



## VDOT's HRTAC and Mega- Projects Program

November 18, 2015

**James W. Long, III, P.E., DBIA**

District Major Projects Delivery Director

Hampton Roads District

## Agenda

1. Hampton Roads Transportation Accountability Commission Overview
  - What is HRTAC?
2. HRTAC Projects
  - Overview of Projects
  - Summary of Statuses and Funding
3. Mega-Project: Midtown Tunnel/Downtown Tunnel/MLK Expressway



## Hampton Roads Transportation Accountability Commission (HRTAC)

### About HRTAC:

- HRTAC is a political subdivision of the Commonwealth
- Primarily Funded with HB 2313 Revenue (Hampton Roads Transportation Fund) approved by the 2013 General Assembly
- *“The money’s deposited in the fund shall be used solely for new construction projects on new or existing highways, bridges, and tunnels in the localities comprising Planning District 23”*
- *“[HRTAC] shall give priority to those projects that are expected to provide the greatest impact on reducing congestion for the greatest number of citizens” and “shall ensure that the moneys shall be used for such construction projects”*



## **Hampton Roads Transportation Accountability Commission (HRTAC)**

**Purpose:** To develop a funding plan for planned projects and work with VDOT to deliver the projects.

- **Empowered to procure, finance, build and operate highway, bridge and tunnel projects in Hampton Roads**
- **Authorized to use HRTF monies for construction projects on new or existing highways, bridges and tunnels**
- **HRTAC may issue bonds to finance projects and use HRTF monies to support those bonds**
- **HRTAC project implementation takes into account Project Prioritization by the Hampton Roads Planning Organization (HRTPO)**

# Hampton Roads Transportation Accountability Commission (HRTAC)

- Voting members

## Cities

Chesapeake  
Franklin  
Hampton  
Newport News  
Norfolk  
Poquoson  
Portsmouth  
Suffolk  
Virginia Beach  
Williamsburg

## Counties

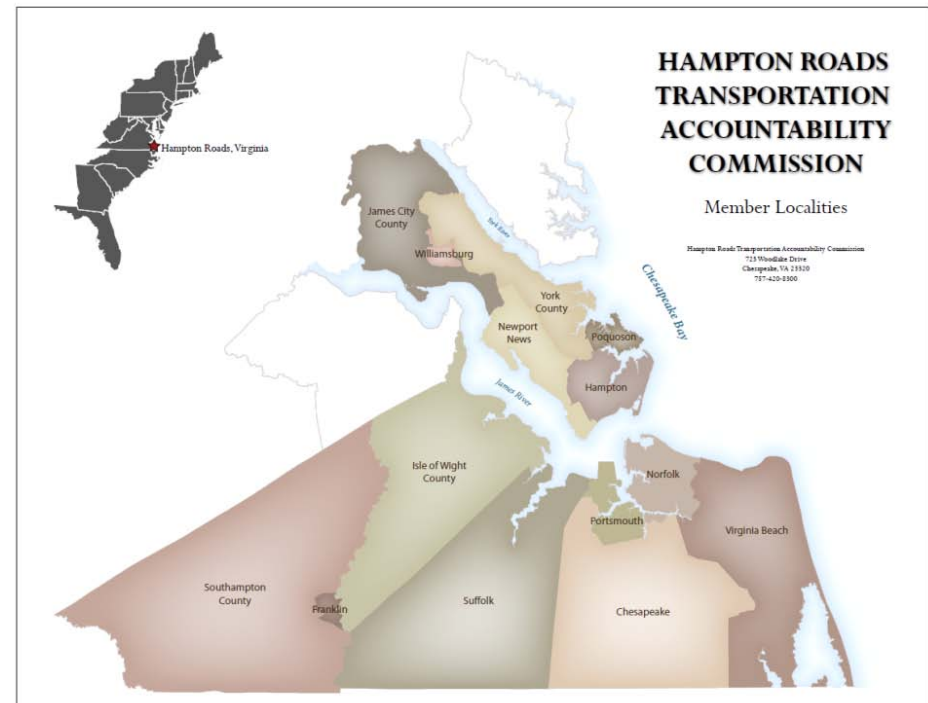
Isle of Wight  
James City  
Southampton  
York

## Virginia General Assembly

Two Members of the Virginia Senate  
Three Members of the Virginia House of Delegates

- Non-Voting Ex-officio members

Commonwealth Transportation Board Member  
Virginia Department of Transportation  
Virginia Department of Rail and Public Transportation  
Virginia Port Authority





## Hampton Roads Transportation Accountability Commission (HRTAC)

### I-64 Peninsula (6-Lane Option)

- Segment I - Jefferson Ave (exit 255) to Route 238/Mile Marker 248 (exit 247)
- Segment II - Route 238/Mile Marker 248 (exit 247) to Route 199 East of Williamsburg (exit 242)
- Segment III - Route 199 East of Williamsburg (exit 242) to Route 199 West of Williamsburg (exit 234)
- Fort Eustis Blvd Interchange

