



Assessment of VDOT Bowers Hill Improvement Alternatives to Ease Evacuation

**HRTPO Board Meeting
December 15, 2011
Stephany Hanshaw**

Project Purpose

Optimize the Route 58 Lane Reversal Conceptual Plan aiding traffic evacuation from areas south and east of the I-64 High Rise Bridge

Leverage study efforts already concluded by the Hampton Roads Regional Catastrophic Planning Team (*Dewberry and Atkins consultant team*)

Background - 2008

- In 2008 VDOT, VDEM and the Cities of Chesapeake and Suffolk began to explore ways to alleviate evacuation traffic queues in the Bowers Hill area
- VDOT developed a conceptual plan to reverse a 14 mile section of Route 58 through Chesapeake and Suffolk
 - Lane reversal begins on I-64 in the area immediately west of the I-64 / Military Highway Interchange to an area just east of Pitchkettle Road Interchange
 - Projected Construction Cost - \$7.1M.

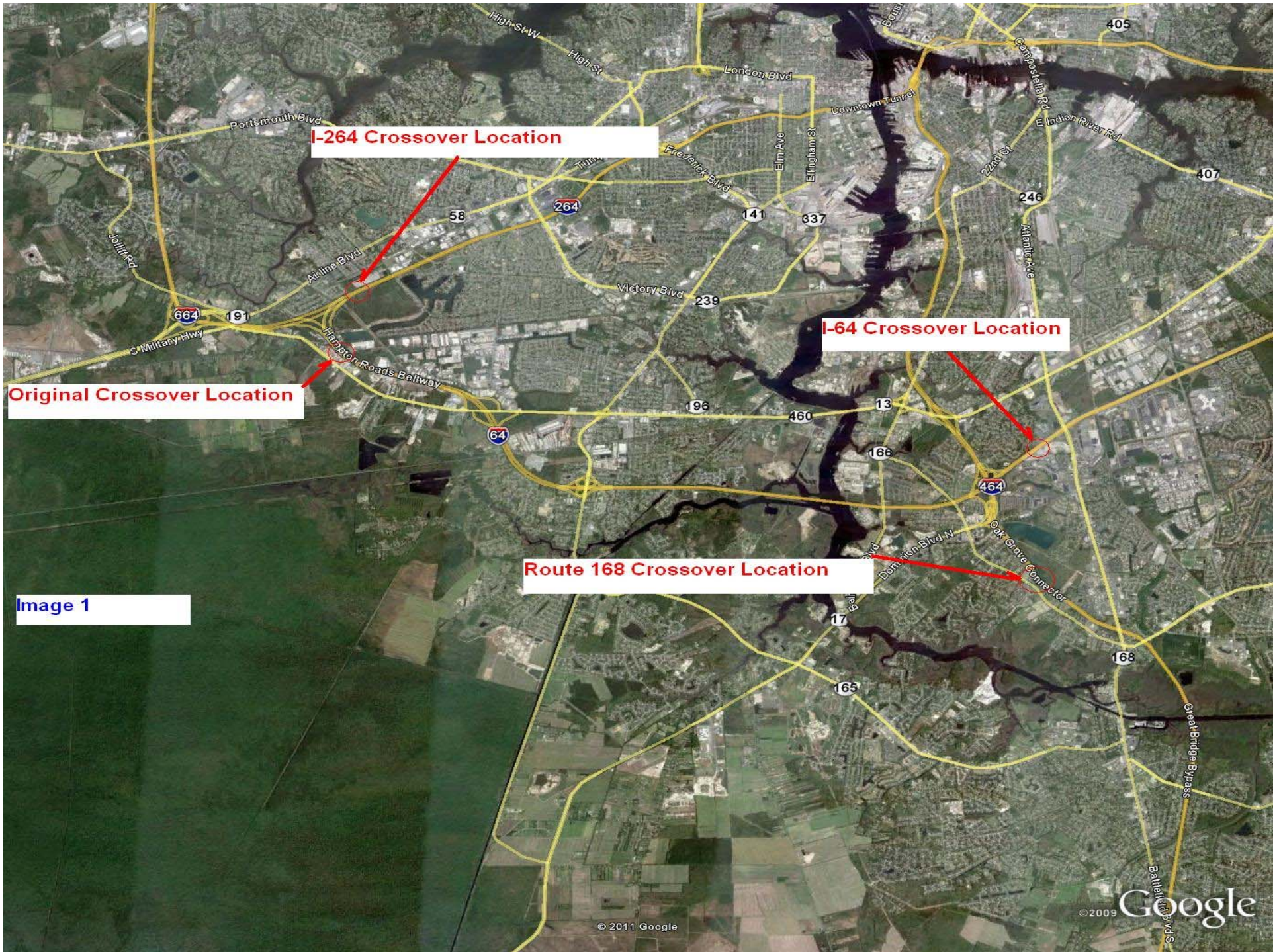
Background - 2011

- **Transportation personnel and emergency managers continue to review the Bowers Hill and Barco areas in VA and NC respectively as critical bottlenecks to evacuation**
- **Planning meetings result in a review of the Route 58 Reversal Conceptual Plan in an effort to further minimize traffic congestion approaching the Bowers Hill area**
- **VDOT initiates an evaluation of 5 options to improve the Route 58 Lane Reversal**

