COMMONWEALTH *of* VIRGINIA

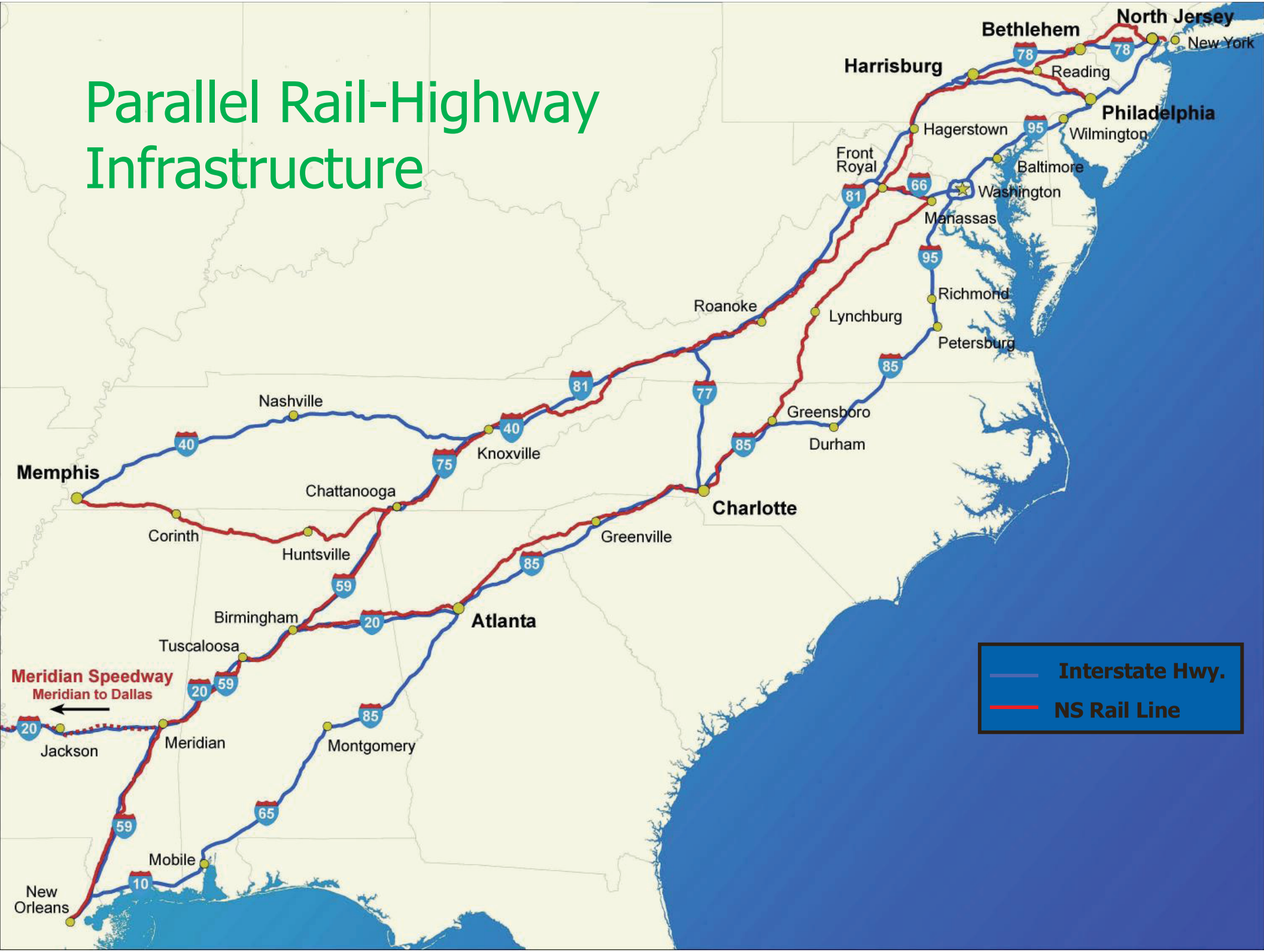
Office of the

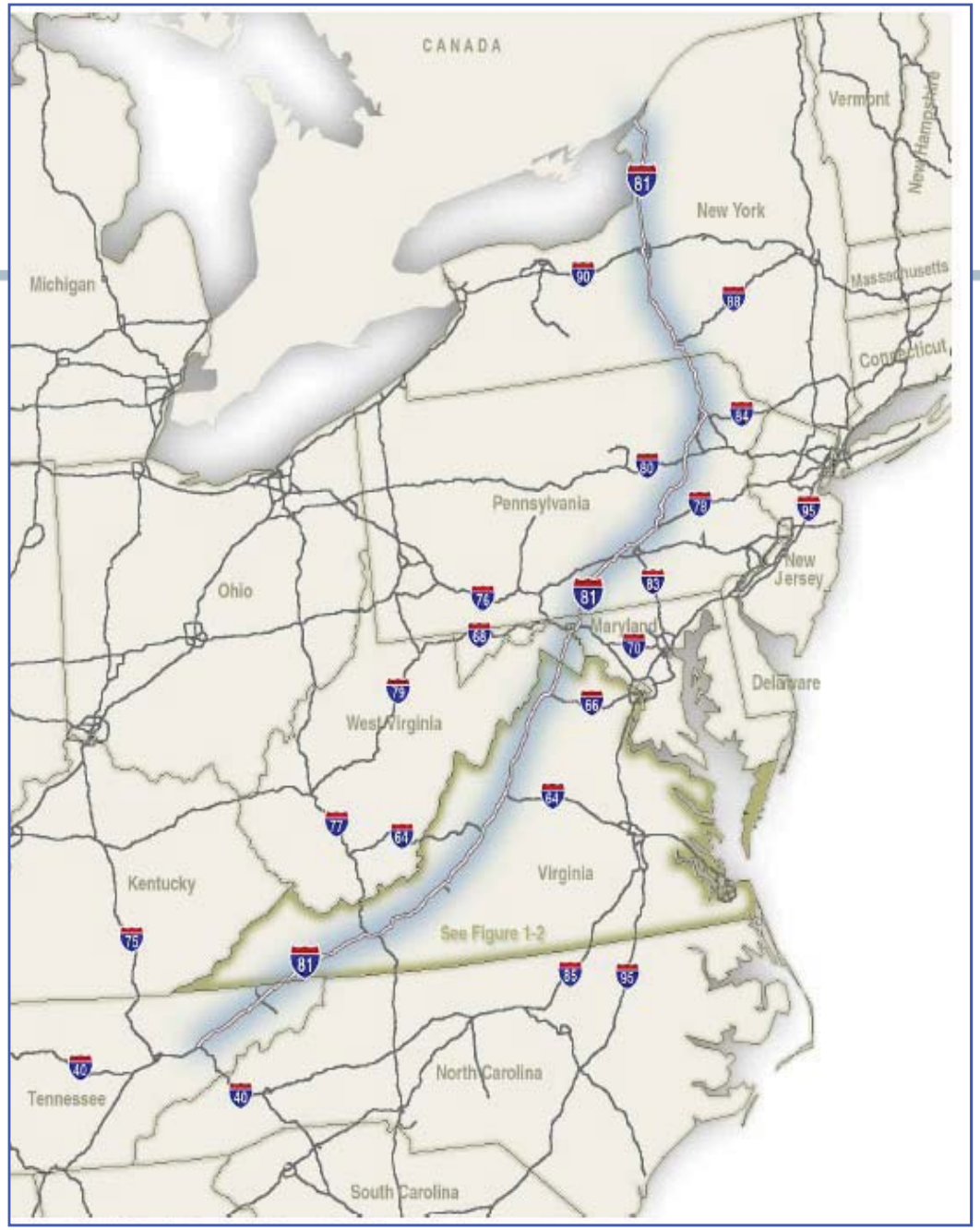
SECRETARY *of* TRANSPORTATION

I-81 Multi-State Multi-Modal Corridor

Pierce Homer
