



Corridors of Statewide Significance

To:
VTrans2035 Forum
October 16, 2009

By:
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VHB

- **Review of Concept of Corridor of Statewide Significance**
- **Corridor Summaries**
 - Major Components (Multimodal Facilities and Parallel Routes)
 - Functions of Corridor
- **Improvement Strategies**

CoSS as a Concept

- **Corridors of Statewide Significance (CoSS) were introduced in VTrans2025 as a focus for state investment (called Multimodal Investment Networks (MINs))**
- **CoSS are multimodal**
- **High priority multimodal projects within the CoSS would be given increased consideration over single-mode solutions in modal plans**
- **CoSS are broadly drawn and include parallel facilities**

HB 2019 (2009) requires:

- **The long-range transportation plan to set forth an assessment of needs for all corridors of statewide significance**
- **The assessment is to consider all modes of transportation**
- **In the designation of corridors, the CTB is not to be constrained by local, district, regional, or modal plans**

Corridors of Statewide Significance:

An integrated, multimodal network of transportation facilities that connect major centers of activity within and through the Commonwealth and promote the movement of people and goods essential to the economic prosperity of the state.

- **Distributed white paper introducing topic**
- **Convened day long meeting with:**
 - Multimodal Technical Committee
 - VDOT District & Central Office Planners,
 - DRPT Planners
 - Aviation Planners
 - Port Planners
 - MPO Exec. Directors and planners
 - PDC Exec. Directors and planners
- **Developed criteria**
- **Applied criteria and identified CoSS**

CoSS 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**

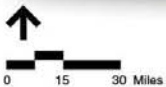
- **Regional Planning Forum, Spring 2009**
- **MPO, PDC and local jurisdiction transportation plans**
- **Local Comprehensive Plans**
- **Public outreach**
- **Surface Transportation Plan**
- **VA Modal Agency Plans**
- **System Performance Data**

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 guide regional and MPO transportation and land use planning.

Corridors of Statewide Significance



Crescent Corridor (I-81)

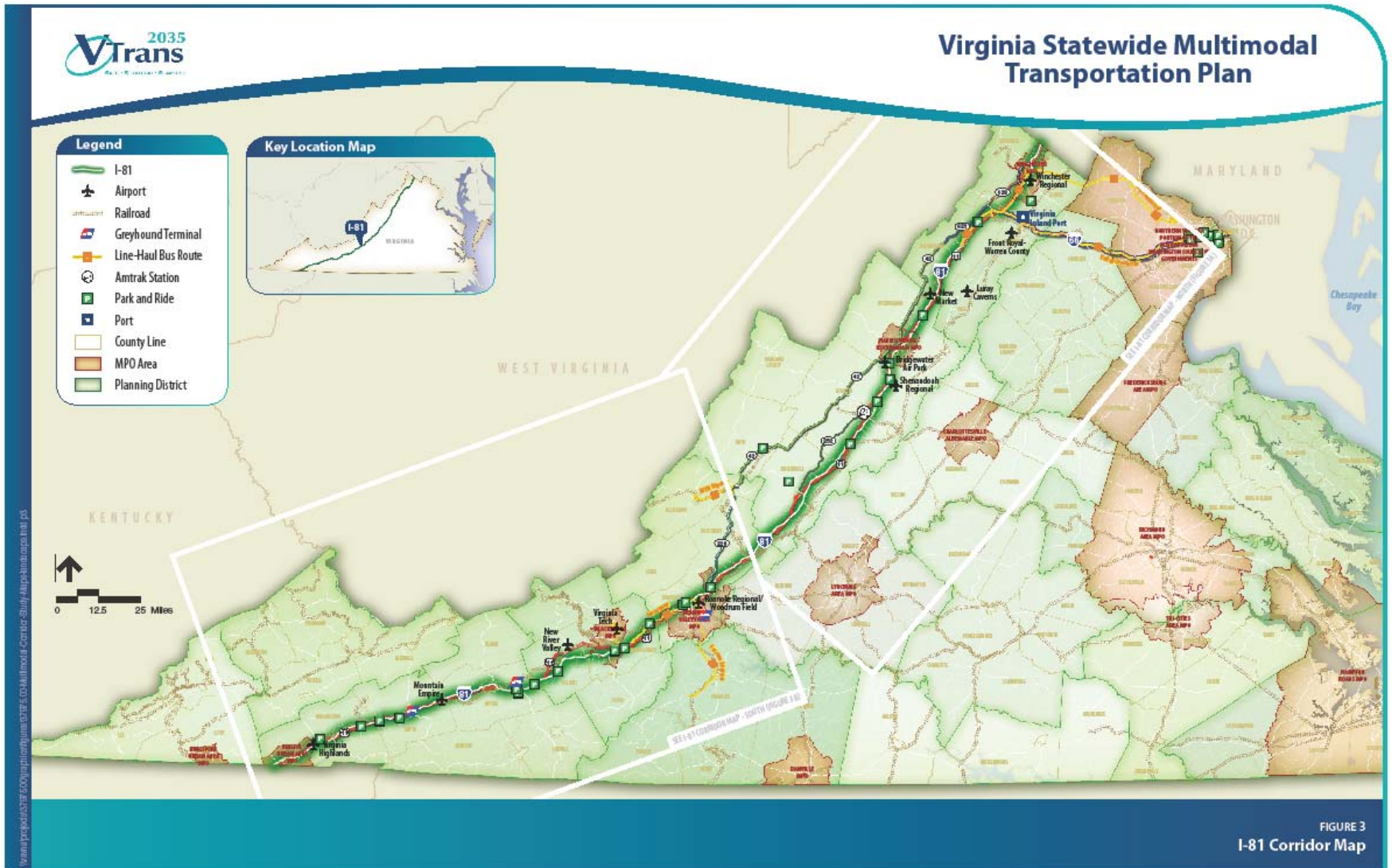
Major Components:

