

### 3. CONTEXT OF THE VIRGINIA STATEWIDE RAIL PLAN

#### 3.1. FRA Requirements

This Chapter of the Virginia Statewide Rail Plan (VSRP) presents information related to Virginia's Transportation Network in the context of the national system. This is not a requirement of 49 CFR § 266.15 however, some of the data presented fulfills portions of the requirements.

The requirement of 49 CFR § 266.15 (c) (2) iii is met by Figure 3-11 Major Freight Corridors in Virginia.

#### 3.2. Transportation Corridors and National Transportation Network

The Statewide Rail Plan must be understood within the context of the development of multi-modal transportation corridors in the Commonwealth for passenger and freight movement, including rail, highways, aviation, and waterborne transportation. The rail plan must also be understood within a multi-state and national transportation corridor context. Passenger and freight traffic along Virginia's key transportation corridors (I-64, I-66, I-77, I-81, I-95, and Routes 13, 17, 29, 58, 220, 220 and 460) incorporates more than internal movements within the Commonwealth. It also includes significant movements from interstate travel and commerce, and Virginia's major global passenger and freight connections through Dulles International Airport and the Ports of Hampton Roads.

Virginia's major transportation corridors are heavily used for both local and long distance travel. I-95 stretches from Washington, D.C. through Richmond to the North Carolina border. This highway is significantly congested in the Washington, D.C. and Richmond areas. The I-81 corridor lies in the western half of the state through the mountains and runs from West Virginia in the north to Tennessee in the south. The entire corridor will be experiencing significant congestion in 20 years. I-64 traverses the state east to west from Hampton Roads, passing through Richmond, and on to West Virginia. It is significantly congested in Richmond and Hampton Roads today and in the future will be congested in the Staunton area. Route 460 serves as a parallel road to I-64 and serves more of a local route. However, to avoid I-64, an increasing number of vehicles are using Route 460, especially to access areas of the state south of Richmond. The I-66 corridor runs from Northern Virginia west to I-81 and allows access to suburban and rural areas west of Washington, D.C. See the section on Highways for more discussion on actual traffic numbers and Level of Service.

According to a recent report, *America 2050 – A Prospectus*, most of the nation's rapid population growth, and an even larger share of its economic expansion, is expected to occur in ten or more emerging megaregions: large networks of metropolitan regions. These regions are connected by diverse factors such as environment, transportation facilities, economy, and cultural climate. Each megaregion covers thousands of square miles and by 2050, 70% of the population and economic growth is expected to occur in these regions. Megaregions are located in every part of the country. The 10 megaregions in the country are shown in Figure 3-1. A short description of each region follows:

- **Cascadia:** The vision for Cascadia links Seattle, Portland, and Vancouver, British Columbia with high-speed rail, while protecting the area's unique and pristine

environment. Other strategies highlight these cities' shared high-tech competencies, commitment to environmental sustainability, and creative clusters in film, music, and green building.

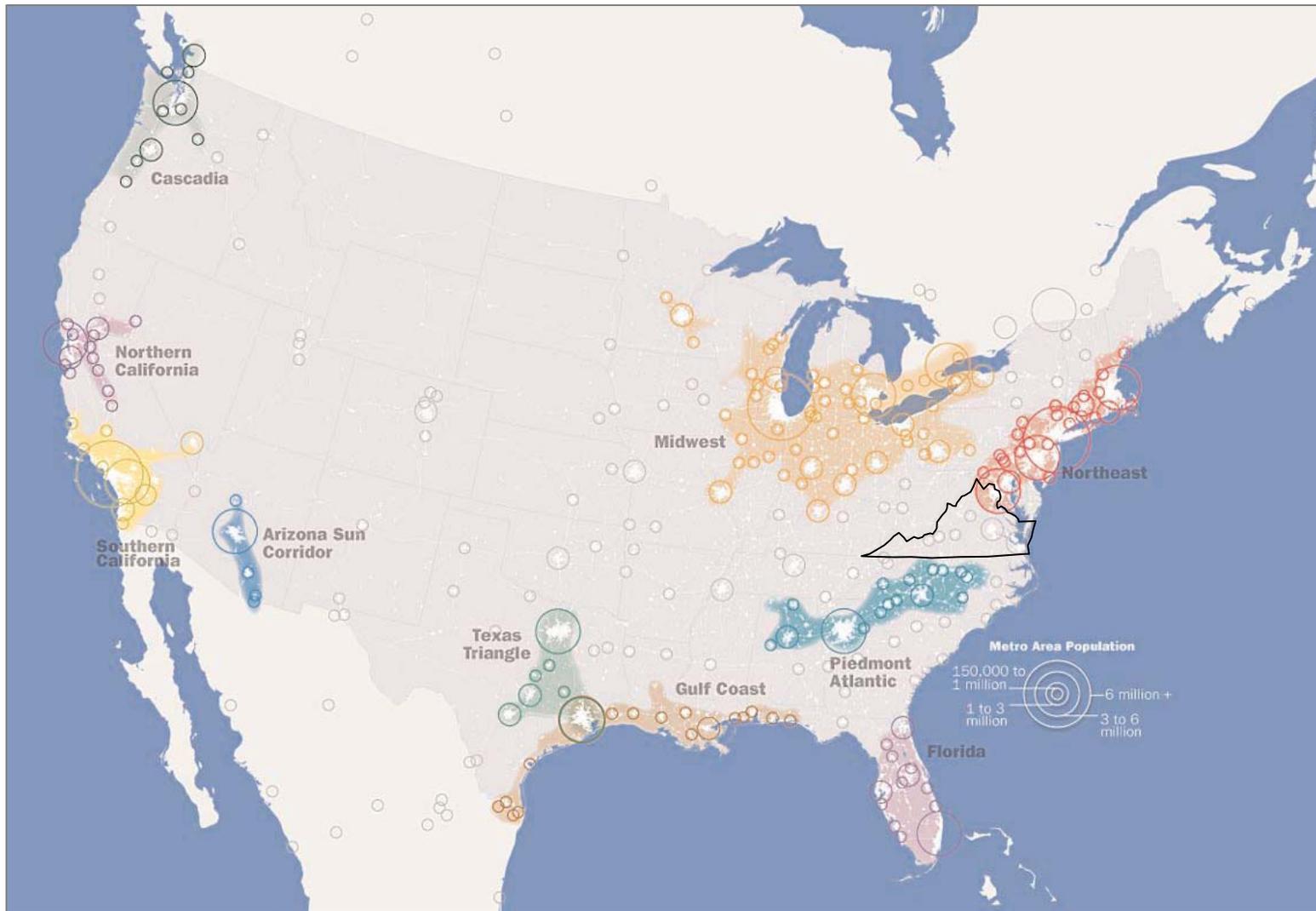
- **Northern California:** The high quality of life, cultural heritage, and environmental assets of the Northern California region make it an attractive (and expensive) place to live. How can sustainable land use be employed while limiting the skyrocketing cost of living?
- **Texas Triangle:** By 2050 about 35 million people, or 70 percent of the population of Texas, will live in the metropolitan areas that compose the Texas Triangle. Three of the nation's 10 largest cities are in the Triangle, including Houston, which has a port that handles more foreign tonnage than any other in the U.S. Cultural cohesion creates the potential for collaboration among the metro regions of the Triangle to address land use, transportation, and environmental concerns.
- **Southern California:** With some of the largest ports in the nation, the economy of Southern California is closely tied to the logistics and goods movement industry. This region is taking aggressive action to build infrastructure that enhances its role as a global gateway while providing opportunities for its fast-growing native-born and immigrant populations.
- **Arizona Sun Corridor:** The Sun Corridor is equivalent to Indiana in size and population but will add another Indiana's worth of residents by 2040. Located in a desert environment, Phoenix and Tucson (the megaregion's biggest metropolitan regions) have instituted water conservation requirements and are promoting the use of desert landscaping. These efforts provide the two metros with enough water for perhaps up to twenty million people, preparing the Sun Corridor for current and future growth.
- **Great Lakes:** The Great Lakes megaregion is exploring ways to grow its economy in face of the shrinking role of the manufacturing sector. The region's assets include the environmental resources and amenities of the Great Lakes and a strong research and cultural tradition tied to its leading public universities.
- **Northeast:** The Northeast is a powerhouse of density and economic output, producing 20 percent of the nation's Gross Domestic Product with 18 percent of the population and only two percent of the nation's land area. Over the next generation, the Northeast will add 18 million new residents. This population growth will demand infrastructure investments and economic growth to accommodate these new residents while preserving quality of life.
- **Piedmont Atlantic:** The low cost of living and high quality of life in the Southeast are two reasons for this megaregion's booming population, which is anchored by Atlanta but stretches east to Raleigh, North Carolina and west to Birmingham, Alabama. The region is facing challenges associated with its growing population, such as increased traffic congestion, runaway land consumption, and inadequate infrastructure, which it hopes to address with sustainable solutions.
- **Gulf Coast:** The devastation of Hurricanes Katrina and Rita and the displacement of victims along the I-10 corridor highlighted the environmental, transportation, and economic links of the Gulf Coast. Despite the recent destruction, the region is expected to grow due to the continued in-migration of retirees from the Midwest.