### Third Crossing

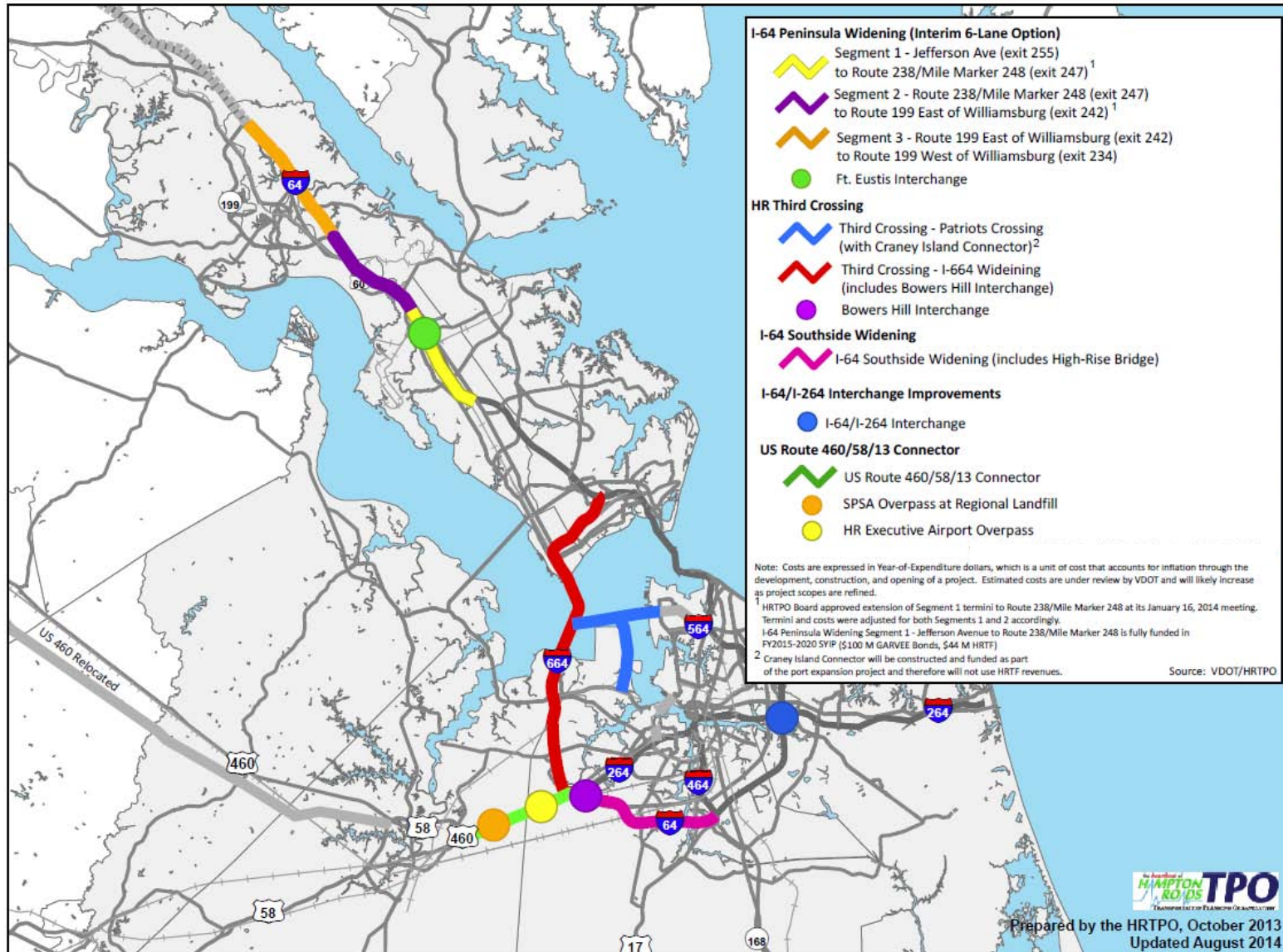
- Patriots Crossing (with Craney Island Connector)
- I-664 Widening (includes Bowers Hill Interchange)

### I-64 Southside (includes High Rise Bridge)

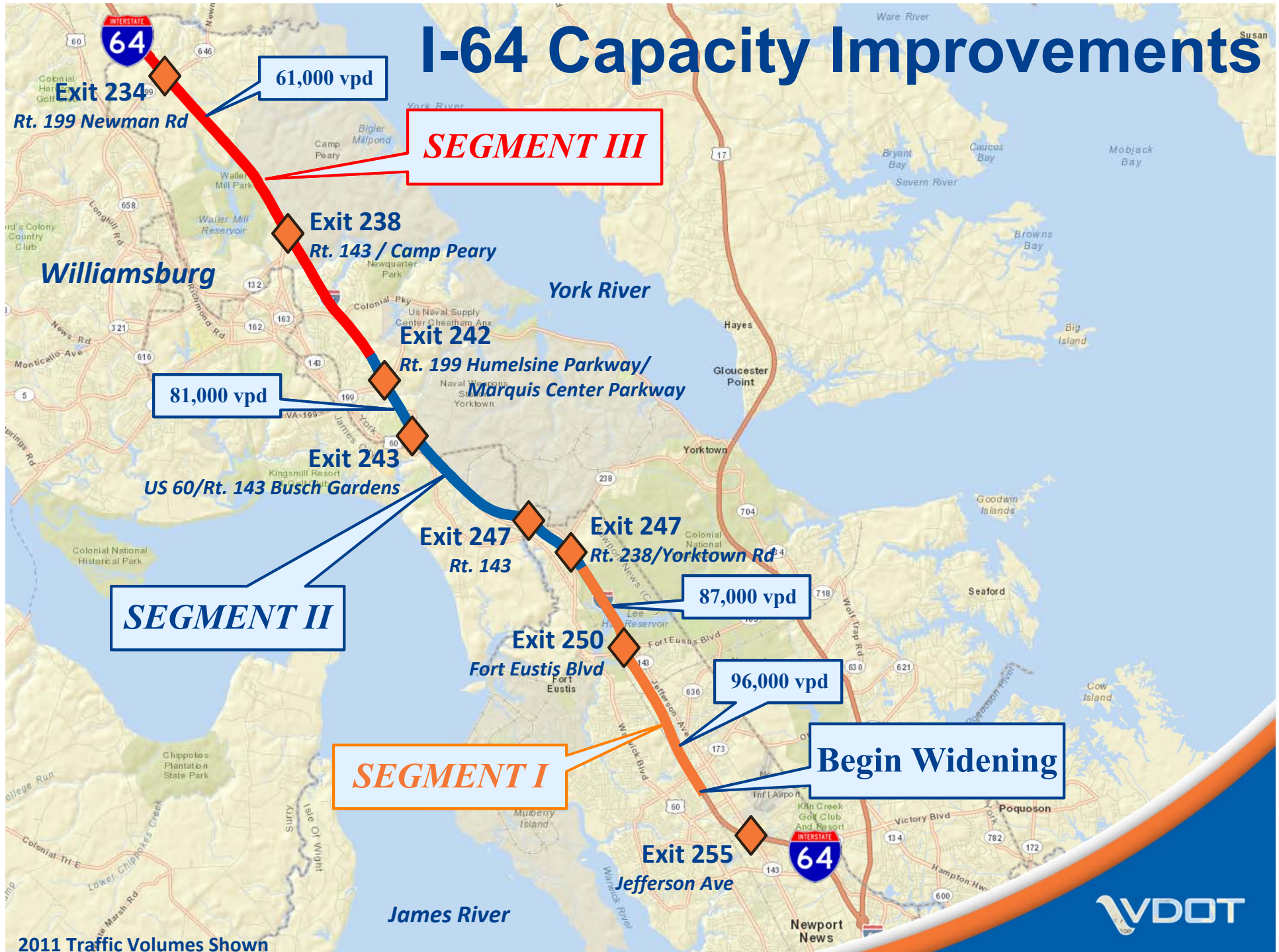
### I-64/I-264 Interchange (including Witchduck Interchange)