Secretary of Transportation
October 13, 2009

Parallel Rail-Highway Infrastructure





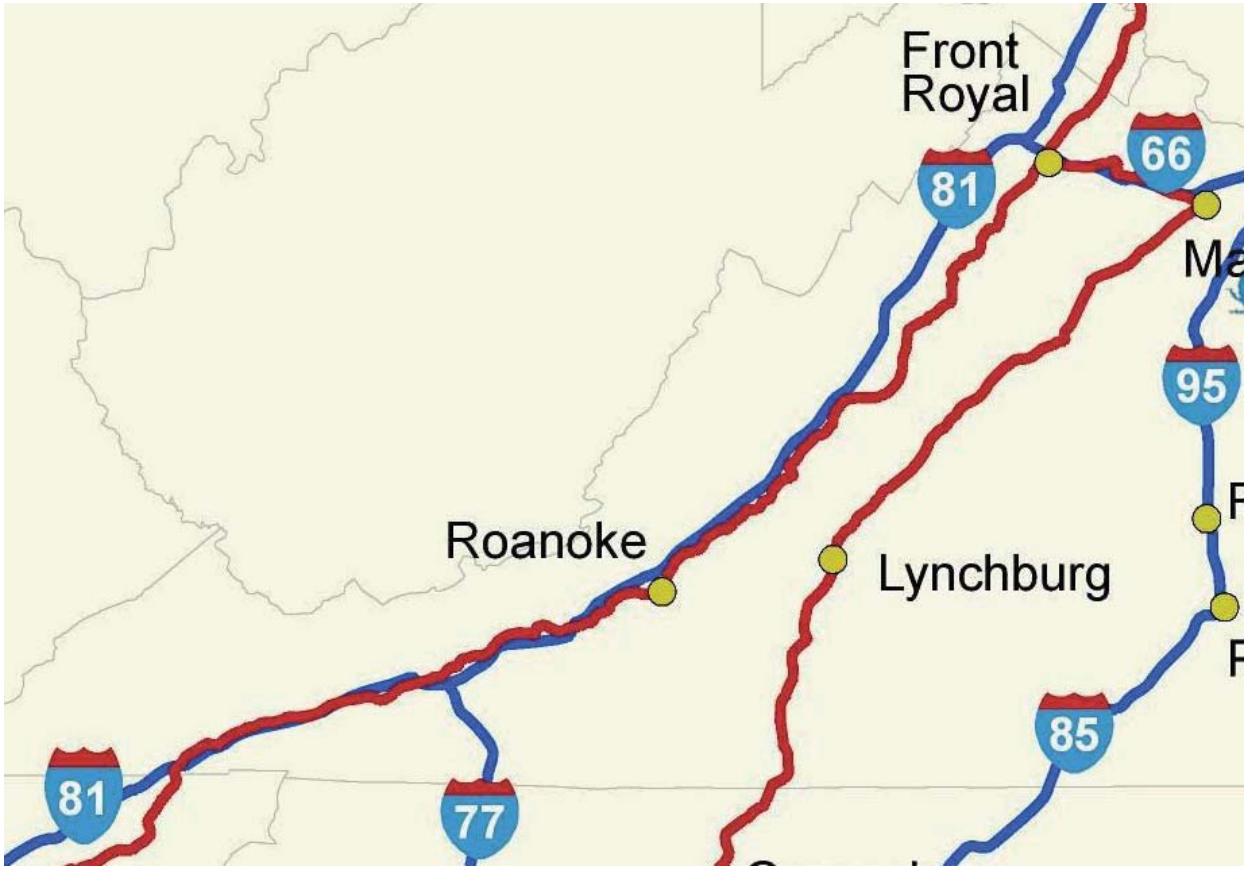
I-81 Corridor runs 855 miles through six states

Local and regional connector

National and international trade corridor

I-81 Corridor Background

- 325 miles of highway in Virginia
- Two parallel Norfolk-Southern rail lines –
  - Piedmont
  - Shenandoah
- 20+ colleges and universities
- 15+ cities and towns