- **Florida:** The Florida megaregion is one of the fastest growing in the nation and possesses a wealth of diversity, with six of every 10 new residents in the last decade coming from foreign countries. It is both dense and populous, with the major international city of Miami acting as a gateway to Latin America. Regional strategies to protect the Everglades have preserved the natural heritage of the state.

As seen in Figure 3-1, Virginia is part of, and a vital transportation link between, the Northeast and Piedmont Atlantic megaregions. Virginia will become the buffer between the different economic cultures of these two regions.

Improvements in the national and state rail system could include the following benefits:

- The diversion of auto and truck traffic to rail to improve public safety and air quality by reducing congestion and greenhouse emissions, which affect climate change and health.
- The diversion of air travel passengers to passenger rail to reduce congestion occurring in the nation's airport system and to provide a cost-effective and timely alternative for intercity travelers.
- Improved passenger and freight rail service to help reduce the negative impacts to individuals and the economy of short or prolonged energy supply disruptions and/or energy price increases.
- Land use and travel pattern changes for both passenger and freight movements can improve air quality, water quality, and aesthetic appeal.
- Rail improvements to provide mobility and economic development opportunities to smaller communities and rural areas with little or no other access to passenger or freight transportation.
- The availability of an improved rail system to ensure a redundant transportation mode for use in emergency situations involving natural disasters, terrorist attacks, and military response and readiness for war time situations.
- Passenger rail to provide a mobility option for individuals who cannot or choose not to drive or fly.
- Freight rail to provide an option to companies who cannot or choose not to use trucks and the highway system for the transport of cargo.

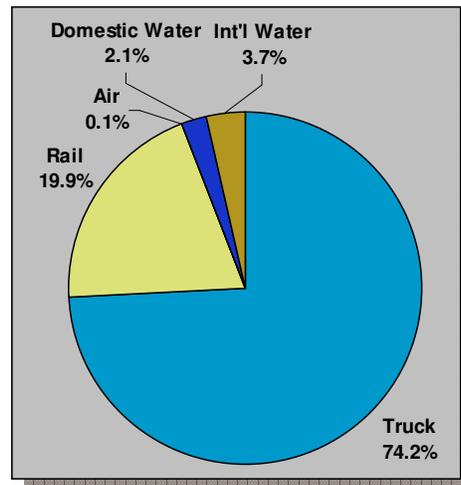


**Figure 3 - 1 National Megaregions**  
(Source: *America 2050 – A Prospectus*)

### 3.3. Multimodal Considerations

Virginia must plan today to support its future prosperity. Additional economic and population growth means that travel demand will continue to increase significantly over the next twenty years. Virginia's transportation system functions reasonably well today as a result of investments made more than ten to twenty years ago. The costs for maintaining roads, rail, transit, port, and aviation networks are increasing and compete with limited dollars for new investments. According to *Virginia Performs*, Virginia's goal is to ensure that the transportation system is safe, enables easy movement of people and goods, enhances the economy, and improves quality of life. Virginia has the third largest state-maintained highway system in the nation. The Port of Virginia, Dulles International Airport, and the I-81 and I-95 corridors are both gateways to international markets and major economic engines for the state.

The vast majority of freight is moved by truck, followed by rail, as shown in Figure 3-2. This graphic depicts that by far, most freight is presently moved by truck, in comparison rail carries less than 25% of what trucks carry.



