



## **Interstate 81 Safety and Operational Improvements**

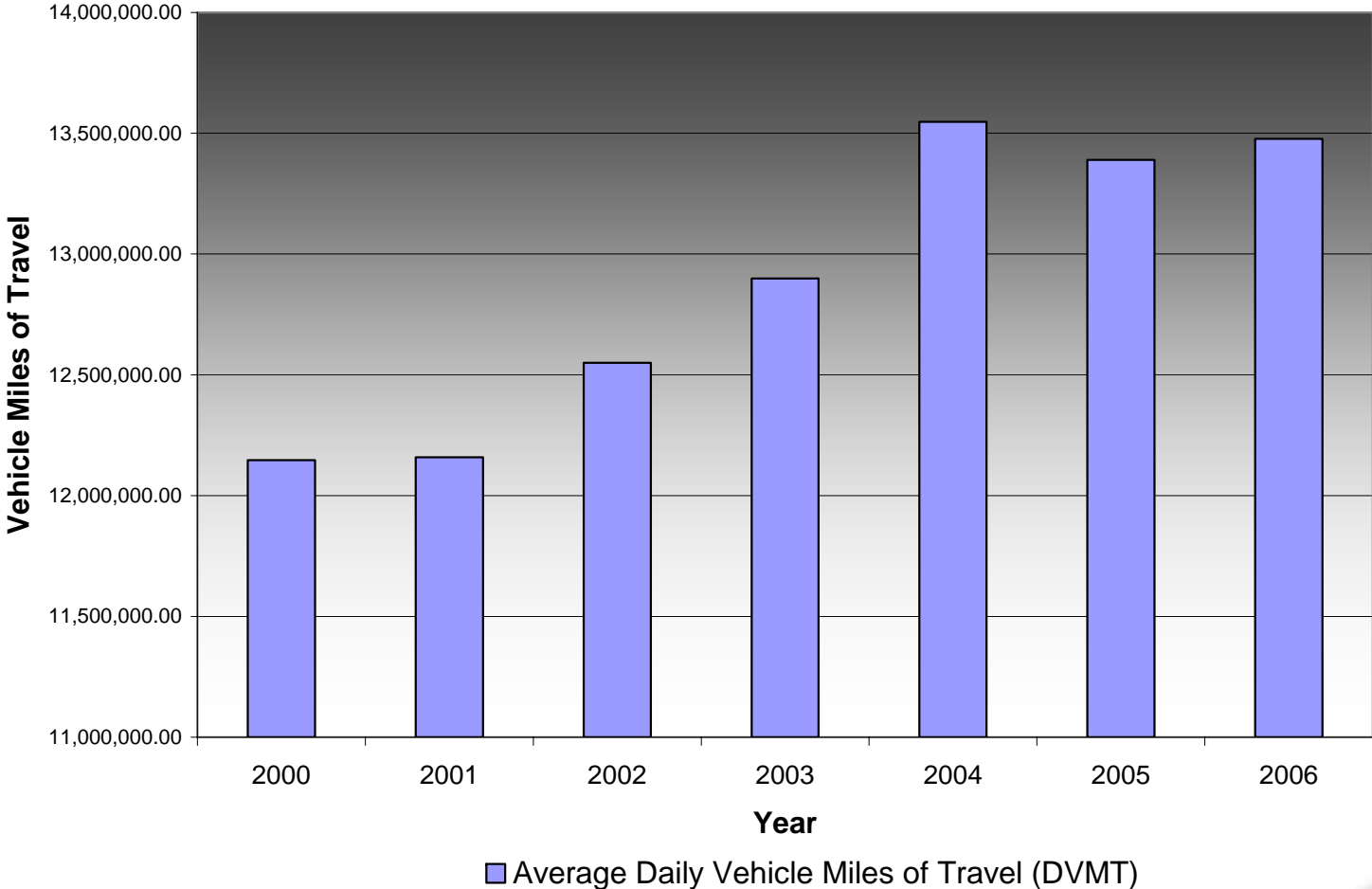
November 7, 2007

**Fred Altizer, P.E.