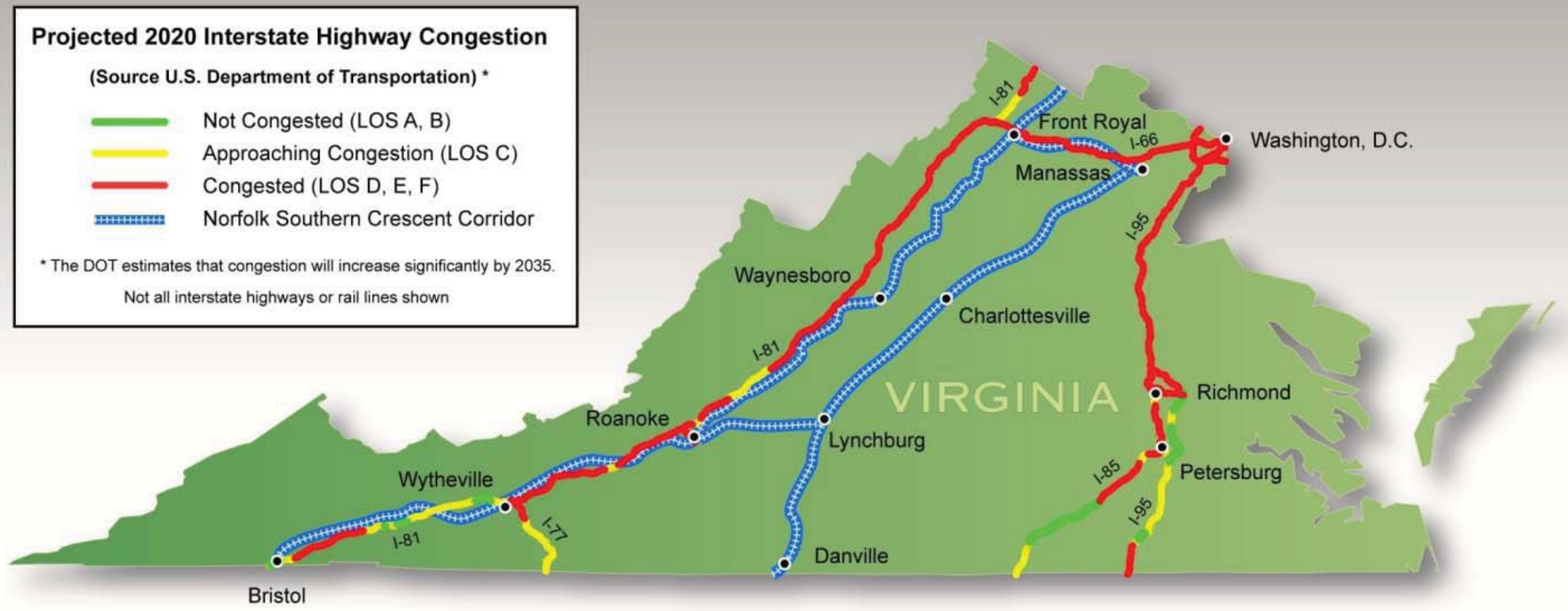


I-81 Multi-State Cooperation

- 6 states meet annually – Tennessee, Virginia, West Virginia, Maryland, Pennsylvania and New York
  - September 22-23,2004 (Roanoke VA)
  - July 25-26,2005 (Kingsport TN)
  - October 3-5, 2006 (Alexandria Bay, NY)
  - April 30, 2008 (Winchester, VA)
- States executed Memorandum of Understanding effective October 2008
  - Establish a seamless freight and passenger network along I-81 and its extensions from Tennessee to New York
  - Ensure the economic vitality of the corridor while improving public safety in the face of increasing truck traffic
- Alabama, Louisiana and Canadian provinces cooperate as well
- Working together, the states will ensure a coordinated direction for public investment in both rail and highway infrastructure

Multi-State I-81 MOU

- Memorandum of Understanding directs states to:
- Share and coordinate I-81 region freight truck and rail study planning
- Coordinate the operating and capital plan and studies
- Consider a joint work plan to identify long term funding needs
- Make recommendations that include highway and rail facility and technological improvements, and identify public and private benefits of the improvements and costs