**Figure 3 - 2 Virginia Freight Movements by Mode**

The single occupant vehicle is the predominant mode of choice for daily commuting, followed by carpool and public transportation, as shown Figure 3-3. This graphic also depicts that three times as many people carpool than use public transportation. It should be noted that public transportation covers all forms of public transportation, including bus and rail.

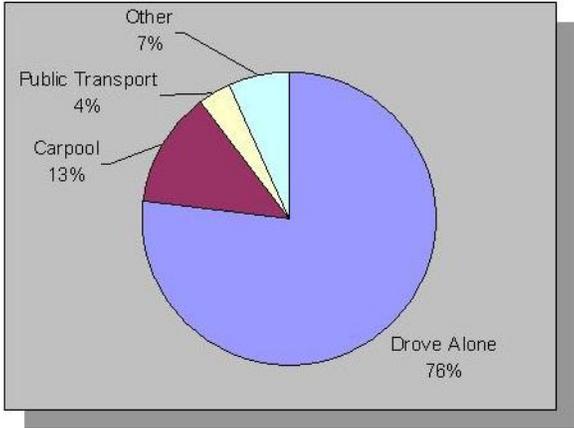


Figure 3 - 3 Virginia Commuter Movements by Mode

Figure 3-4 breaks the public transit piece of the pie found in Figure 3-3 into the different available modes in Virginia. As can be seen in this graphic WMATA, Washington D.C.'s commuter rail, has the largest ridership of any of the facilities in the state.

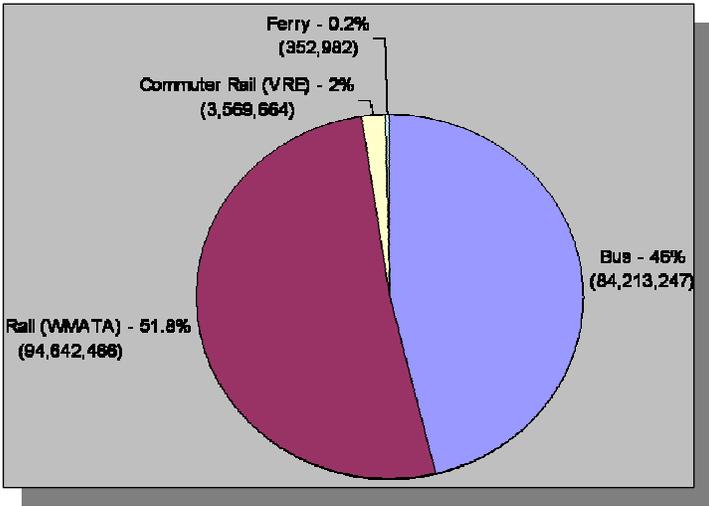


Figure 3 - 4 Virginia Transit Mode Share

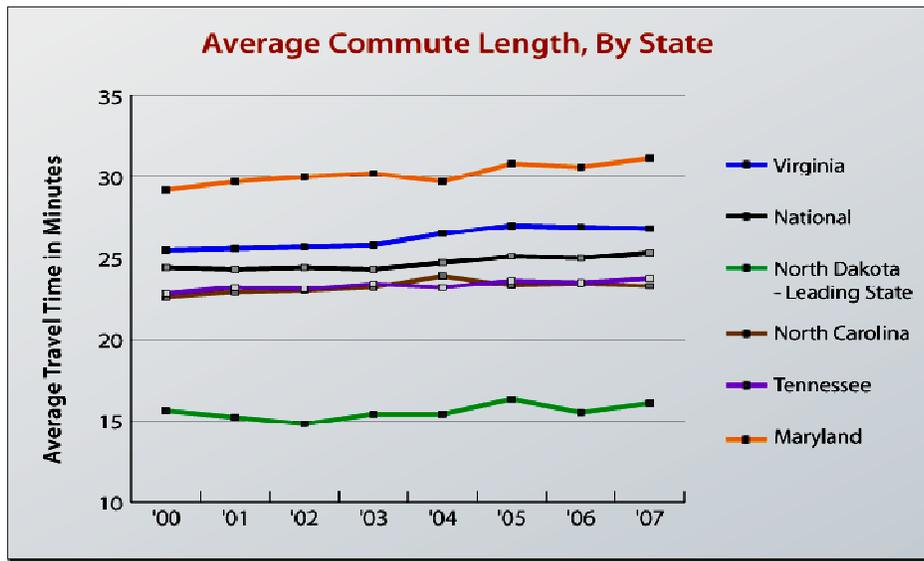
3.3.1. Highways

Virginia ranks 16<sup>th</sup> in the nation in the overall cost-effectiveness of its highway system. The Washington, D.C. metro area, including Northern Virginia, is one of the most congested areas in the nation. Traffic congestion presents more than a headache for commuters; it has a negative impact on the delivery of goods and services, and on the general well-being of citizens. Los Angeles is the most congested city with an average of 70 hours of delay per traveler per year. The Washington, D.C. metropolitan area is second with an average of 62 hours of delay per traveler per year and Atlanta, GA is third with an average of 57 hours of

delay per traveler per year. The Hampton Roads area also experiences high levels of congestion.

Virginia's average commute time to work in 2007 was 26.8 minutes, the eighth highest in the nation. While higher than North Carolina (23.3 minutes) and Tennessee (23.8 minutes), the average time is slightly lower than Maryland's (31.1 minutes). The national average is 25.3 minutes. North Dakota had the least traffic delays of all states with an average commute time of 16.1 minutes as shown in Figure 3-5.

Lane-mile use has increased over time; since the mid-1960s Virginia has experienced a decline in both lane-miles relative to population and lane-miles relative to state gross domestic product (GDP). Locally, the U.S. Census measured average commute time for 28 of Virginia's larger counties and cities in 2007. The highest average commute times were all in the Northern Region with Stafford County (41.3 minutes), Spotsylvania County (39.8) and Prince William County (37.1 minutes) having the highest commute times. Lynchburg City (16.1 minutes) in the West Central Region had the lowest commute time among the localities measured in the Commonwealth.