Evaluation Options

Options Included:

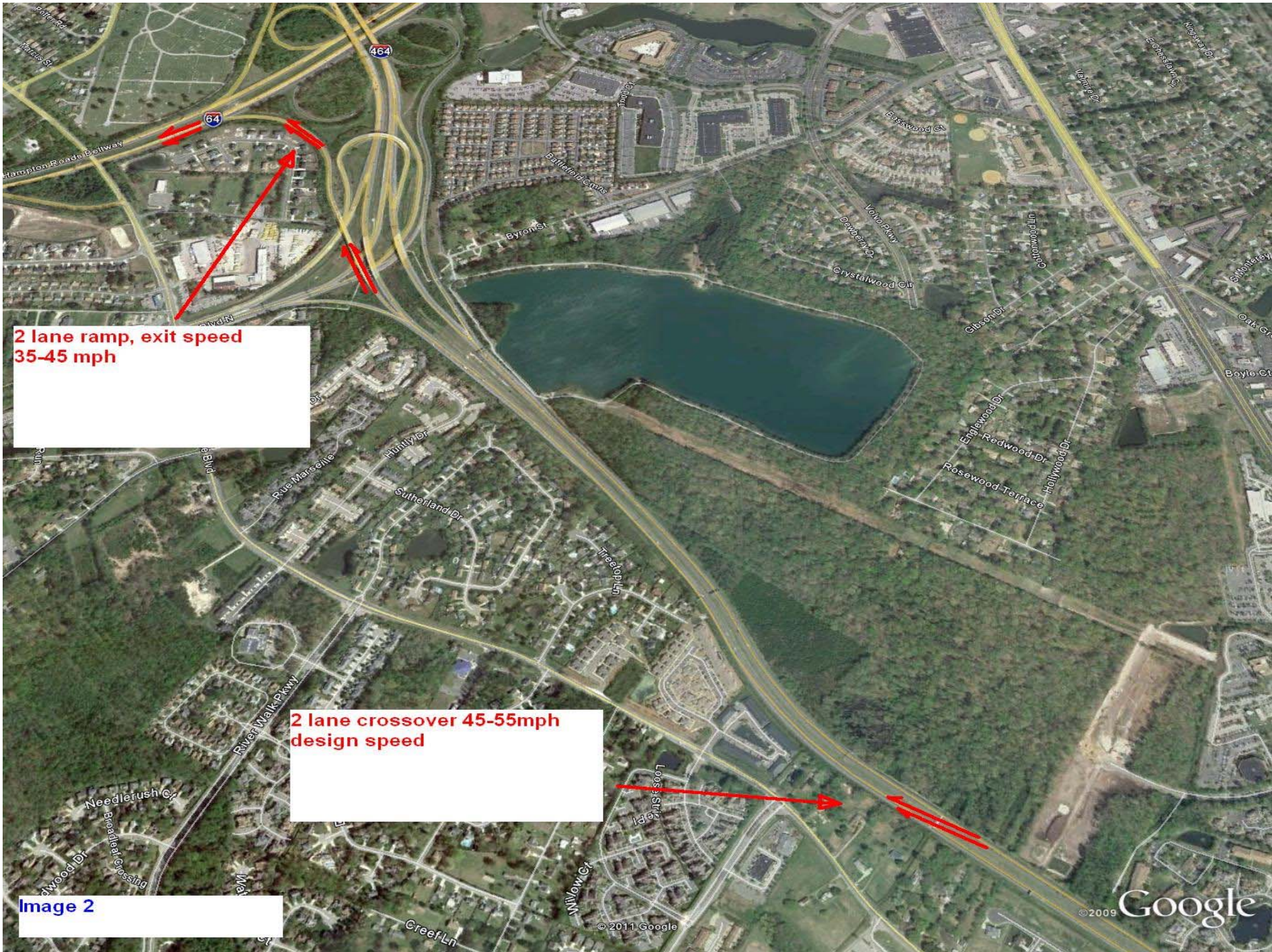
1. Route 168 crossover with I-64 reversal from I-464 through Bowers Hill
2. Route 168 crossover PLUS I-264 crossover with I-64 reversal from I-464 through Bowers Hill
3. Route 168 crossover PLUS I-264 crossover with I-64 reversal after Battlefield Boulevard through Bowers Hill
4. Route 168 crossover with I-64 reversal after Battlefield Boulevard through Bowers Hill
5. Do Nothing



