

Corridors of Statewide Significance

To: CTB Workshop October 14, 2009 By: Mary Lynn Tischer, PhD



Overview

- Review of Issues from September Workshop
- Recommended Corridor Transportation Infrastructure Components (Roadways & Multi-Modal Facilities)
- Corridor Functions
- Improvement Strategies



Tiering and/or Prioritization of Corridors:

- Identifying several levels or tiers of corridors or assigning priorities to them
- Removing or adding corridors



Addressing how the Corridors of Statewide Significance will be used:

Whether or not a proposed project is within a Corridor of Statewide Significance is to be a *consideration* for prioritization for funding.

It is envisioned that CoSS strategies will help <u>guide</u> regional and MPO transportation and land use planning.



Addition of Corridors of Statewide Significance:

- Can be part of a subsequent phase of analysis
- Identification process should be based on criteria:
 - Involves multiple modes or is an extended freight corridor
 - Connects regions/states/major activity centers
 - Involves a high volume of travel
 - Provides a unique statewide function and/or addresses statewide goals
- Can include emerging corridors



Recommended Corridors





I-81, U.S. 11, Local Transit Services, Virginia Inland Port, Norfolk Southern Crescent Corridor, Shenandoah Valley Regional Airport, Roanoke Regional Airport

- Freight corridor (trucks, Norfolk Southern rail lines)
- Passenger link between urban centers (Winchester, Harrisonburg, Staunton, Roanoke, Blacksburg, Bristol)
- Through travel (link between Tennessee, Pennsylvania, New York, I-40, I-80, I-90, etc.)
- Education (Virginia Tech, James Madison University, 27 other colleges and universities)
- Tourism (State Parks, recreational areas, National Forests, many other sites, such as Civil War battlefields)



- Increase capacity for both passengers and freight by expanding freight rail service and adding capacity to allow for passenger rail service.
 - Improvements to Norfolk Southern line to Roanoke
 - Rt. 29/81 Passenger Rail Service from Bristol to Roanoke to Lynchburg to Richmond to Washington DC and beyond
 - Additional passenger rail north of Roanoke
- Increase highway capacity of I-81 in strategic locations by improving interchanges, construction of new interchanges at strategic locations, and/or by roadway widening.
 - Widenings planned in Winchester and Roanoke
 - Multiple interchange constructions and improvements
 - I-77/I-81 overlap in Wytheville
 - Improvements to Route 11



- Improve safety by addressing high crash rate areas and making necessary improvements.
 - Over 100 high-crash rate areas along corridor
- Improve safety and increase capacity by adding truck-climbing lanes in strategic locations.
 - Two locations already in the Six-Year Plan
 - Others possible



- Increase park and ride capacity by expanding existing lots and adding new facilities at strategic locations.
 - Needed near Winchester and Roanoke and southern part of corridor to connect to long-distance transit systems
- Improve transit in rural areas by expanding existing fixed-route services and offering increased demand response services and services for the elderly and disabled.

- Rural areas need improved human services-related transit





- Improve air passenger service by increasing commercial service where market forces allow at existing airports and improving ground access to air facilities.
 - Increase service at Roanoke Regional and Shenandoah Valley Airports
 - Consider Air Taxi
- Implement Intelligent Transportation Systems (ITS), as appropriate, to increase system efficiency and safety.
 - Incident & work zone management
 - Airport navigational aid systems



I-95, I-395, I-495, I-85, I-195, I-295, U.S. 1, U.S. 301, WMATA Blue and Yellow Lines, Local Transit Services, VRE, Ports of Alexandria and Richmond, James River, CSX National Gateway Corridor, Amtrak, Dulles International Airport, Reagan National Airport, Richmond International Airport

Functions:

- Commuter corridor in Northern Virginia and Richmond areas
- Through traffic ("Main Street" of east coast)
- Freight corridor (trucks, CSX rail lines)
- Military access (Ft. Belvoir, Ft. AP Hill, Quantico, Pentagon)
- Education (Virginia Commonwealth University, George Mason, etc.)
- Link to Maryland, Washington D.C., and Capital Beltway from points south



- Implement value pricing to increase capacity and/or reduce singleoccupancy vehicles along the corridor.
 - I-495 HOT Lanes from Mixing Bowl to Dulles Toll Road (VA 267)
 - I-395/I-95 HOT Lanes from Washington D.C. to Massaponax
 - Expansion of existing HOV facilities
 - Add park and ride lots, bus stations, bus routes
 - Enhance incident response and management
 - Dulles Toll Road
 - I-66
- Increase interstate capacity around the Washington D.C. Metropolitan area and increase capacity for through traffic.
 - Possibility of Western Transportation Corridor (TransAction 2030)
 - Possibility of new Eastern Crossing into Maryland (TransAction 2030)



- Increase transit options and transit capacity between Washington, D.C. and south of Richmond.
 - Orange and Blue Line metrorail extensions
 - VRE extensions to Spotsylvania and Gainesville
 - Park and ride expansion and construction of new lots
 - Refurbishments to existing infrastructure
- Encourage Increased Transportation Demand Management.
 - Carpooling/vanpooling
 - Transit use
 - Telework
 - Parking management
 - Encouraging/requiring TDM measures for new developments
 - Supporting Transit-oriented development along the corridor





- Increase highway capacity through interchange improvements and modifications, interchange construction, and widening in strategic locations.
 - New interchanges and improvements/expansions in Six-Year Plan
 - Widening projects in NoVA and Richmond
- Improve Intelligent Transportation Systems throughout the I-95 corridor, as appropriate, including along parallel roadways.
 - Part of proposed HOT Lanes project
- Improve freight rail capacity and allow for greater passenger rail capacity, including for the east-coast high-speed rail corridor.
 - Rail Plan calls for CSX National Gateway Corridor improvements
 - East Coast High(er)-Speed Rail Corridor along I-95
 - Richmond to DC rail



U.S. 460, Coalfields Expressway, Local Transit Services, Port of Virginia, James River, Norfolk Southern Heartland Corridor, Norfolk International Airport, Newport News-Williamsburg International Airport, Richmond International Airport, Lynchburg Regional Airport, Roanoke Regional Airport, Elliston Intermodal

- Freight corridor (east-west from coalfields to Hampton Roads, Norfolk Southern rail lines, etc.)
- Link between Hampton Roads, Petersburg, Lynchburg, link to U.S. 29 and I-81 (also for evacuation)
- Military (Hampton Roads)
- Education
- Historic/tourism



- Increase capacity for both passengers and freight by expanding freight rail service and adding capacity to allow for higher-speed rail.
 - The Heartland Corridor Project which will double capacity
- Ensure multimodal freight movement coordination with the proposed Craney Island expansion and divert more freight to rail.
 - 50% of freight from Craney Island will be moved by rail
 - Expansion of Norfolk Central Rail Yard at Port of Virginia



- Improve transit in the Hampton Roads area and in rural areas and offer increased demand response services and services for the elderly and disabled.
 - Light Rail proposed in Hampton Roads (extension to Virginia Beach)
 - Rural areas need improved human services-related transit
- Complete construction of the U.S. 460 realignment west of Suffolk and increase the highway capacity of U.S. 460 in strategic locations.
 - Intersection improvements, interchange construction



- Improve safety by addressing high crash rate areas and making necessary improvements.
 - Spot improvements, turn lanes, medians, etc.
 - Better access management
- Encourage commercial and industrial development, encourage concentrated development centers to avoid strip development, and coordinate land use and transportation decisions.
- Improve access management.
 - Consolidation of entrances