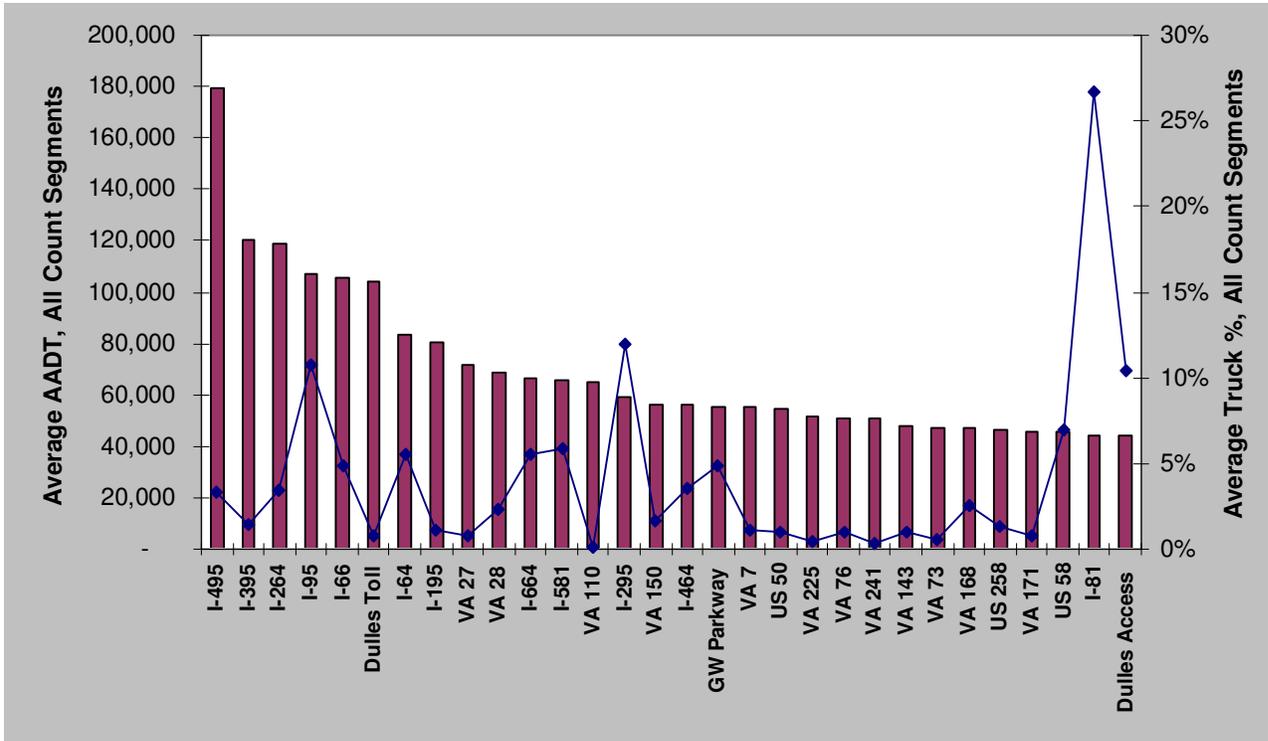
**Figure 3 - 5 Average Travel Time to Work by State**  
(Source: *Virginia Performs*)

In 2008, 25.9 percent of Virginia's bridges were functionally obsolete or structurally deficient, placing the state at 29th lowest in the nation for percent of deficient bridges. (Note: Functionally obsolete or structurally deficient bridges are not necessarily unsafe.) Virginia's rate was higher than Tennessee's 20.2 percent, but lower than that of either North Carolina or Maryland, which had 28.7 and 26.3 percent functionally obsolete or structurally deficient bridges, respectively. Arizona was the leading state at 11.2 percent; the national average in 2008 was 25.2 percent.

Today as a result of increased travel demand, 47 percent of Virginia interstates and 13 percent of the primary systems lane miles are deficient in terms of congestion capacity while vehicle miles of travel indicate that travel on Virginia's roads is outpacing the national average. The cost of construction for new roads is challenged by rising maintenance costs

that receive the first spending priority and consume approximately 42 percent of the Virginia Department of Transportation’s budget. If just the highway construction monies are considered, maintenance takes 75 percent of the total. The Commonwealth also recognizes that it cannot pave its way out of congestion. The Commonwealth must have a balanced transportation investment plan given the goals related to land use and the environment.

Figure 3-6 shows the Virginia Average Annual Daily Traffic (AADT) (all vehicle types) for all segments of a given route as bar columns, and the corresponding average truck percentages as points with a line for the top 30 transportation corridors and roads in Virginia.



**Figure 3 - 6 Average Total AADT and Truck Percentages (2005 Data)**  
(Source: Cambridge Systematics)

The top 10 routes on the basis of average AADT are: I-495 (the Capital Beltway); I-395; I-264; I-95; I-66; the Dulles Toll Road (VA 267); I-64; I-195; VA-27; and VA-28. Of these, only I-95 has a truck percentage exceeding 10 percent. Among other top 30 AADT routes, the highest average truck percentages are found on I-81 (27 percent), I-295 (12 percent), and the Dulles Airport Access Road (10 percent). Trucks actually represent a relatively low percentage of AADT on most of Virginia’s most heavily used highways.

Highway congestion is often evaluated in terms of Level of Service (LOS) with grades varying from A to F. An LOS of “A” is free-flowing traffic with no delays, and LOS of “F” is essentially gridlock. Grades D, E and F are all associated with significant and increasing congestion. As can be seen in Figure 3-7, metropolitan areas like Washington D.C., Richmond and Hampton Roads are experiencing a level of congestion that causes traffic delays and backups. Figure 3-8 shows project LOS of state highways in 2035. From this

graphic, assuming no improvements to the highway capacity, the level of congestion will spread from the metro areas into the main transportation corridors causing traffic delays statewide.

