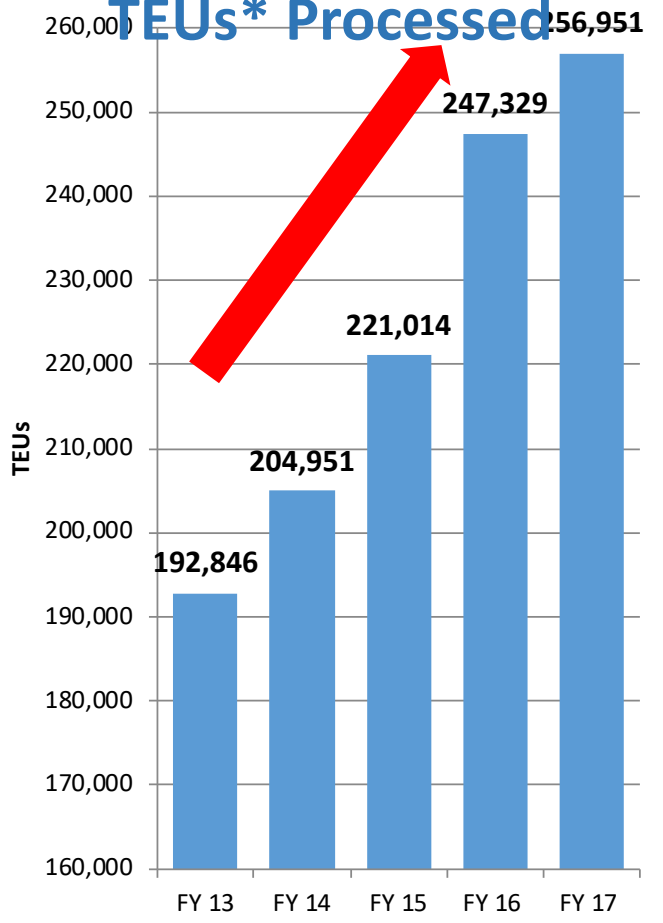
# Port Owners

# Conley Terminal Keeps MA Businesses Competitive



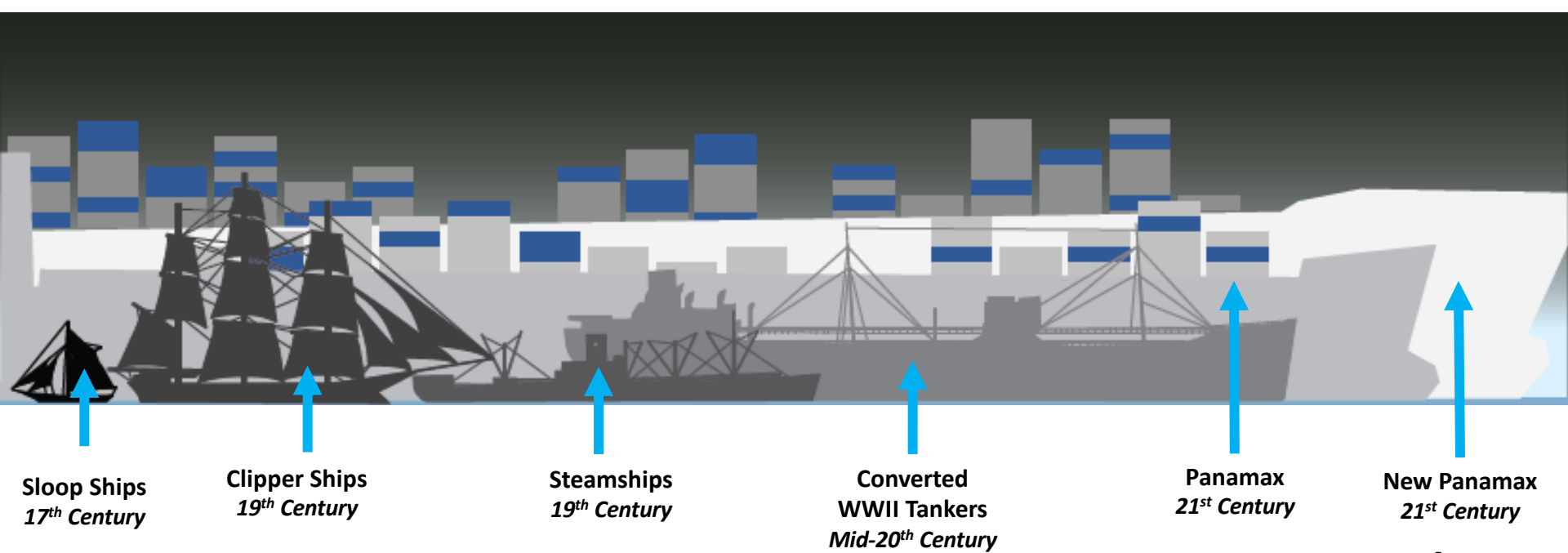
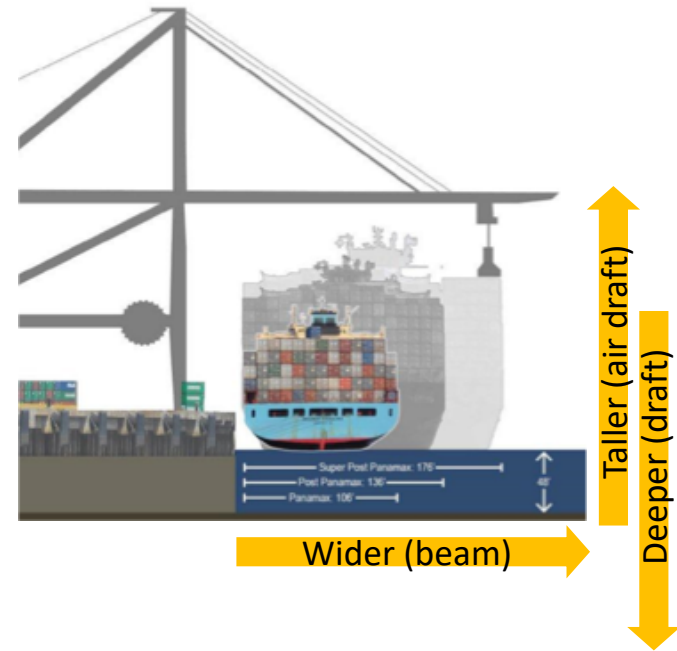
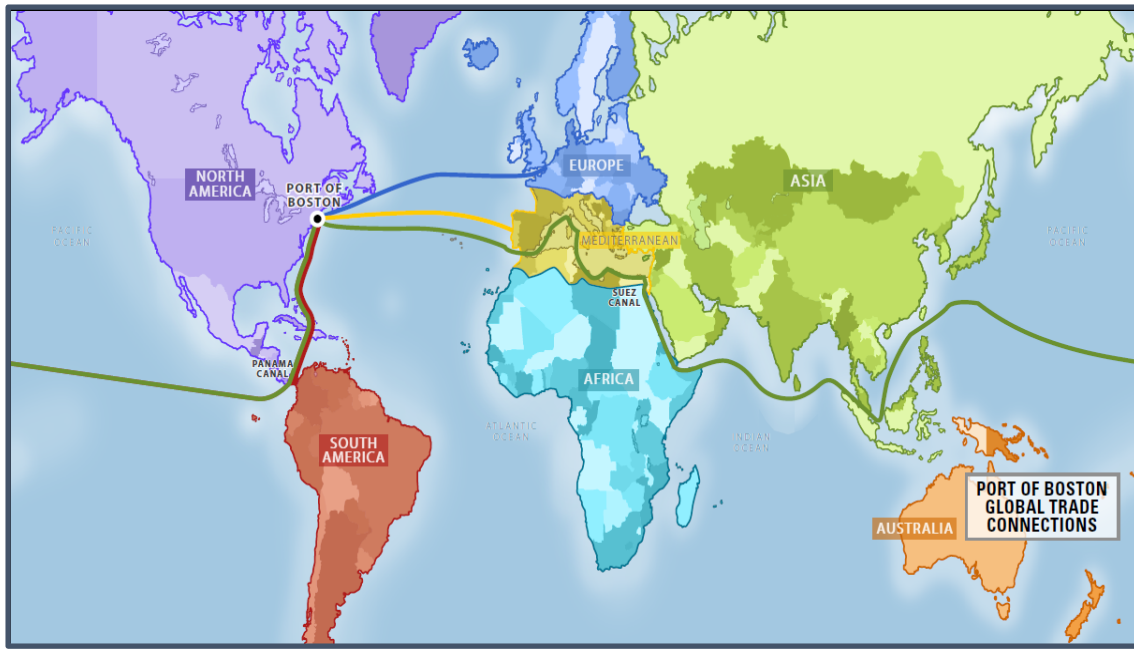
## 2017 Marked Conley's 3rd Straight Record-Setting Year for the Volume of

**TEUs\* Processed**



\*TEUs or twenty-foot equivalent units are the shipping industry standard for measuring container volumes.



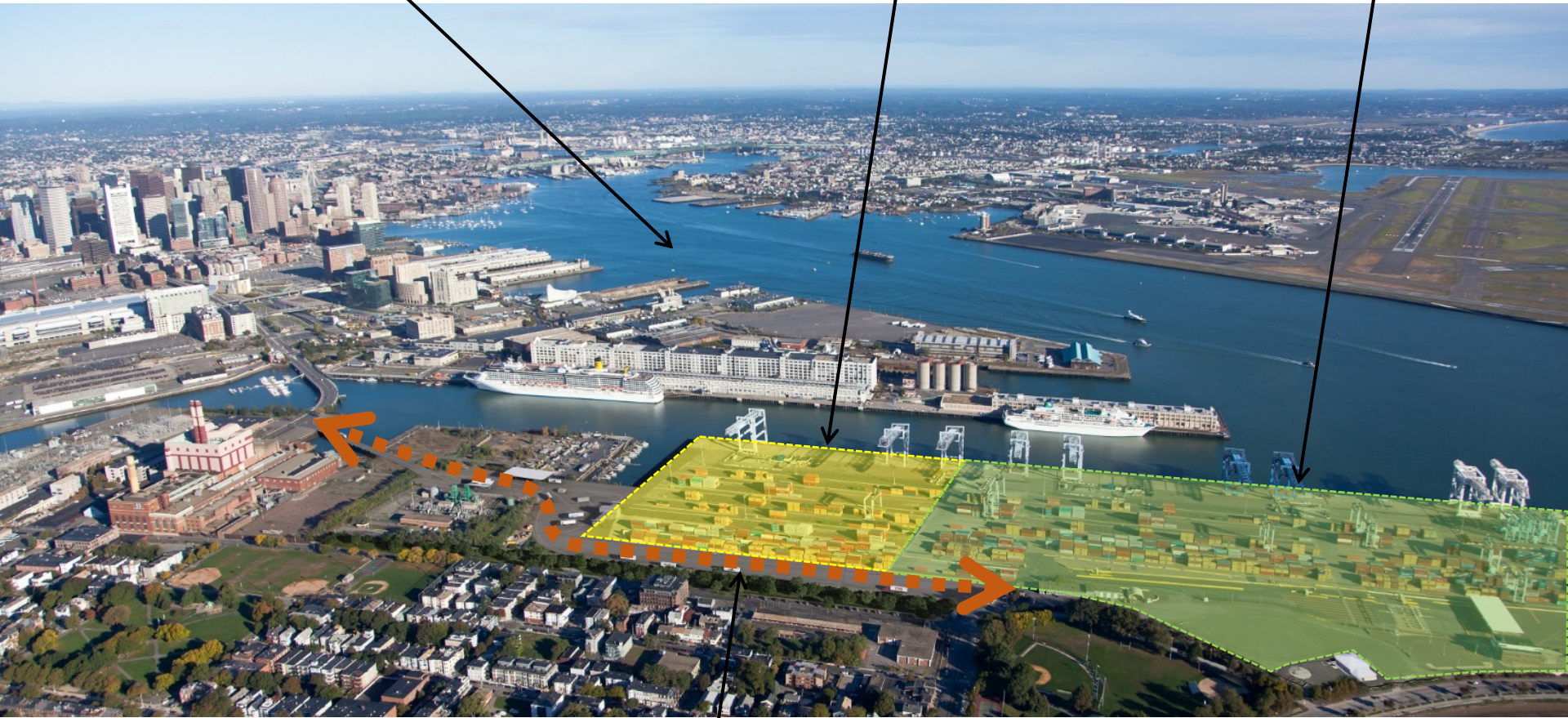


# Conley Terminal Revitalization and Modernization

Harbor Dredging (\$350M)

New Berth With 3 New Cranes (\$215M with \$107.5M from Economic Development Bill)