Benefits to Virginia

878,000	*Annual Trucks Diverted to Rail from VA Interstates*
34.7 Million Gallons	*Fuel Saved per Year*
385,000 Tons	*CO_2 Reduction per Year*
$98.8 Million	*Annual Congestion Savings*
$30.1 Million	*Cost of Accidents Avoided*

I-81 Rail Improvements

- Elliston Intermodal Facility - $25.3M state funding
- Nokesville to Calverton - $22.1M state funding
- Northern Virginia Passing Tracks – $23.7 M state funding
- Manassas to Front Royal – $42.9M state funding

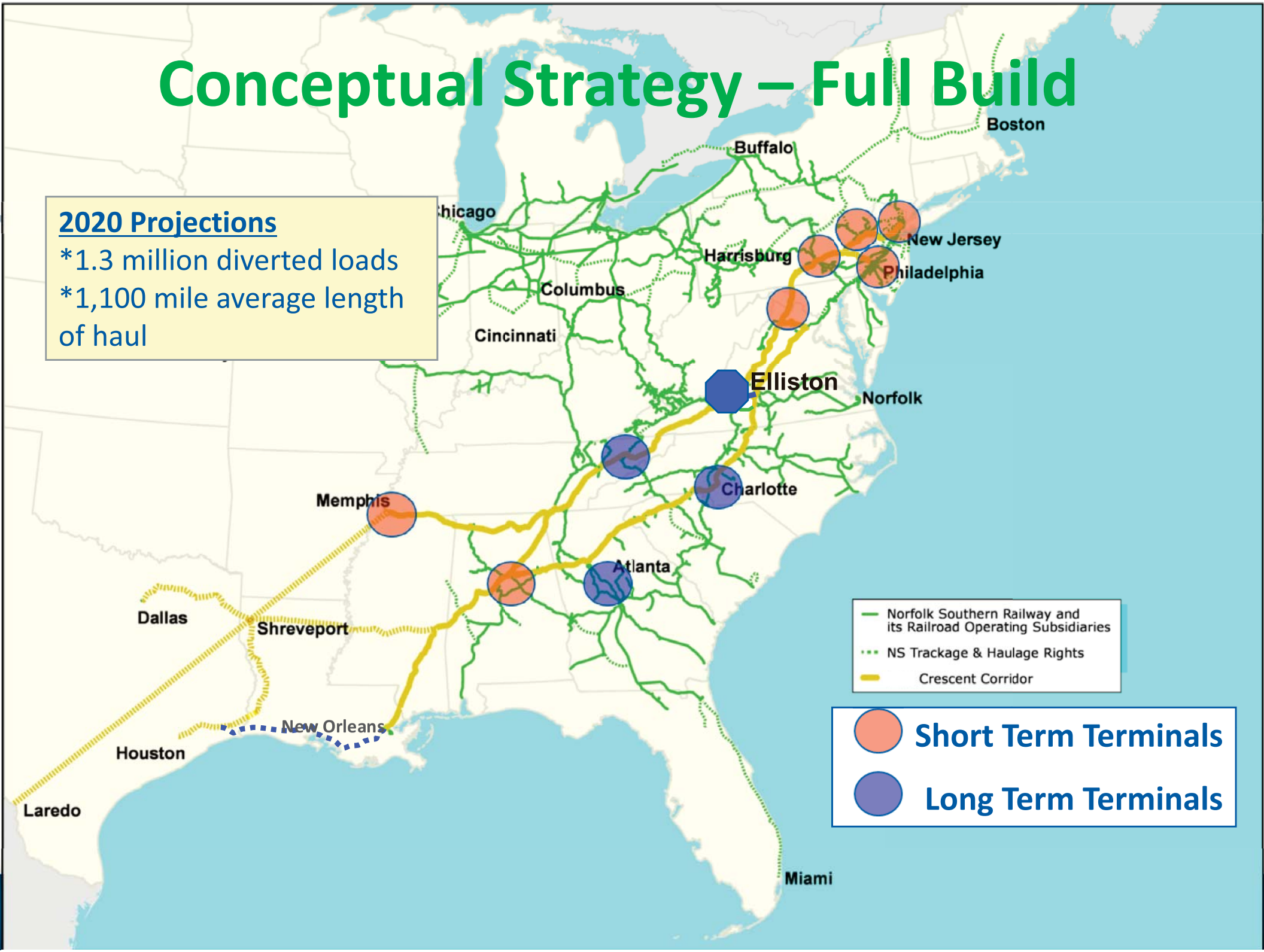
I-81 Highway Improvements

- Montgomery County truck climbing lane - $83 M
- Rockbridge County truck climbing lane - $82.9 M
- Maury River bridge replacement - $23.2 M
- Buffalo Creek bridge replacement - $29.2 M
- Route 50/17/522 interchange improvements - $9.4 M
- I-81 ARRA pavement rehabilitation - $19.5 M
- Exit 150 Access Management Study

Crescent Corridor Multi-State Initiative

- Public-private partnership with Norfolk-Southern
  - Alabama, Mississippi, Tennessee, and Pennsylvania
  - $114 M in I-81 rail investment in Virginia: $88.7 M rail capacity and $25.3 M Elliston intermodal facility
  - Requires additional public and private funding Outgrowth of multi-state cooperation
- First new or improved services to roll out along Corridor in 2011
- At full build in 2035 Norfolk-Southern estimates that there are over one million divertible truckloads in I-81 corridor
  - Requires NS be competitive with single-driver transit times and with high reliability/consistency in the service
  - 28 new trains will be introduced as the network is developed
- Corridor development will take time and commitment from public and private sector

