

REGIONAL  
CONNECTORS  
STUDY

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# WORKING GROUP MEETING

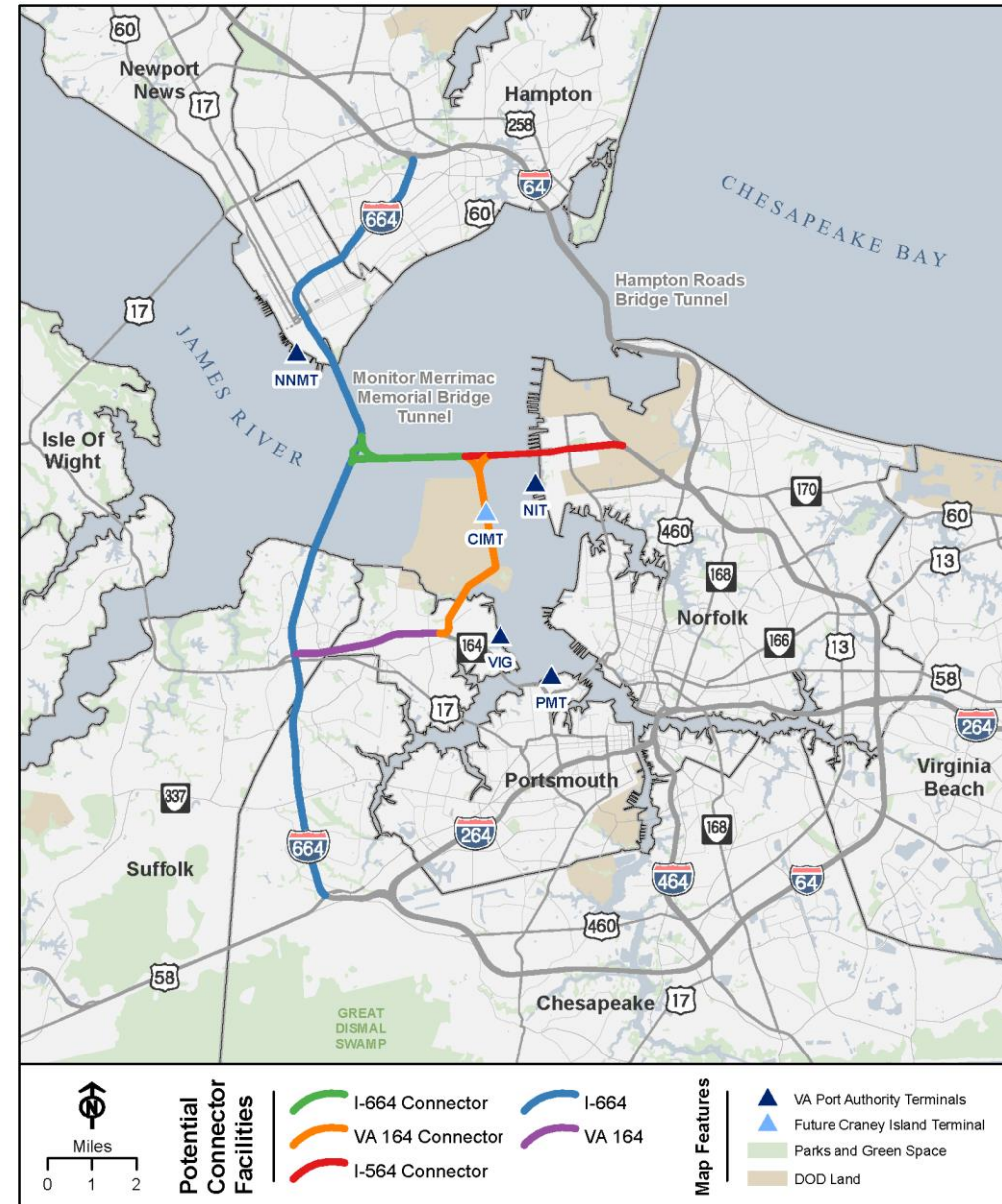
**December 10, 2020**

# MANDATED SEGMENTS

## Previous Discussion

- As per October 27 Joint Steering (Policy) Committee/Working Group recommendation, Consultant team to investigate potential refinements of mandated segments