### US 460/58/13 Connector (Suffolk Bypass to I-664, includes SPSA and Hampton Roads Executive Airport interchanges)

# HRTF Candidate Projects



# I-64 Capacity Improvements



## Project Purpose & Need

### I-64 Capacity Improvements (Segments I, II and III)

- **Providing additional lanes brings significant value:**
  - ✓ Provides increased capacity and decreases travel delays
  - ✓ Improves safety by reducing congestion
  - ✓ Improves tourist access
  - ✓ Improves connectivity between military installations
  - ✓ Provides for efficient transport to/from Port of Virginia
  - ✓ Corridor operates at a deficient LOS
  - ✓ Traffic volumes are expected to increase
- **Improvements shall fulfill the FEIS preferred alternative for each roadway section**

# I-64 Peninsula Widening Project Segment I Overview

- **Length: 5.6 Miles**
- **Design-Build Construction**
- **Roadway Widening and Overlay of Lanes**
- **Replacement of two bridges**
  - I-64 over Industrial Park Dr and CSX
- **Widening four bridges**
  - I-64 over Rt. 105 Fort Eustis Blvd
  - I-64 over Lee Hall Reservoir
- **City of Newport News Park**
  - Section 4(f) property
- **Sound Barrier Under Consideration: 2.5 miles**
- **Stream Impacts: Up to 4100 LF**
- **R/W and Easements: Approx. 15 acres**
- **Partially funded by the Hampton Roads Transportation Fund**



# I-64 Peninsula Widening Project Segment II Overview

- Length: 7.1 Miles
- Design-Build Construction
- Roadway Widening and Full of Existing Lanes
- Widening nine bridges
- City of Newport News Park
  - Section 4(f) property
- Yorktown Naval Weapons Station
  - Borders 3.5 miles of project corridor
- SWM Facilities: Approx. 32
- R/W and Easements: Approx. 15.5 acres
- Fully funded by the Hampton Roads Transportation Fund

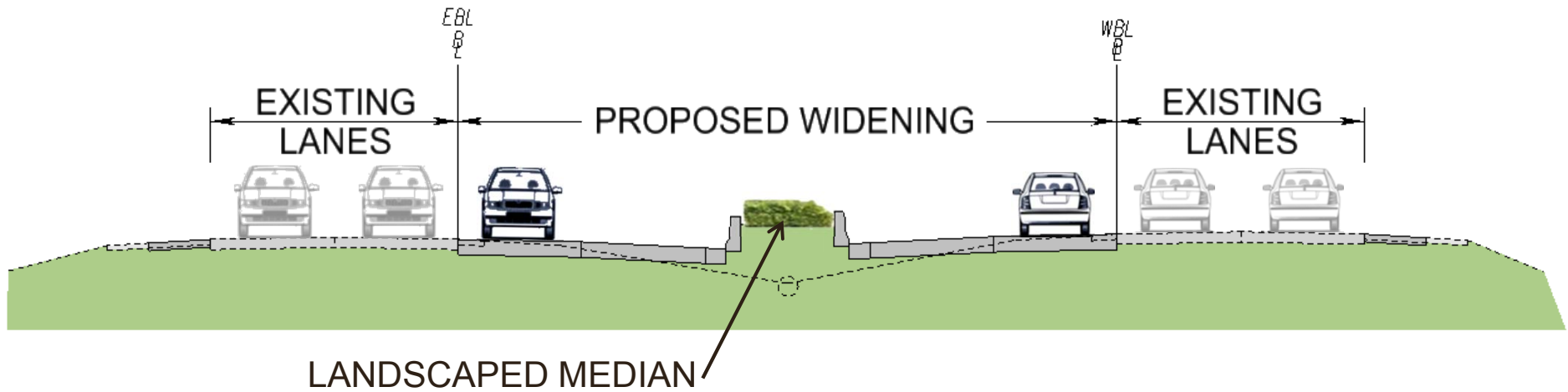


# I-64 Peninsula Widening Project Segment III Overview

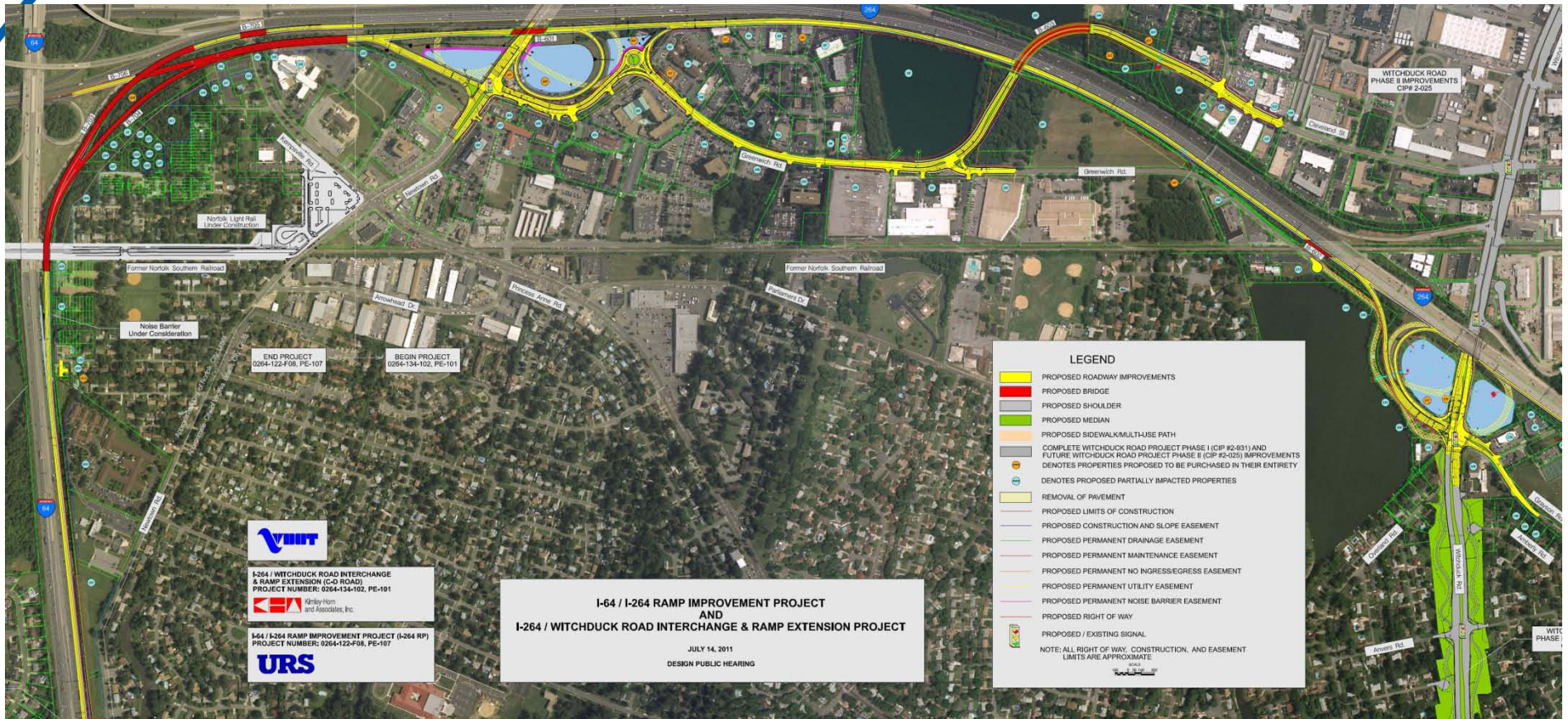
- **Length: ~8 Miles**
- **Design Build Construction**
- **Widening four bridges**
  - I-64 over Colonial Parkway
  - Route 1314 Lakeshead Drive
- **Replacing two overpass bridges**
  - Route 716 Queens Drive and Route 143 at Camp Peary
- **Replacing I-64 bridges over Queens Creek: 900'+ length**
- **Camp Peary**
  - Borders 3 miles of project corridor
- **Historic / archaeological sites**
  - Avoid or minimize project effects
  - Avoid above-ground historic sites
- **Coordination with National Park Service**
  - SWM facilities located outside of view sheds
  - Aesthetics of existing bridges maintained
- **Schedule to be determined**