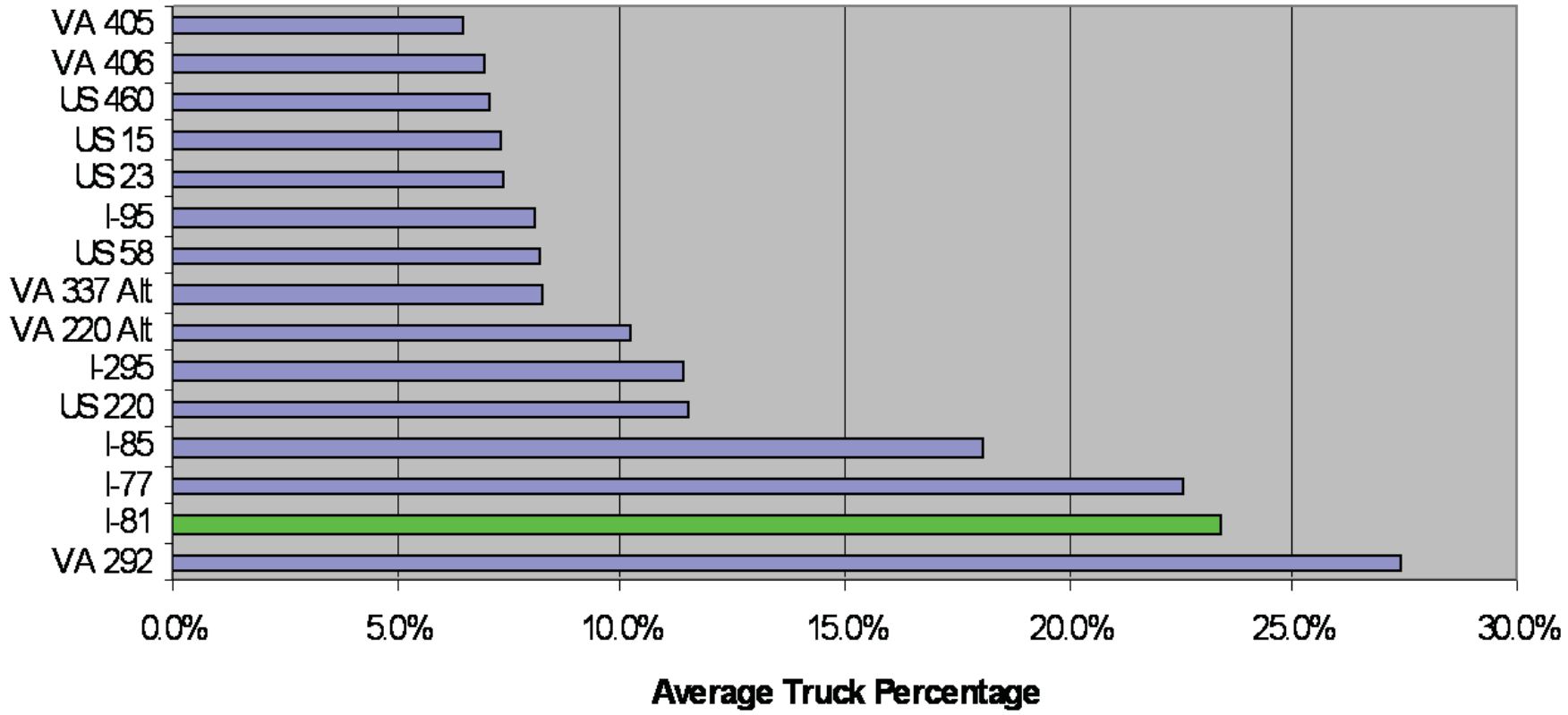
Conceptual Strategy – Full Build



I-81 Corridor – Virginia's Priorities

- Virginia will continue to work with other states and Norfolk-Southern to improve rail network
- Virginia will complete construction of truck climbing lanes and other spot improvements on I-81 to enhance safety
- Virginia and 5 states are in the process of conducting a multi-state study to:
  - Provide the basis for a multi-state and multimodal coordinated plan for I-81
  - Review and integrate the current studies for highway and rail in the Corridor