Evaluation Results

Comparison of VDOT Bowers Hill Evacuation Improvement Alternatives

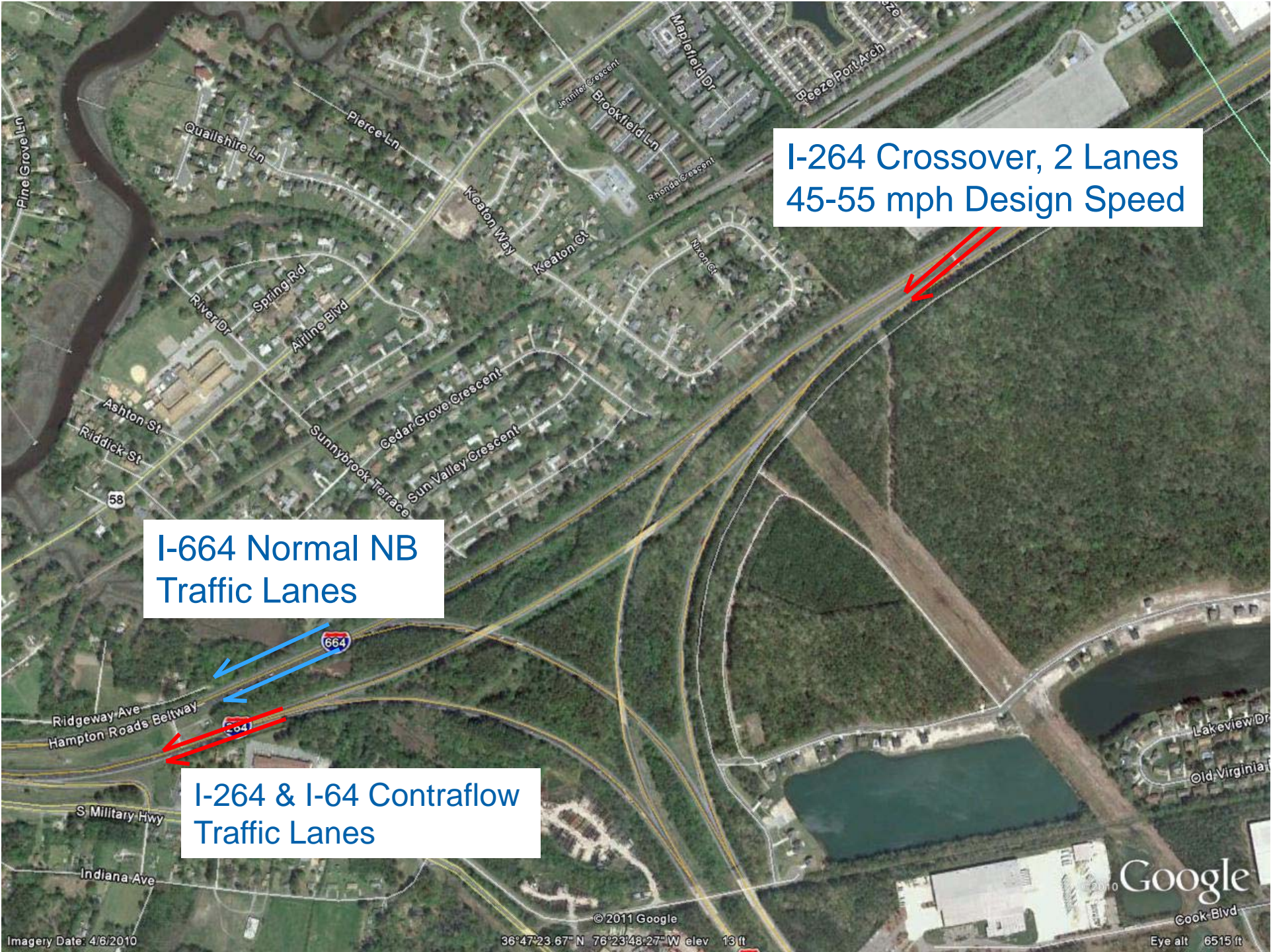
VDOT Option	Description	Max Clearance Time Savings	% Balance of Evac & Background Traffic Normal vs Reversed Lanes		Approximate Length of Required Reversal
			I-64 GW to BH	Suffolk Byp	
1	Rt 168 crossover	17 hours	57% to 43%	65% vs 35%	18 miles
2	Rte. 168 crossover plus I-264 crossover	19 hours	57% to 43%	49% vs. 51%	18.3 miles
3	Route 168 crossover plus I-264 crossover plus I-64 crossover at Battlefield Blvd	9 hours	38% vs 62%	33% vs 67%	19.5 miles
4	Route 168 crossover plus I-64 crossover at Battlefield Blvd	19 hours	38% vs 62%	49% vs 51%	19 miles
Do Nothing	No crossovers or reversals	0 hours	100% vs 0%	100% vs 0%	0 miles
<p>Note: All options with crossovers assume reversal from Bowers Hill through Suffolk Bypass and maintaining at least two lanes of traffic on the normal and reversed side of the segments through the I-64/I-264/I-664 interchange.</p>					



**2 lane ramp, exit speed
35-45 mph**

**2 lane crossover 45-55mph
design speed**

Image 2



I-264 Crossover, 2 Lanes
45-55 mph Design Speed

I-664 Normal NB
Traffic Lanes

I-264 & I-64 Contraflow
Traffic Lanes

Current Status

- **VDOT has hired consultant to develop a detailed Route 58 Lane Reversal Plan**
- **Recommendations from this evaluation will be incorporated into the detailed plan**
- **Currently there is no construction funding in the VDOT Six Year Plan**

Questions?

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