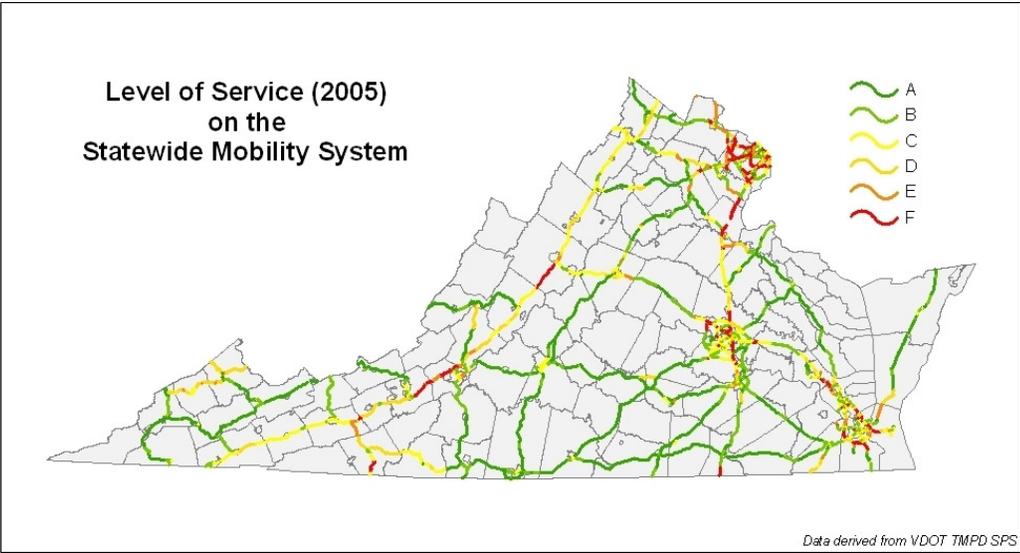


Figure 3 - 7 Highway Congestion in 2005.

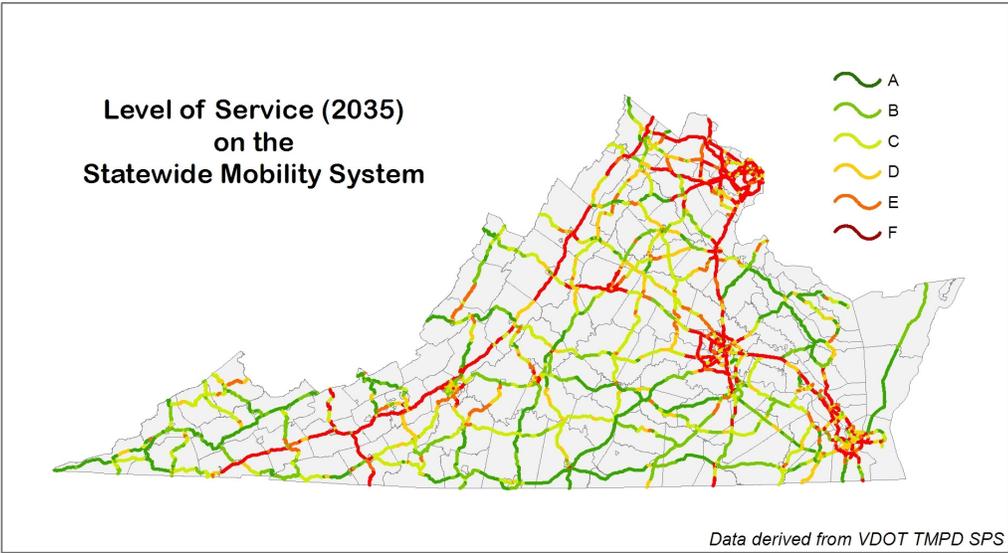


Figure 3 - 8 Projected Highway Congestion in 2035.

### 3.3.2. Ports

The Port of Virginia is the second largest port on the East Coast. The Port has three general cargo marine terminals: Norfolk International Terminal, Portsmouth Marine Terminal, and Newport News Marine Terminal. In 2008, the Port handled 2.1 million (five percent) of the nation's 43 million 20-foot equivalent units (TEUs), the standard measure of container terminal capacity. The Port of Virginia's TEU growth in containerized cargo is expected to increase by 350 percent between 2005 and 2035. Current VPA terminal capacity is limited to approximately 3 million TEUs per year and will reach full operating capacity by 2011 unless improvements are made.

In the 10-year period (1998-2007), the total volume of container traffic through the Port of Virginia marine terminals has increased at an average annual rate of 5.74 percent. With the scheduled opening of the Heartland Corridor in early 2010, the recent clearance of the CSX double stack (standardized cargo container boxes stacked two high on rail cars) rail route to Atlanta, and the planned addition of a third series of locks in the Panama Canal by 2014, this growth trend is expected to continue. For planning purposes, an annual rate of 4.3 percent has been used for future projections; this represents a "moderate" growth scenario compared to the past. According to VPA's 2040 Plan, the growth rate projections varied from a "low" scenario of 3.5 percent to a "high" scenario of 7.5 percent growth per year in container traffic. To meet the increased volume of container traffic, the Port has developed a multi-faceted strategy to increase the capacity and efficiency of its terminals. This includes replacing obsolete and aged infrastructure through a series of projects that will increase the number of ship berths, expand container yards and increase rail capacity.

The use of rail is a significant part of the Port of Virginia's plan to enhance the efficiency and cost effectiveness of shipping. In fact, the Port already moves a higher percentage of containers by rail than any other East Coast port. Rail volume in 2007 increased 20 percent and remains the fastest growing sector of the Port's growth.

The Port will need to add capacity to maintain market share. A new private marine terminal, APM Terminals, opened in 2007. The Virginia Port Authority (VPA) plans to construct a fourth terminal, Craney Island Marine Terminal, which is scheduled to open its first phase in 2017. These new facilities coupled with expansions and renovations at existing facilities, such as Norfolk International Terminals, will allow the Ports of Hampton Roads to accommodate over eight million TEUs per year by 2035. This capacity will position the Port as the largest on the East Coast based on current TEU numbers. The majority of cargo moving in and out of the Port is transported by trucks.

As the only VPA terminal with "on-dock" rail service, Norfolk International Terminals (NIT) handles the vast majority of the intermodal container traffic. In 2007, NIT shipped by rail 289,000 TEU's (or 25.6 percent of total TEU volume at the terminal) – this is equivalent to 165,000 trucks off the highway system. VPA expects the total TEU volume at NIT to increase to 1.85 million TEU's by the year 2017, when the proposed Craney Island Marine Terminal comes on line. Based on a projected 30% volume of TEU's moved by rail, it is expected that 554,608 TEU's will move by rail from NIT in 2017 - equivalent to 317,000 trucks off the highway system. When fully developed by 2035, the Craney Island Marine Terminal will handle approximately 2.4 million TEU's per year. VPA's goal is to ship 50 percent of TEU's at Craney Island by rail, which would be approximately 1.2 million TEUs per year – equivalent to 686,000 trucks off the highway per year from this terminal alone.

