



I-64 HOV 2+ to HOT 2+ Conversion

Norfolk/Virginia Beach/Chesapeake

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Presented to HRTPO
September 15, 2016

History

Aug 1992: CTB resolution designated HOV lanes in Hampton Roads as HOV-2: Monday - Friday 5:00am – 8:30 am; 3:00pm – 6:00pm and restricted trucks from operating on certain HOV lanes

Jan 1998: CTB resolution restricted trucks (except for pickup or 2 axle panel type trucks) from operating on any HOV lane in Hampton Roads

Feb 1999: CTB resolution effective May 1, 1999 modifying operational hours of all HOV lanes on I-564, I-264, I-64 and Route 44 to be Monday - Friday 6:00am – 8:00am; 4:00pm – 6:00pm

Jun 2008: U.S. Secretary of Transportation encouraged the conversion of HOV to HOT (allowed by SAFETEA-LU) in a response to Virginia Congressional request to convert to general purpose lanes.

Background

Dec 2015: Letter from Secretary Layne to HRTPO initiating a feasibility study of a HOV to HOT conversion on I-64

Jan 2016: Briefed CTB on the beginning of feasibility study

Jan 2016: Briefed HRTPO on the beginning of feasibility study

May 2016: Briefed HRTPO on the initial study results

Jul 2016, Finalized the study and briefed to Secretary Layne

Study Recommendations will require CTB Actions:

- Convert HOV-2 to HOT-2 and change in operational hours
- Use the Toll Facility Revolving Account funds for initial capital costs

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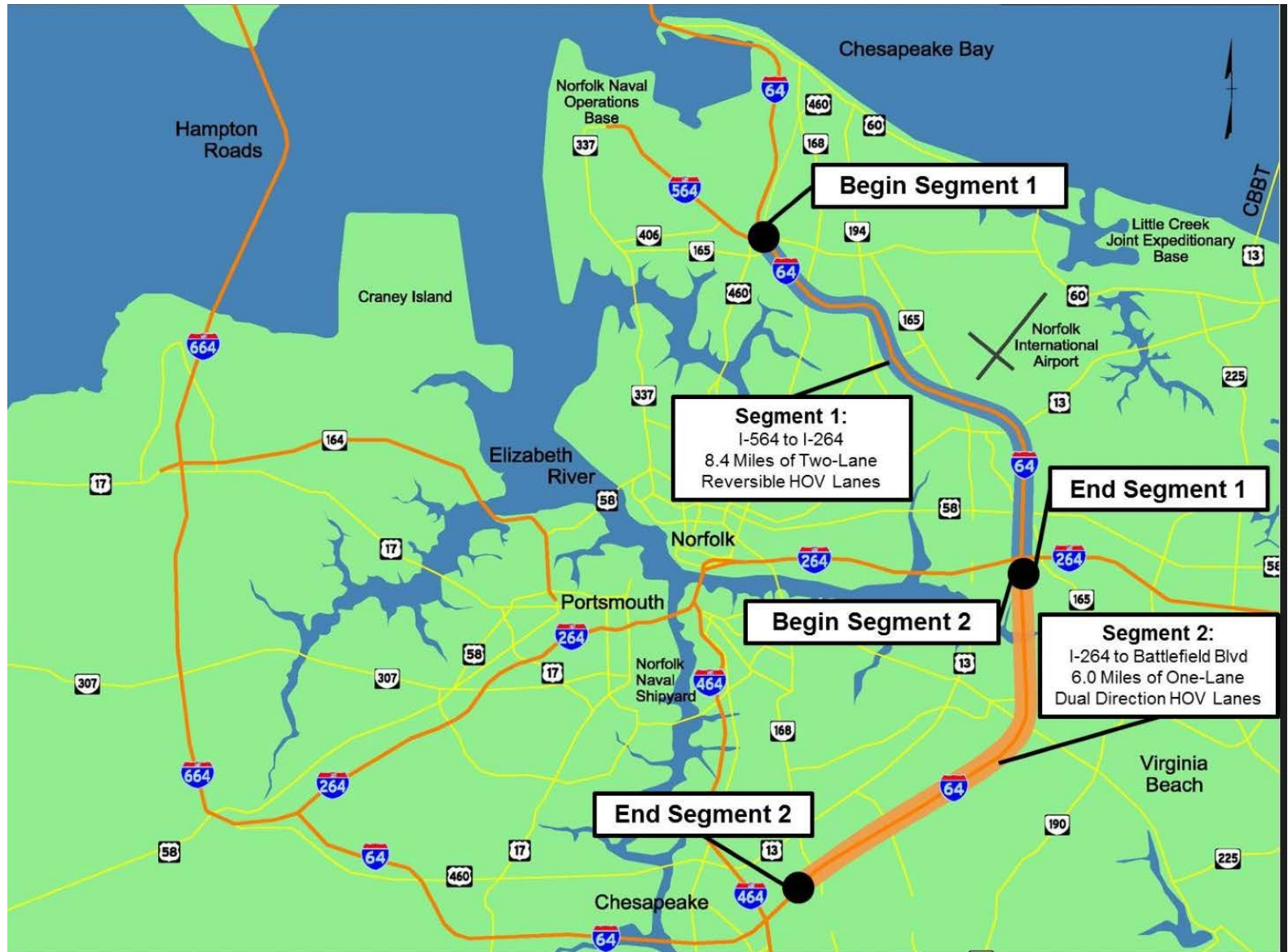
Regional Opportunity