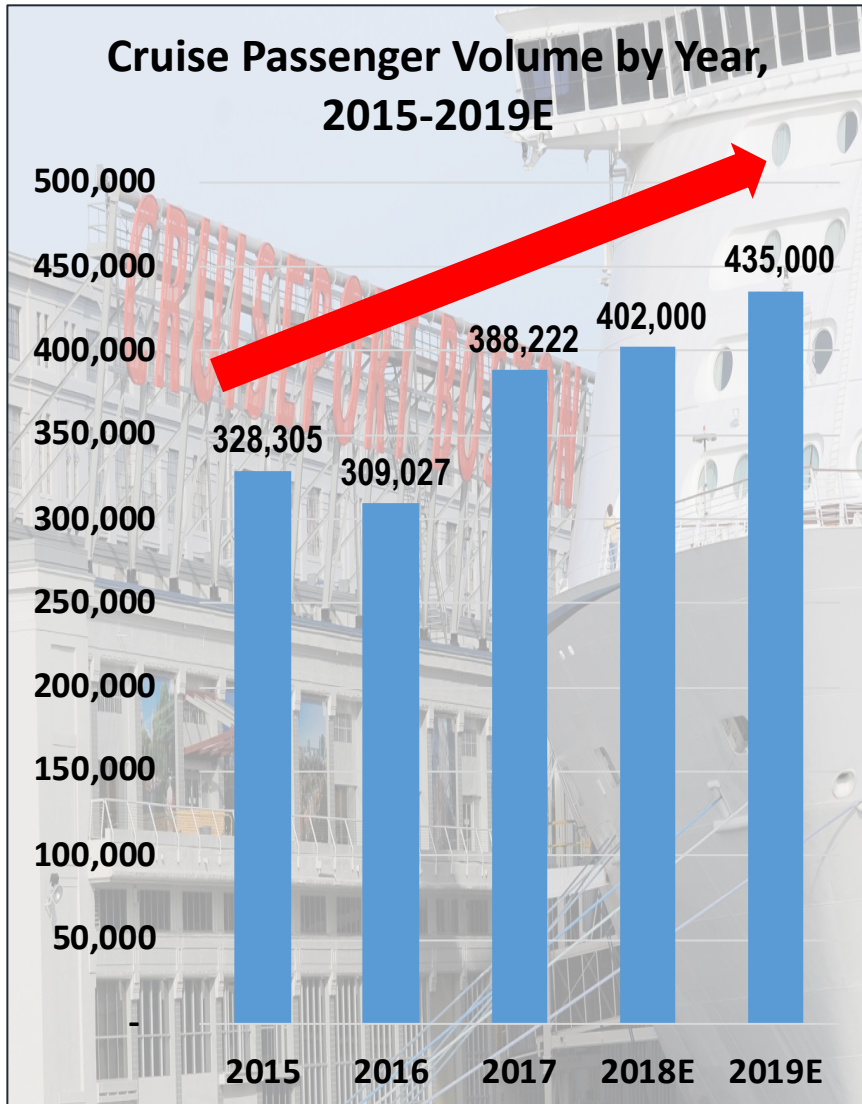
Existing Terminal (\$103M with \$42M FASTLANE Grant)



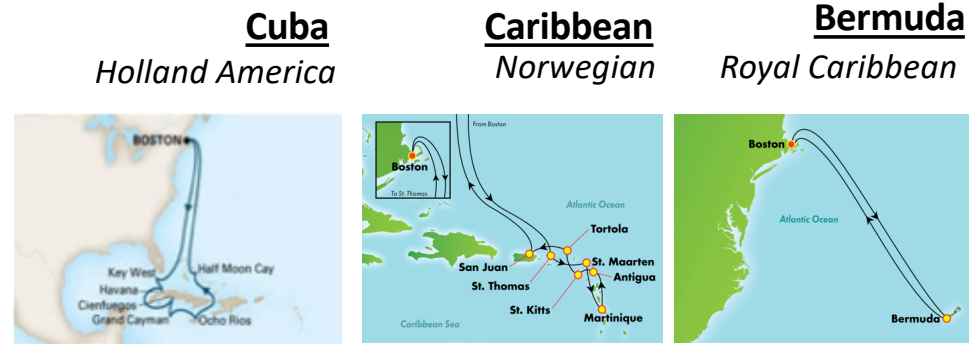
Butler Dedicated Freight Corridor and Buffer Park (\$75M)  
Opened in fall 2017



# CRUISE ship call bookings predict record-breaking volumes ahead



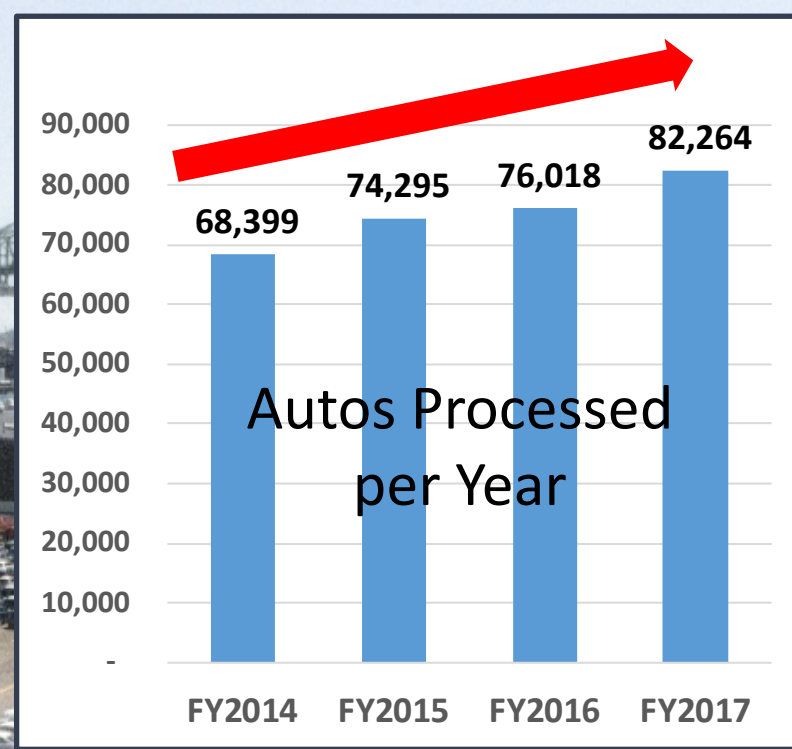
## *New Itineraries in 2018 Season*





# Growth and Investment at Boston Autoport

- More than 80,000 autos processed in 2017
- Nearly 250,000 metric tons of salt imported
- Supports 10 different maritime industrial businesses
- 500 employees
- Significant investment by tenant in infrastructure and facilities



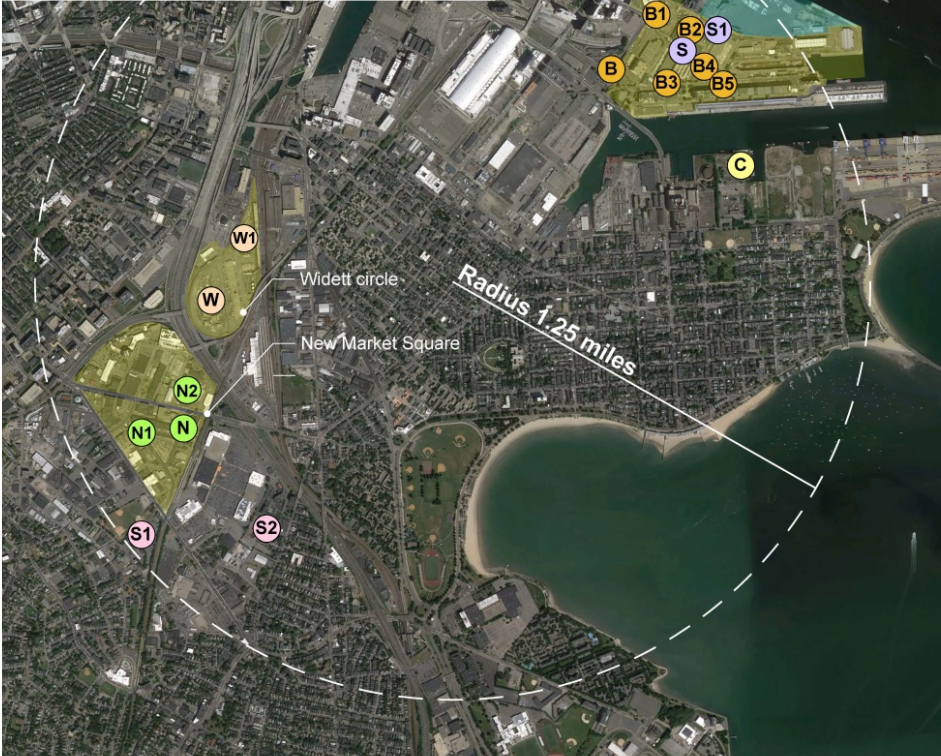


# A thriving and growing seafood industry cluster exists in South Boston

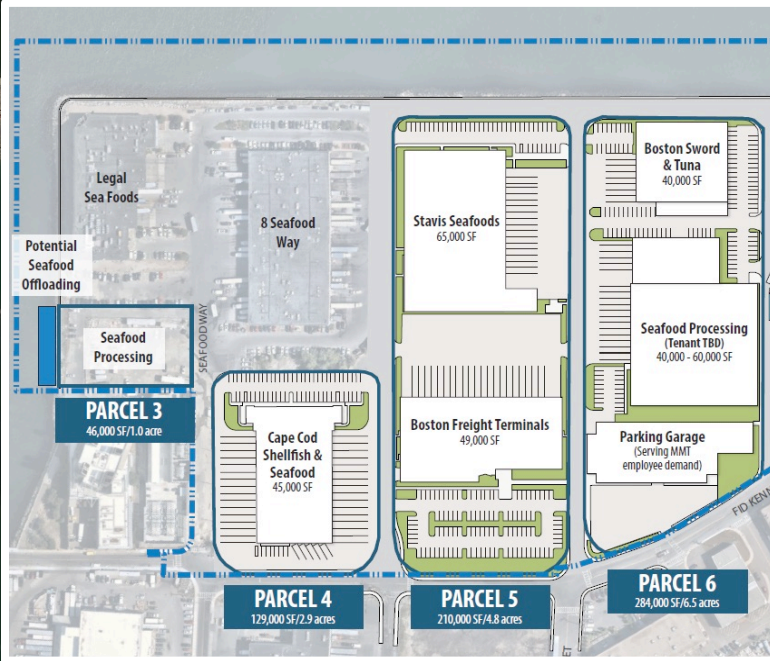


HRA  
Analysis Advisors, Inc.  
DRAFT

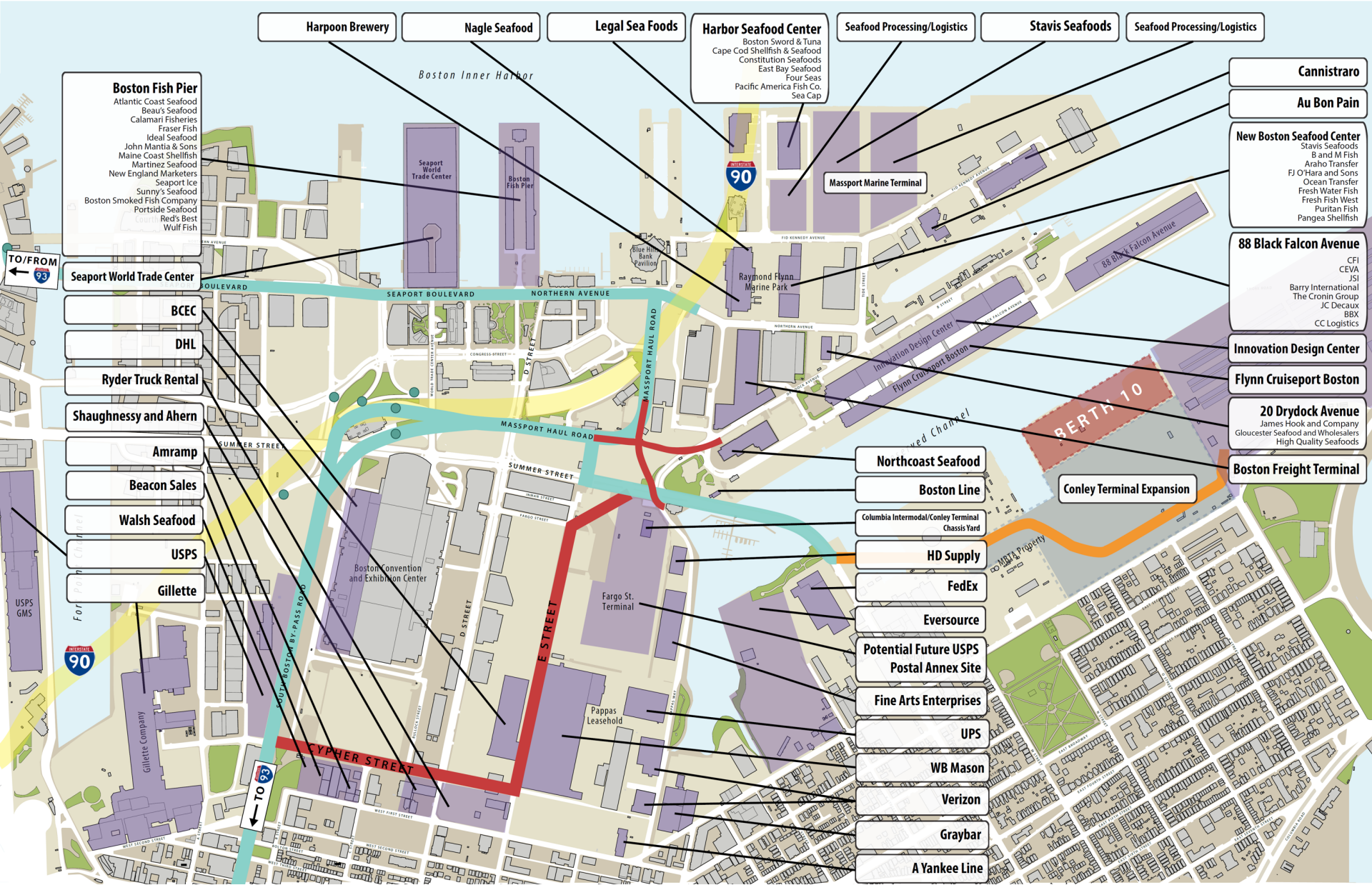
November 2015  
Massachusetts Port Authority  
**Boston Seafood Industry Analysis**  
Executive Summary