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

Functions:

- **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)**

Crescent Corridor (I-81)



- **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 freight lines
 - TransDominion Express (passenger rail) from Bristol to Roanoke
 - Possibility of 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 in Six-Year Plan
 - I-77/I-81 overlap in Wytheville
 - Improvements to Route 11

- **Improve safety by addressing high crash rate areas and making necessary improvements.**
 - Multiple high-crash rate areas identified in Six-Year Plan and Regional Planning Forum
 - 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

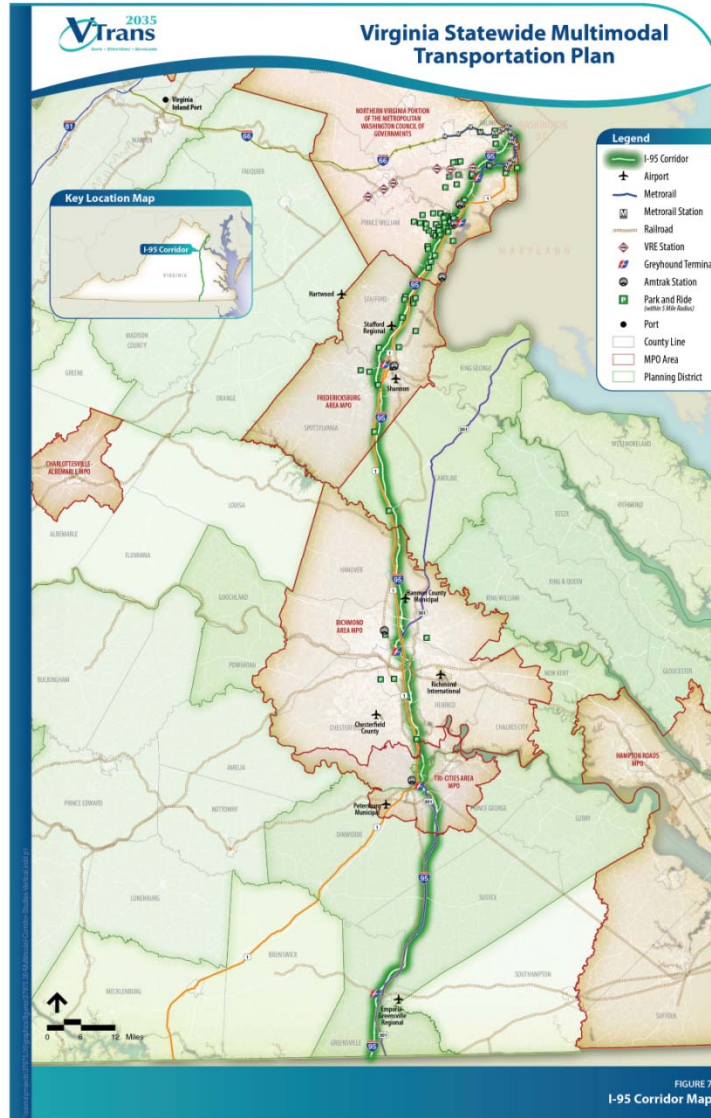
- **Improve air passenger service by increasing commercial service where market forces allow at existing airports and improving ground access to air facilities.**
 - Increase service at Roanoke Regional and Shenandoah Valley Airports
 - Add service at Tri-Cities Airport or Triad Piedmont convenient for southern residents
 - Consider Air Taxi
- **Implement Intelligent Transportation Systems (ITS), as appropriate, to increase system efficiency and safety.**
 - Incident management
 - Work zone management
 - Airport navigational aid systems

Major Components:

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 Washington 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)**
- **Multi-modal corridor (Metrorail, VRE, AMTRAK, express bus, HOV/HOT lanes)**
- **Link to Maryland, Washington D.C., and Capital Beltway from points south**



- **Implement value pricing to increase capacity and/or reduce single-occupancy 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, telework
 - Transit use
 - Parking management
 - Encouraging/requiring TDM measures for new developments
 - Supporting Transit-oriented development along the corridor

Washington to North Carolina Corridor (I-95) Strategies

- **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

Heartland Corridor (U.S. 460)

Major Components:

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

Functions:

- **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**

Heartland Corridor (U.S. 460)