# Proposed Roadway Typical Section



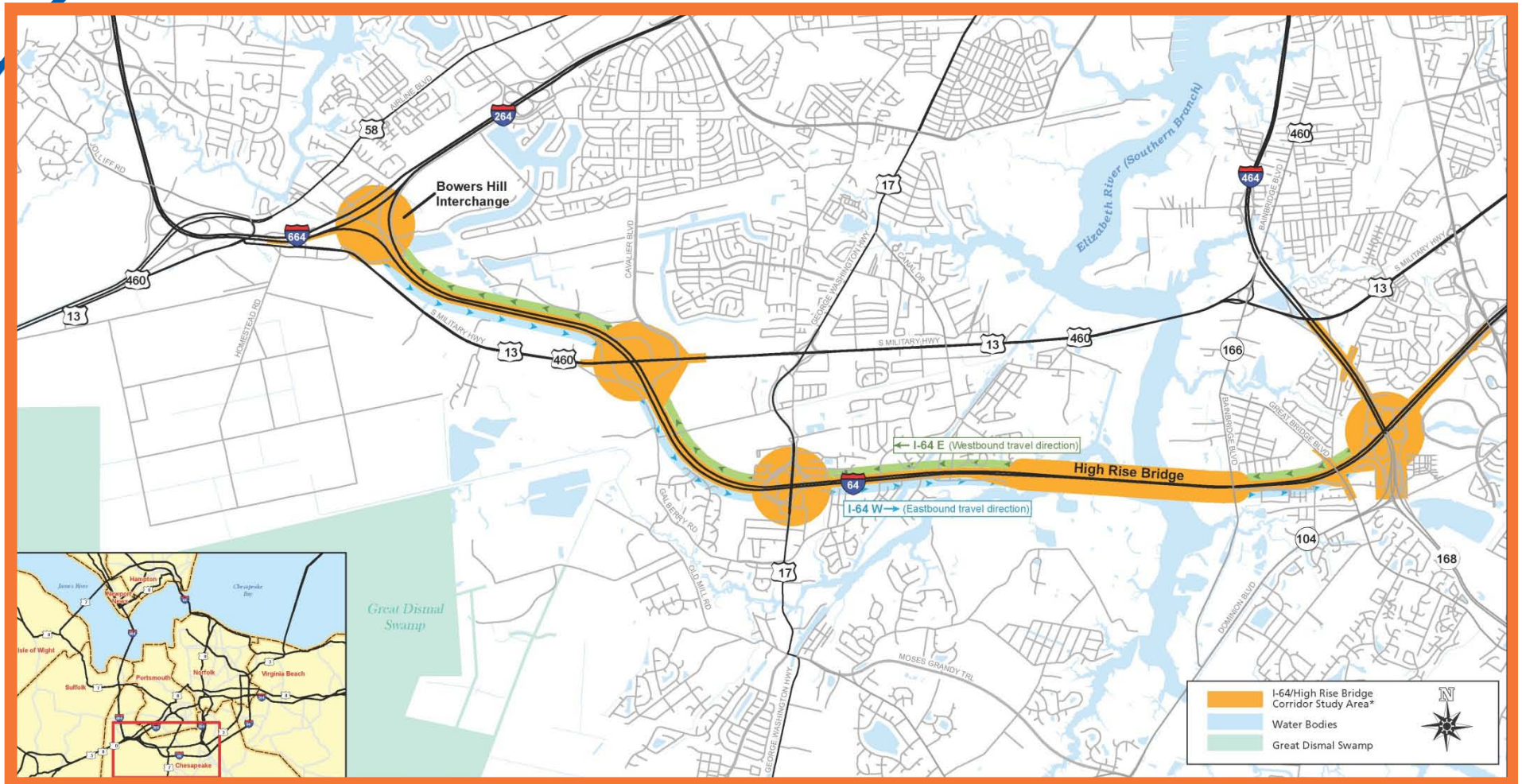
# I-64/I-264 Interchange Improvements (UPC's 17630 & 57048)



## I-64/I-264 Interchange Improvements (UPC's 17630 & 57048)

- **Scope:**
  - Adding a second exit lane on I-64 WB
  - Widening the off-ramp from I-64 WB to I-264 EB
  - Adding a new 2-lane Collector-Distributor (C-D) roadway from I-64 to the Witchduck Rd Interchange
  - Reconfiguring Newtown Rd and Witchduck Rd Interchanges south of I-264
  - Adding new overpass that connects Greenwich Rd and Cleveland St
- **Current Status**
  - Right-of-Way Acquisition has commenced
  - Project being advertised in two segments:
    - Segment I (UPC 57048) – I-64 WB to I-264 EB just before Newtown Rd Interchange
    - Segment II (UPC 17630) - I-264 EB from Newtown Rd to Witchduck Interchanges
- **Project Schedule**
  - Segment I (UPC 57048) Advertisement– April 12, 2016
  - Segment II (UPC 17630) Advertisement – Spring 2017

## I-64 Southside Widening including the High Rise Bridge



The study area shown above is a buffer around the road corridor that includes all natural and physical resources that must be analyzed in the NEPA document. It does not imply right-of-way take or construction impact.