**100% Leased at the Boston Fish Pier**

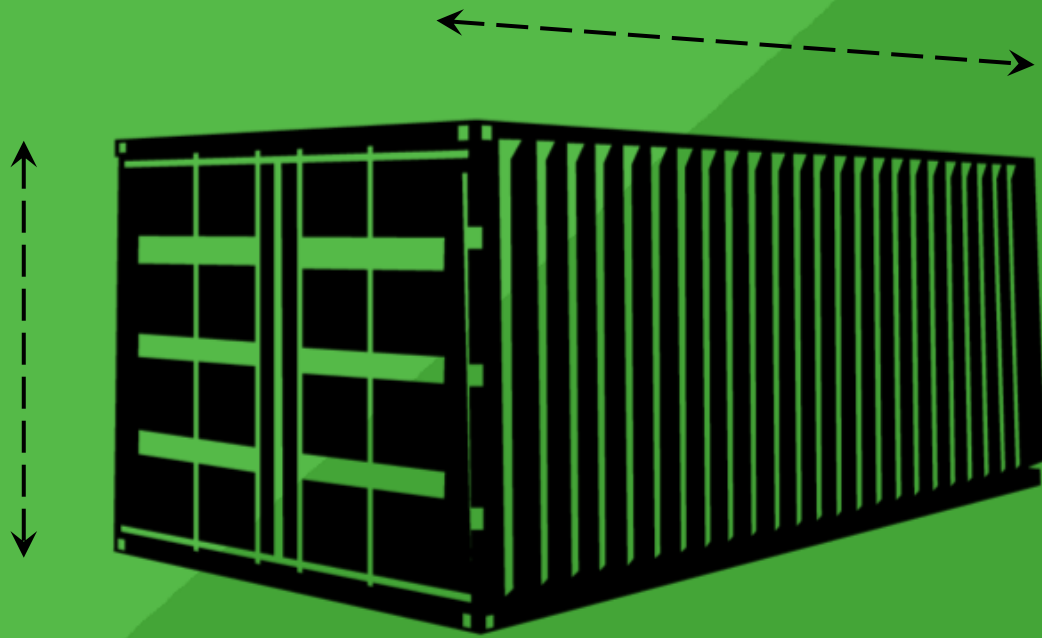






# Truck Routes and Truck-Generating Facilities and Businesses in South Boston

- Primary Truck Routes  
*general traffic allowed*
- Butler Freight Corridor  
*Spring 2017 Completion*
- Proposed E/Cypher Corridor
- Truck Generating Facilities
- Interstate Ramp Access
- Interstate Tunnels



**8 x 40**





# ROSEANN BONGIOVANNI

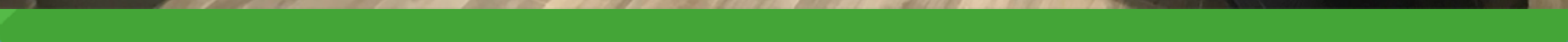
Executive Director  
**GreenRoots**

#MAWorkingPort

@BostonHarborNow



**GreenRoots**  
227 Marginal Street,  
Suite 1  
Chelsea, MA 02150  
617.466.3076  
[www.GreenRootsChelsea.org](http://www.GreenRootsChelsea.org)











## Chelsea

- 45,000+ residents
- 1.8 sq. miles
- 75% ethnic/racial minorities
- 24% live below the poverty level

## East Boston

- 55,000+ residents
- 2 sq. miles
- 53% Latino
- 17% live below the poverty level

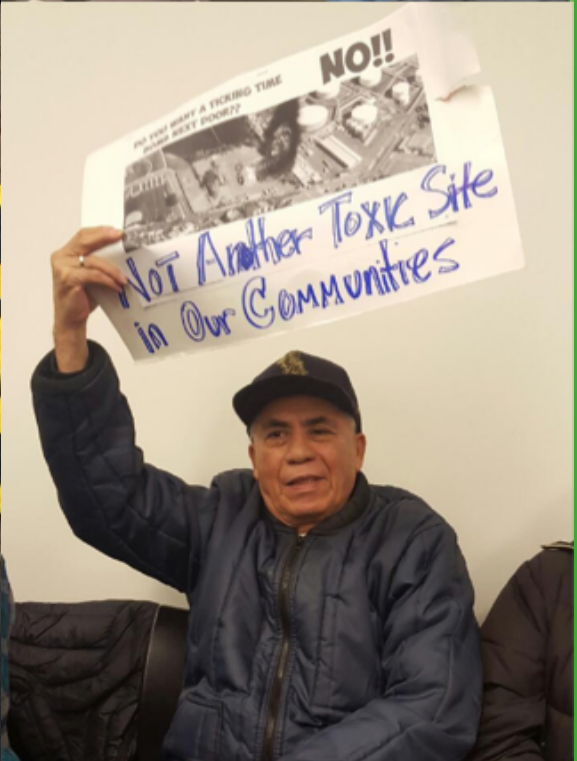












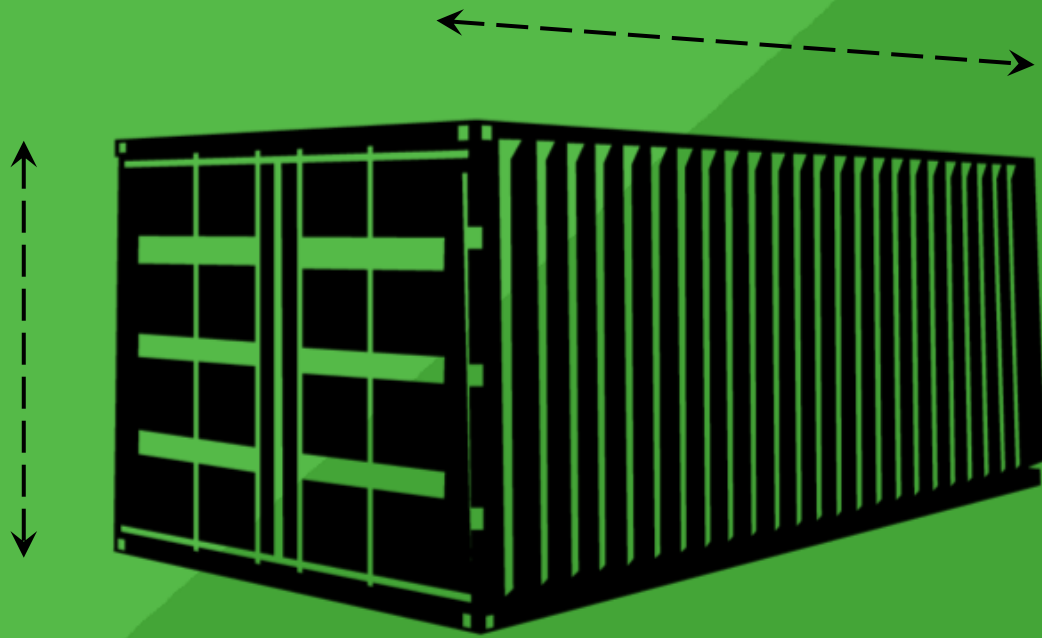












**8 x 40**

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# **JAKE CITRIN**

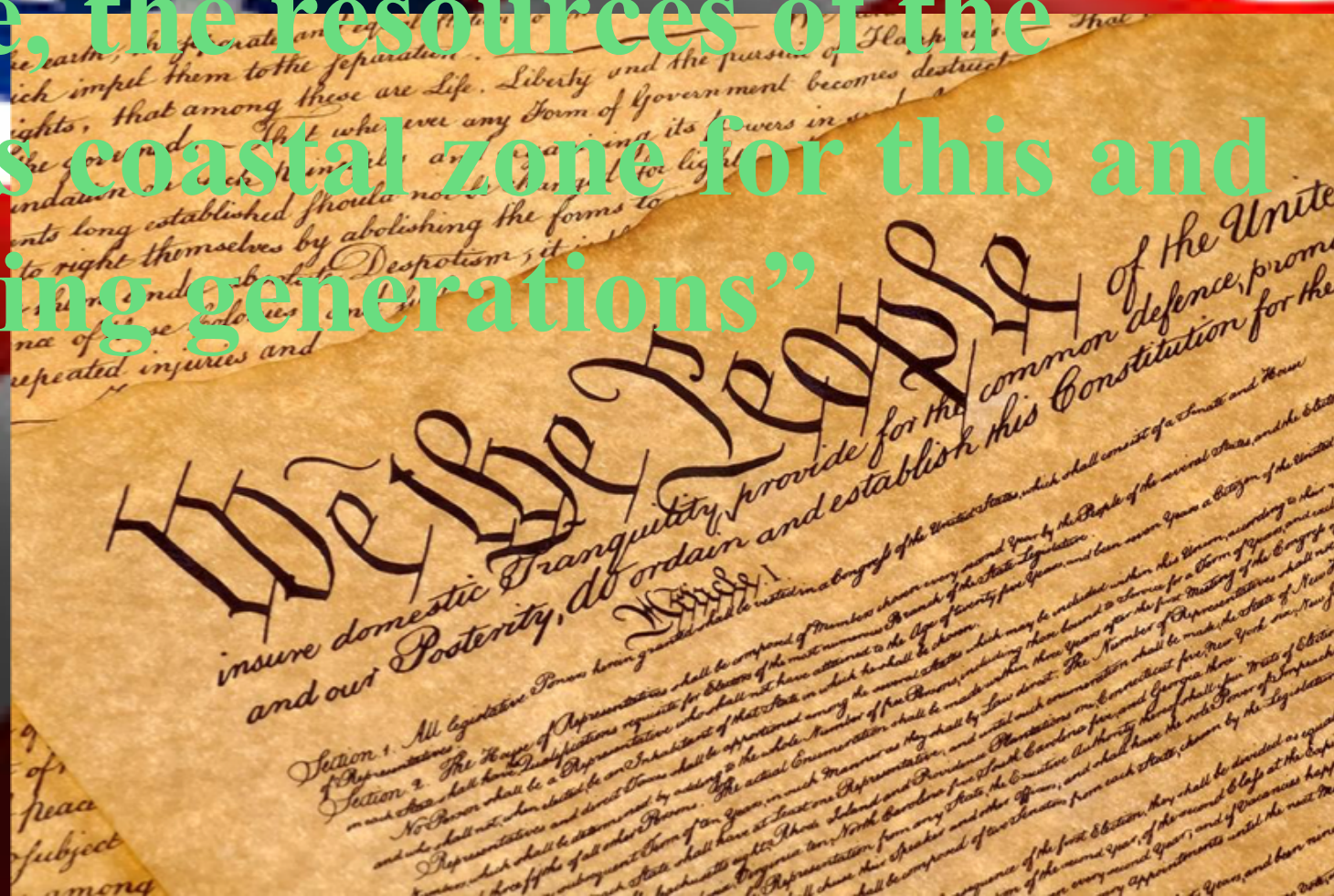
Chief Executive Officer  
**Cargo Ventures**

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To “preserve, protect, develop,  
and where possible, to restore or  
enhance, the resources of the  
Nation’s coastal zone for this and  
succeeding generations”





# Thou Shall Not Allow:

- Uses except for compatible public access and certain industrial, commercial and transportation activities on an interim basis.
  - Supporting Uses to exceed 25% of the total DPA area.
  - Residential units, hotels and motels.
  - Recreational boating facilities and large sport/amusement complexes.
- 
- A photograph of Moses, played by Charlton Heston, holding the stone tablets. He is standing in a rocky, desert-like environment. The text is overlaid on the image in yellow and white.



