VDOT
Virginia Department of Transportation

STATE PROJECT: 0064-M11-002, P101

WHY ARE IMPROVEMENTS TO I-64 NEEDED?

INTERSTATE 64 PENINSULA STUDY ENVIRONMENTAL IMPACT STATEMENT

ROADWAY CAPACITY

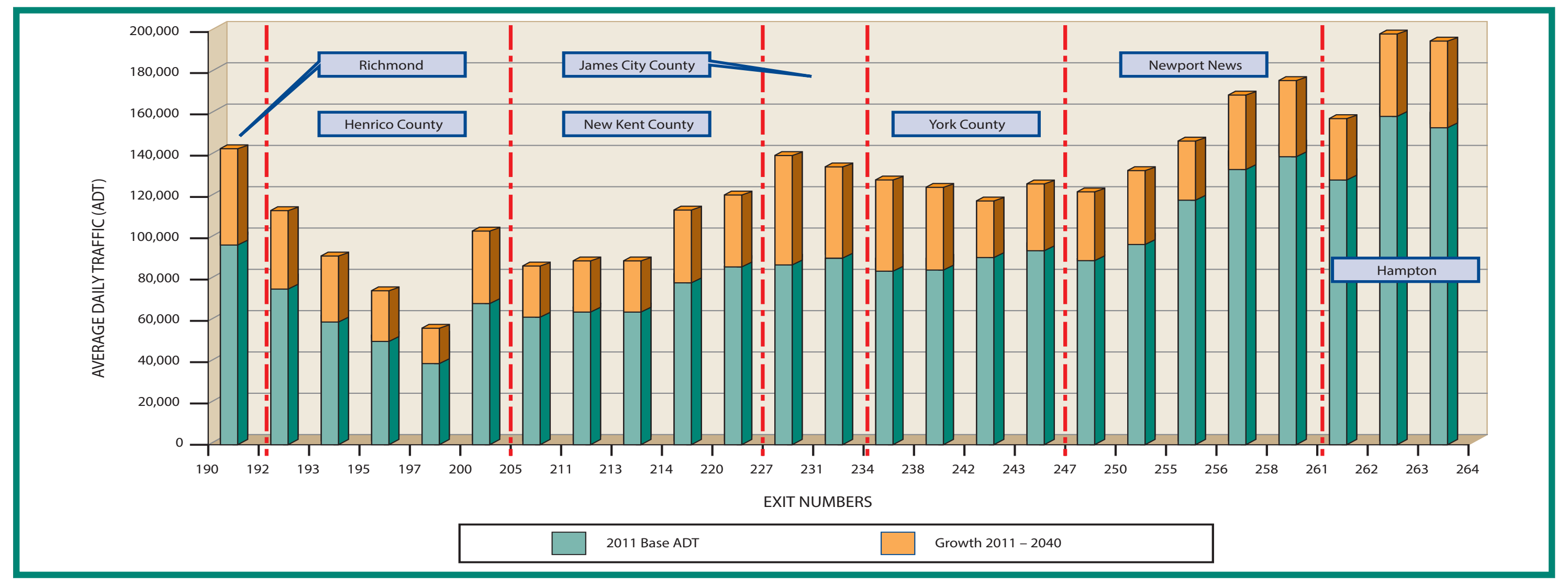
Identified Needs

- Provide for increased capacity in order to reduce travel delays.
- Provide improved access to tourist attractions throughout the region.
- Provide efficient connectivity to, from and between military installations.
- Provide capacity for increased demand from the freight industry.
- Provide for the efficient transporting of freight in and out of the Port of Virginia.
- Support the current economic development needs along the corridor and in the region.

Base Year 2011

Base (2011) traffic volumes are higher than the current facility can accommodate at an acceptable level of service, particularly during peak travel times.

Total Count of all Components of the Corridor that are at Deficient LOS in 2011 Base Conditions	
I-64 Mainline (LOS D/E/F)	48 miles eastbound, 49 miles westbound out of 75 miles
Interchanges with deficient LOS (LOS D/E/F)	14 of 25 (56%)
Cross Street Intersections (LOS E/F)	2 of 38 (5%)



Future Year 2040

The existing facility will be unable to accommodate the projected future (2040) traffic volumes within the corridor at an acceptable level of service.

Total Count of all Components of the Corridor that are Projected to be at Deficient LOS in 2040 No-Build Conditions	
I-64 Mainline (LOS D/E/F)	67 miles eastbound, 58 miles westbound out of 75 miles
Interchanges with deficient LOS (LOS D/E/F)	24 of 25 (96%)
Cross Street Intersections (LOS E/F)	13 of 38 (34%)

ROADWAY DEFICIENCIES

Identified Needs

- Minimize roadway geometric and structure deficiencies on the I-64 mainline and at the interchanges.

Base Year 2011

Due to changes in the interstate design standards and almost 50 years of traffic volumes creating wear and tear on the corridor infrastructure, there are a number of roadway and structure deficiencies throughout the corridor.