**

I-81 Program Manager

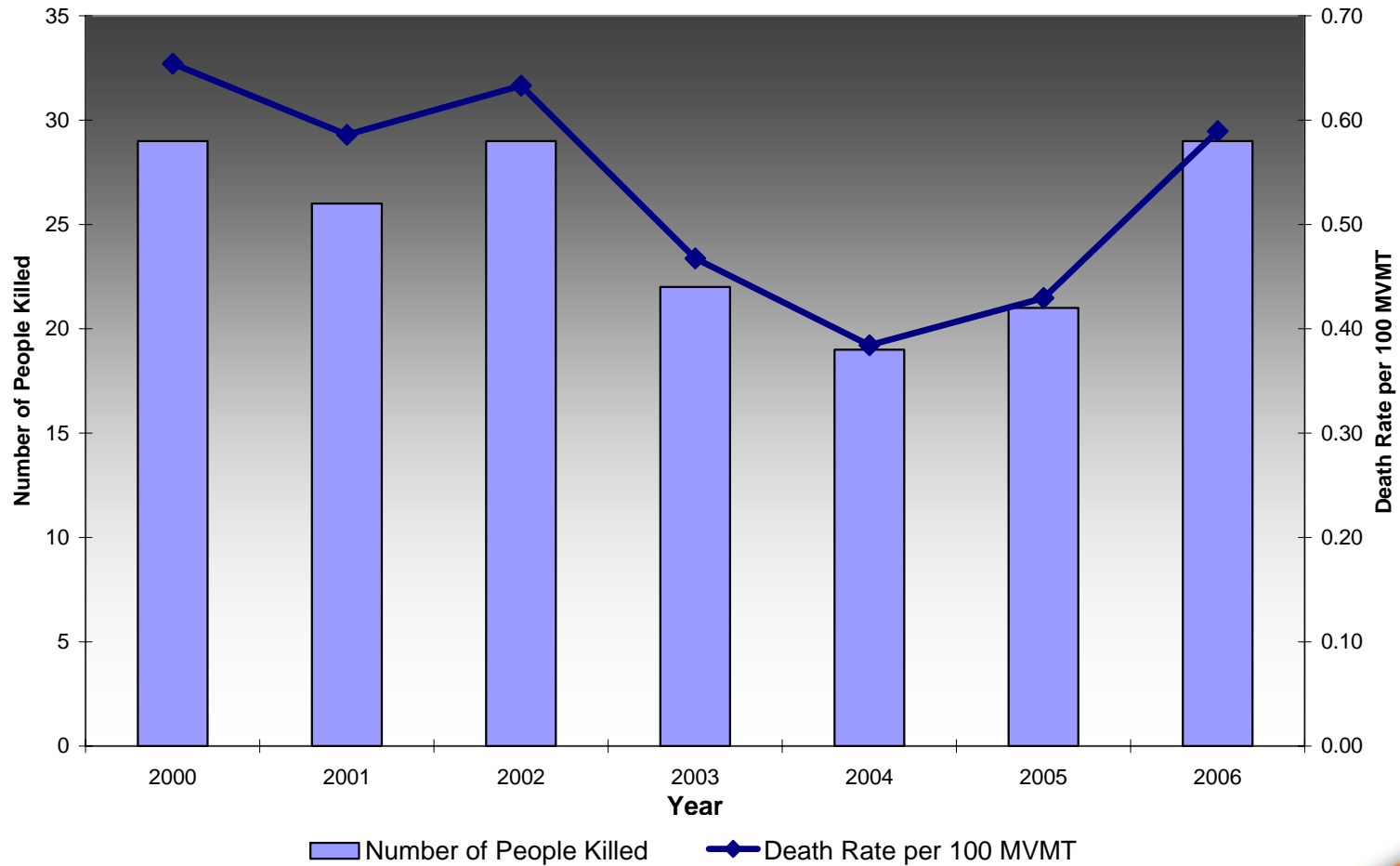
# I-81 Traffic Volume Trend

I-81 (NB and SB) Traffic Volume Trend (2000-2006)