## Average Price per foot of FAR (floor area ratio):

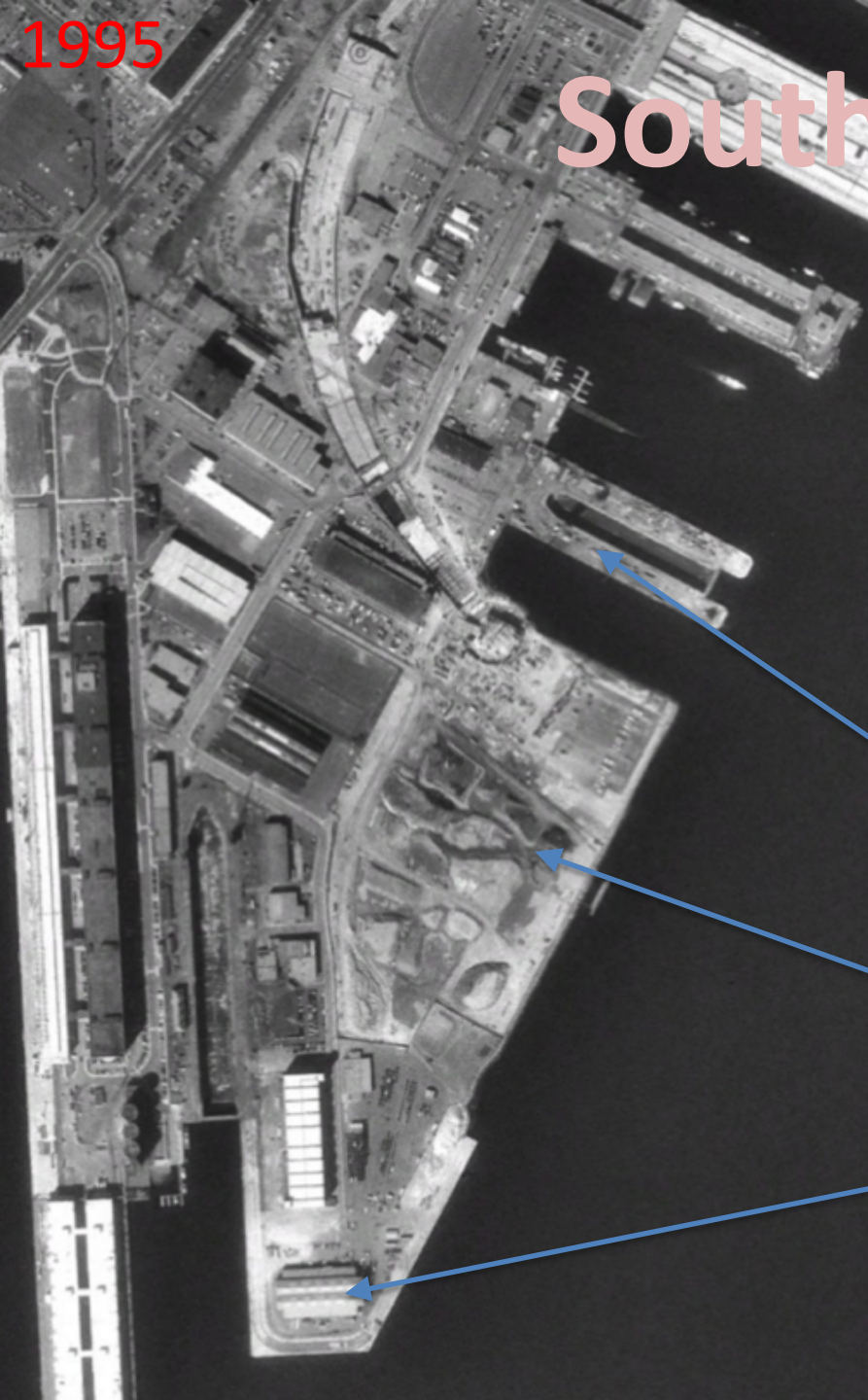
-Multi-Family:  
\$140+

-Office:  
\$75-125

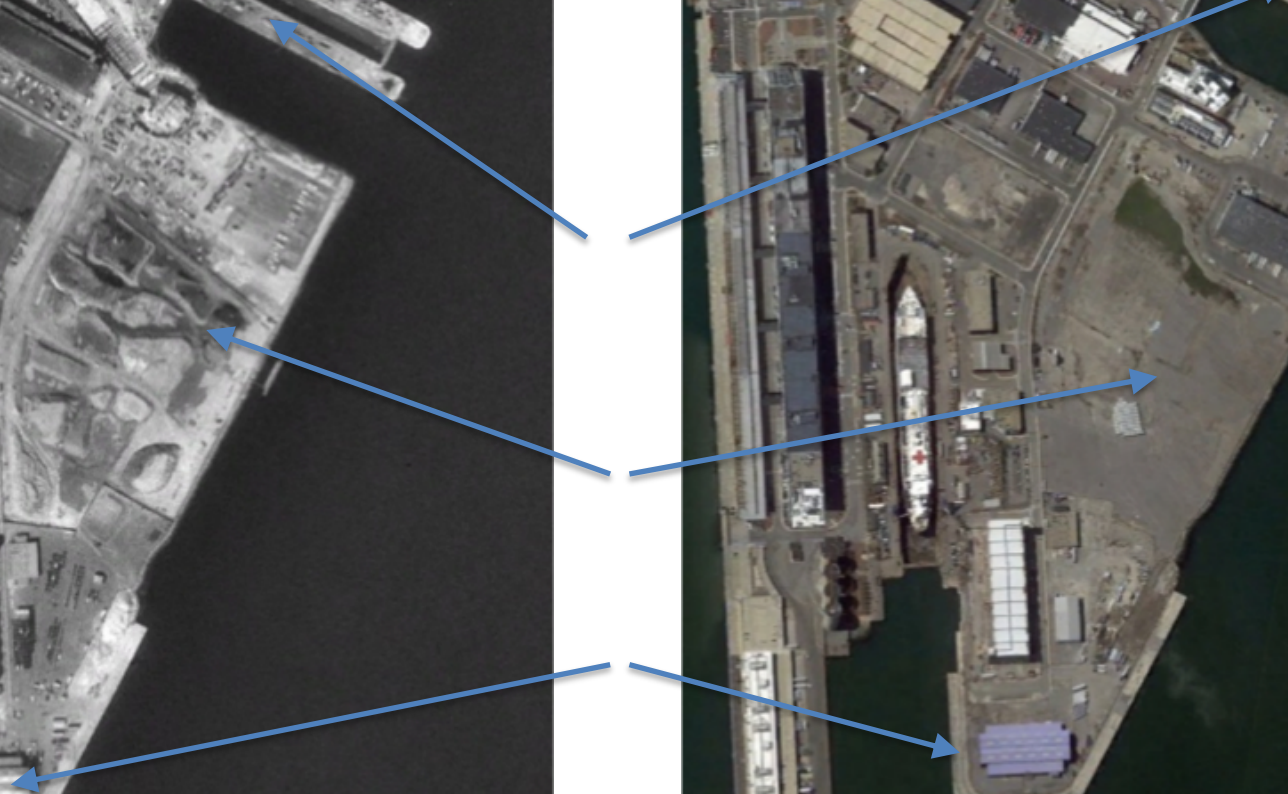
-General Industrial:  
\$25-\$50





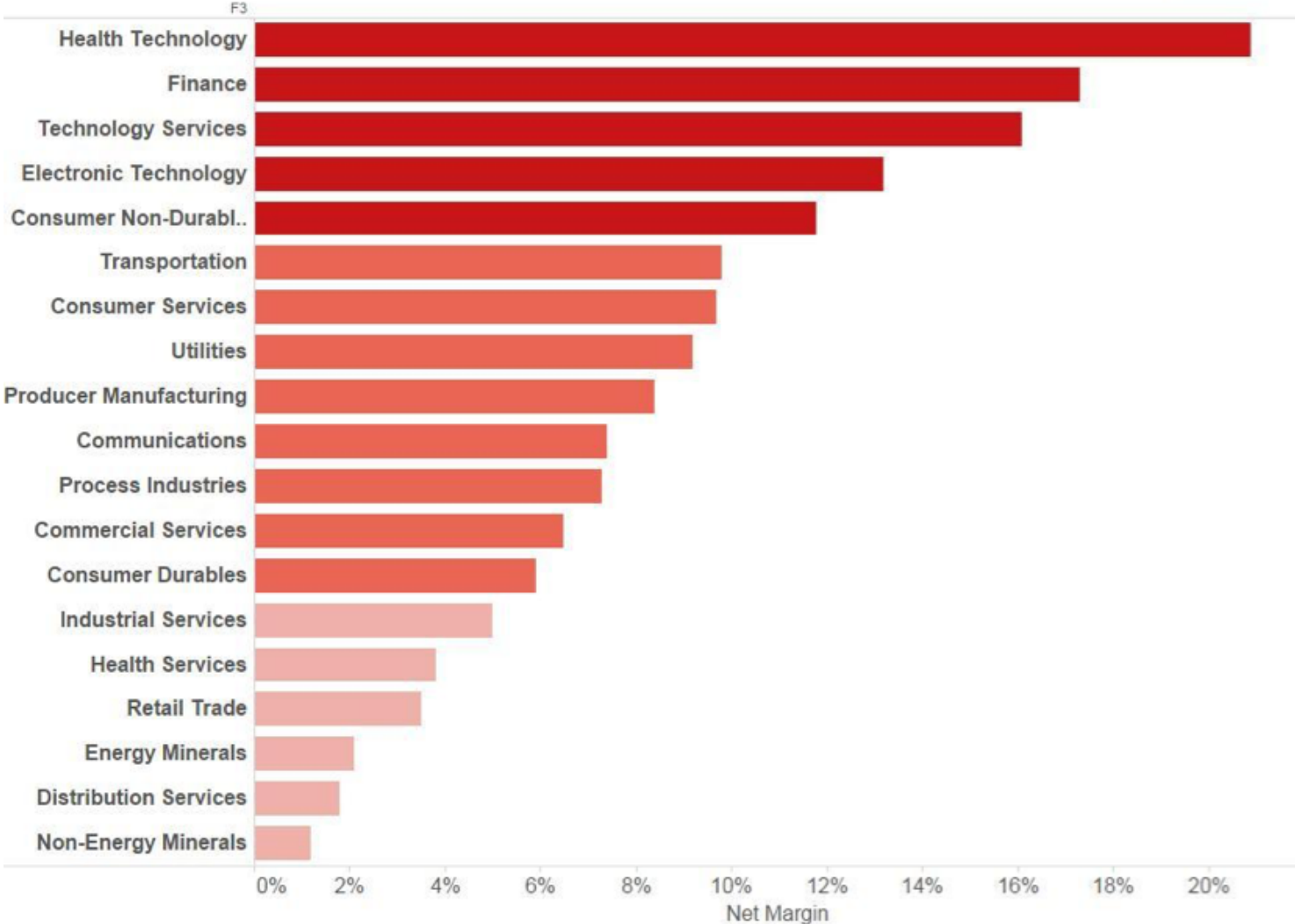


# South Boston

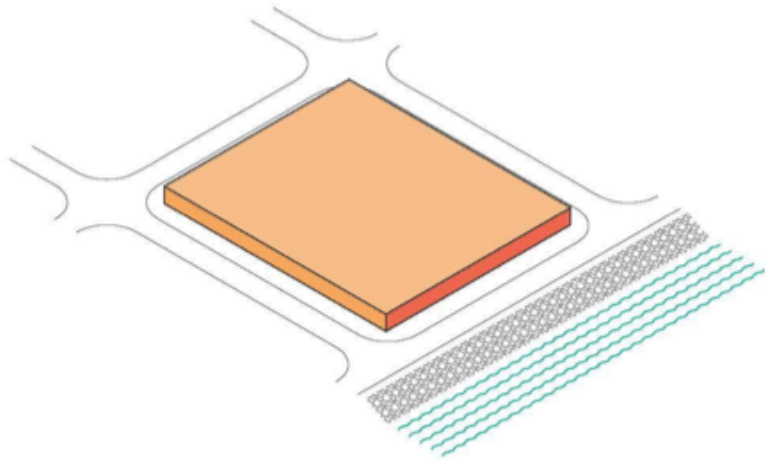




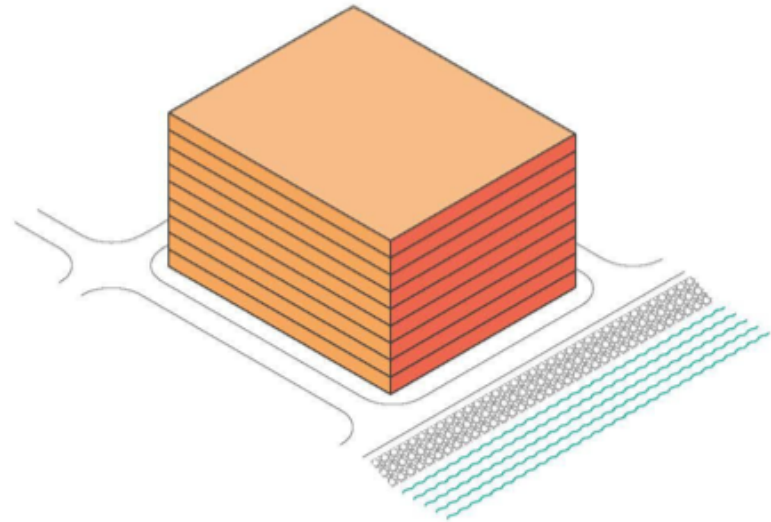
# The Most Profitable Industries In 2015