## **I-64 Southside Widening including the High Rise Bridge**

- **Scope:**
  - **Widen I-64 from Exit 291 (I-464) to Exit 299 (I-64/I-264/I-464) at Bowers Hill**
  - **Replace High Rise Bridge**
  - **Reconfigure the following interchanges:**
    - I-464 – Exit 291
    - Route 17 (George Washington Hwy) – Exit 297
    - Route 13 (Military Hwy) – Exit 297
- **Current Status**
  - **Finalizing Environmental Assessment (EA)**
  - **Requested Preliminary Bridge Height Determination from USCG**
  - **Performing Geotechnical Investigation**
  - **Performing Survey and Subsurface Utility Designation**
- **Project Schedule**
  - **Advertise RFP 24 Months After Funding Identified**
  - **Construction Complete 60 Months After Award**

## Third Crossing: Patriot's Crossing (with Craney Island Conn.)

- **Scope:**

- Add new 4-lane roadway and bridge from I-664 near southern end of Monitor Merrimac Memorial Bridge-Tunnel to I-564
- Add new 4-lane roadway and bridge from segment 1 to VA 164

- **Current Status**

- Supplemental Environmental Impact Statement (SEIS)  
(will include all harbor crossings)

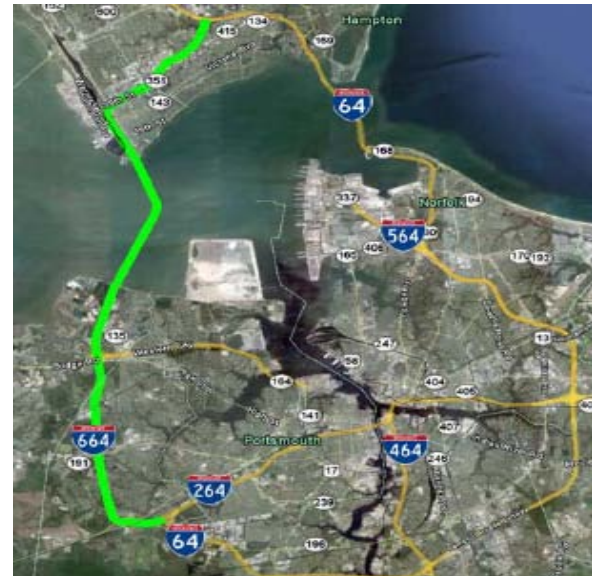
- **Project Schedule**

- SEIS Began– June 2015
- SEIS Complete – June 2017



## Third Crossing: I-664 Widening (including Bowers Hill Interchange)

- **Scope:**
  - Widen to 6 lanes in Chesapeake and Suffolk
  - Widen to 8 lanes in Newport News and Hampton
  - Improve Bowers Hill Interchange
- **Current Status**
  - Supplemental Environmental Impact Statement (SEIS)  
(will include all harbor crossings)
- **Project Schedule**
  - SEIS Began– June 2015
  - SEIS Complete – June 2017



## Hampton Roads Crossing Study (HRCS)

- **Revisits Final EIS from 2001**
- **Facilities included in Study:**
  - **Hampton Roads Bridge Tunnel**
  - **Monitor Merrimac Memorial Bridge Tunnel**
  - **Patriots Crossing**
  - **Interstate 64 between I-664 and I-564**
  - **Interstate 564 and Intermodal Connector**
  - **Interstate 664 (entire length)**
  - **Route 164**
- **Citizen's Information Meetings**
  - **July 2015**
  - **December 2015**
- **Public Hearing and Draft Document – August 2016**
- **Preferred Alternate from CTB – November 2016**
- **Final Document – June 2017**
- **First Record of Decision (ROD)– August 2017**

## US Route 460/58/13 Connector (UPC 106694)

- **Scope:**
  - Improve roadway to Interstate standards from Bowers Hill interchange to the eastern end of the Suffolk Bypass
  - Grade separated interchange at SPSA Landfill
  - Grade separated interchange at Hampton Roads Executive Airport
- **Current Status**
  - No work performed
  - Will require an Environmental Impact Statement (EIS)

## Candidate Project for Funding: I-64/I-264 Interchange Improvements

- **Scope:**
  - Improve remaining movements between I-64 to I-264
- **Current Status**
  - No work performed
  - Previously studied in conjunction with I-264 Corridor Study completed in 2006
  - Currently updating previous I-264 Corridor Study



## Current HRTF Funding Status

Project	Est.	Allocation		Comments
		Fed/State	HRTF	
I-64 Widening – Segment I (UPC 104905)	\$144M	\$100M	\$44M	<ul style="list-style-type: none"> <li>Current Estimate - \$122.6M</li> <li>Additional Scope Items under Review</li> </ul>
I-64 Widening – Segment II (UPC 106665)	\$213M	\$0	\$213M	<ul style="list-style-type: none"> <li>Fully Funded</li> </ul>
I-64 Widening – Segment III (UPC 106689)	\$311M	\$0	\$0	<ul style="list-style-type: none"> <li>Not Funded</li> <li>No Work Performed</li> </ul>
Fort Eustis Blvd Interchange (UPC 106700)	\$180M	\$0	\$0	<ul style="list-style-type: none"> <li>Not Funded</li> <li>No Work Performed</li> </ul>
I-64/I-264 Interchange (UPC's 17630 & 57048)	\$345M	\$17M	\$70M	<ul style="list-style-type: none"> <li>PE and Right-of-Way Funded</li> <li>Construction Phase Not Funded</li> </ul>



## Current HRTF Funding Status

Project	Est.	Allocation		Comments
		Fed/State	HRTF	
I-64 Southside Widening including the High Rise Br. (UPC 106692)	\$1.8B to \$2.3B	\$5M*	\$20M	<ul style="list-style-type: none"><li>• PE Partially Funded</li><li>• Right-of-Way and Construction Phases Not Funded</li></ul> <p>* - Environmental Assessment</p>
Patriots Crossing (with Craney Island Connector)	\$4B	\$9M**	\$5M	<ul style="list-style-type: none"><li>• \$9M Previously Expended</li><li>• \$5M for SEIS</li><li>• Not Funded PE, Right-of-Way or Construction</li><li>• No Work Performed</li></ul> <p>** - Previous work on Third Crossing</p>
I-664 Widening including Bowers Hill Interchange	\$4B	\$0	\$0	<ul style="list-style-type: none"><li>• Included in the SEIS noted above</li><li>• Not Funded</li><li>• No Work Performed</li></ul>
Route 460/58/13 Connector	\$150M	\$0	\$0	<ul style="list-style-type: none"><li>• Not Funded</li><li>• No Work Performed</li></ul>