Roadway Deficiencies	Number of Occurrences
I-64 Mainline – Deficient Vertical Geometry	3 locations eastbound, 1 location westbound
Bridge Structures over I-64 – Deficient Vertical Clearance (<16.5 feet)	12 structures out of 61 (20%)
Sufficiency Ratings for Bridge Structures *	50 out of 109 (46%) major bridge structures have a sufficiency rating of less than 80 out of 100 and thus can be considered eligible for federal funds for reconstruction
Interchanges with Deficient Geometry **	22 of 25 (88%)

* "Sufficiency Rating" refers to the measure of the ability of a bridge to remain in service. Ratings are on a scale of 1 to 100, with 100 considered as an entirely sufficient bridge, usually new; an entirely deficient bridge would receive a rating of 0. A low sufficiency rating does not mean that a bridge is in imminent danger of failure, but it does mean that VDOT needs to monitor the bridge more closely and plan for its rehabilitation or replacement.

** Includes one or more of the following: merge/diverge area lengths, weaving areas, ramp horizontal & vertical geometry.

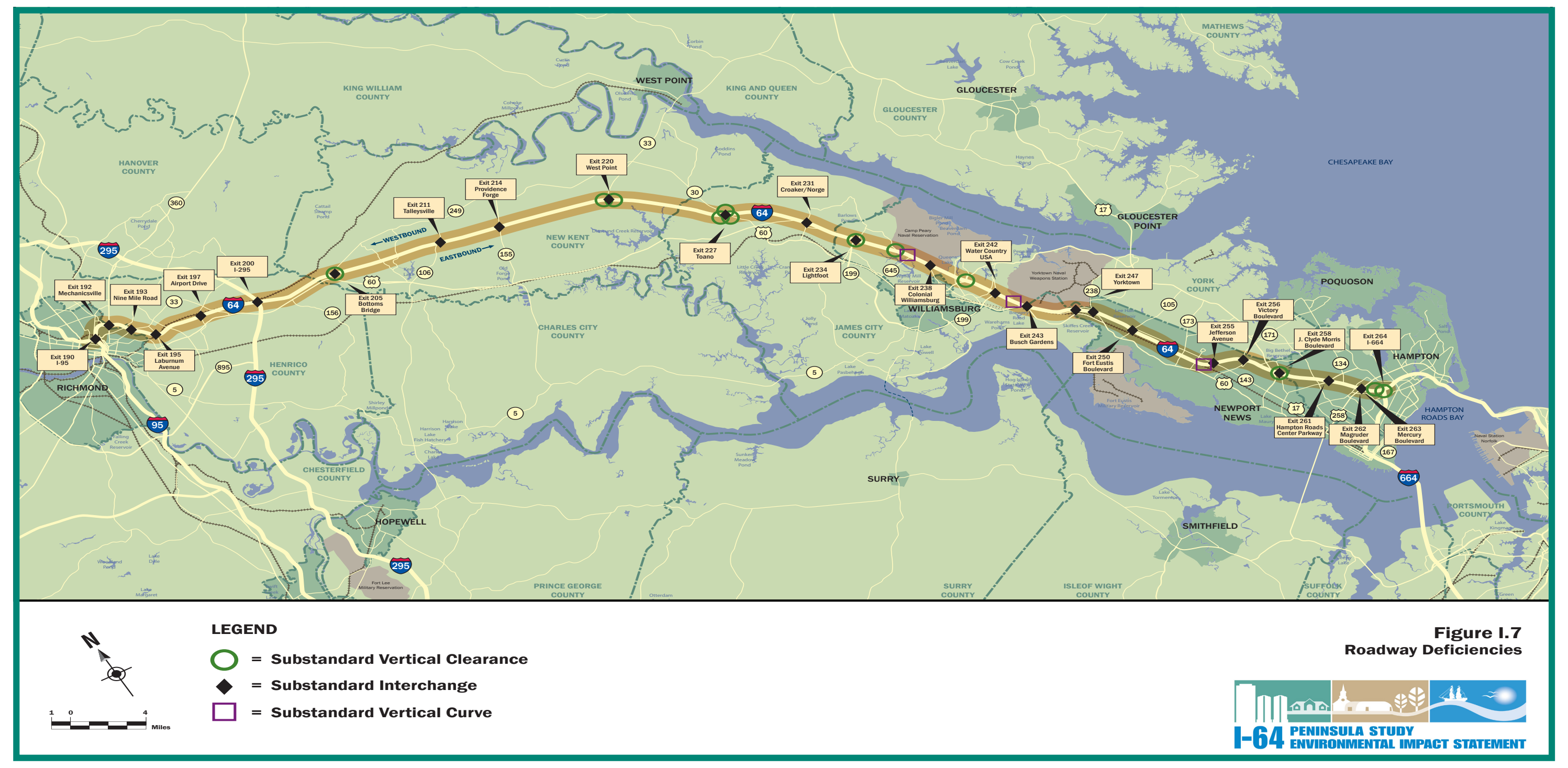


Figure I.7
Roadway Deficiencies

Future Year 2040

Future increase in traffic volumes and continued aging of the corridor will cause deterioration of the mainline pavement. Existing structures will also continue to deteriorate in future years without major rehabilitation or replacement.