# I-81 Traffic Deaths

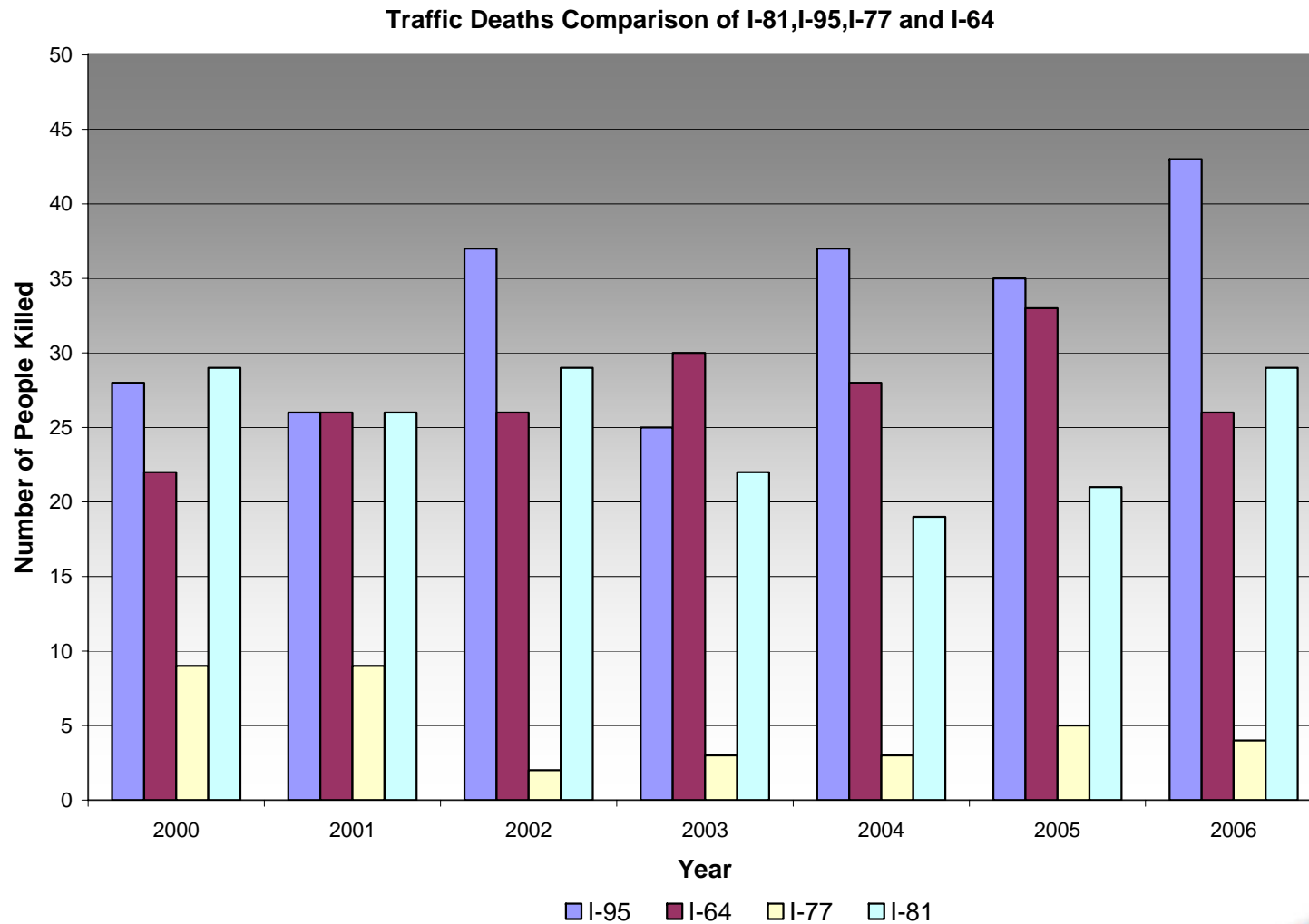
I-81 Traffic Deaths Trend (2000-2006)



# Truck Involved Deaths

- From 2000-2006:
  - 42% of deaths on I-81 involved at least one truck (73 of 175 deaths)
  - 29% of deaths on I-95 involved at least one truck (68 of 231 deaths)
- There are a comparable number of trucks traveling on I-95 as on I-81; however, trucks are a smaller percentage of total vehicles on I-95 than on I-81.