**1 Story Industrial Building**  
70,000 sq. ft.



**9 Story Office Building**  
70,000 sq. ft. per floor  
for 630,000 sq. ft.





**Building Square Footage**                      **70,000**

<u>COSTS</u>	<u>Costs</u>	<u>PSF</u>	<u>% of Total</u>
Site Work/Foundations	10,220,000	146.00	26.1%
Hard Costs	23,100,000	330.00	58.9%
Soft Costs	4,000,000	57.14	10.2%
Contingency	1,866,000	26.66	4.8%
<b>Total Costs</b>	<b>39,186,000</b>	<b>559.80</b>	<b>100.0%</b>

<u>CAPITAL</u>	
Equity	25,326,000
Debt	13,860,000
<b>Total Sources</b>	<b>39,186,000</b>

<u>INCOME</u>		
<b>Net Operating Income</b>	<b>1,260,000</b>	<b>\$18.00</b>
Return on Cost	3.2%	
Debt Service	884,000	
<b>Net Cash Flow</b>	<b>376,000</b>	
Return on Equity	1.5%	

**Building Square Footage**                      **630,000**

<u>COSTS</u>	<u>Costs</u>	<u>PSF</u>	<u>% of Total</u>
Site Work/Foundations	15,300,000	24.29	5.4%
Hard Costs	201,600,000	320.00	71.0%
Soft Costs	53,550,000	85.00	18.9%
Contingency	13,522,500	21.46	4.8%
<b>Total Costs</b>	<b>283,972,500</b>	<b>450.75</b>	<b>100.0%</b>

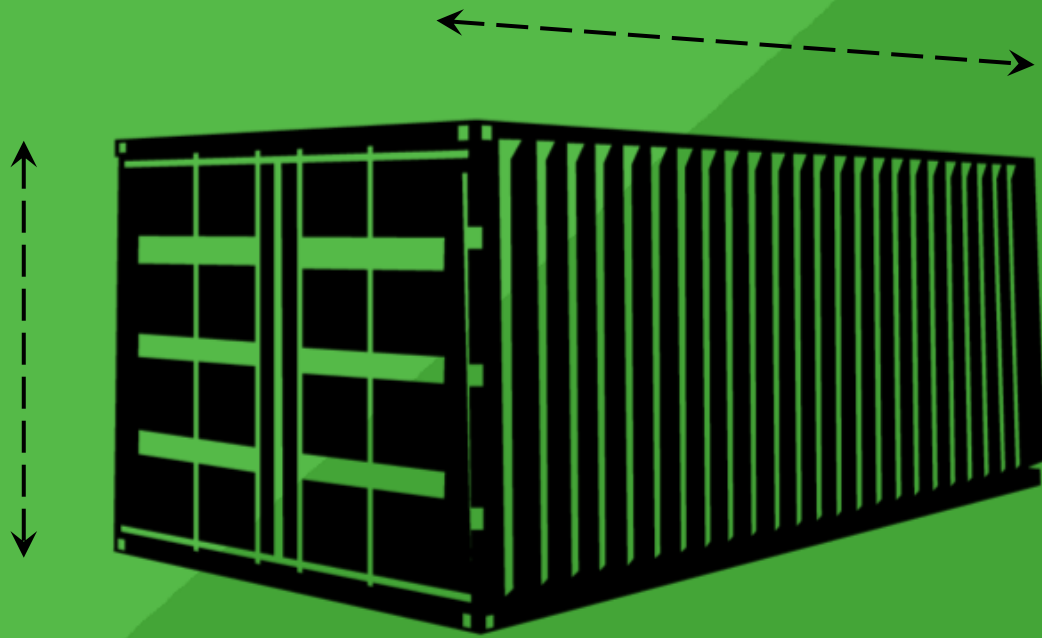
<u>CAPITAL</u>	
Equity	113,589,000
Debt	170,383,500
<b>Total Sources</b>	<b>283,972,500</b>

<u>INCOME</u>		
<b>Net Operating Income</b>	<b>31,500,000</b>	<b>\$50.00</b>
Return on Cost	11.1%	
Debt Service	22,098,000	
<b>Net Cash Flow</b>	<b>9,402,000</b>	
Return on Equity	8.3%	

# New Economic Model:







**8 x 40**



# MIA MANSFIELD

Climate Ready Boston  
Program Manager

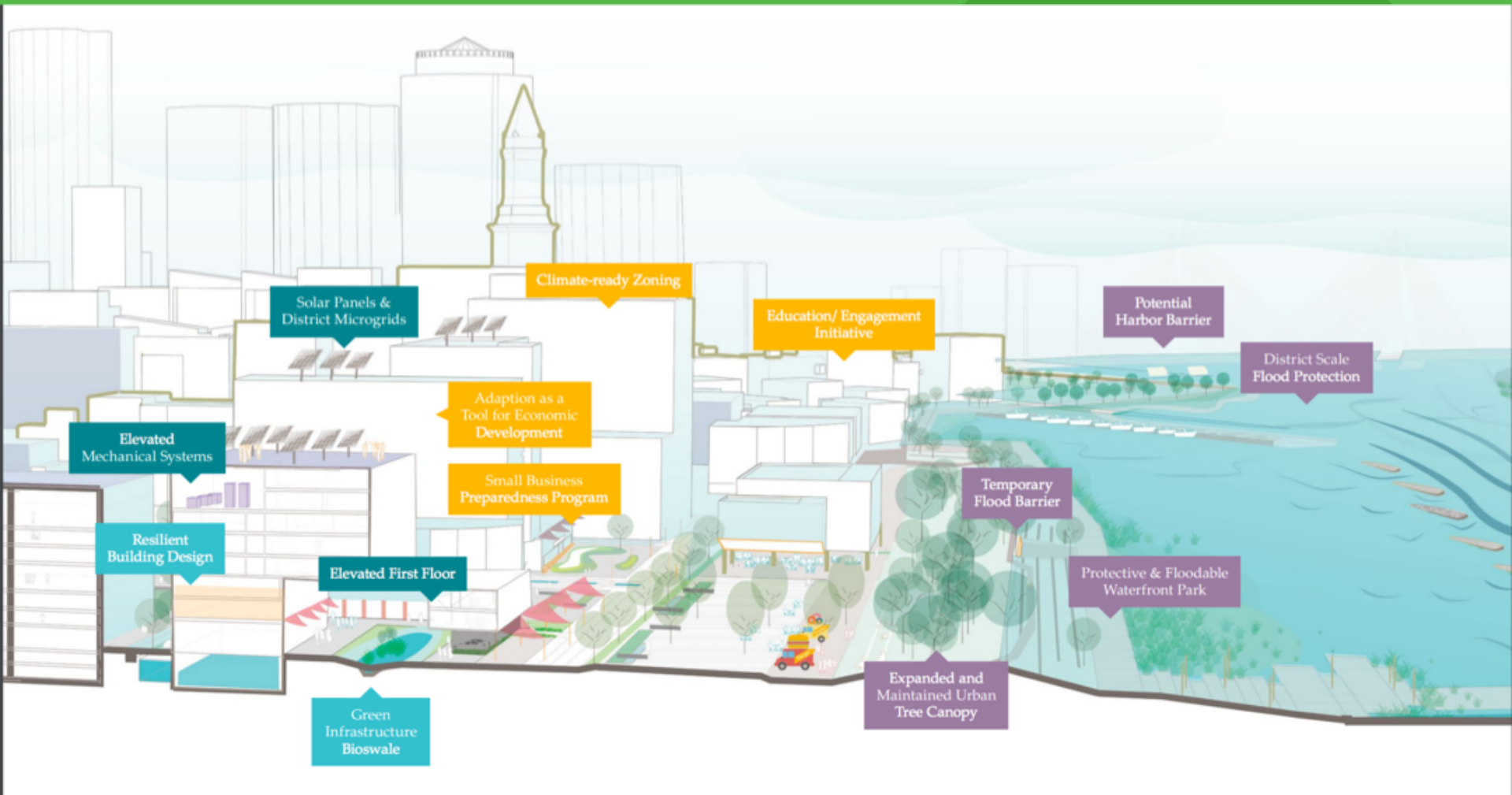
**City of Boston Office of  
Environmental Energy and  
Open Space**