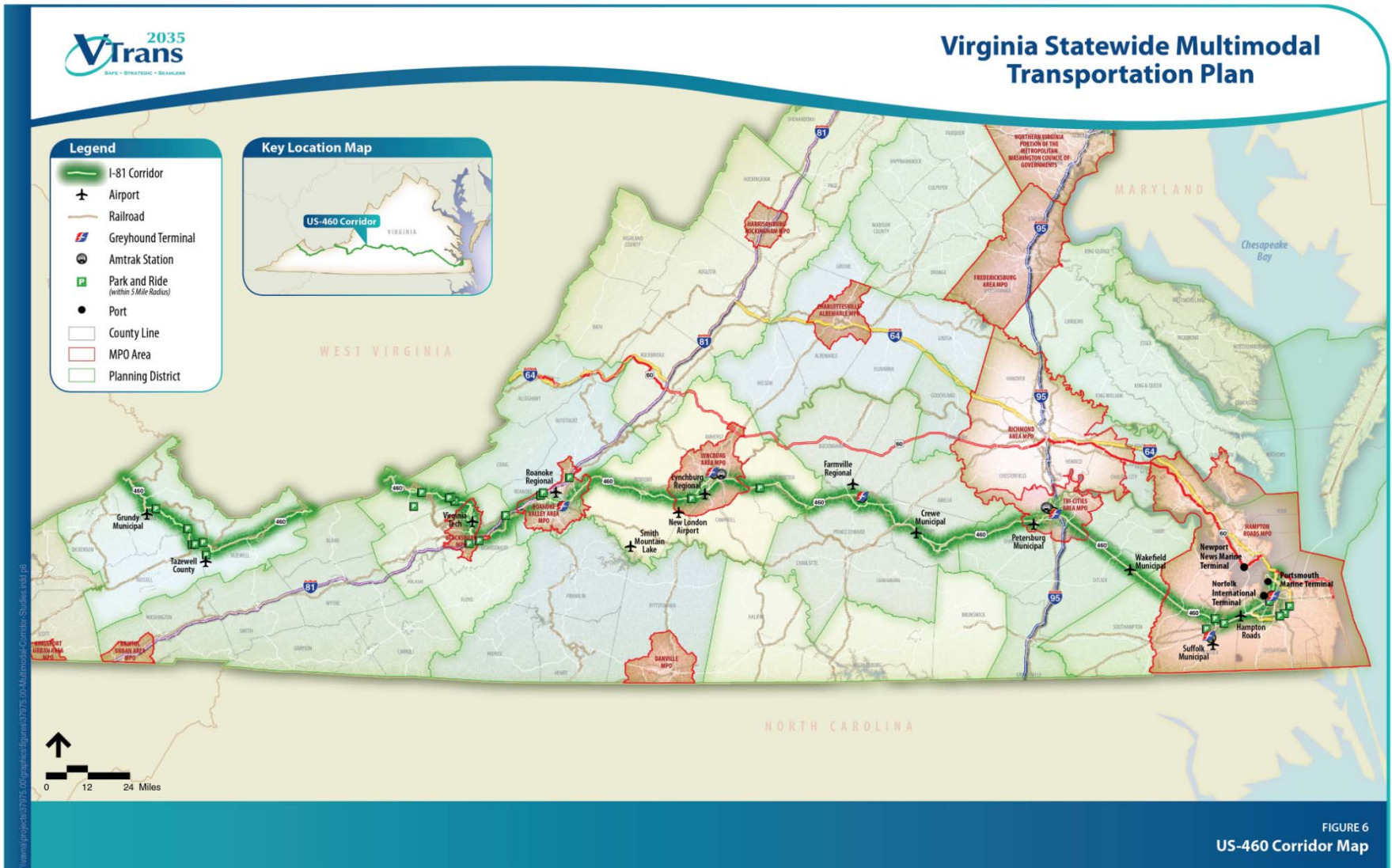


FIGURE 6
US-460 Corridor Map

- **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 will double capacity
- **Ensure multi-modal 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 by offering increased demand response services and services for the elderly and disabled.**
 - Light Rail proposed in Hampton Roads (extension to VA 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
 - Fewer median breaks
 - See previous strategy

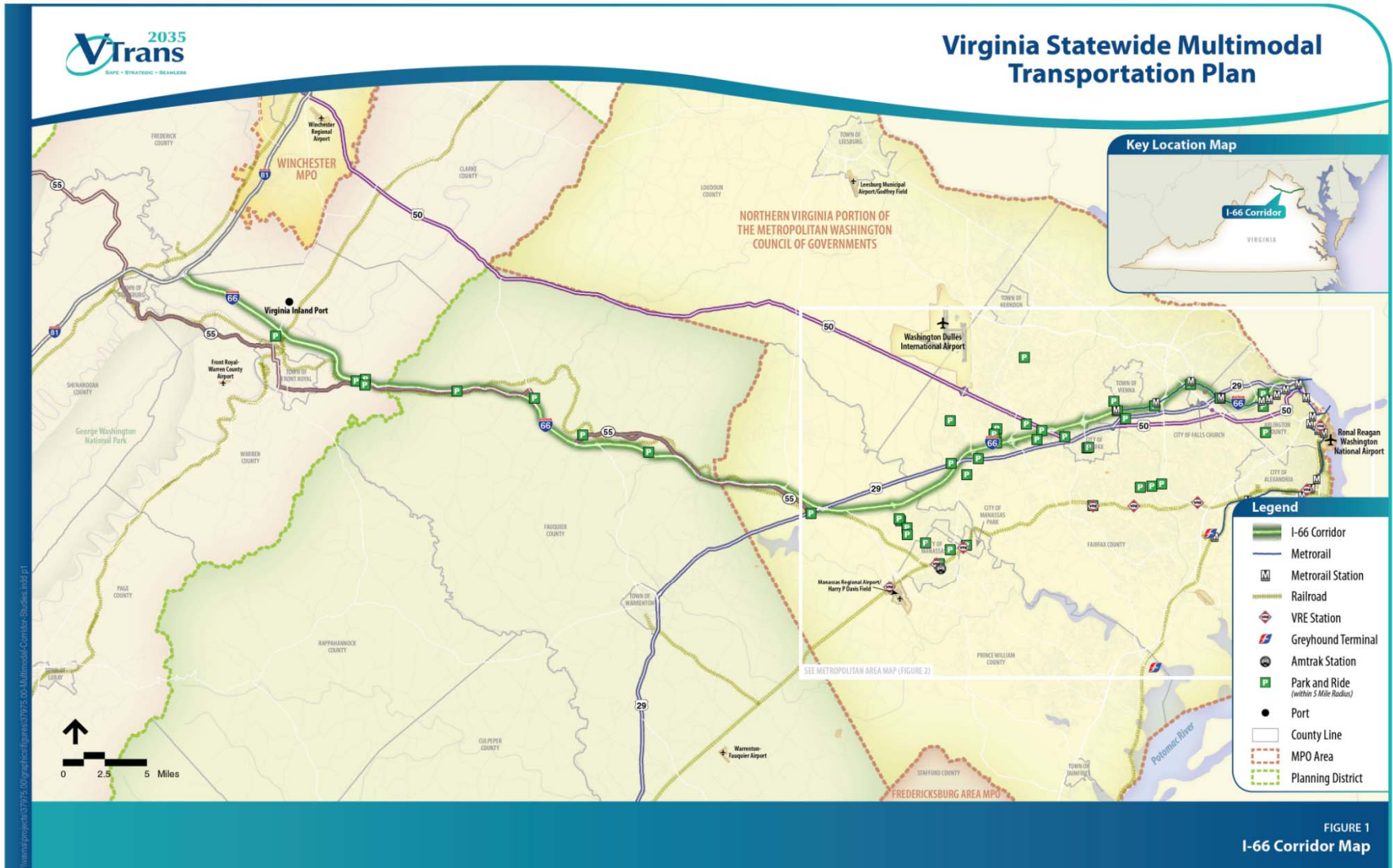
Major Components:

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

Functions:

- **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)**
- **Multi-modal corridor (Metrorail, VRE, express bus, HOV)**
- **Dulles Airport access**
- **Technology corridor**

Northern Virginia Connector (I-66)



- **Extend Metrorail service.**
 - Dulles Airport Silver Line extension (underway)
 - Proposed Orange Line extension to Centreville
- **Increase transit options and transit capacity in Northern Virginia.**
 - Local transit (Metrobus, Fairfax Connector, etc.)
 - Increased capacity along existing Metrorail lines
 - Park and ride lots
- **Encourage increased Transportation Demand Management.**
 - Carpooling/vanpooling, telework
 - Transit use
 - Parking management
 - Encouraging/requiring TDM measures for new developments
 - Supporting Transit-oriented development along the corridor

- **Improve express bus service to Washington D.C. and Dulles Airport and extend Virginia Railway Express (VRE) lines.**
 - Valley Connector, etc.
 - VRE extension to Fauquier County and Culpeper County
- **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.**
 - U.S. 29 and U.S. 50, especially in Northern Virginia
 - Route 55 west of Gainesville

- **Improve Intelligent Transportation Systems throughout the I-66 corridor, as appropriate, including along parallel roadways.**
 - Vehicle Detection, CCTV, Dynamic Message Signs
 - Also for parallel routes, including signal optimization and transit signal priority
- **Improve freight movement via increased rail and highway capacity.**
 - Norfolk Southern Crescent Corridor
 - Freight movement inside the Capital Beltway
 - Better movement west from Inland Port

East-West Corridor (I-64)

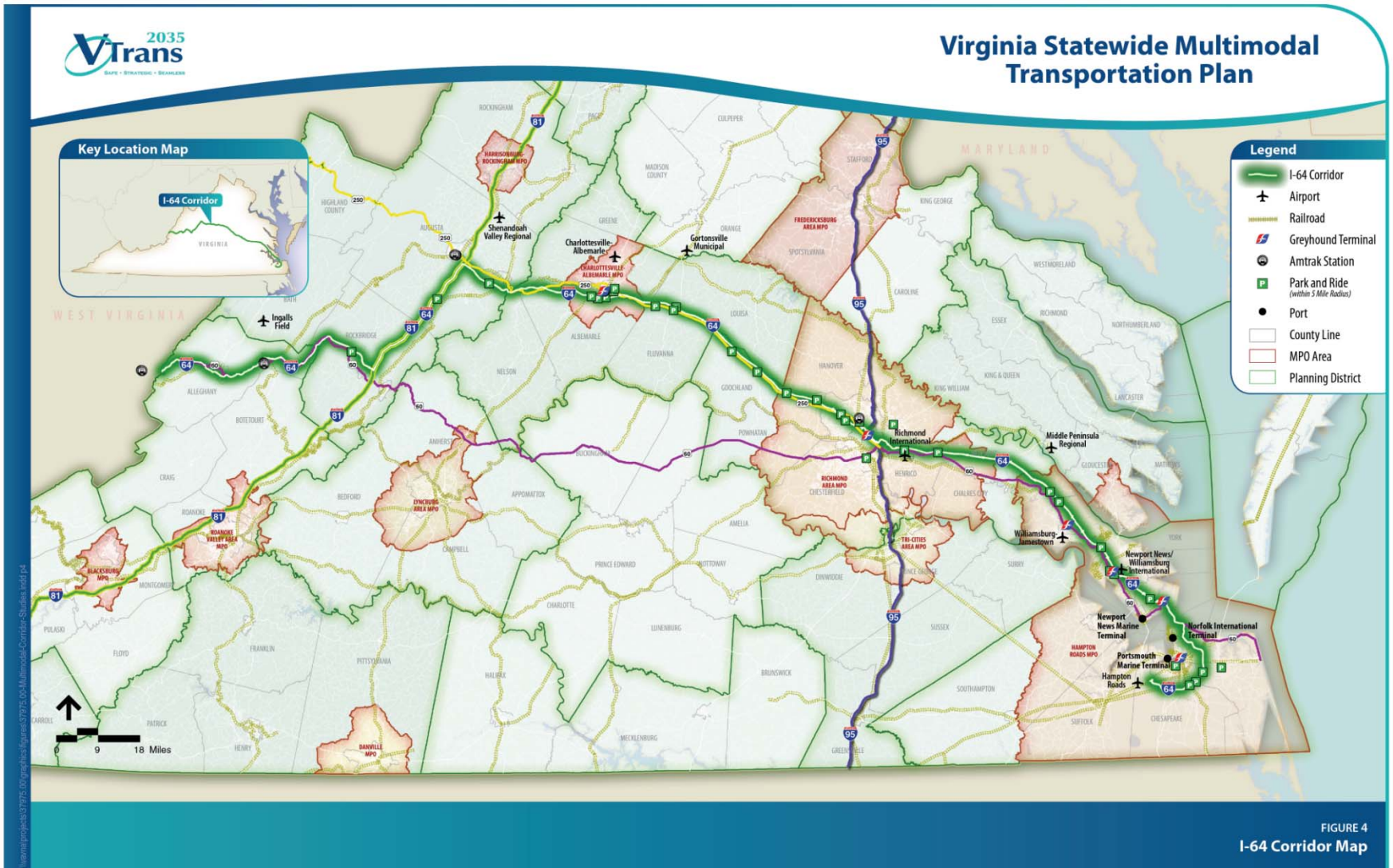
Major Components:

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 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.)

East-West Corridor (I-64)



- **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.**
 - Spur to Hampton Roads from main high-speed corridor along I-95 Corridor
 - CSX lines along entire corridor
 - Many rail connections from Port
- **Ensure multi-modal 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.**
 - 50% of freight from Craney Island will be moved by rail
 - Expansion of Norfolk Central Rail Yard at Port of Virginia

- **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.**
 - Rural areas need improved human services-related transit
- **Increase park and ride capacity by expanding existing lots and adding new facilities at strategic locations.**
 - Hampton Roads, Richmond, Charlottesville, between these areas
- **Increase highway, bridge and tunnel capacity of I-64 between Richmond and Hampton Roads.**
 - Expansion projects
 - Should concentrate of I-64 capacity to increase capacity along parallel routes

- **Improve ground access to airport facilities along I-64 corridor where relevant.**
- **Implement Intelligent Transportation Systems (ITS), as appropriate.**
 - Evacuation
 - Incident management

Seminole Corridor (U.S. 29)

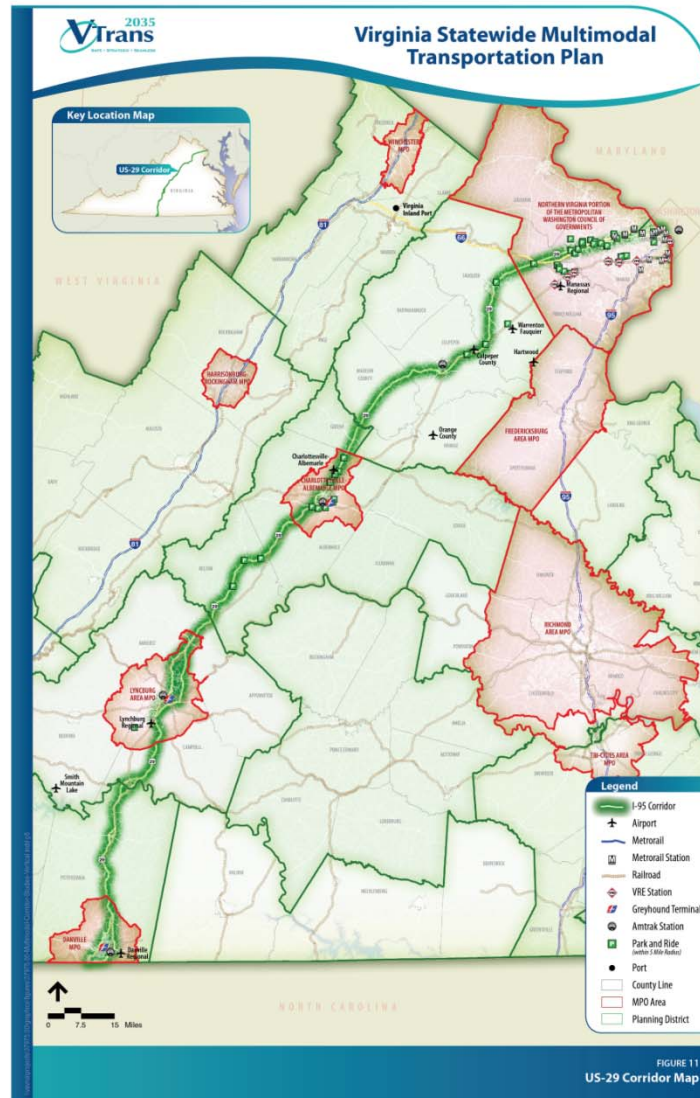
Major Components:

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

Functions:

- **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**

Seminole Corridor (U.S. 29)



- **Improve access management and coordinate land use with access management.**
 - Limited-access sections, though not along entire corridor
 - Proliferation of traffic signals near Charlottesville, etc.
- **Increase capacity through intersection improvements, construction of interchanges, and signal coordination at strategic locations.**
 - Turn lanes and signalization
 - Signal optimization
- **Increase freight rail capacity and continue to allow for passenger rail service.**
 - Norfolk Southern Crescent Corridor projects
 - Amtrak passenger rail, TransDominion Express