This growth in rail traffic would require 300 new intermodal trainsets based on current modal percentages at the Ports of Hampton Roads.

### **3.3.3. Aviation**

The aviation industry in the United States is struggling and there is no doubt that fundamental changes are underway that will impact future travel. The events of September 11, 2001 had a significant negative impact on the aviation industry. Competition and significantly rising fuel costs represent the latest major challenge for airlines. Competition between airlines is forcing them to look for new revenue sources in order to keep ticket prices down (baggage charges, for instance). Historically, fuel represented approximately 25 percent of the airline industry costs. Since last year the cost of a gallon of airline fuel has increased by 73 percent. In the last two years, ten airlines have filed bankruptcy and seven have gone out of business.

Given the aforementioned issues in the aviation industry, it is clear that there will be reduced frequencies of service, increased travel times, and increased fares. Figure 3-9 gives the typical travel time (not including the time required for advance check-in at each departure), connections, and costs for flights originating in Bristol, Roanoke, Lynchburg, Charlottesville, and Newport News, terminating in either Washington, D.C. or Richmond. Additionally, a few of the aviation routes are shown graphically in Figure 3-9 along with their travel time and cost versus the same trip via Amtrak passenger rail service. Other than a few selected cities, there are few direct flights, so airline travelers must first fly to a hub airport in another state and then return to Virginia by a connecting flight.

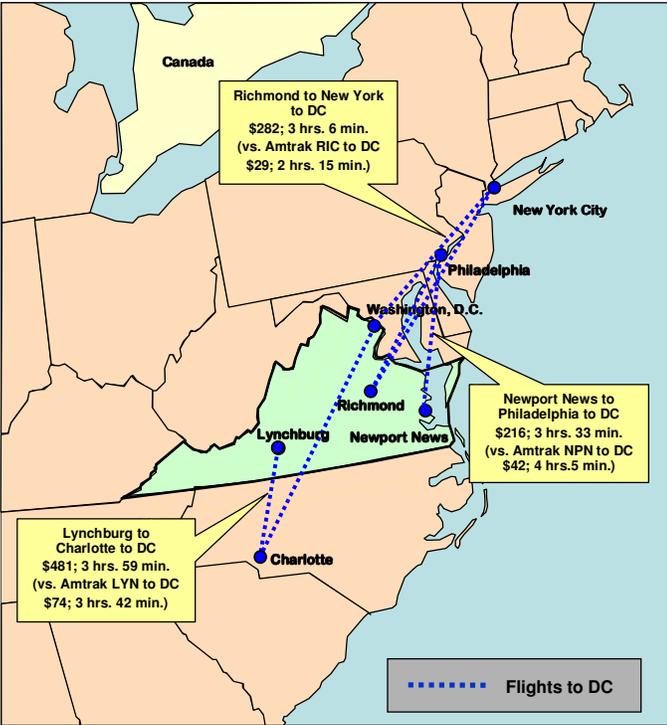
### **3.4. Land Use, Natural Resources, and Environmental Influences**

The nation is in the early stages of a major change in transportation, the economy, and ultimately quality of life. There is global competition for finite resources of oil and coal. Crude oil prices averaged \$72.00 per barrel in 2007. In late June 2008, the price for crude oil increased to approximately \$135.00 per barrel - an increase of 88 percent. In late October 2009, the price for crude oil is approximately \$78.00 per barrel based upon the economy showing signs of growth again. China and India are making significant investments in infrastructure and are emerging as strong competitors in the global economy. India's middle class population alone is equal to the total population of the United States. We must find a way to become more energy efficient and reduce greenhouse gases. This section discusses land use, natural resources and the environment within the context of statewide transportation goals and multimodal planning process for all modes.

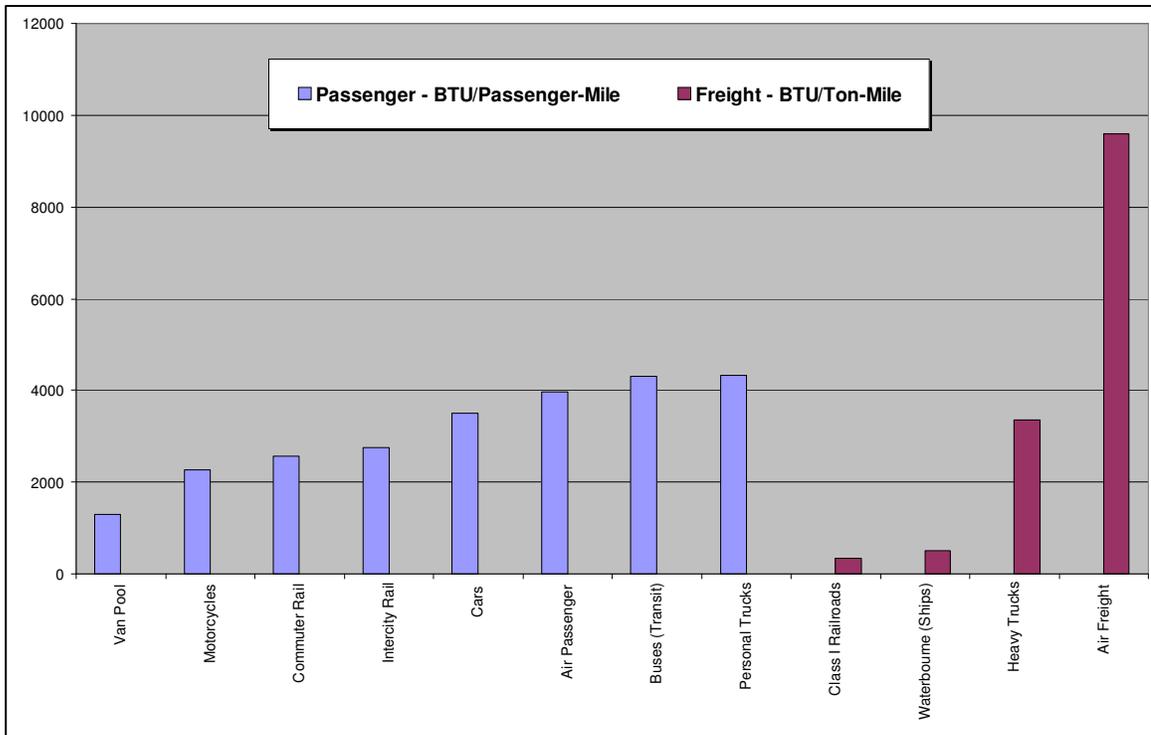
The purpose of Virginia's transportation system is to link regions and service communities by moving people and goods throughout the state. Infrastructure construction must not come, however, at the expense of Virginia's vast natural and cultural resources. Virginians have communicated that they do not want to sacrifice the environment or quality of life for transportation improvements. Virginia's transportation agencies are dedicated to designing and operating a system that seamlessly integrates into communities while protecting the assets of every community throughout the Commonwealth. The plan also includes rail improvement projects that will improve national energy efficiency, and increase the use of coal to both domestic and global markets (CFR § 266.15 FRA Requirements for State Rail Plan – [c.11A] improvements to national energy efficiency).