## Hampton Roads Regional Connectors Study



# Activity since October 27 Joint meeting

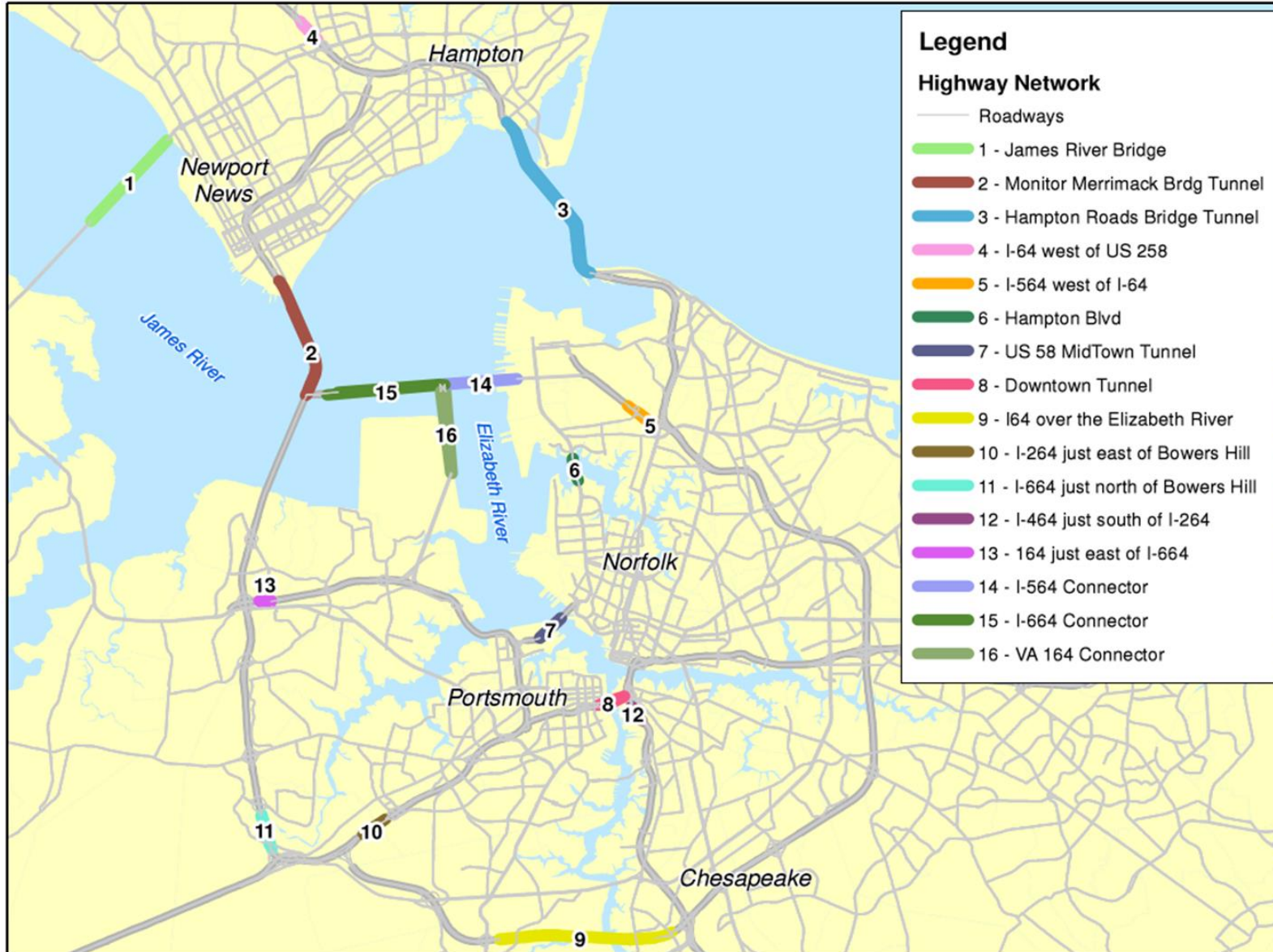
- Prepared draft travel demand model evaluation memo
- Resumed work on draft Technical Guide for Scenario Evaluation (draft anticipated in early January)
- Ran travel demand model for unconstrained (no capacity restrictions) condition with E+C (Existing plus Committed) network
- Ran travel demand model for unconstrained condition with E+C network and all mandated segments
- Prepared matrix to illustrate volume differences between 2017, Unconstrained with E+C, and Unconstrained with E+C and mandated segments