- **Improve safety by addressing high crash rate areas and making necessary improvements.**
 - Turn lanes and signalization
 - Signal optimization
- **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.**
 - Rural areas need improved human services-related transit
- **Increase park and ride capacity by expanding existing lots and adding new facilities at strategic locations.**
 - Fauquier County and Culpeper County

- **Increase transit options and transit capacity in the Northern Virginia region.**
 - VRE extension to Fauquier County and Culpeper County
 - Metrorail Orange Line expansion to Centreville
 - Refurbishments to existing infrastructure
- **Improve ground access to airport facilities along U.S. 29 corridor where necessary.**
 - Manassas and Charlottesville

Major Components:

I-77, U.S. 52, U.S. 11

Functions:

- 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.**
 - I-81 Corridor Improvement Study in VDOT Six-Year Plan
 - Multiple alternatives
- **Increase north-south capacity, especially around the Big Walker Mountain Tunnel and the East River Mountain Tunnel.**
 - Truck-climbing lanes near tunnels
 - Refurbishments, possibility of new tubes
 - New north-south connection
- **Implement Intelligent Transportation Systems (ITS), as appropriate.**
 - Incident management, especially at tunnels
 - Additional dynamic message signs needed
 - Fog detection and mitigation

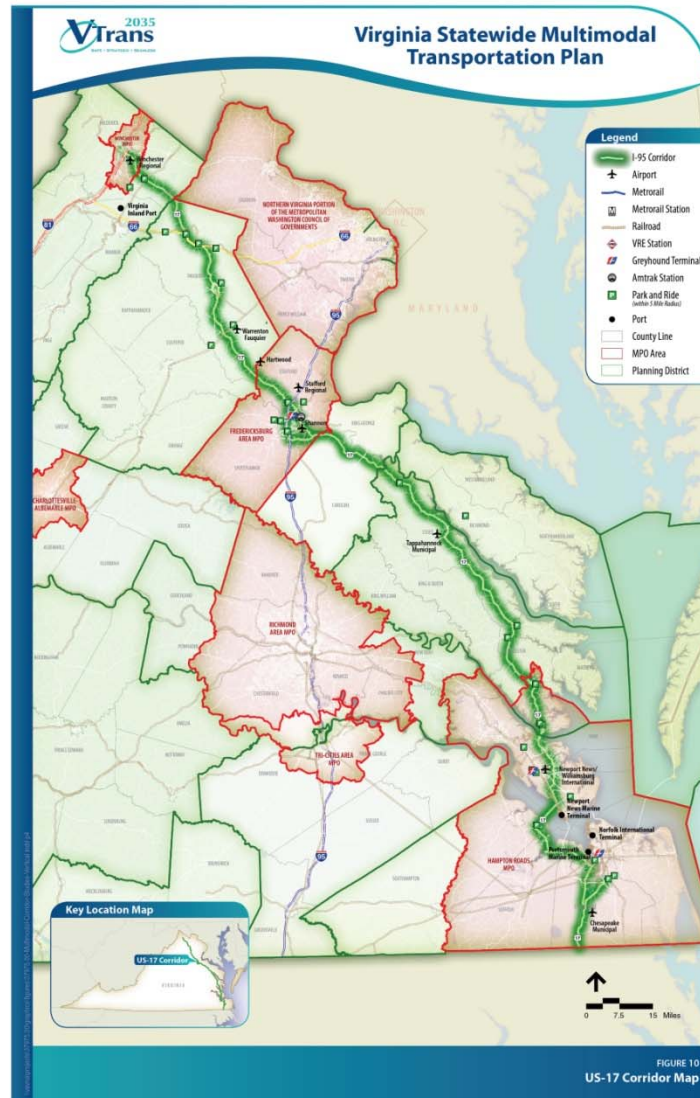
Major Components:

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

Functions:

- **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)**

Northern Neck Corridor (U.S. 17)



- **Improve capacity by widening, intersection improvements, and/or construction of interchanges at strategic locations.**
 - Two-lane section near Fredericksburg, York County
 - Route 15/29 connection
- **Increase freight rail capacity from Port of Virginia and ensure multi-modal freight movement coordination with the proposed Craney Island expansion.**
 - 50% of freight from Craney Island will be moved by rail
 - Expansion of Norfolk Central Rail Yard at Port of Virginia

- **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.**
 - Rural areas need improved human services-related transit
- **Improve capacity through high-density areas of the U.S. 17 corridor through traffic management, access management, and possible use of ITS technologies.**
 - Signal re-timings and coordination (Tappahannock, Warrenton, Fredericksburg, Winchester)
 - Consolidation of entrances, etc.
- **Improve ground access to airport facilities along U.S. 17 corridor where relevant.**