#MAWorkingPort

@BostonHarborNow

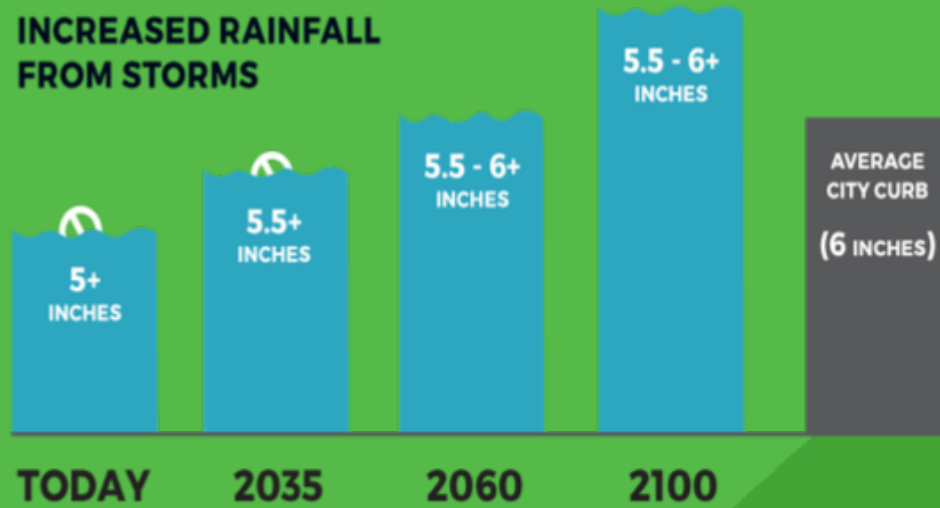


# A CARBON FREE, CLIMATE READY BOSTON

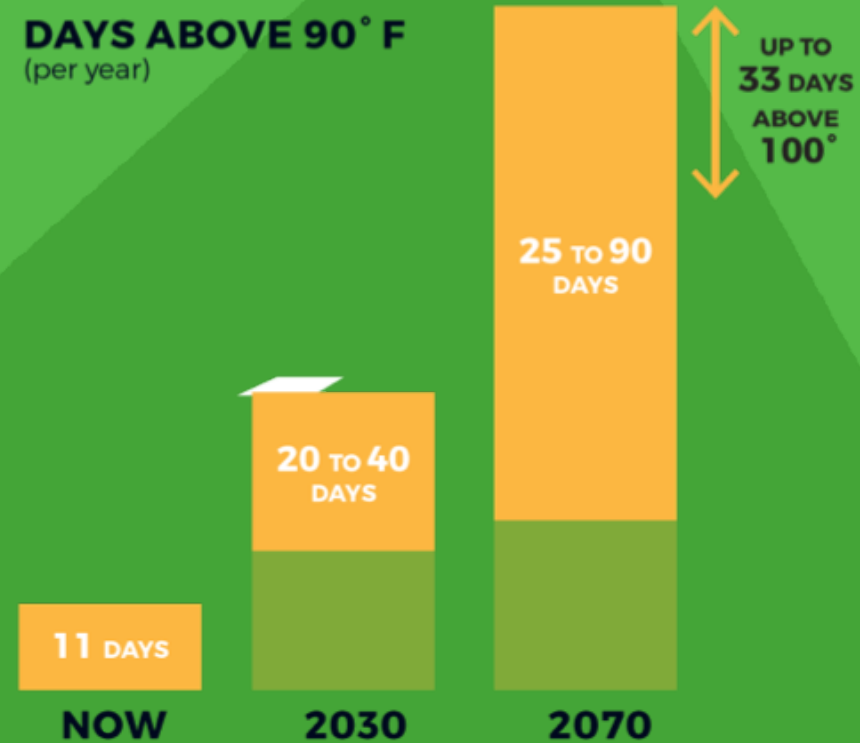


# IMPACTS ARE HAPPENING

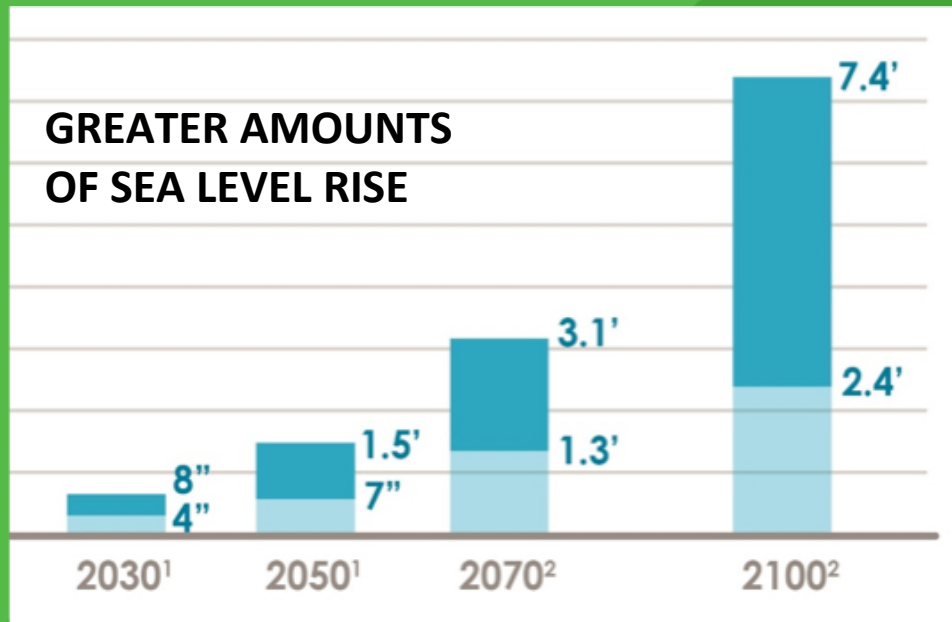
## INCREASED RAINFALL FROM STORMS



## DAYS ABOVE 90° F (per year)



## GREATER AMOUNTS OF SEA LEVEL RISE

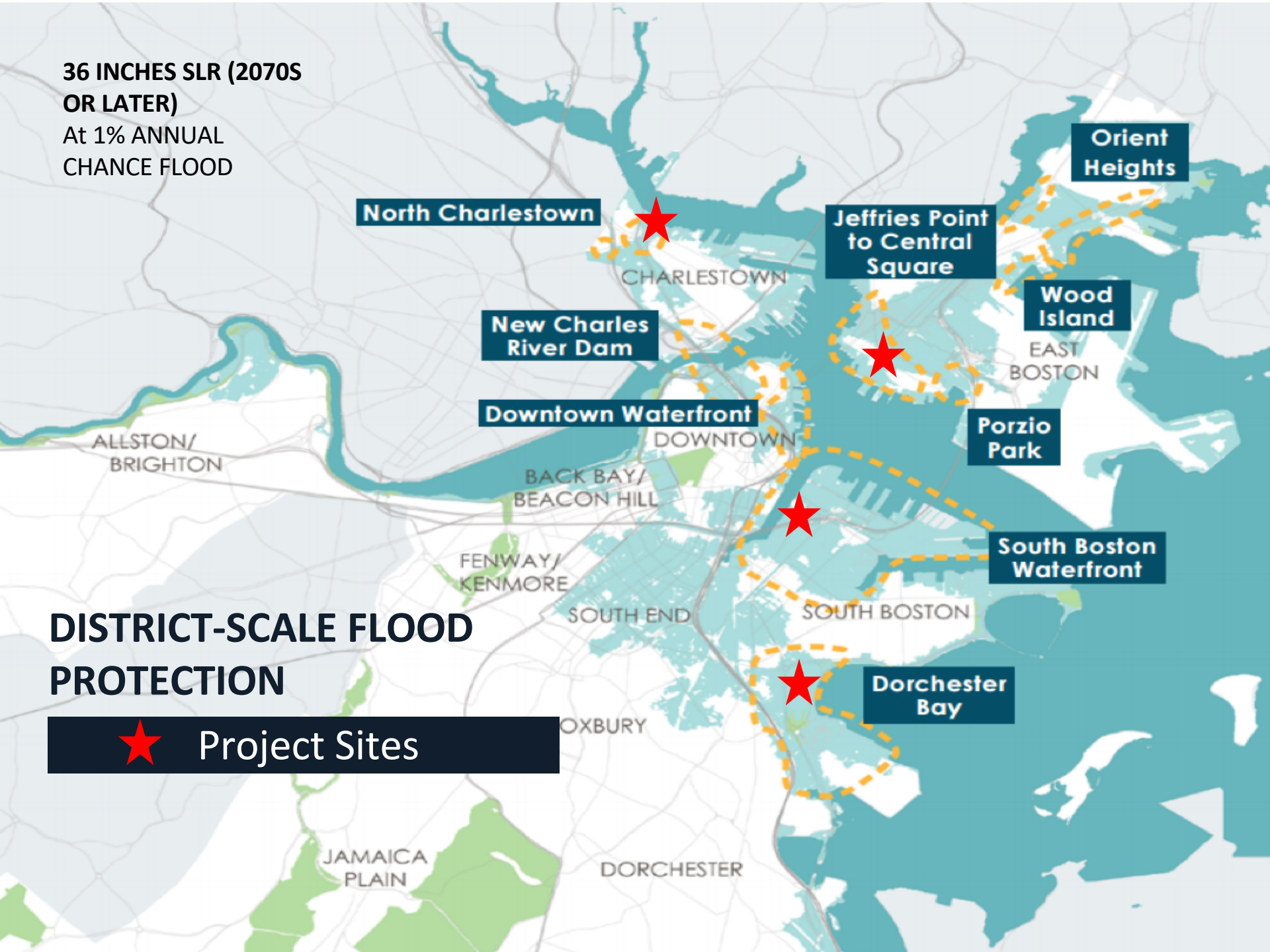








**36 INCHES SLR (2070S  
OR LATER)**  
At 1% ANNUAL  
CHANCE FLOOD



# DISTRICT-SCALE FLOOD PROTECTION

 Project Sites



# COASTAL RESILIENCE SOLUTIONS FOR EAST BOSTON AND CHARLESTOWN

[Boston.gov/climate-ready](https://www.boston.gov/climate-ready)



One version of a new elevated entrance to the East Boston Greenway





# LONG TERM COASTAL RESILIENCE VISION

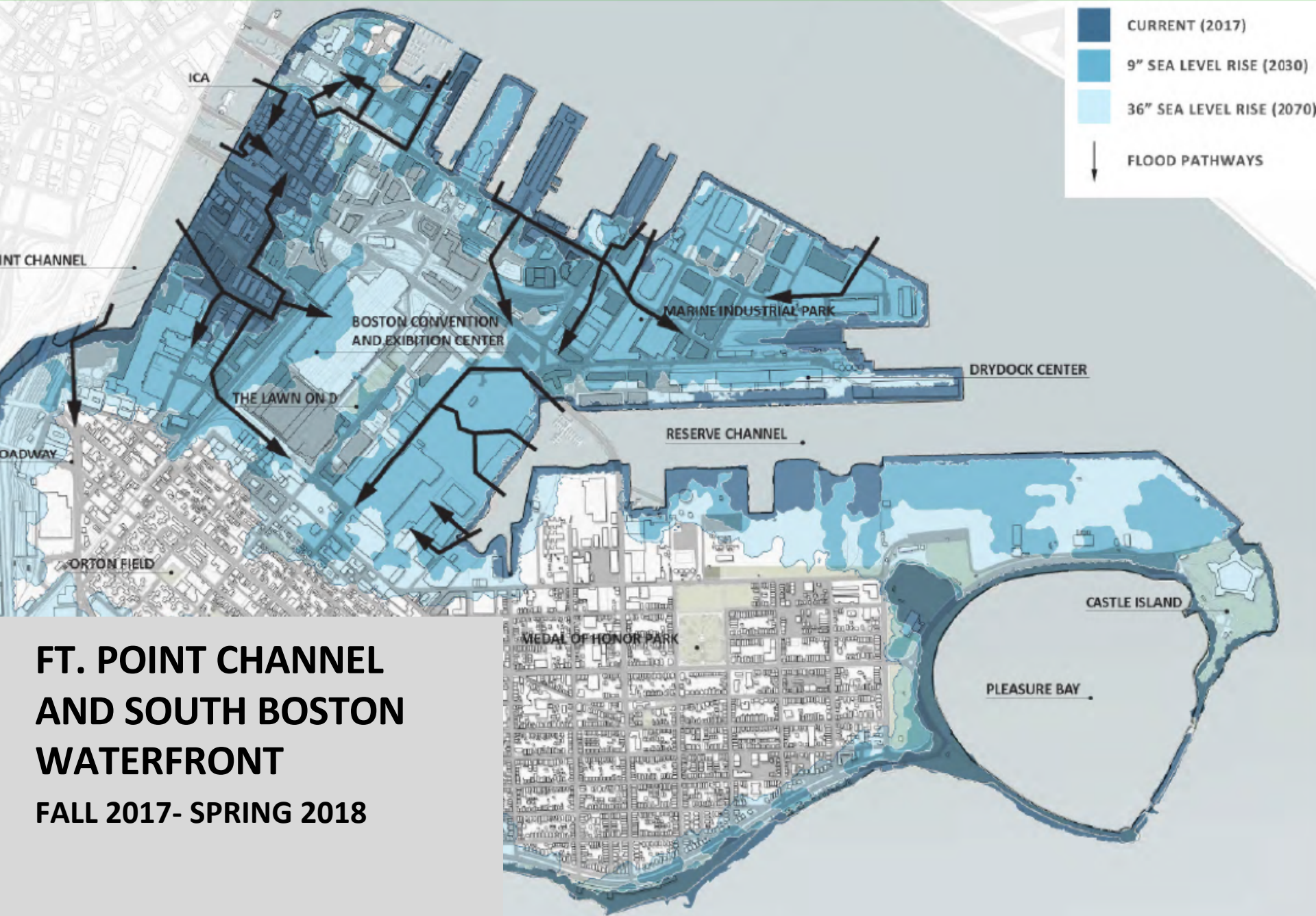




# WINTER STORM GRAYSON 1/4/18

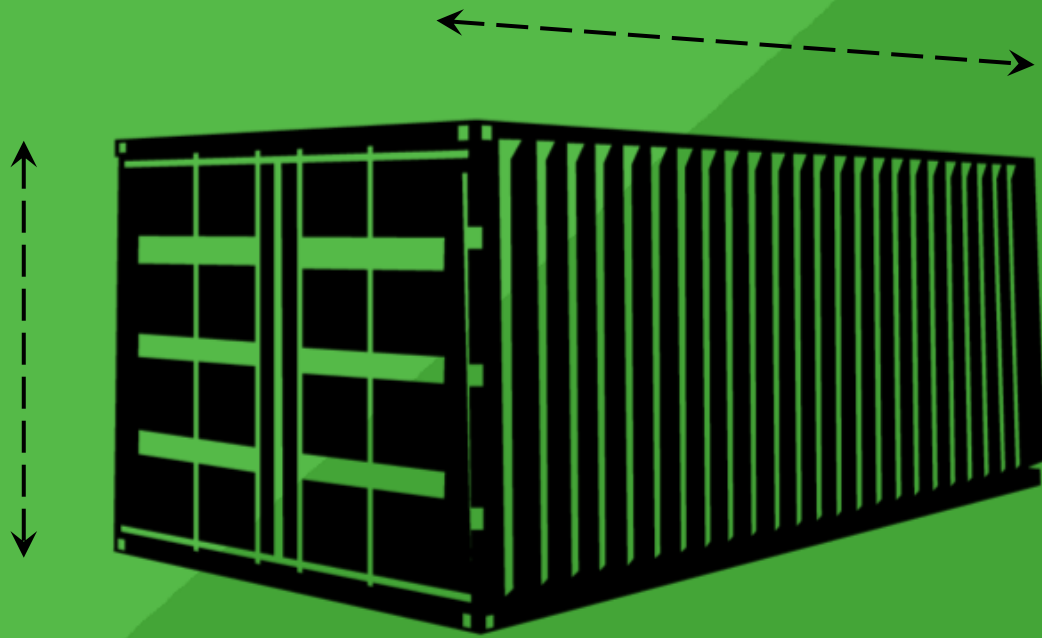


*East Boston Waterfront  
Image courtesy of Kannan Thiru*



**FT. POINT CHANNEL  
AND SOUTH BOSTON  
WATERFRONT  
FALL 2017- SPRING 2018**





**8 x 40**



# **TIFFANY SKOGSTROM**

Outreach and Policy Coordinator  
**Massachusetts Office of Technical  
Assistance (OTA)**

#MAWorkingPort

@BostonHarborNow



# Chemical Safety and Climate Change Risks



Tiffany Skogstrom, MPH  
Outreach & Policy, Massachusetts Office of  
Technical Assistance (OTA)  
[tiffany.skogstrom@state.ma.us](mailto:tiffany.skogstrom@state.ma.us)  
617-626-1086

# Program Goal

Toxics Use  
Reduction



Climate  
Change  
Preparedness



Reduced  
Risks of  
Industrial  
Accidents



# Floods

Chemical Releases & Spills  
Emergency Shutdowns

# Extreme Heat

Chemical Temperature  
Explosion Risks

Climate Change  
& Chemical  
Releases

# Extreme Cold

Power Outages  
Frozen pipes  
HVAC Failure

# Storms

Power Outages  
HVAC Failure  
Infrastructure Failure



Dangerous  
Chemical?