# Death Trends on Virginia Interstates



# Progress to Date: Managing Traffic

- Two traffic centers serve I-81 corridor
  - Staunton and Salem
- 70+ changeable message signs; 12 RWIS sites
- Safety Service Patrol covers 106 miles
  - In October, added service to I-81/I-77 overlap



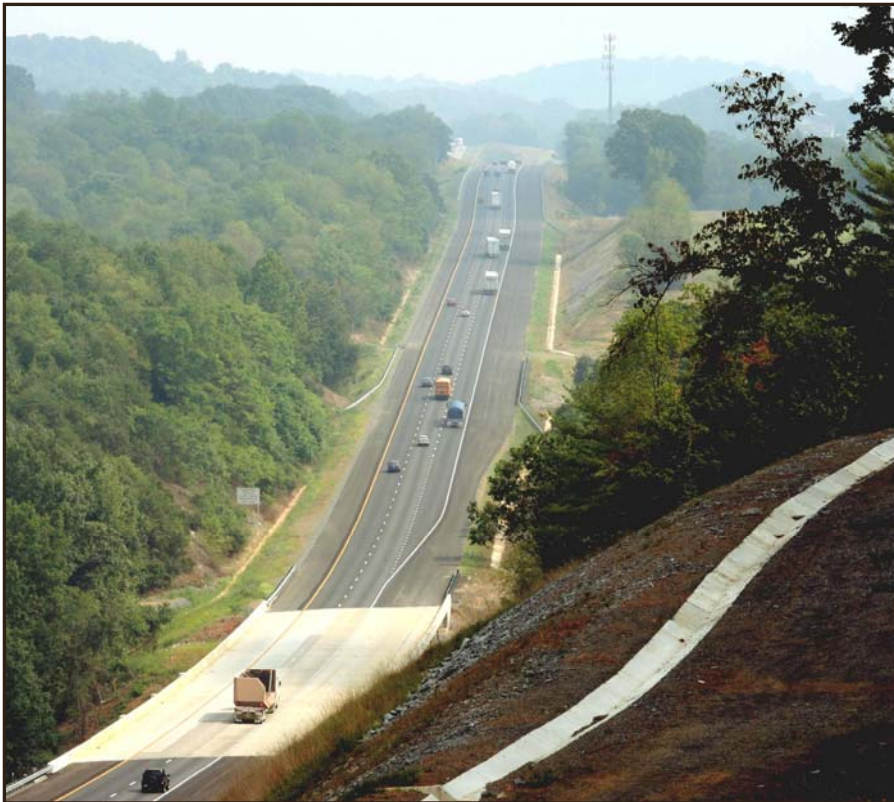
# Progress to Date: Major Ramp Extension

- Exit 313 Abrams Creek interchange
  - Ramp extension, including new bridge
  - Approximately \$10 million