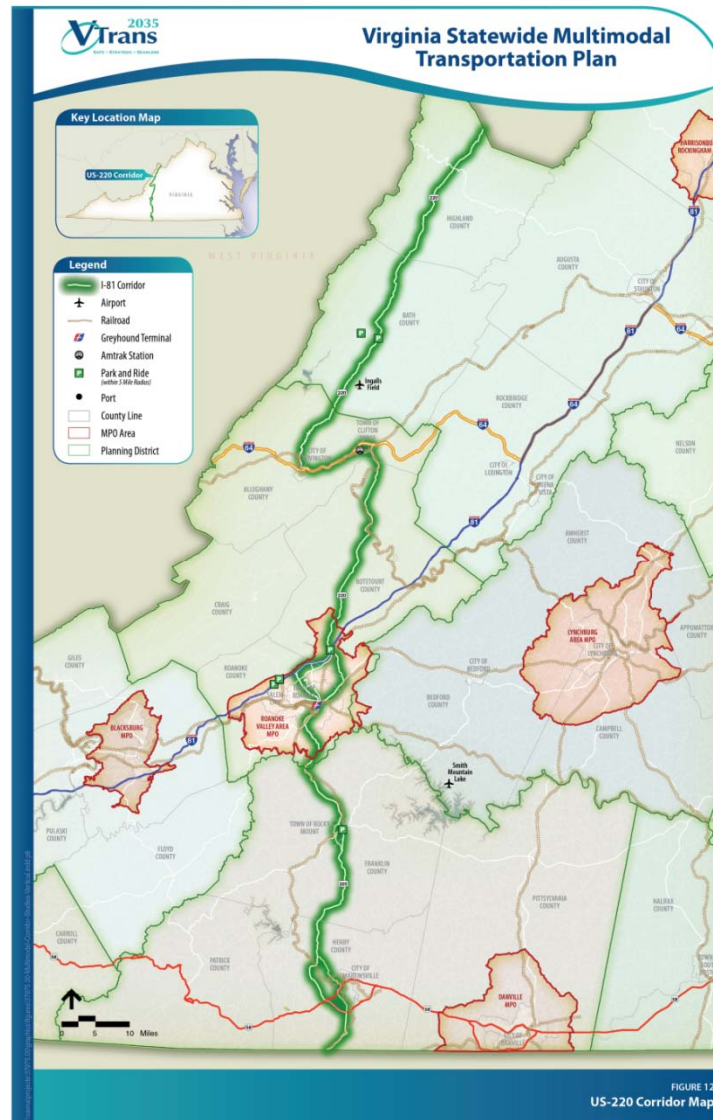
Major Components:

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**

North Carolina to West Virginia Corridor (U.S. 220)



North Carolina to West Virginia Corridor (U.S. 220) Strategies

- **Complete construction of Interstate 73 between I-581 in Roanoke and the North Carolina border, separating through traffic from local traffic.**
 - Would run along separate alignment from North Carolina to Roanoke
- **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.**
 - Rural areas need improved human services-related transit
- **Implement Intelligent Transportation Systems (ITS), as appropriate.**

Major Components:

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

Functions:

- **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**

Southside Corridor (U.S. 58)