Departure	Connecting Flight(s)	Destination	Cost	Time*
Roanoke	Nonstop	Washington, DC	\$755	1 hr. 5 mins.
Charlottesville	Nonstop	Washington, DC	\$461	48 mins.
Richmond	New York, NY	Washington, DC	\$282	3 hrs. 6 mins.
Lynchburg	Charlotte, NC	Washington, DC	\$481	3 hrs. 59 mins.
Bristol (Tri-Cities)	Charlotte, NC	Washington, DC	\$385	3 hrs. 44 mins.
Newport News	Philadelphia, PA	Washington, DC	\$216	3 hrs. 33 mins.
Washington, DC	New York, NY	Richmond, VA	\$282	3 hrs. 6 mins.
Roanoke	Atlanta, GA	Richmond, VA	\$825	4 hrs. 15 mins.
Charlottesville	New York, NY	Richmond, VA	\$676	4 hrs. 18 mins.
Lynchburg	Atlanta, GA	Richmond, VA	\$830	6 hrs. 0 mins.
Bristol (Tri-Cities)	Charlotte, NC	Richmond, VA	\$555	2 hrs. 53 mins.
Newport News	Atlanta, GA	Richmond, VA	\$329	4 hrs. 25 mins.

\* Note: Time does not include the 1.5 hours recommended before departure for check-in and security screening for each departure (an additional time of approximately three (3) hours per trip).  
 (Source: Yahoo Travel, June 2008)



**Figure 3 - 9** Sample Time and Costs for Airline Trips to Washington, D.C. and Richmond from Selected Virginia Cities



**Figure 3 - 10 Fuel Efficiency in Transportation**  
 (Source: U.S. Department of Energy)

The rail system in Virginia has essentially remained the same since 1920 (prior to the development of the interstate and national highway system). Other than improvements within existing rail right-of-way, or immediately adjacent to existing track locations, no new rail routes will likely be constructed in the future. Utilizing the existing system and making improvements to expand its capacity to meet future needs will preserve existing land uses, protect natural resources, and lead to environmental improvements by reducing air emissions (as compared to trucks) and reducing potential pollutants to our valuable waterway system as compared to truck and highway impacts.

According to the Association of American Railroads, greater use of freight and passenger rail offers a simple and relatively immediate way to reduce greenhouse gas emissions without adverse impacts on the economy. It can be seen in Figure 3-10 that the fuel efficiency of commuter rail is 27 percent more efficient than car for passenger travel and Class I Railroad is 90 percent more efficient than truck for freight movement. Railroads are typically three or more times more fuel efficient than trucks and railroads have a smaller carbon footprint. Every ton-mile of freight that moves by rail instead of truck reduces greenhouse emissions by 67 percent or more. Based on Federal Environmental Protection Agency (EPA) data, freight railroads account for 2.6 percent of the nation’s greenhouse gas emissions from transportation sources and just 0.7 percent from all sources. Based on data from the American Association of State Highway and Transportation Officials (AASHTO), diverting 1 percent of long-haul freight that currently moves by truck to rail would result in

annual fuel savings of 110 million gallons, and annual greenhouse gas emissions would fall by approximately 1.2 million tons.

Railroads represent the most fuel efficient mode of ground transportation. In 2008, freight railroads moved a ton of cargo an average of 457 miles per gallon of fuel. According to the Association of American Railroads, railroad fuel efficiency has risen 94 percent between 1980 and 2008 due to new locomotive technologies, advanced R&D, innovative operating practices, employee training and diligence in complying with environmental laws and regulations. In 2008, Class I railroads used 3.7 billion fewer gallons of fuel, and emitted 41 million fewer tons of carbon dioxide, than they would have if their fuel efficiency and operating procedures had remained at 1980 levels.

### **3.5. VTrans2035**

VTrans2035, the Commonwealth's statewide long-range multimodal transportation plan, is being updated by the Office of Intermodal Planning and Investment with the support of the five state transportation modal agencies: Department of Rail and Public Transportation, Department of Aviation; Department of Transportation, Department of Motor Vehicles and the Virginia Port Authority. The Statewide Rail Plan will be a key input into the VTrans2035 update.

