Introduction and Purpose

Context in Virginia

FRA Compliance

Document Structure

Federal Funding

Data Analysis

2017 Virginia Rail Plan
Outreach

VARAILPLAN.ORG

SYIP Public Hearings
Stakeholder Workshops
Web Based Surveys
CTB Rail Committee
VA Railroad Association
Web-Based Public Meeting
Stakeholder Interviews
Executive Summary
Benefits of Rail in Virginia

**GROW THE ECONOMY**
Rail services drive 6% of Virginia’s total economy. More than 6,000 jobs created directly by rail network.

- **Freight Rail:** $2.2 billion in annual benefits
- **Passenger Rail:** $190 million in annual benefits

Benefits are largely derived from savings from diverting freight and passengers from highways to rail and includes congestion savings and crash reduction benefits.

**BREATHE EASIER**
3 million tons of CO2 emissions avoided (6.4% of total in Virginia per year)

- On average, railroads are **four times** more fuel efficient than trucks.
- Moving freight by rail instead of truck generates **75% less** greenhouse gas emissions.
- The total estimated level of rail service in Virginia in 2015 was about **25 billion ton-miles**.

**TRAVEL SAFE**
18 lives saved and 3,000 crashes avoided each year

- Shipping by rail avoids about **1.7 billion miles** of truck travel in Virginia.
- Passenger travel by rail avoids about **271 million miles** of personal driving in Virginia.

**SAVE MONEY**
$123M PAVEMENT MAINTENANCE SAVINGS (6% of annual VDOT maintenance budget)

- 8 Passenger Railcars = 240 Passenger Vehicles
- 100 Freight Railcars = 340 Semi-Trailer Trucks
Benefits Continued

- Connects to National and International Markets
- Moves both people and goods
- Serves Port of Virginia
Future Trends
Future Trends

RAIL INDUSTRY DRIVERS

- Growth in Intermodal Traffic
- Changes in Energy Production: Oil, Gas and Coal
- Congestion
- Environmental
- Demographic Changes
- Aging Infrastructure
- Changes in Rail Governance Framework
- Amtrak Northeast Corridor
Future Trends

**Freight**

Freight tonnage is expected to grow by 50% in Virginia by 2040.

Movement by rail will increase by 14%; additional rail investment can enhance rail’s modal share and keep additional freight from congested roadways.

**Port of Virginia Shipments**

TEUs anticipated to more than triple from 2.1 M in 2012 to 7.2 M in 2040.

Capacity to move 45% by rail in 2040, up from 35% today.

**Expected Evolution of Major Freight Markets**

Growth in intermodal traffic will impact operational approach to major freight corridors. Intermodal movement relies on tight timetables and high demand for on-time performance.
Future Trends

**Freight**

Movement by truck and rail is expected to increase in Virginia.

**Passenger**

Population concentrated in the urban crescent. Since 2010, the share of Virginia’s total population growth in the urban crescent rose to 93 percent, up from 81 percent between 2000 and 2006.

Population is growing older – 1 in 8 Virginians is 65 or older, and the largest concentration of Virginia’s aging population lives in the urban crescent. [DC2RVA Purpose and Need]

Increasing demand for public transportation. Urban environments conducive to public transportation and an older demographic create more reliance on multi-modal options.
Future Trends

**Freight**

Movement by truck is projected to increase by 14%, with additional movement by rail which can enhance pipeline capacity, reduce emissions, and keep additional congestion off the road.

**Passenger**

Population continues to rise in the urban crescent.

Since 2010, the share of the estimated total population has increased by 27%. The urban crescent rose by 81% from 2000 and is projected to continue to grow.

**Network Significance**

The Washington, D.C. metropolitan area has the nation’s highest rate of congestion.

The Hampton Roads area also experiences high levels of congestion.

[Measuring Traffic Congestion in Virginia - Virginia Performs, Virginia.gov]

Vehicle use per road-mile has been increasing for decades.

Since the mid-1960s Virginia has experienced a decline in relative capacity as both population and state gross domestic product (GDP) have steadily risen.

[Measuring Traffic Congestion in Virginia - Virginia Performs, Virginia.gov]

Economic Growth

Virginia’s rail network is a key link between two mega-regions, the Northeast mega-region and the Piedmont Atlantic mega-region to the south. Most of the nation’s population growth and economic expansion is occurring in ten emerging mega-regions.
Vision, Goals & Future Investments
Vision

VTrans Vision
Good for business, good for communities, and good to go.

State Rail Plan Vision
Virginia’s rail network is a valuable asset that drives the economy, reduces congestion, improves safety, and saves taxpayer money. Continued investment in rail infrastructure will ensure the mission and vision of the Commonwealth’s transportation network is achieved.

Goals and objectives link visions to prioritize investments in rail.
Investments

WASHINGTON TO NORTH CAROLINA CORRIDOR
- CSX owned/operated
- Intermodal freight service
- Primary north-south route for Amtrak long-distance service
Investments

Crescent Corridor
- Norfolk Southern owned/operated
- Intermodal freight service
- Amtrak long distance and regional service

Top Drivers
- Congestion
- Demographic Changes
- Amtrak Northeast Corridor

Key Goals
- Optimize Return on Investments
- Improve Coordination between Transportation and Land Use
- Support Regional Economic Development
Investments

EAST-WEST CORRIDOR
- CSX and Buckingham Branch owned/operated
- Primary coal route
- Passenger connection to Newport News

KEY GOALS
- Ensure Safety, Security, and Resiliency
- Improve Coordination between Transportation and Land Use
- Ensure Transparency and Accountability, and Promote Performance Management
- Support Regional Economic Development
Investments

HEARTLAND CORRIDOR
- Norfolk Southern owned/operated
- Intermodal freight service
- Passenger connection to Norfolk

TOP DRIVERS
- Growth in Intermodal Traffic
- Changes in Energy Production
- Environmental

KEY GOALS
- Ensure Safety, Security and Resiliency
- Improve Coordination between Transportation and Land Use
- Support Regional Economic Development
- Ensure Efficient Intermodal Connections
Investments

PORT OF VIRGINIA

- 6 terminals
- 30 miles of on-dock rail
- 55 foot deep channel

TOP DRIVERS

- Growth in Intermodal Traffic
- Congestion
- Environmental

KEY GOALS

- Ensure Transparency and Accountability, and Promote Performance Management
- Ensure Efficient Intermodal Connections
- Support Regional Economic Development
Investments

SHORTLINE ROUTES IN VIRGINIA
• 9 shortlines in Virginia
• Important first/last mile connection for freight
Thank You
Questions?