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**TRAVEL DEMAND MODELING**

# Modeling Volume Locations





# Volume Comparison

Daily Traffic Volumes at Key Locations					
ID	Location	2017 Existing	2045 Baseline	2045 Unconstrained	2045 Unconstrained w/ 5 Segments
1	James River Bridge	37,431	52,299	49,415	47,128
2	Monitor Merrimack Bridge Tunnel	74,994	89,602	104,498	124,712
3	Hampton Roads Bridge Tunnel	92,195	160,343	200,633	172,590
4	I-64 west of US 258 (Mercury Blvd)	133,420	181,822	216,585	216,060
5	I-564 west of I-64	124,208	107,045	139,970	210,000
6	Hampton Blvd over the Lafayette River	42,949	43,301	40,223	35,086
7	US 58 MidTown Tunnel	50,700	60,583	45,053	36,071
8	I-264 under the Elizabeth River (Downtown Tunnel)	76,479	83,530	88,290	85,553
9	I-64 over the Elizabeth River	106,183	133,137	233,002	215,245
10	I-264 just east of Bowers Hill	64,611	82,359	92,746	89,180
11	I-664 just north of Bowers Hill	85,186	100,594	158,315	145,729
12	I-464 just south of I-264	88,248	97,055	201,321	181,842
13	164 just east of I-664	50,087	49,737	53,049	45,644
14	I-564 Connector	-	-	-	79,683
15	I-664 Connector	-	-	-	56,173
16	VA 164 Connector	-	-	-	23,510

# Potential Alternative Discussion

- Potential combinations of segments?
- Consider other segments besides Mandated ones? (James River Bridge?)