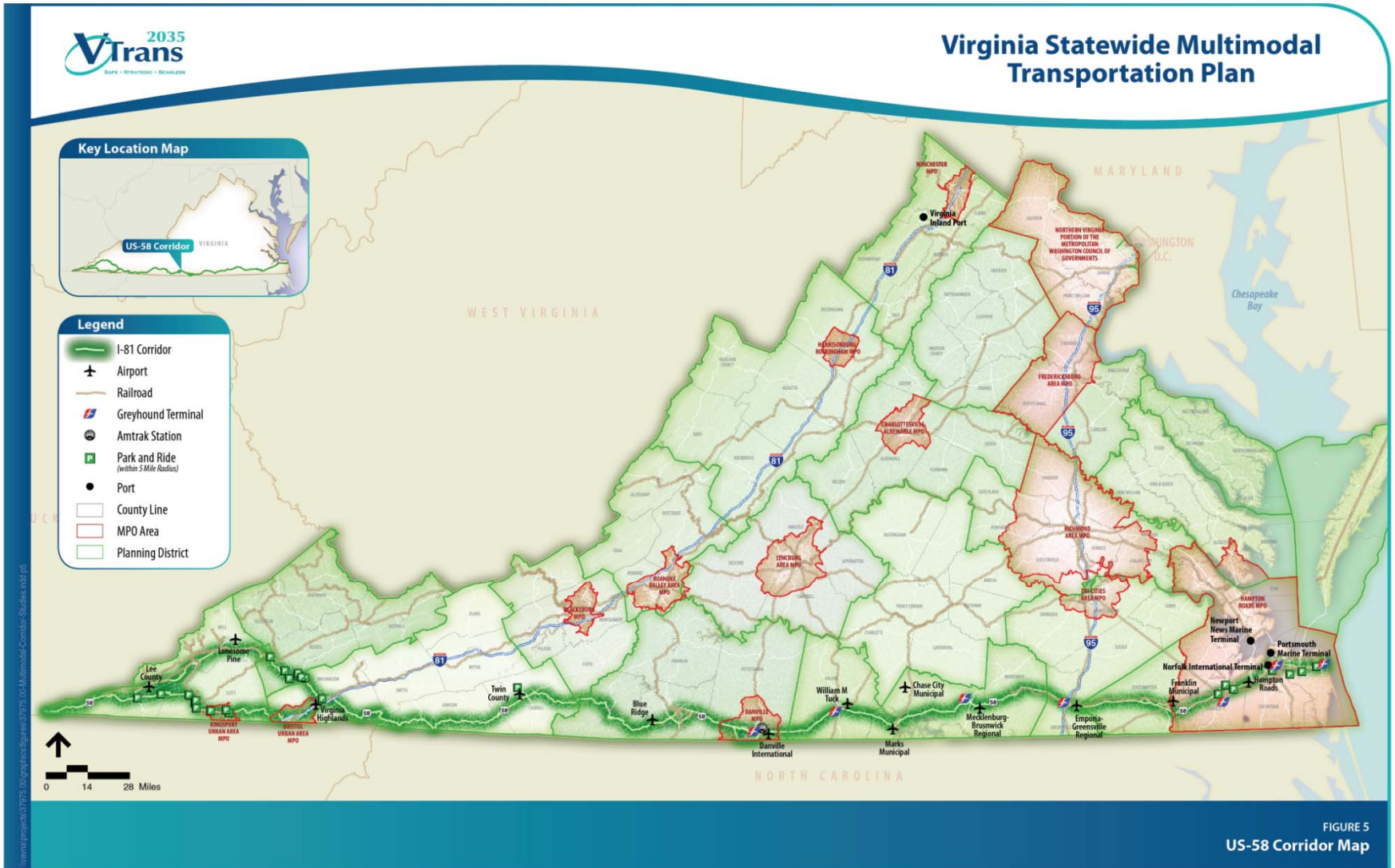


FIGURE 5

US-58 Corridor Map

- **Encourage commercial and industrial development and encourage concentrated centers to avoid strip development.**
 - Access management and safety issues
- **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.**
 - West of Stuart, there are 2-lane section
- **Increase freight rail capacity from Port of Virginia and ensure multi-modal freight movement coordination with the proposed Craney Island expansion.**
 - 50% of freight from Craney Island will be moved by rail
 - Expansion of Norfolk Central Rail Yard at Port of Virginia

- **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.**
 - Rural areas need improved human services-related transit
- **Implement Intelligent Transportation Systems (ITS), as appropriate.**
 - Evacuation, reversible lanes
- **Improve ground access to airport facilities along U.S. 58 corridor where necessary.**

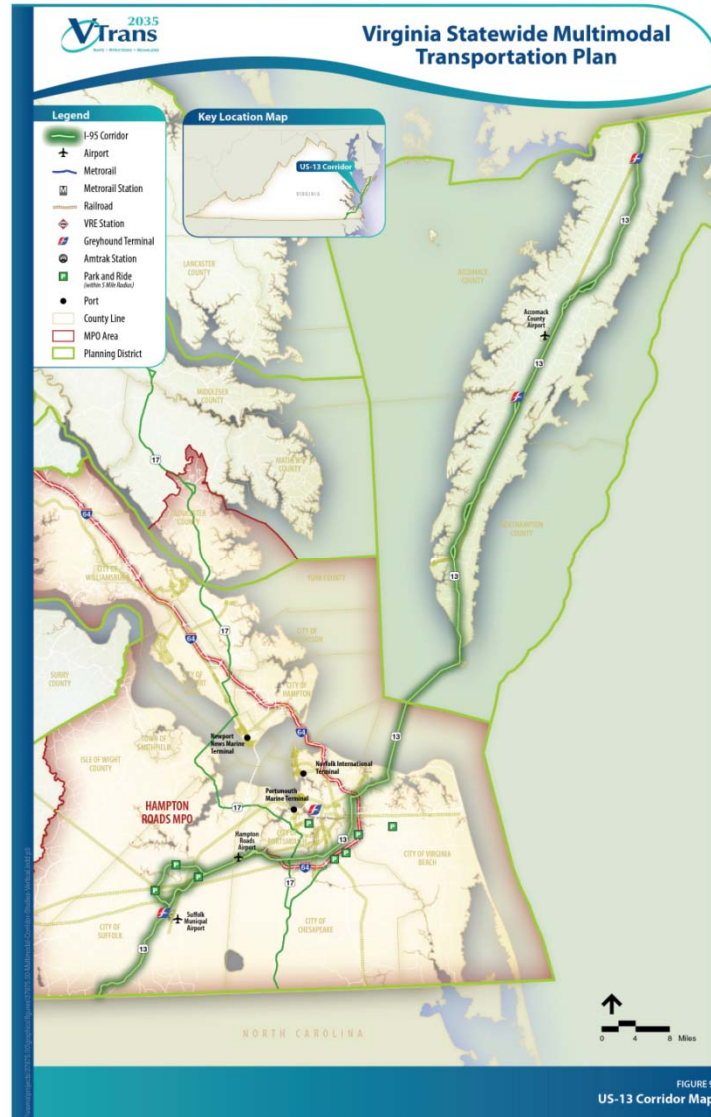
Major Components:

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

Functions:

- **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**

Eastern Shore Corridor (U.S. 13)



- **Improve safety and mobility along U.S. 13 throughout the Eastern Shore.**
 - Access management
 - Consolidation of entrances
- **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.**
 - Fastest connection from Port to Northeast markets

Common Strategies

- **Increased transit and TDM for heavy commuting corridors in Northern Virginia (I-95, I-66, U.S. 29)**
- **Increased freight rail capacity and need for passenger rail (most corridors)**
- **Ensure multi-modal coordination with Craney Island expansion and divert more freight to rail (Hampton Roads corridors)**
- **Increased use of Intelligent Transportation Systems (most corridors)**
- **Increased demand-response transit for rural areas (I-64, I-81, U.S. 58, U.S. 29, U.S. 220, U.S. 460, U.S. 17)**
- **Better access management for non-interstates (U.S. 29, U.S. 460, U.S. 220, U.S. 13, U.S. 58)**
- **Encouraging economic development in rural areas yet discouraging strip development (U.S. 58, U.S. 460, U.S. 13)**
- **Coordinate land use and transportation (U.S. Highways)**
- **Better ground access to airport facilities (most corridors)**