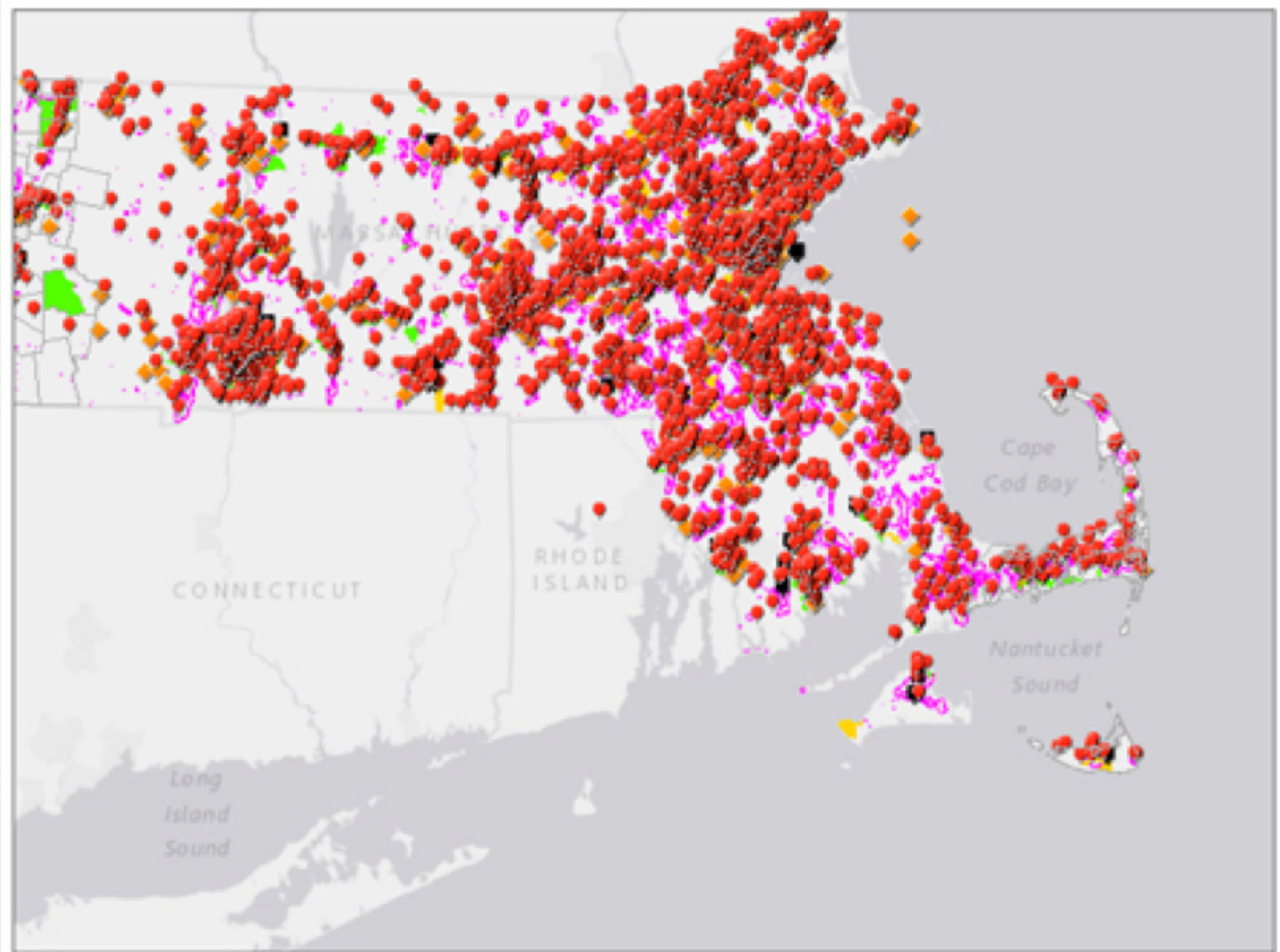
Human /  
Environmental  
Contact?



Potential for  
Hazard?



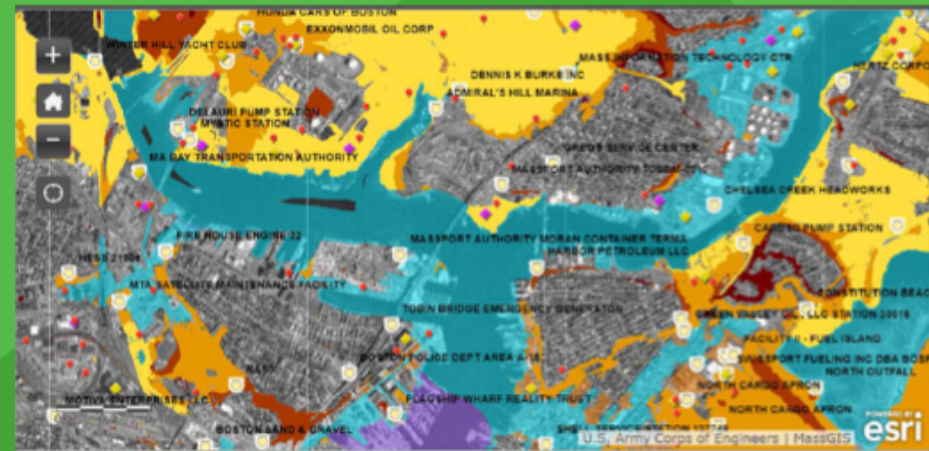
[mass.gov/eea/ota-climate](https://mass.gov/eea/ota-climate)



# Chelsea Creek



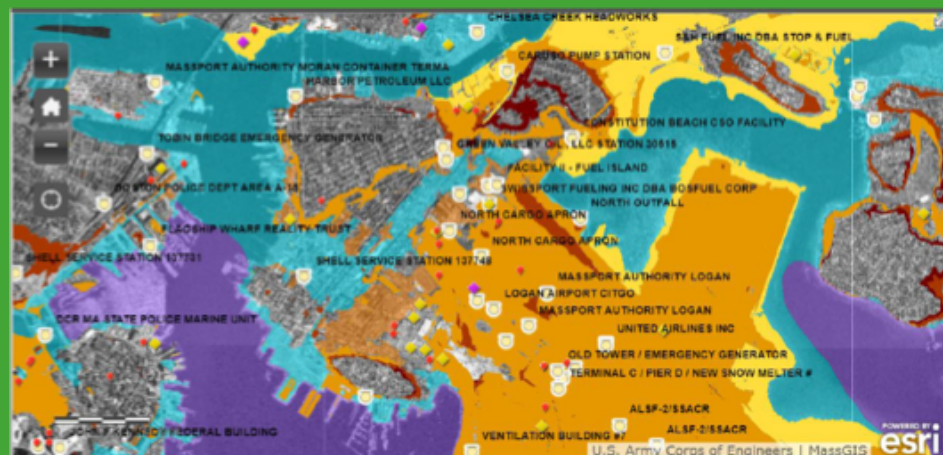
# Mystic River



# South Boston



# East Boston





## Training Dates and Locations

### Lowell

Northern Middlesex Council of Governments (NMCOG)

Thursday, March 1, 2018  
8:30am – 11:30am

### Taunton

Southeastern Regional Planning and Economic Development District (SRPEDD)

Friday, March 2, 2018  
9 a.m. - 12:30 p.m.

### Leominster

Montachusett Regional Planning Commission (MRPC)

Tuesday, March 13, 2018  
9 a.m. - 12 p.m.

### Haverhill

Merrimack Valley Planning Commission (MVPC)

Tuesday, March 27, 2018  
8 a.m. - 12 p.m.

### Holyoke

Pioneer Valley Planning Commission (PVPC)

Tuesday, March 27, 2018  
8:30am – 11:30am

### Greenfield

Franklin Regional Council of Governments (FRCOG)

Tuesday, April 3, 2018  
4 p.m. - 6 p.m.

Central Massachusetts Regional Planning Commission (CMRPC)  
TBA

[www.mass.gov/eea/ota-climate](http://www.mass.gov/eea/ota-climate)

# Recommendations & Opportunities



Unite  
Chemical  
Safety &  
Emergency  
Preparedness

Refer  
Businesses  
to OTA

Incorporate  
Trainings  
Into L/REPC  
Culture

Form Govt.  
Agency  
Alliances

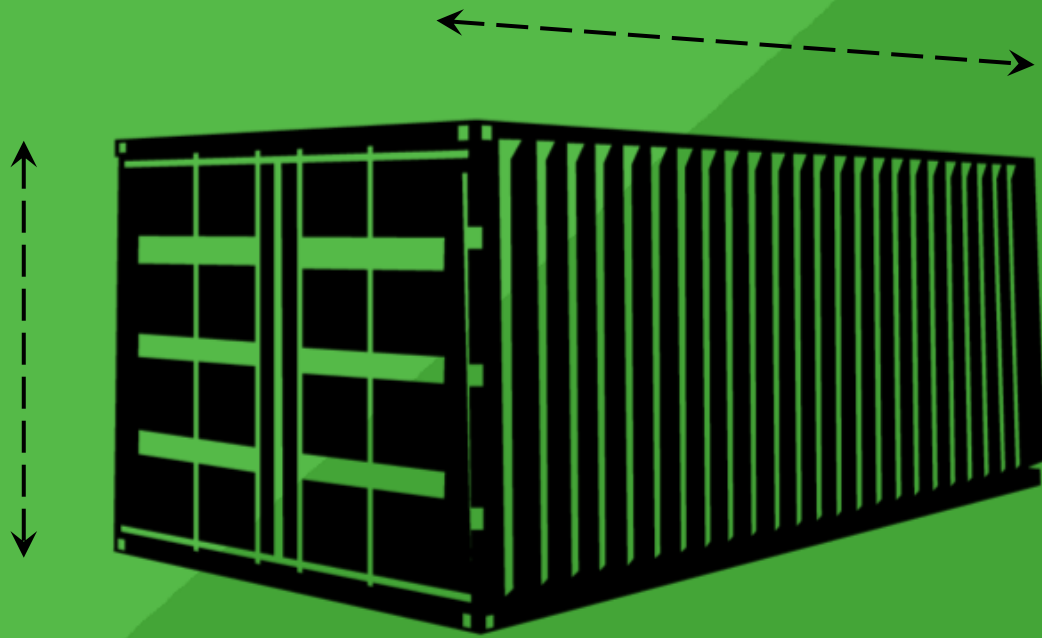
Refer  
Businesses  
to Spring  
Trainings

Tiffany Skogstrom  
tiffany.skogstrom@state.ma.us

617-626-1086

[mass.gov/eea/ota-climate](https://mass.gov/eea/ota-climate)