# Progress to Date: Four New Bridges

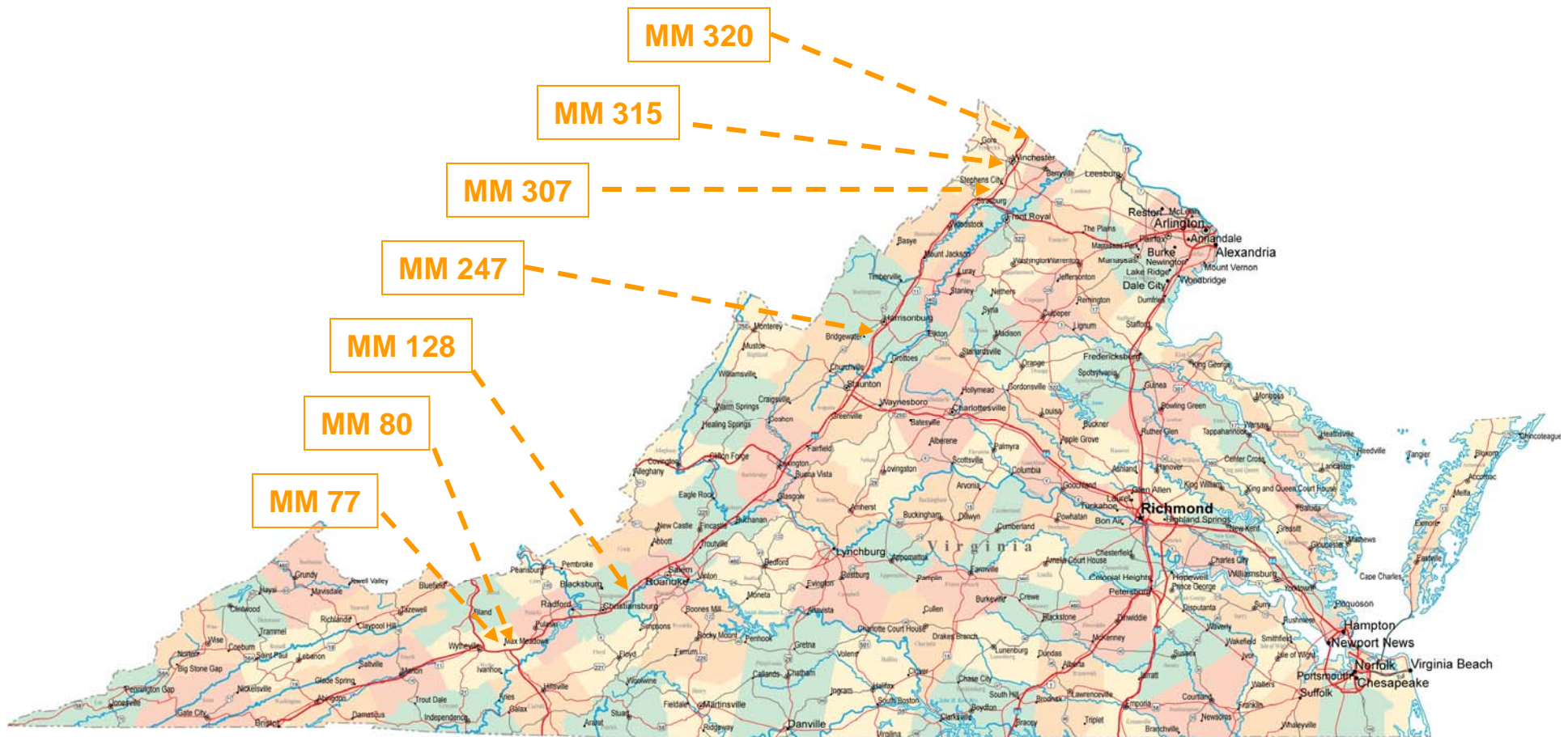
- Rockbridge County near Lexington
  - Maury River and Buffalo Creek bridges
  - Included 1.3 miles of NB climbing lane
  - \$62.5 million investment





# Funded Ramp Extensions

- Nearly two dozen locations identified at \$50 million
- Seven funded in current SYIP for \$11.4 million
- Ad dates: 4th quarter 2007 to 1st quarter 2009



