

# **Hampton Roads Metropolitan Planning Organization**

## **Item #11**

### **Hampton Roads Bridge Tunnel Transportation Study Scope of Work**



# Hampton Roads Bridge Tunnel Transportation Study

## Scope of Work

### ***Purpose***

The Virginia Department of Transportation (VDOT) proposes to assess six identified alternatives that may have the capability of managing congestion at the Hampton Roads Bridge Tunnel (HRBT). The goal of this study is to compare potential alternatives that provide congestion relief at the HRBT while minimizing property impacts within the project limits. Study deliverables for each alternative should include concept-level drawings designed to specific design criteria, traffic analysis data for short and long-term traffic projections, preliminary right of way impacts, planning level costs for engineering, right of way, and construction, and possible construction schedules.

### ***Study Area and Criteria***

The study area is generally defined as the portion of I-64 stretching from the I-64/I-664 Interchange on the Peninsula to the I-64/I-564 Interchange on the Southside. These limits may vary with the alternative being considered. Each alternative will be compared for effectiveness using short-term (2018) and long-term (2030) traffic volumes with and without the Hampton Roads Third Crossing Study (HR3X) in place. Measures of effectiveness shall include, at a minimum, levels of service (LOS), delay and peak hour analysis, right of way impacts, and relative cost of implementation. Others may be determined during Milestone 2.

### ***Definition of Milestones/Analysis Element and Alternatives***

Six alternatives will be considered using milestones to determine benefits and feasibility. Each successive milestone will build on the results of the previous milestone to narrow the range of alternatives to those best meeting the study requirements. In other words, only those alternatives determined to be viable based on the results of the first screen analysis element and/or Department recommendation will be carried to the next analysis element level. Alternatives will be developed relying extensively on existing traffic and base information. Alternative development and analysis will be done in an open and transparent manner readily accessible to the public and interested federal, state, and local officials. The alternatives to be considered in the initial milestone include:

- Two additional lanes of bridge-tunnel capacity to provide a contiguous, six-lane facility connecting the Peninsula and Southside
- Two additional lanes of reversible bridge-tunnel capacity to provide greater peak hour and evacuation capacity
- Four additional lanes of bridge-tunnel capacity connecting the Peninsula and Southside
- Four additional lanes of bridge-tunnel capacity to provide a contiguous, eight-lane (3+1 1+3) SOV-Multimodal facility connecting the Peninsula and Southside
- Two additional lanes of bridge capacity to provide a contiguous, six-lane facility connecting the Peninsula and Southside
- Four additional lanes of bridge capacity

## ***Study Process and Milestones***

### **Discovery Phase**

#### ***Data Collection and Consolidation***

- Collect data on the following elements:
  - Existing traffic volumes for roadway segments within the study area
  - Existing land uses, roadway geometrics, traffic control conditions, railroad and transit facilities and services
  - Transportation-related data on existing land uses and known environmental data from pertinent existing reports and studies including, but not limited to the Regional Transportation Model, GIS database and the Third Crossing Study
  - Existing projects within the corridor of study
- Consolidate data prior to submittal to Study Consultants

### **Milestone 1: Conceptual Traffic Analysis Element**

#### ***Short-term Alternatives Year 2018***

- Analyze each alternative to determine traffic benefits and feasibility with and without the HR3X in place

#### ***Long-term Alternatives Year 2030***

- Analyze each alternative to determine traffic benefits and feasibility with and without the HR3X in place

#### ***Milestone Draft Report***

- Prepare draft report of Milestone findings and recommendations regarding alternatives to be carried forward for Department consideration and approval prior to start of next milestone

### **Milestone 2: Conceptual Design Analysis Element**

#### ***Conceptual Drawing Development***

- Develop concept level design for each alternative carried forward
  - Provide preliminary right of way impacts
  - Provide construction cost
  - Provide implementation schedule

#### ***Milestone Draft Report***

- Prepare draft report of Milestone findings comparing traffic analysis results, right of way impacts, construction costs, and implementation schedules

### **Milestone 3: Draft Final Report**

#### ***Deliverables***

- Detailed scope of work and study schedule
- Visual aids including maps or aerial photos of study area as needed
- Report on existing conditions
- Stakeholder meeting minutes
- Draft Report
- Final Report
- Monthly progress reports

#### ***Draft Final Report Meeting***

- Discuss Study results with stakeholders

### **Milestone 4: Final Report**

#### ***Deliverable***

- Final Report