**8 x 40**



# DAN ADAMS

Founding Principal  
Landing Studio

#MAWorkingPort

@BostonHarborNow





Salt Landscape in Chelsea, 2004





Seal + Jet Fuel + Cars + Chelsea Creek

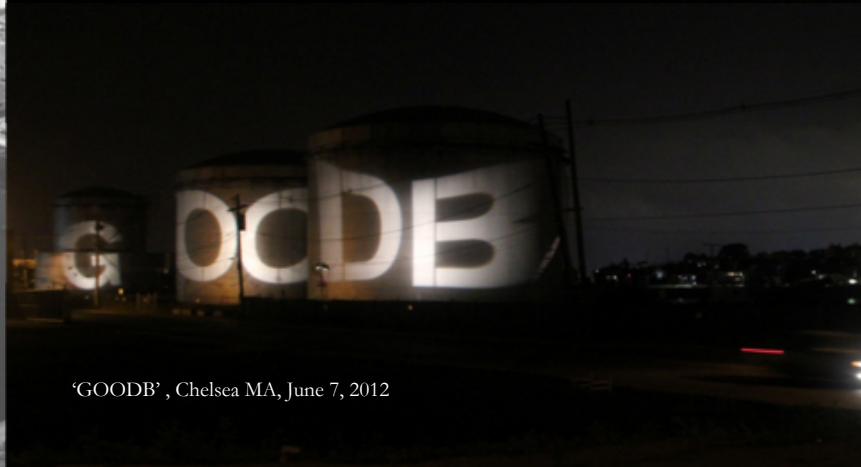




Eastern Salt + Coastal Oil + Chelsea



'GOODBYE', Chelsea MA, May 19, 2012



'GOODB', Chelsea MA, June 7, 2012



'GOO', Chelsea MA, June 21, 2012

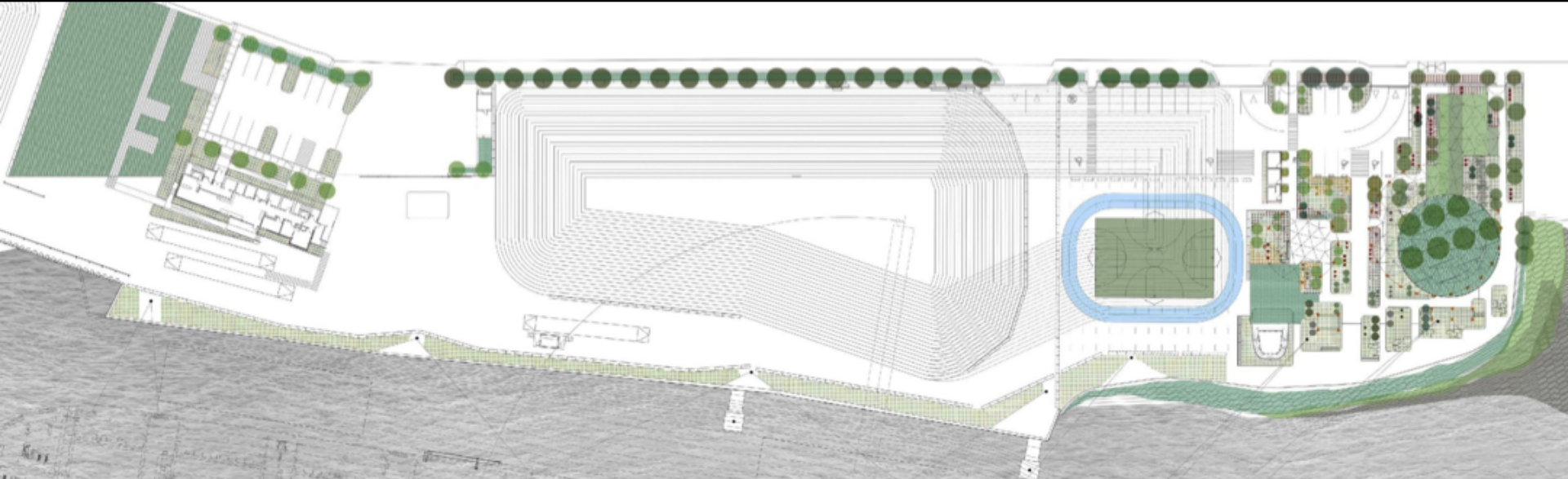


### Marginal Street Corridor Improvement Project and Memorandum of Agreement

This Memorandum of Agreement ("MOA") is made this 9th day of July, 2007 between and among Eastern Minerals, Inc., Eastern Salt Company Inc., Rock Chapel Marine LLC (sometimes collectively "Eastern"), and the City of Chelsea, a Massachusetts municipal corporation (the "City").

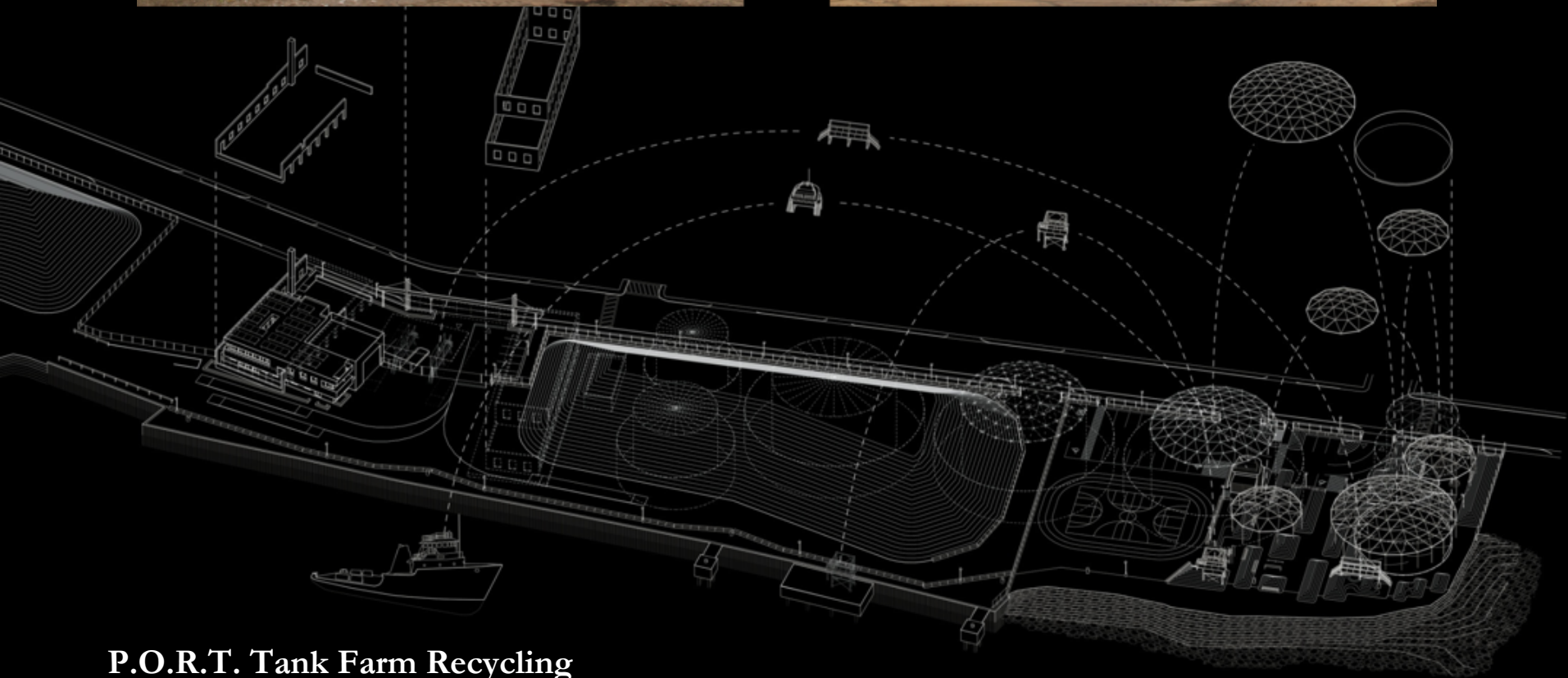
The purpose of this MOA is to establish a framework for mutual cooperation in achieving the following goals:

1. Increase the opportunities for public access to the City's waterfront in a manner that is safe, compatible, and harmonious with the commercial cargo operations and other water-dependent marine industrial uses of the Chelsea Creek Designated Port Area ("DPA"); and with the port security and public safety requirements established under the United States Coast Guard's Homeland Security regulations.
2. Increase the capacity for public recreation and meeting space on the City's waterfront neighborhood in a manner that promotes understanding and cooperation between local businesses and residents; improves understanding and knowledge of the City's ongoing maritime heritage; and improves and benefits from the scenic opportunities of the harbor and the City's working waterfront.
3. Investigate and remedy historical environmental contamination at the marine petroleum terminal located at 99 Marginal Street.
4. Coordinate the aesthetic appearance of the Marginal Street Promenade, as that term is used in this MOA, in order to improve the scenic vitality of the streetscape and establish a satisfying visual linkage between the neighborhood's industrial, commercial, residential and recreational land uses as shown on the Revised Landscape Plan, Sheet L3, stamped by Marshall Cory LLC, dated January 28, 2007, revised April 13, 2007 (the "Landscape Plan"), which is attached hereto as Exhibit A.
5. Reduce the risk of traffic congestion on Marginal Street, a state designated truck route.



Seasonal P.O.R.T. Area + Rock Chapel Marine Plan + Memorandum of Agreement (MOA)





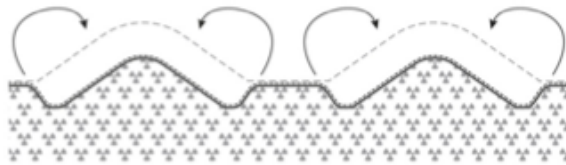
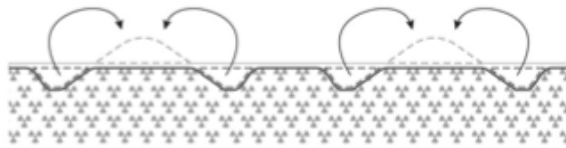
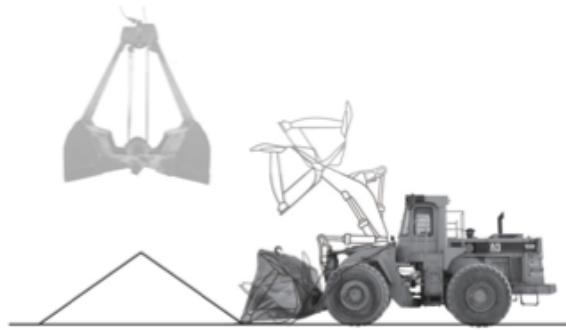
**P.O.R.T. Tank Farm Recycling**





P.O.R.T. Oil Tank Amphitheatre + Tug Boat Classroom





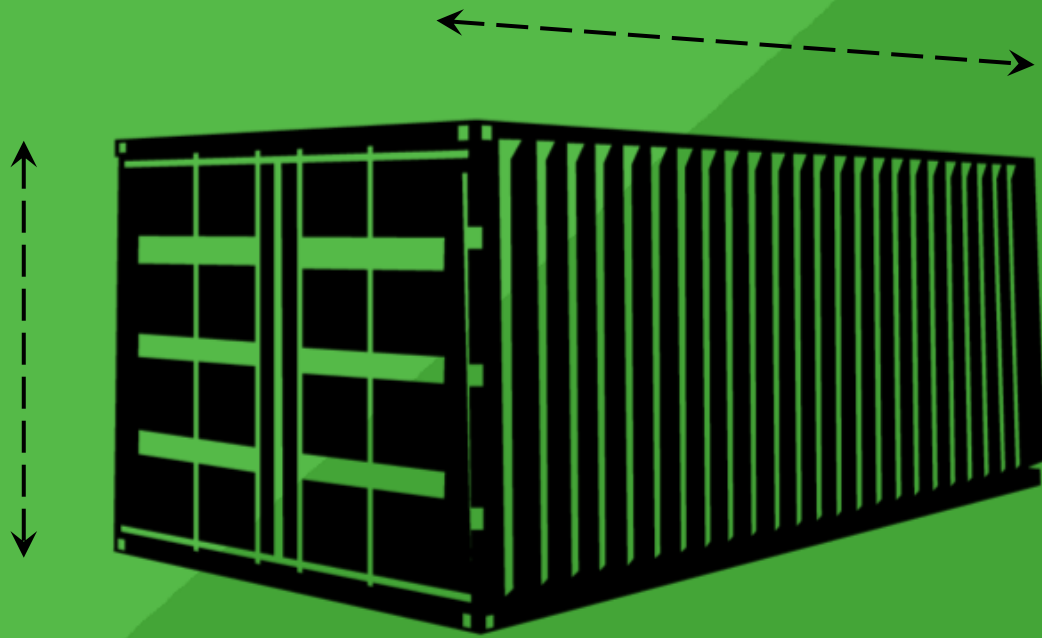
Loaders + Pile Building + P.O.R.T.





Salt + Plants + Birds + Butterflies + Hamlet





**8 x 40**

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Program to commence shortly.**

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