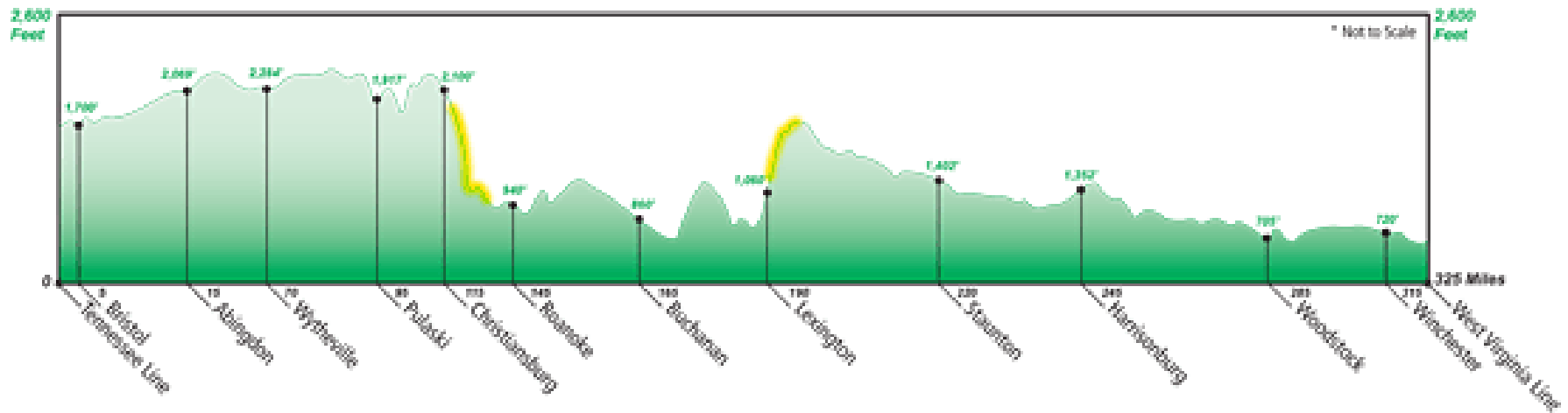
## Example: Exit 315 on-ramps at Winchester



- Ad date: 4<sup>th</sup> quarter 2007; estimated cost: \$2 million
- Heavy development feeding the interstate

# Funded Truck Climbing Lanes

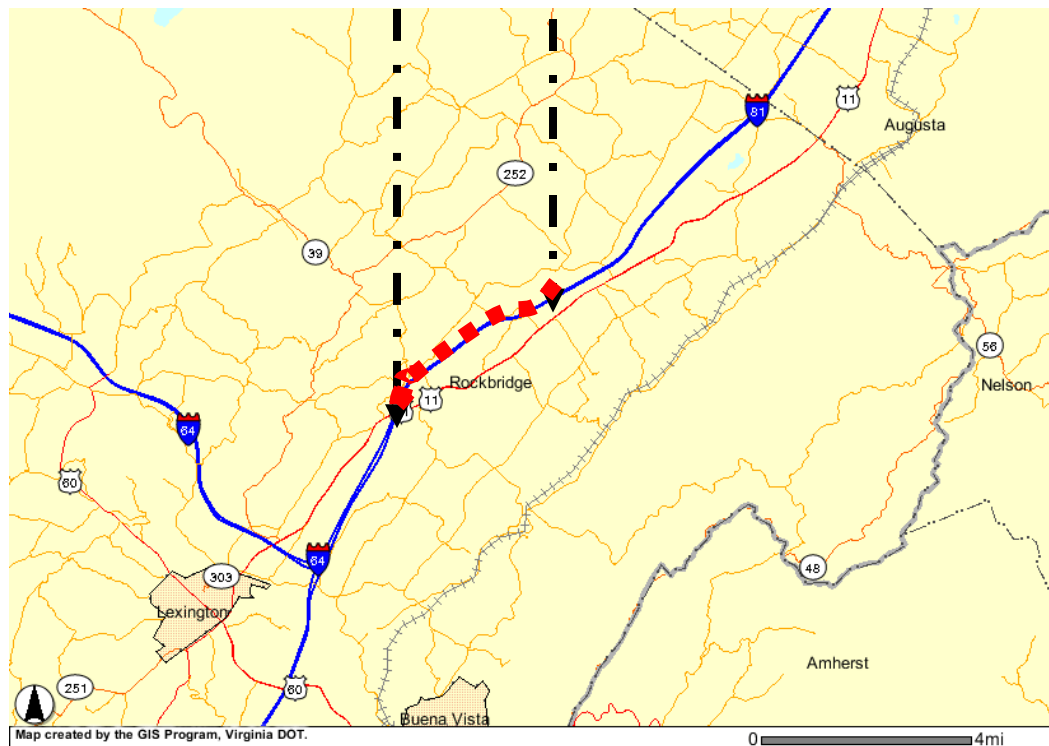
- 12 locations identified at estimated cost of \$366 million
- Two locations selected and funded in current SYIP
  - Rockbridge County, northbound; Montgomery County, southbound
- I-81 profile shows long, steep grades in these locations