- 32 miles of HOV lanes in Hampton Roads are underused
- Opportunity to provide travel choices to reduce traffic congestion by using the underused HOV lanes
- Improve reliability and reduce congestion in both general purpose and HOV travel lanes

Objective

- Determine the feasibility of converting portions of the existing HOV network to HOT lanes
- Identify the potential benefits and implications of a HOV to HOT conversion

Study Scope -- Location Map



Feasibility Assessment Relative to Benchmarks

Segment 1 (I-564 to I-264) is feasible

- HOT 2+
- 4 hours in both the AM and PM peak
- Weekday only
- Dynamic Pricing
- Transaction-based (single gantry)

Segment 2 (I-264 to I-464) is NOT feasible financially*

- HOT 2+
- 4 hours in both the AM and PM peak and non-peak
- Weekday only
- Dynamic Pricing
- Transaction-based

* may be feasible, pending further study, if combined with managed lanes on High-Rise Bridge

Benefits

Segment 1 (I-564 to I-264)

- Average utilization during 2 Hour AM & PM HOV restricted periods
 - **AM: 1603 (existing), 4325 (2018), 4825 (2034)**
 - **PM: 2348 (existing), 5275 (2018), 5725 (2034)**
- GP utilization decreases **17% - 20%** due to shifts to HOT lanes
- Free flow capacity = 6000+ vehicles
(1,500 vehicles / lane x 2 lanes x 2 hours)

Segment 2 (I-264 to I-464)

- Average utilization during 2 Hour AM & PM HOV restricted periods
 - **AM: 1335 (existing), 2315 (2018), 2805 (2034)**
 - **PM: 1651 (existing), 2450 (2018), 2925 (2034)**
- GP utilization decreases **3% - 10%** due to shifts to HOT lanes
- Free flow capacity = 3000+ vehicles
(1,500 vehicles / lane x 1 lane x 2 hours)

Anticipated CTB Action:

Based on the results of the feasibility study, VDOT will recommend the CTB take two actions:

- Convert Segment 1 (I-564 to I-264) from HOV-2 to HOT-2 and extend the operating hours to Monday - Friday 5:00am – 9:00am; 2:00pm – 6:00pm
- Authorize VDOT to use of the Toll Facility Revolving Account funds for initial capital costs

NOTE: Segment 2 (I-264 to I-464) is currently being evaluated in conjunction with the I-64 High Rise Bridge (I-464 to I-264) analysis

Implementation Schedule

Activities	Dates
Anticipate CTB Action	Oct 2016
RFP Development	Oct - Nov 2016
Civil Design	Oct – Dec 2016
Integrator Procurement	Nov 2016- Mar 2017
Public Outreach	Feb – Dec 2017
Civil Construction	Mar – Jun 2017
Integrator Implementation	Apr – Aug 2017
Open to Tolls	Summer/Fall 2017



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