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**3-MONTH OUTLOOK**

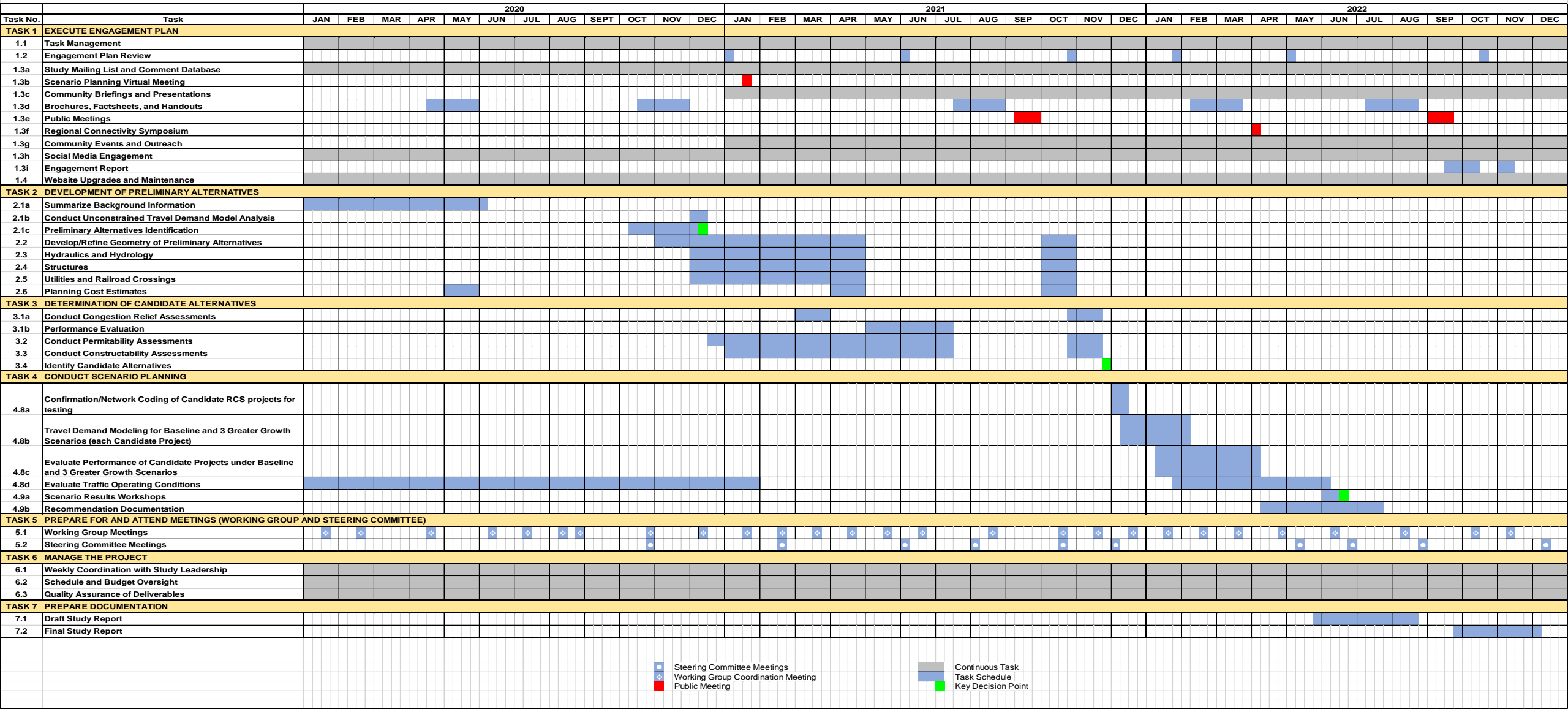


# Next Steps

- Determine Preliminary Alternatives
- Complete Phase 2 documentation
- Working Group Meeting, January 14
- Hold Scenario Planning Virtual Meeting (late January)
- Refine alignments of segments
- Initiate assessment of segment's permitability and constructability
- Working Group Meeting, February 11
- Working Group Meeting, March 11

# Phase 3 Schedule

## REVISED - Regional Connectors Study - Phase 3 Schedule (December 8, 2020)



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**REFERENCE SLIDES – IF NEEDED**