# Rockbridge County, Northbound TCL

- North of Lexington near Fairfield
- Public hearing scheduled for tomorrow, Nov. 8
- Construction: spring 2008

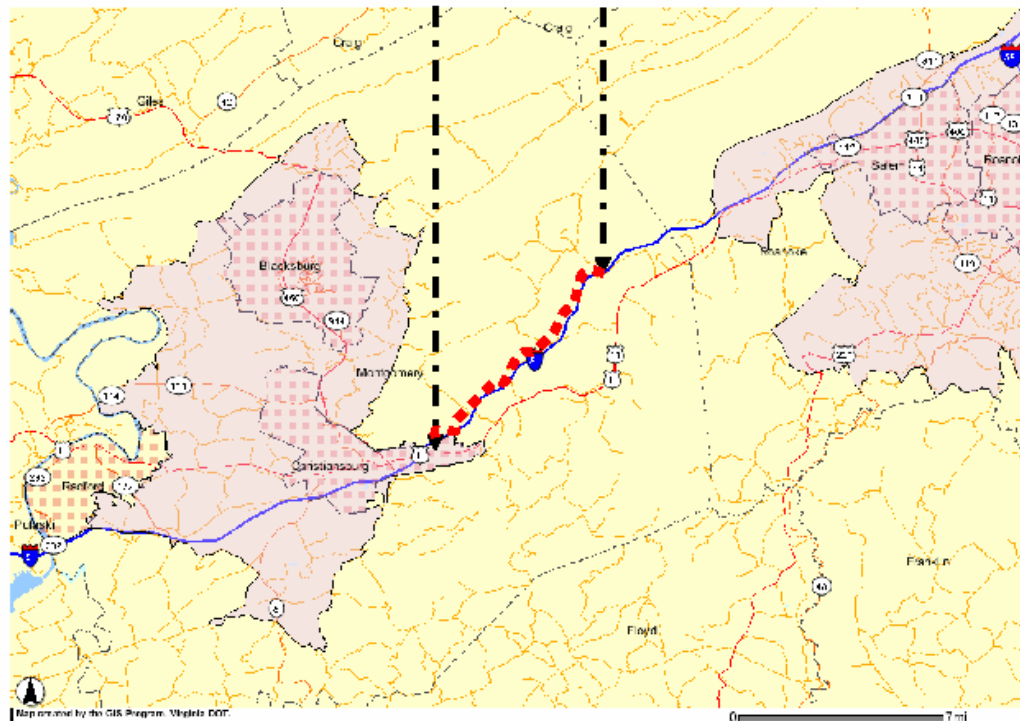
Truck Climbing Northbound MP 195 – 202



# Montgomery County, Southbound TCL

- Ironto to Christiansburg
- Surveying and engineering work under way
- Public hearing: summer 2008
- Construction: late fall 2008

Truck Climbing Southbound MP 128 - 119



# Unmet Needs

- Additional 16 locations for ramp extensions
  - Estimated cost: \$33.4 million
- Up to 10 additional locations for truck climbing lanes
  - Estimated cost: more than \$200 million
- Bridges need continued attention:
  - 90% of bridges are older than 40 years
  - 14 bridges and three culverts are structurally deficient
  - Estimated cost for replacements: \$78 million