I-66, U.S. 50, VA Route 7, VA Route 55, WMATA Orange & Silver Line, VRE, Amtrak, Local Transit Services, Virginia Inland Port, Norfolk Southern Crescent Corridor, Dulles International Airport, Dulles Rail, Reagan National Airport

- Commuter corridor for Northern Virginia/Washington D.C.
- Freight (Inland Port accessibility, trucks)
- Link between I-81/western Virginia and D.C. Metro area (also for evacuation/security)
- Multimodal corridor (Metrorail, VRE, express bus, HOV)
- Dulles Airport access
- Technology corridor





- Extend Metrorail service.
- Increase transit options and transit capacity in Northern Virginia.
- Encourage increased Transportation Demand Management.
- Improve express bus service to Washington D.C. and Dulles Airport and extend Virginia Railway Express (VRE) lines.





- Improve ground access to Dulles International Airport from the west and from the Virginia Inland Port and improve ground access to other airport facilities along the I-66 corridor.
- Improve capacity of parallel roadway facilities to relieve pressure on I-66.
- Improve Intelligent Transportation Systems throughout the I-66 corridor, as appropriate, including along parallel roadways.
- Improve freight movement via increased rail and highway capacity.





I-64, U.S. 250, U.S. 60, Local Transit Services, Port of Virginia, Port of Richmond, James River, York River, CSX Coal Corridor, Norfolk Southern Heartland Corridor, Norfolk Southern Coal Corridor, Amtrak, Norfolk International Airport, Newport News-Williamsburg International Airport, Richmond International Airport, Charlottesville-Albemarle Airport

Functions:

- Tourism
- Freight corridor (east-west to coalfields, CSX rail lines, Hampton Roads port facilities, etc.)
- Link between major urban areas (Hampton Roads, Richmond, Charlottesville, Staunton, also for evacuation/security)
- Access across mountains to points west, I-81, and to West Virginia
- Military access (Hampton Roads area)
- Education (University of Virginia, University of Richmond, VCU, ODU, etc.)





- Third crossing and/or HRBT/MMT expansion
- Increase capacity for both passengers and freight by expanding freight rail service and adding capacity to allow for passenger rail service, including the possibility of a higher-speed connection.
- Ensure multimodal freight movement coordination with the proposed Craney Island expansion, and consider moving more freight via barge from the Port of Virginia to locations within the Commonwealth.
- Improve transit, especially in rural areas, by expanding existing fixed-route services and offering increased demand response services and other services for the elderly and disabled.





- Increase park and ride capacity by expanding existing lots and adding new facilities at strategic locations.
- Increase highway, bridge and tunnel capacity of I-64 between Richmond and Hampton Roads.
- Improve ground access to airport facilities along I-64 corridor where relevant.
- Implement Intelligent Transportation Systems (ITS), as appropriate.





U.S. 29, U.S. 50, VA Route 28, WMATA Orange Line, VRE, Local Transit Services, Norfolk Southern Crescent Corridor, Amtrak, Dulles International Airport, Charlottesville-Albemarle Airport, Lynchburg Regional Airport

- Connection between Northern Virginia, Charlottesville, Lynchburg, Danville
- Commuter route feeding Northern Virginia and other urban areas
- Freight alternative to I-81/I-95 (major rail corridor)
- Cultural resources/tourism
- Education





- Improve access management and coordinate land use with access management.
- Increase capacity through intersection improvements, construction of interchanges, and signal coordination at strategic locations.
- Increase freight rail capacity and continue to allow for passenger rail service.
- Improve safety by addressing high crash rate areas and making necessary improvements.





- Improve transit, especially in rural areas, by expanding existing fixed-route services and offering increased demand response services and services for the elderly and disabled.
- Increase park and ride capacity by expanding existing lots and adding new facilities at strategic locations.
- Increase transit options and transit capacity in the Northern Virginia region.
- Improve ground access to airport facilities along U.S. 29 corridor where necessary.