SAFETY

Identified Needs

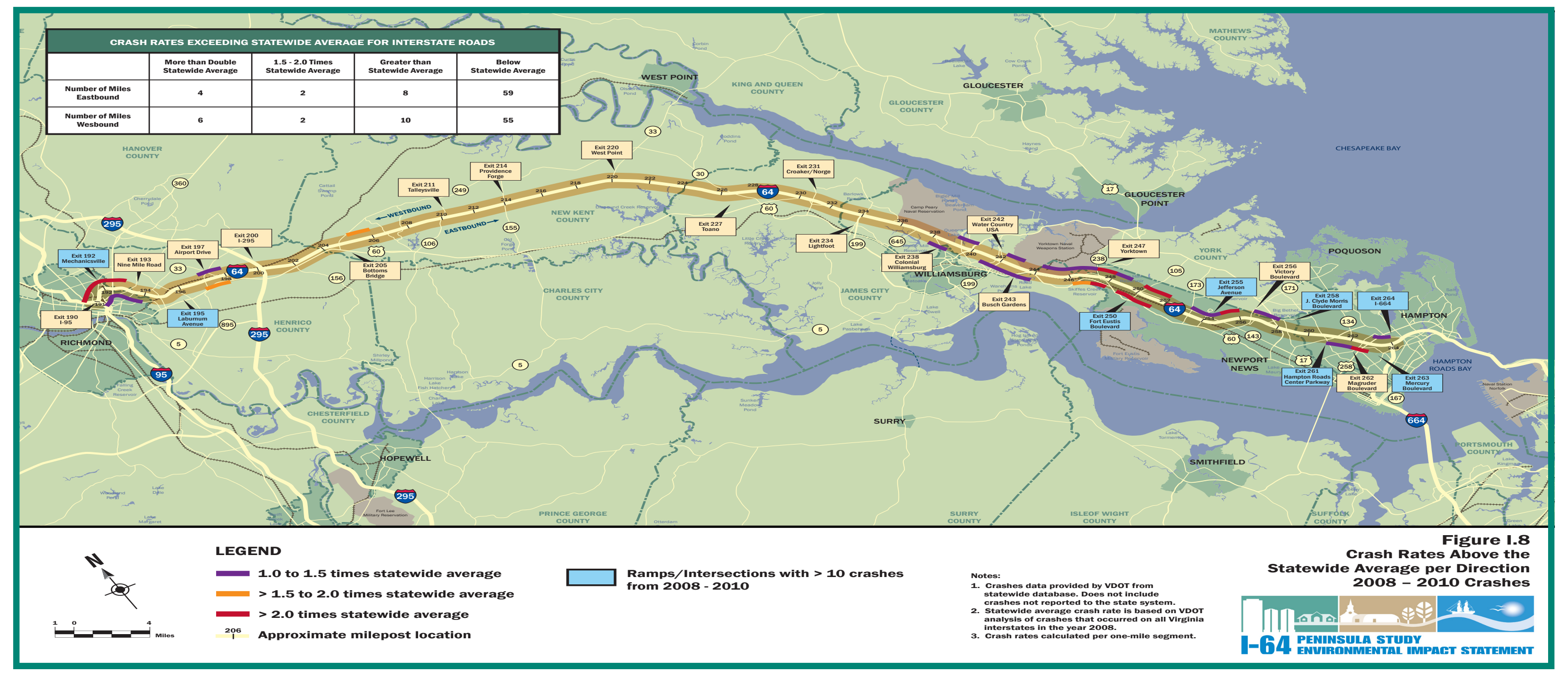
- Improve safety by reducing the frequency of vehicle crashes along the corridor.

Base Year 2011

Existing traffic congestion along with aging roadway and structural deficiencies have exacerbated safety concerns within the corridor.

Safety Consideration	Type/Occurrences
I-64 Mainline Crashes	3,802 reportable crashes over a 3 year period from 2008 to 2010, including 20 fatalities
Type of Crashes	48% rear end crashes, 30% involved fixed object
Comparison to Statewide Average *	14 miles eastbound greater than the statewide average 18 miles westbound greater than the statewide average

* The crash rate on I-64 (crashes per 100 million vehicle miles traveled) was compared to the statewide average for all Virginia Interstates.



CRASH RATES EXCEEDING STATEWIDE AVERAGE FOR INTERSTATE ROADS				
	More than Double Statewide Average	1.5 - 2.0 Times Statewide Average	Greater than Statewide Average	Below Statewide Average
Number of Miles Eastbound	4	2	8	59
Number of Miles Wesbound	6	2	10	55

Notes:
1. Crashes data provided by VDOT from statewide database. Does not include crashes not reported to the state system.
2. Statewide average crash rate is based on VDOT analysis of crashes that occurred on all Virginia interstates in the year 2008.
3. Crash rates calculated per one-mile segment.

Figure I.8
Crash Rates Above the Statewide Average per Direction
2008 – 2010 Crashes

Future Year 2040

Increased traffic congestion along with aging roadway and structural deficiencies will result in increased safety concerns within the corridor.

DECEMBER 2012, LOCATION PUBLIC HEARING