  - Review and coordinate the operating and capital plans for the corridor of each State
  - Make recommendations regarding corridor-wide improvements
  - Identify the public and private benefits of the improvements and estimate costs

Truck Percentages on Commonwealth Highways



I-81 averages more than 23% trucks (both directions, averaged over all count segments) – 9,300 trucks out of 40,000 vehicles

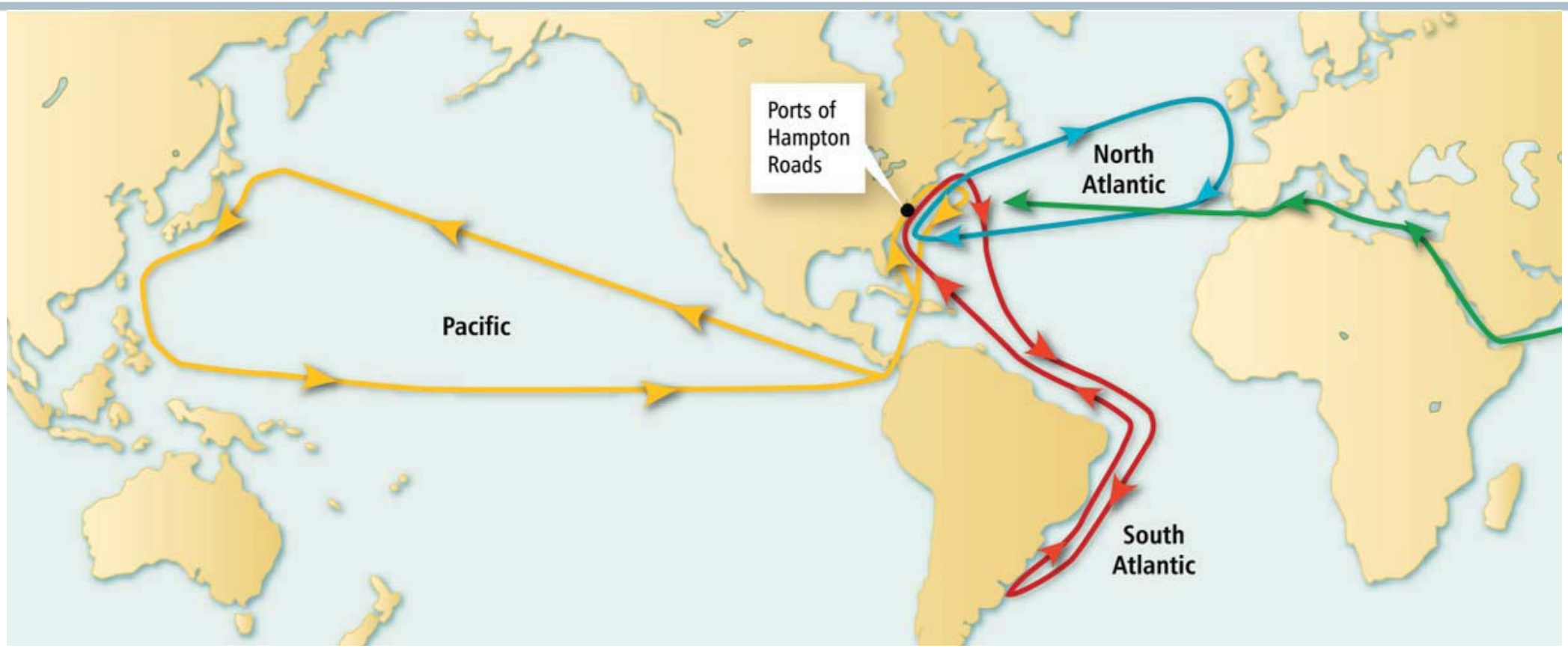
 Source: CS analysis of VDOT Traffic Counts for year 2008.