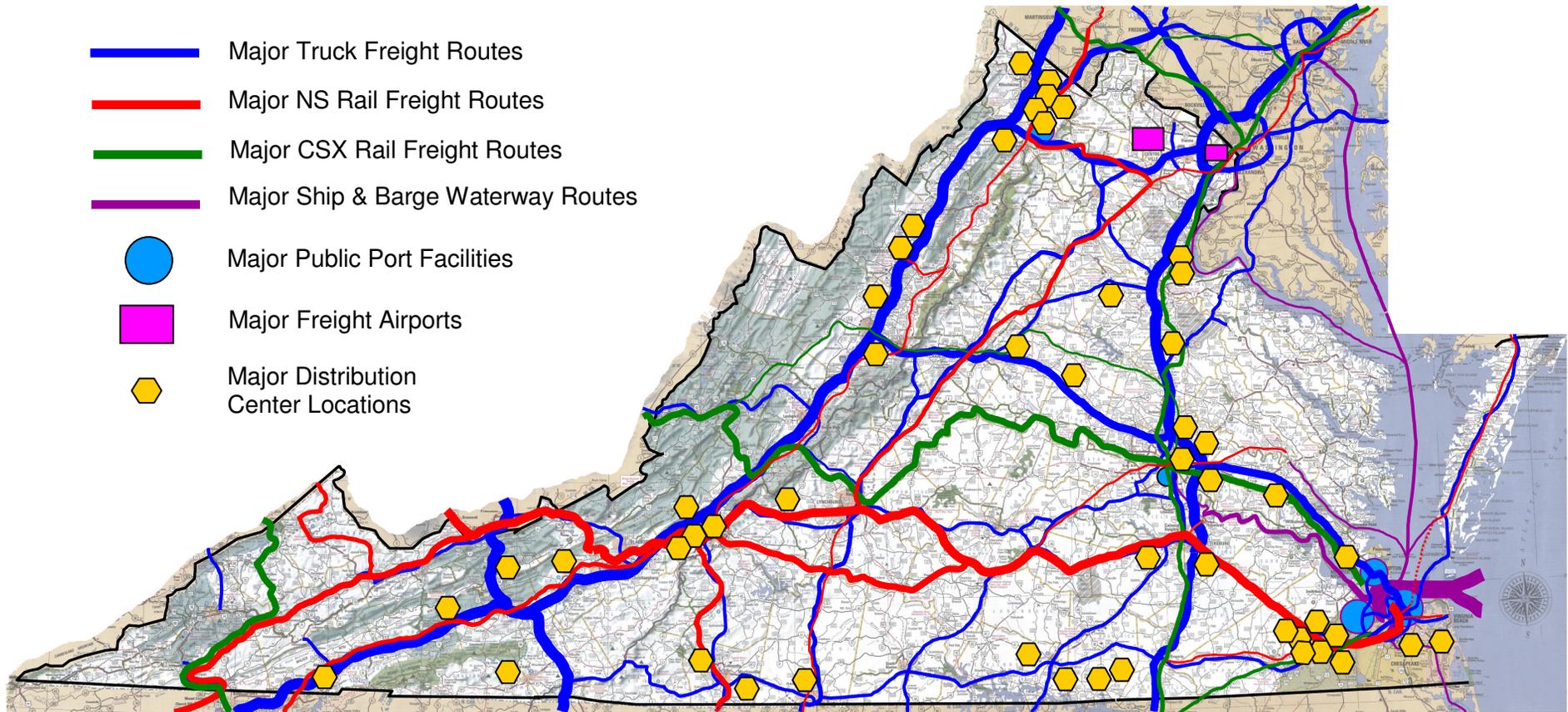
VTrans2035 is being updated in conjunction with the Federal Highway Administration (FHWA), Metropolitan Planning Organizations (MPOs), and other key stakeholders across the Commonwealth. This coordinated effort will ensure a well-balanced plan that evaluates pressing transportation issues across the entire state and across all modes. VTrans2035 will begin by looking at the accomplishments of VTrans2025, the current statewide long-range multimodal transportation plan that was completed in 2004. Figure 3-11 depicts the multimodal transportation network developed during the original VTrans2025 study. The VTrans2035 update will:

- Validate the vision and goals set forth in VTrans2025
- Conduct an inventory of the existing transportation system, across all modes
- Examine socioeconomic and demographic trends
- Explore the long-term viability of the motor fuels tax
- Explore through a series of issue papers pressing transportation policy and topics such as safety, system preservation, freight mobility, accessibility/connectivity, land use, regionalism, economic development, technology, congestion and environment
- Determine the economic impact of transportation investments
- Examine the adequacy of transportation funding
- Look closely at the characteristics and deficiencies of corridors of statewide significance
- Identify strategies to improve movement through and between the corridors using modal plans to select the best strategies
- Integrate agency modal plans into a comprehensive and cohesive Statewide Plan
- Include extensive public and stakeholder involvement

Initial recommendations from planning conducted as part of the VTrans2035 effort that impact transportation in the Commonwealth include:

- Improve efficiency of corridors of statewide significance across the Commonwealth
- Improve access management to reduce conflicts
- Remove bottlenecks
- Move more cargo by alternatives other than trucks
- Use technology
- Implement public investments in the private sector that produce public benefits
- Use DRPT's Rail Enhancement Fund as a model

VTrans 2035 will incorporate a surface transportation (highway, transit and travel demand management), rail, port and aviation plans. As one of the modal plans that will be incorporated into VTrans 2035 this VSRP addresses the goals as indicated utilizing the state transportation planning process. The VSRP was developed based on the significant statewide multimodal transportation corridors and provides the Commonwealth with a balanced modal approach to the movement of people and goods. This plan recommends the best rail infrastructure investments utilizing a clearly defined process that takes into account cost, funding sources, safety, congestion and the environment. VTrans 2035 is a progressive approach to transportation planning that not only utilizes traditional transportation planning and modal optimization methods but also considers land use regulations, environmental regulations and other non-traditional tools to achieve transportation goals.



Note: Thickness of lines denotes relative cargo volume for each mode.

Figure 3 - 11 Major Freight Corridors in Virginia

### **3.6. Six-Year Improvement Plan**

The Six-Year Improvement Plan (SYIP) includes funding for rail transportation, commuter and public transportation, and all interstate and primary highway projects that are being studied, designed, and constructed throughout Virginia over six fiscal years. Fiscal years start on July 1 and end on June 30. The current SYIP and this Statewide Rail Plan cover the six-year time frame from FY2009 to FY2014. This Statewide Rail Plan also covers the 25 year long range planning and vision that will be included in the VTransS2035 update.

The Commonwealth Transportation Board (CTB) updates the SYIP each year as priorities are revised, project schedules and costs change, and study results become known.

All projects in the SYIP that are eligible for federal funding will be included in the Statewide Transportation Improvement Plan (STIP), which documents how Virginia will obligate its share of federal funds.

DRPT's process within the Six-Year Improvement Plan differs from the VDOT process in two key areas:

- DRPT advances projects primarily through partnerships with local and regional governments and private entities in Virginia.
- DRPT funds a portion of rail and public transportation project costs, with a share of expenses borne by localities, or the grantee.

DRPT provides leadership, advocacy and funding support for initiatives across the Commonwealth by working with partners at the local, regional, state and federal levels. The agency also prepares statewide rail and public transportation plans and conducts studies to assess the feasibility and environmental impacts of new and expanded services in Virginia. DRPT works closely with private railroads, service operators and Metropolitan Planning Organizations (MPO) to plan and program new services and capital improvement projects.

DRPT provides technical expertise and assistance in project preparation and then accepts requests for funding when projects are ready for implementation.