# Mega-Project: Midtown/Downtown/MLK Project

## LENGTH:

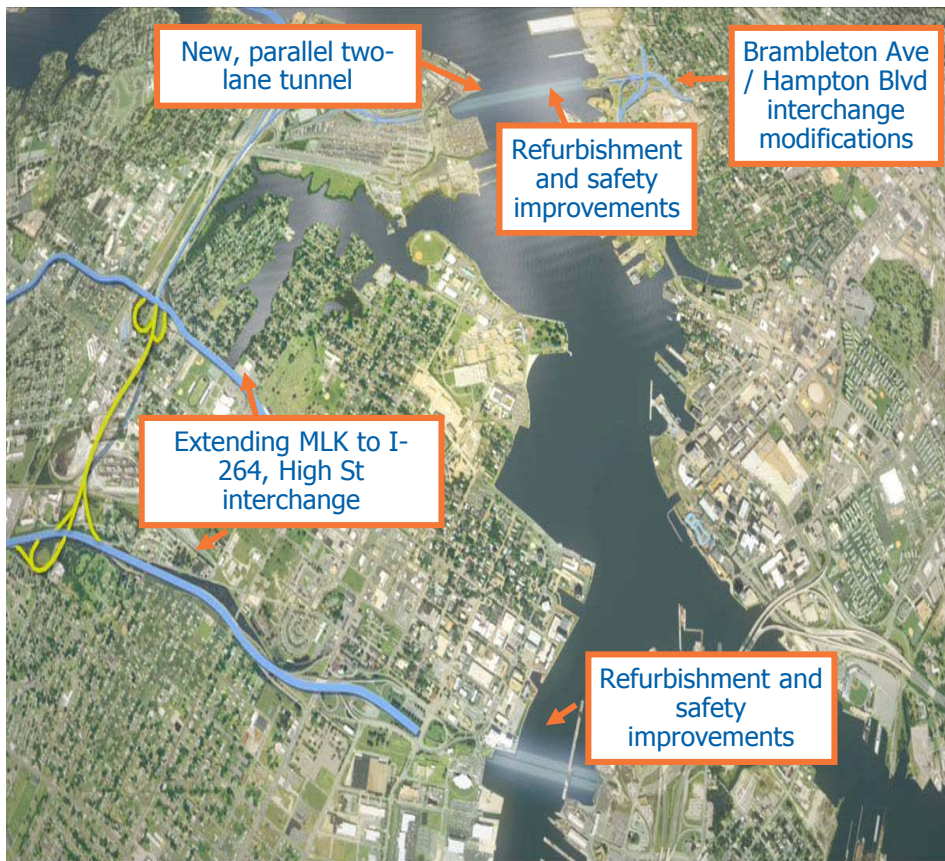
- 0.8 mile (Added Midtown)
- 1.2 miles (MLK Extension)
- Martin Luther King Extension - London Blvd to I-264

## PROJECT:

- 2 Lanes Parallel Tube at Midtown
- 4 Lanes Limited Access MLK
- Upgrade Existing Tunnels
- Rehab of Existing Tunnels

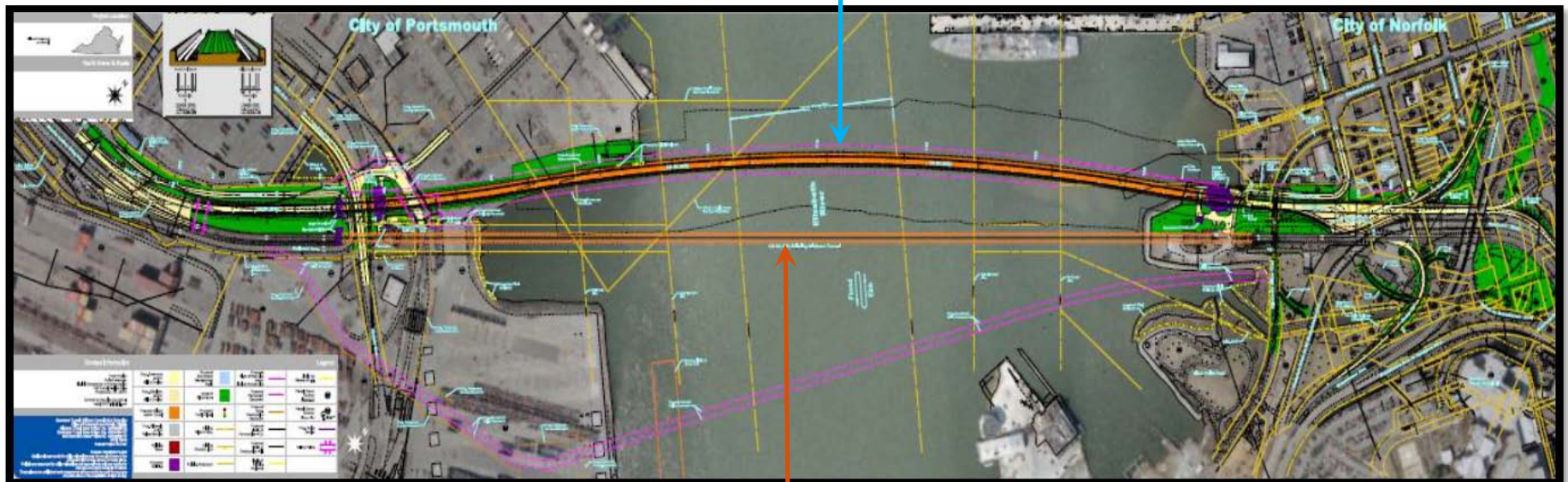
## CURRENT STATUS:

- Construction Completion: May 2018



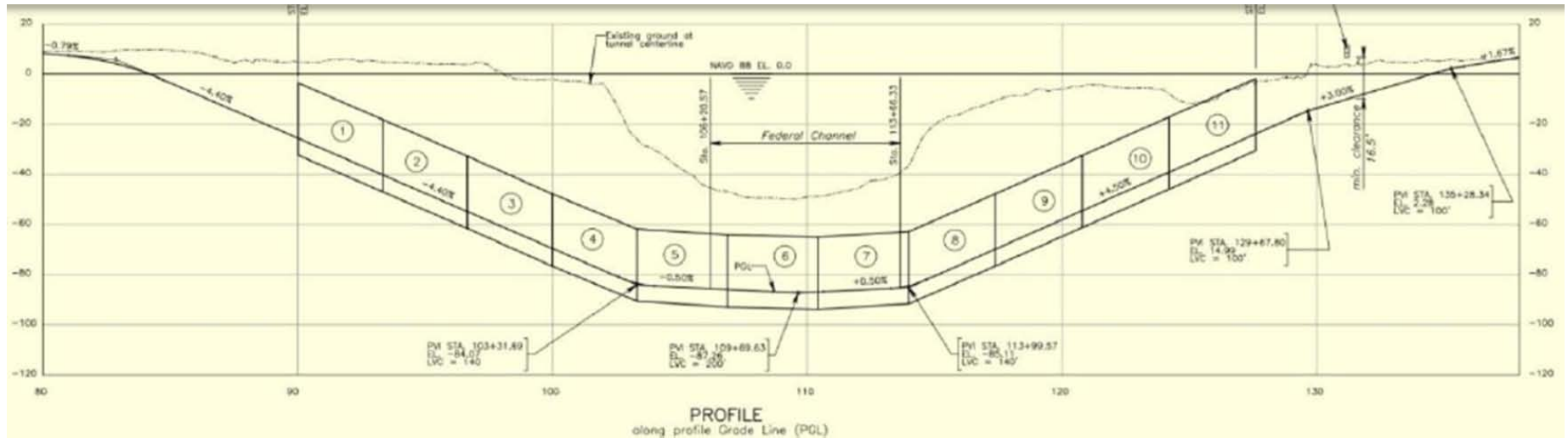
# New Midtown Tunnel

New Midtown Tunnel



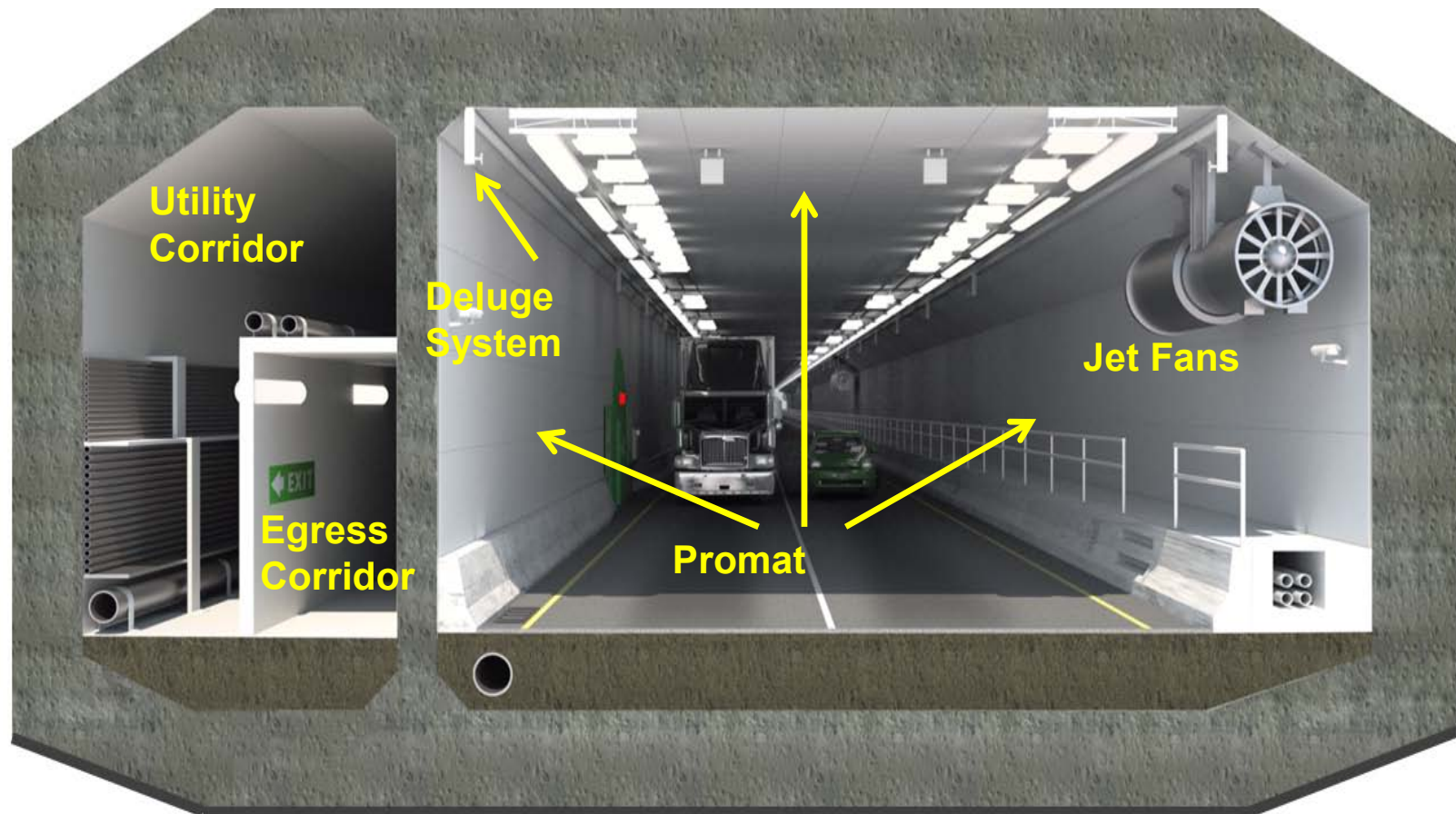
Existing Midtown Tunnel

# New Midtown Tunnel



# New Midtown Tunnel

- Concrete shell, Immerse Tube Tunnel (ITT)
- Westbound tube connecting Norfolk to Portsmouth
- Two vehicular lanes and an egress corridor