What are "Potentially Divertible Trucks"?

- The opportunities is broad and includes trucks currently using I-81, or forecasted to use I-81, in the future
- Limiting factors
  - Certain commodities are time or motion sensitive, or require special handling
  - Rail can only divert traffic that is going to and from places that are relatively close to where the railroad goes, otherwise truck shipping costs at each end become prohibitive
  - Traditional technologies capture only intermodal trucks – containers and dry vans
  - Speed of rail travel results in more effective service for longer distance travel
- Other influencing factors
  - Fuel prices
  - Highway level of service
  - Rail capacity
  - Overall health of the economy
  - Global trade routes
  - Global exchange rates

Benefits, Costs, Risks

Strategy	Benefits	Costs	Risks
1. Existing intermodal network with limited terminal and capacity upgrades, operating at conventional speeds, capturing long-haul intermodal trucks passing through VA	Diversion of 1,364 units/day or ~ 500,000 units/year Around 15% of all I-81 trucks, or 24% of I-81 through trucks BCR of 8.9 to 15.6 (at 7% and 3% discount rates) from TIGER Grant	$2.1 billion total program cost $500 million in Virginia	Relies on coordination of major investments across multiple states Environmental review not yet performed Delivery of anticipated benefits not guaranteed
2. Multistate open technology network, operating at conventional speeds, capturing long-haul bulk trucks passing through VA	Diversion of 682 units/day or ~ 250,000/year Around 7% of all I-81 trucks, or 12% of I-81 through trucks BCR not yet estimated	Possibly $375 million Almost all costs are outside Virginia	Potentially feasible but not proven Relies on coordination of major investments across multiple states Environmental review not yet performed
3. Upgrade Virginia terminals plus (1) and (2) above, capturing long-haul trucks with Virginia origins and destinations	Diversion of 230 units/day or ~ 84,000 / year Around 2% of all I-81 trucks BCR not yet estimated	Possibly $100 million in Virginia, in addition to investments in Strategies #1 and #2	Potentially feasible but not proven, funding not secured, environmental review not performed
4. Multistate open technology network capturing shorter haul intermodal and bulk trucks	Diversion unknown BCR unknown	Unknown, possibly $1 to $2 billion in Virginia	High potential costs, unknown benefits
5. “State-line truck shuttle” -- open technology terminals with very high speed service through Virginia	Diversion unknown BCR unknown	Unknown, possibly up to $7 billion in Virginia	High potential costs, unknown benefits


Ports of
Hampton
Roads
North
Atlantic
Pacific
South
Atlantic