Major Components: I-77, U.S. 52, U.S. 11

- Multi-state connection (Ohio to North Carolina, through traffic)
- Connection through tunnels (Big Walker Mountain, East River Mountain)
- Freight connection to I-81







- Increase roadway capacity of I-77/I-81 overlap near Wytheville.
- Increase north-south capacity, especially around the Big Walker Mountain Tunnel and the East River Mountain Tunnel.
- Implement Intelligent Transportation Systems (ITS), as appropriate.





U.S. 17, Local Transit Services, Port of Virginia, Port of Richmond, Rappahannock River, Norfolk Southern Heartland Corridor, Norfolk Southern Coal Corridor, CSX National Gateway Corridor, CSX Coal Corridor, Amtrak, Norfolk International Airport, Newport News-Williamsburg Airport

- Major I-95 alternative to shore destinations and through traffic (alternative route from Hampton Roads to Northern Virginia)
- Freight corridor for trucks between Hampton Roads and I-95
- Access to Northern Neck and Middle Peninsula (tourism)



- Improve capacity by widening, intersection improvements, and/or construction of interchanges at strategic locations.
- Increase freight rail capacity from Port of Virginia and ensure multimodal freight movement coordination with the proposed Craney Island expansion.
- Improve transit in rural areas by expanding existing fixed-route services and offering increased demand response services and other services for the elderly and disabled.







- Improve capacity through high-density areas of the U.S. 17 corridor through traffic management, access management, and possible use of ITS technologies.
- Improve ground access to airport facilities along U.S. 17 corridor where relevant.





U.S. 220, Local Transit Services, Norfolk Southern, Roanoke Regional Airport

Functions:

- Link between I-81 and I-64 and connection to West Virginia
- Scenic route/tourism
- Logging and freight route





- Complete construction of I-73 between I-581 in Roanoke and the North Carolina border, separating through traffic from local traffic.
- Increase safety by addressing high crash areas and making necessary improvements.
- Improve transit in rural areas by offering increased demand response services and other services for the elderly and disabled.
- Implement Intelligent Transportation Systems (ITS), as appropriate.





U.S. 58, Local Transit Services, Port of Virginia, CSX National Gateway, Norfolk International Airport, Newport News-Williamsburg Airport

- Local access for Southern Virginia Cities
- Link to Hampton Roads for freight and passengers for Southern Virginia
- Economic development
- Manufacturing/goods-to-market/warehousing/distribution
- Hurricane Evacuation





- Implement Intelligent Transportation Systems (ITS), as appropriate.
- Encourage commercial and industrial development and encourage concentrated centers to avoid strip development.
- Continue Route 58 Corridor Development Program to ensure that all sections of the U.S. 58 Corridor in Virginia are at least 4 lanes to improve safety, capacity, and freight movement and to encourage economic development.





- Increase freight rail capacity from Port of Virginia and ensure multimodal freight movement coordination with the proposed Craney Island expansion.
- Increase safety by addressing high crash areas and making necessary improvements.
- Improve transit, especially in rural areas, by offering increased demand response services and other services for the elderly and disabled.
- Improve ground access to airport facilities along U.S. 58 corridor where necessary.



U.S. 13, Bay Coast Railroad and Barge, Local Transit Services, Port of Virginia, Norfolk Southern, CSX, Amtrak, Norfolk International Airport, Newport News-Williamsburg Airport

- Link between Hampton Roads and Eastern Shore for both passengers and freight (Bay Coast Railroad with ferry barge, Chesapeake Bay Bridge-Tunnel)
- Main street through Eastern Shore
- Access to beaches, Chincoteague, Assateague, NASA Wallops Island





- Improve safety and mobility along U.S. 13 throughout the Eastern Shore.
- Improve safety and mobility along U.S. 13 through land use planning by discouraging development directly along the corridor, especially strip development.
- Ensure continued freight movement across the Chesapeake Bay through investment in the Bay Coast Railroad and barge and encouraging other barge transport of freight.

