



# Advancing Clean Air with CMAQ at The Port of Virginia

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Richmond Regional Transportation Planning Organization

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The background of the slide is a faded, light-colored photograph of a port. It shows several large gantry cranes with orange and blue structures. In the foreground, a dark barge is docked at a pier. The water is visible at the bottom of the frame. The overall scene is industrial and maritime.

# **Advancing Clean Air with CMAQ at The Port of Virginia**

**Context: Richmond Regional TPO and  
The Port of Virginia**

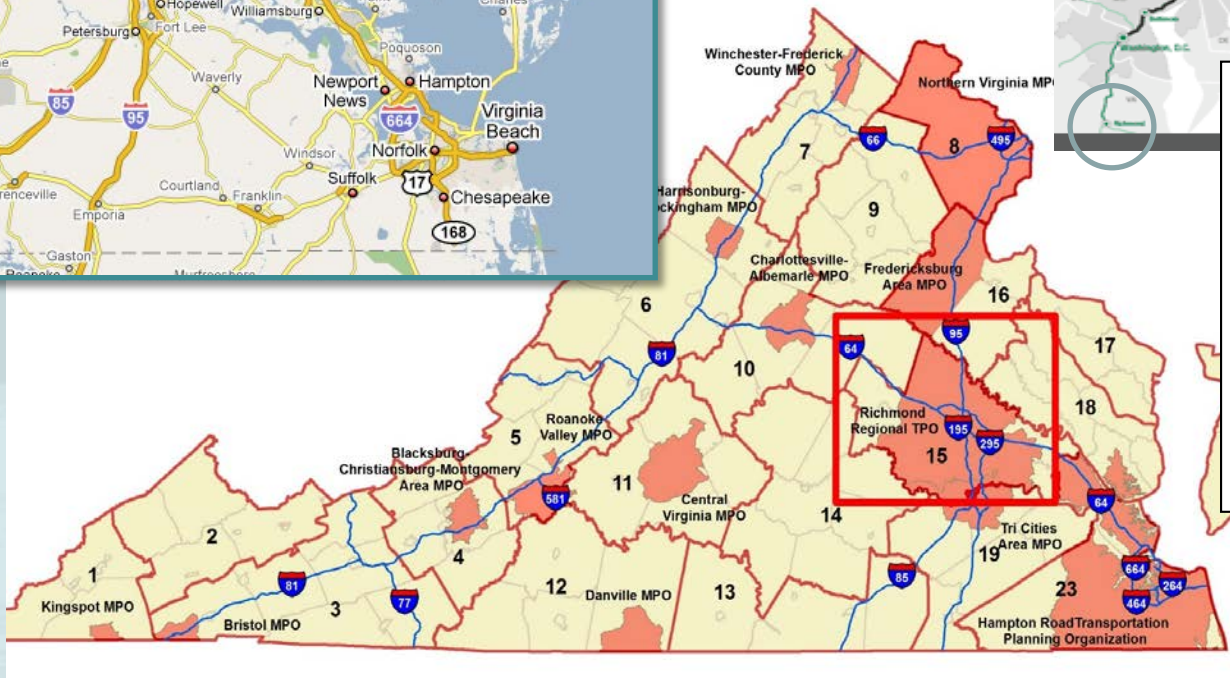
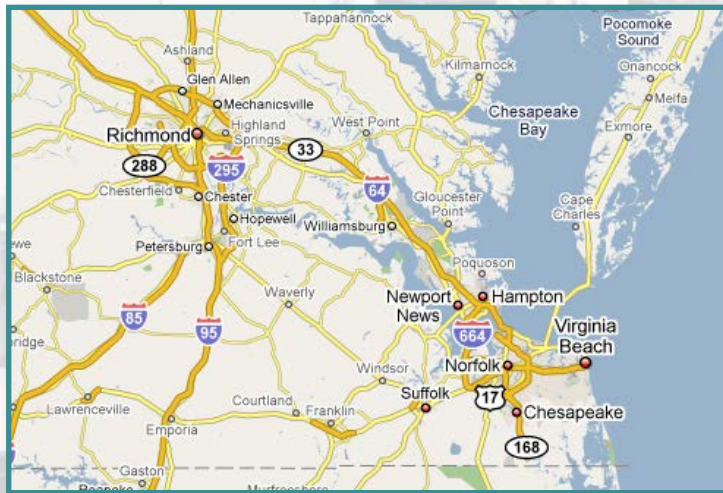
**Competitive Project Selection Process for  
CMAQ Funding**