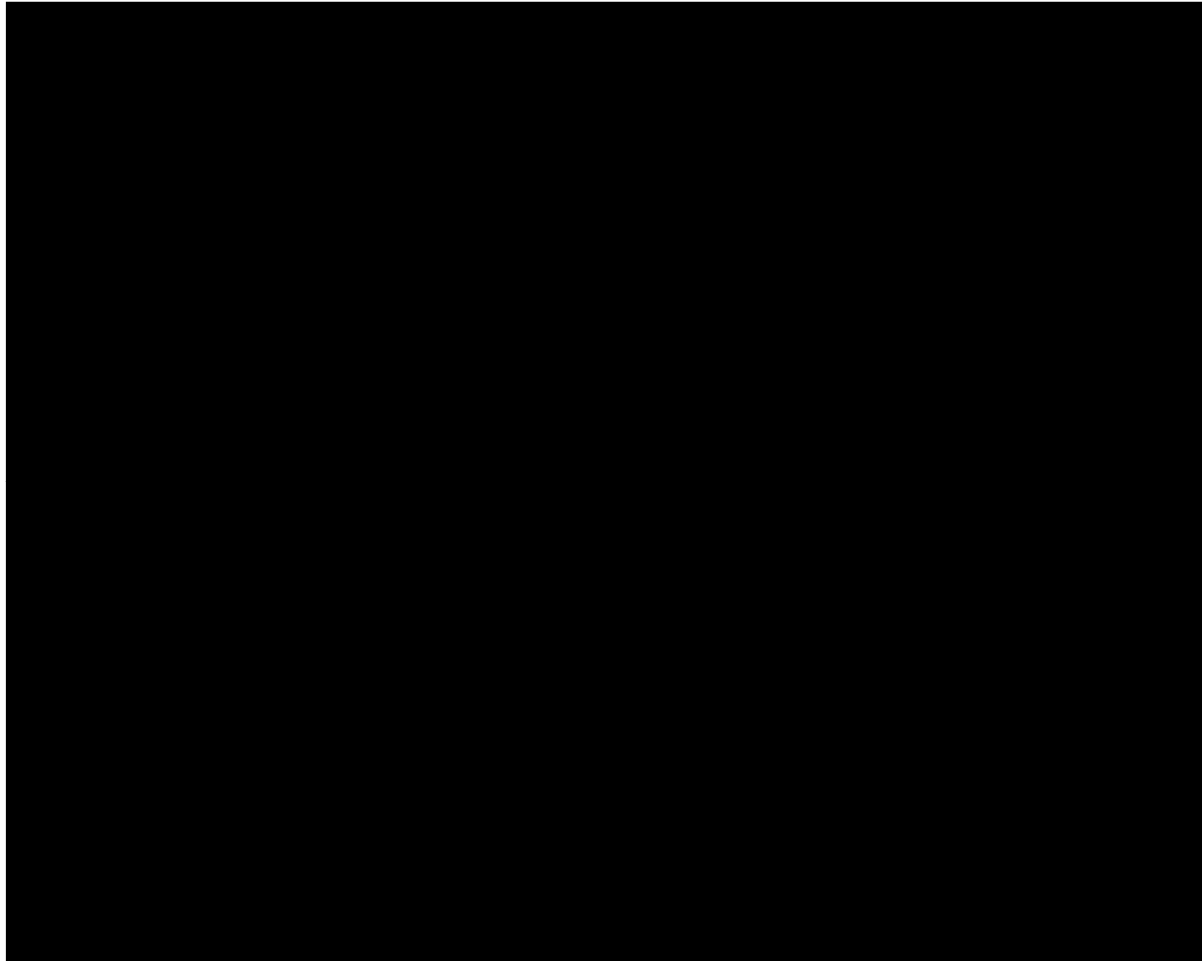


## New MTT: Immersion of the Final Element





## New MTT – Tunnel Walkthrough

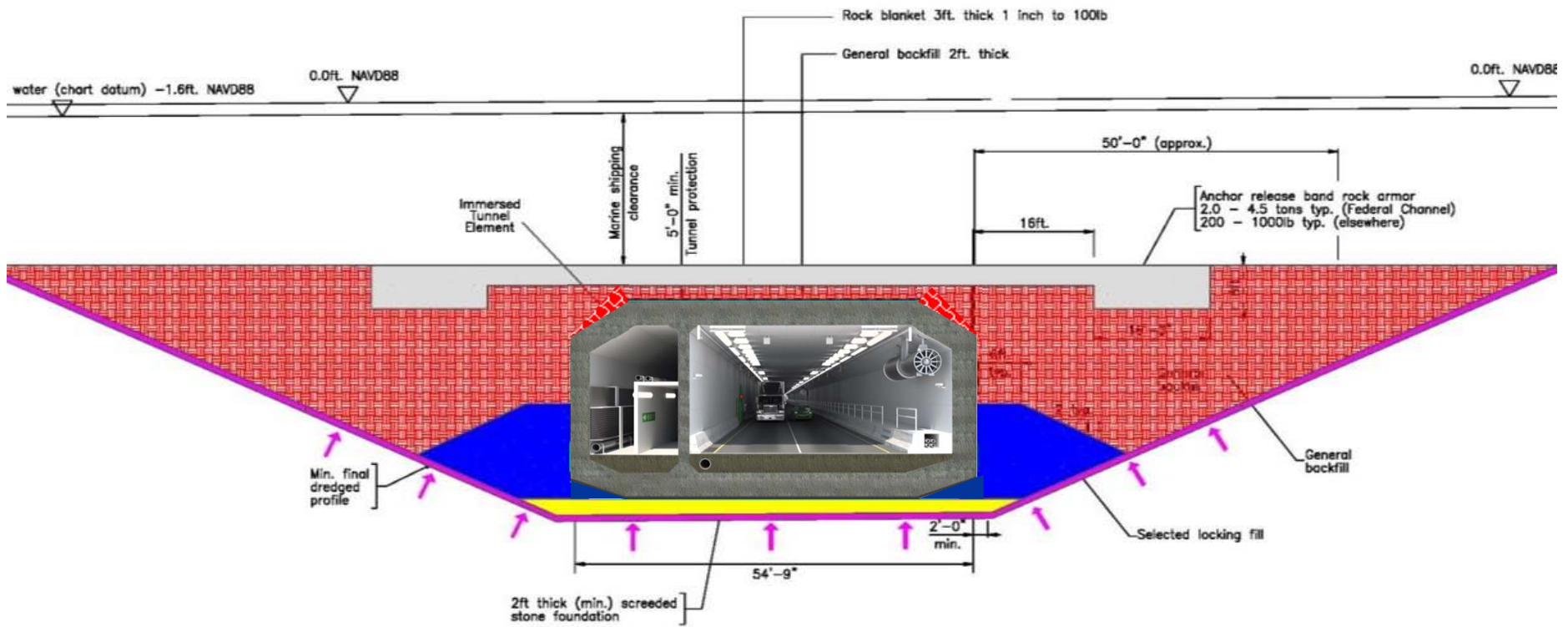


## New MTT – Final Bulkhead



Demo of Temporary Bulkhead N-11 in New MTT (Oct 2015)

# New Midtown Tunnel Element Placement



TYPICAL SECTION

# Tunnel Rehabilitation Scope

## Rehabilitation Projects

- Existing WB Downtown Tunnel
- Existing EB Downtown Tunnel
- Existing (EB) Midtown Tunnel

## Rehabilitation Activities

- Removal of suspended ceilings
- Replace existing transverse with longitudinal ventilation
- Fire-life safety upgrades to 100 mega watt
- Concrete repairs (spalls and cracks)
- Electrical rehabilitation and upgrades
- Misc. signage, painting and repairs



## Downtown Tunnel Rehabilitation Ceiling Removal



## **Downtown Tunnel Rehabilitation Fire Protection & Ventilation Upgrades**



**installation of fire protection board**



**installation of longitudinal ventilation system**

## DTT-WB Lighting Before... and After



# MLK Expressway Extension



## MLK Extension: Structural Steel Erection



# MLK Extension



MLK Mainline - I-264 Interchange

# MLK Extension



Aerial view of MLK Expressway Extension (Oct 2015)



## **VDOT's HRTAC and Mega- Projects Program**

November 18, 2015

**James W. Long, III, P.E., DBIA**

District Major Projects Delivery Director

Hampton Roads District