# CONSTRAINTS

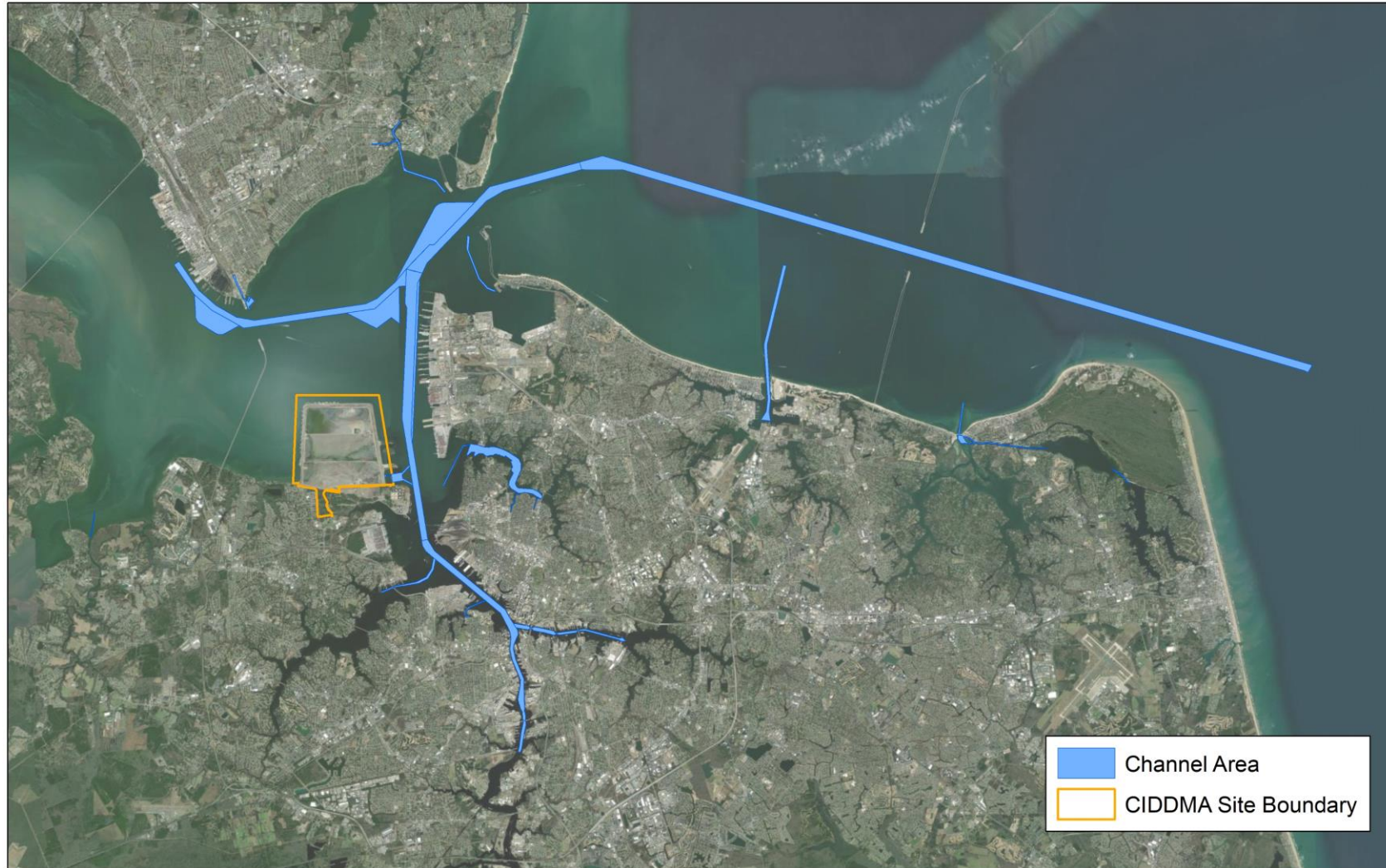
Following field visits to Craney Island and the Navy Fuel Depot the following constraints were identified:

- Craney Island operations and shy distance requirements
- Navy Fuel Depot operations requirements and planned expansion
- City of Portsmouth land fill location and future expansion plans





# HARBOR CONSTRAINTS



# Impacts on Regional Roadway Network (Daily)

Description	2017 Base Year	2045 Baseline w/o Tech	Change*	2045 Baseline w/o Tech**	Change*	2045 Baseline w/Tech**	Change*
Vehicle-Miles Traveled	42,225,948	50,116,393	18.7%	47,148,371	11.7%	52,106,565	23.4%
Vehicle-Hours Traveled	1,173,533	1,457,651	24.2%	1,319,064	12.4%	1,538,821	31.1%
Delay (Hours)	221,122	337,870	52.8%	261,629	18.3%	365,076	65.1%
Average Free-flow Speed (mph)	44.3	44.8		44.6		44.4	
Average Congested Speed (mph)	36.0	34.4		35.7		33.9	

\*compared with 2017 Base Year

\*\* includes MaaS