**Coordination and Collaboration with The  
Port of Virginia to Advance Clean Air Goals**

# Richmond Regional TPO and The Port of Virginia

NEC FUTURE  
Study Area Map

[View Map >](#)



SEHSR Corridor  
OC to Charlotte Tier I ES  
Completed in 2002  
Richmond to Raleigh  
Tier II ES  
Richmond to Hampton Roads  
Tier I ES

Washington, D.C.  
Tier I ES  
Charlotte  
Tier I ES  
SEHSR Extended  
Feasibility Studies  
Complete

Atlanta  
Columbia  
Richmond  
Raleigh  
Jacksonville

**Southeast High Speed Rail (SEHSR)**

DC  
RICHMOND

# RRTPO Competitive Project Selection Process for CMAQ Funds

## Annual Allocations Port Related Projects

- “M-64” Barge Service
- Liebherr Crane
- “Green Operator”





# Coordination and Collaboration

Environmental Impacts  
Transportation System Performance  
Economic Opportunities

# VOLUME GROWTH AT RMT



# Environmental Impacts

Annual 2016		Emissions (Tons)					
	Trips	NOx	CO	HC	PM10	SO2	CO2
Truck Service	19,602	25.78	7.20	1.20	1.18	0.05	4,124.72
Barge Service	138	26.04	4.72	1.41	0.75	0.03	2,414.35
Difference		0.26	-2.48	0.21	-0.43	-0.02	-1,710.37
%CHG		1%	-34%	18%	-36%	-35%	-41%

Annual 2017		Emissions (Tons)					
	Trips	NOx	CO	HC	PM10	SO2	CO2
Truck Service	23,994	31.38	8.81	1.47	1.44	0.06	5,048.90
Barge Service	148	27.93	5.06	1.51	0.80	0.03	2,589.31
Difference		-3.45	-3.75	0.04	-0.64	-0.03	-2,459.59
%CHG		-11%	-43%	3%	-44%	-47%	-49%

# **“Green Operators” Program**

- **Air quality and congestion management program; competes in regional CMAQ project selection**
- **Builds on 2007 Port of Virginia program**
- **Included Activities:**
  - **Clean diesel technologies – diesel retrofits, dray replacements, cargo handling equipment**
  - ***“Transit for Cargo”*: Monitored transportation demand management for shifting cargo**
  - **Tug repowering**



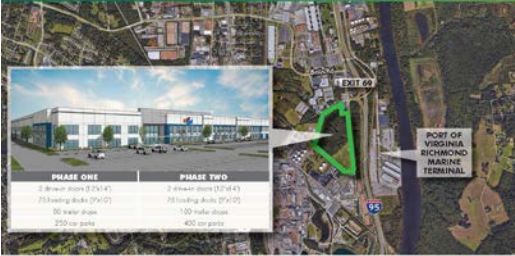
# Transportation System Performance



NEW CONSTRUCTION

## VIRGINIA I-95 LOGISTICS

RICHMOND, VA



PHASE ONE	PHASE TWO
2 Bldg. Area (274' x 47')	2 Bldg. Area (274' x 47')
70 Loading Docks (20' x 60')	70 Loading Docks (20' x 60')
50 Water Trucks	100 Trailer Docks
250 Car Parks	400 Car Parks



### FEATURES

- 461,700 SF (Phase One) delivery date: Q3 2018
- Capex accommodate tenants from 115,425 SF - 1 million SF
- ES&E specialist
- Clear access off I-95 at Balls Road into south of Downtown Richmond
- Adjacent to Port of Virginia Richmond N
- A2 zoning (heavy industrial)
- 58' clear height concrete tilt-up construct
- 54' x 52' column spacing 6.54' x 6.07'
- 57' building depth
- 7' concrete slabs



### CONTACT US

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## DEEPWATER INDUSTRIAL PARK

RICHMOND, VA

### PROPERTY LOCATION DETAILS



HOURIGAN

# Economic Opportunities



EVERGREEN  
ENTERPRISES



Plow and Hearth . CrossGlobe . RI Rubber  
Avail Vapor . Expeditors . Carolina Ocean Lines



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