Rail Plan Workshop
February 2017 CTB Rail Committee
1. January Workshop Recap

2. Status Update
   - Economic Analysis
   - Freight Railroad Outreach

Agenda

Discuss and summarize recent feedback and further detail the Economic Analysis component of the rail plan.
January Workshop Recap
January Workshop Summary

Cost / Impact to Economy
- Cost of Degradation of Service
- Cost Offset by Taking Cars/Trucks Off Road
- Lynchburg Economic Study

Goals
- Protect Core Services
- Leverage Existing Investment with Additional Multimodal Connections

Additional CTB Comments
- Technology
- Rail Network Outside of VA
- Other State Experiences with Purchasing Abandoned Lines
2. Status Update
Virginia Railroad Association

- Increase Rail Preservation
- Handle Size/Type of Class I Volume

- Sidings and Storage
- Update Guidelines

- Improve
  - Split/Clawback
- Lack Connectivity with General Public
  - Would Use Economic Analysis Data

- Improve Highway Operations
- Improve Rail Operations

- Improve Highway Operations
- Improve Rail Operations

- Bridges
- Grade Separated Crossings

- Public Profile
- Industrial Access

- Sidings and Storage
  - Update Guidelines
  - Improve Split/Clawback

- Lack Connectivity with General Public
  - Would Use Economic Analysis Data
Statewide Economic Analysis

Amtrak
Annual Operating Expenditures Pro-rated by State
- Annual Procurement Spending
- Direct Wages
- Direct Tourist Spending

VRE
Annual Operating Expenditures
- Annual Capital Expenses
- Annual Operating Expenses

Norfolk Southern Financial Statements and Corporate Records, VA Rail Plan
- Estimated share of track miles in VA
- Annual Operating Expenses

CSX Financial Statement and Corporate Records, VA Rail Plan
- Estimated share of track miles in VA
- Annual Operating Expenses

Shortline, VA Rail Plan
- Estimated shortline track miles in VA
- Operating Expenses, Pro-rated from NS, CSX on $ per mile

Economic Impacts of Passenger Service
Economic Impacts of Freight Service
Statewide Economic Analysis

- **User Cost Savings – Freight**
  - Truck Shipping Costs
  - Rail Shipper Savings
  - Rail Ton-Miles

- **Pavement Savings – Freight and Passenger Service**
  - VMT Avoided by Trucks, Passenger Vehicles
  - Marginal Pavement Cost Per VMT for Trucks, Passenger Vehicles

- **Congestion Savings – Freight, Passenger Service**
  - VMT Avoided by Trucks, Passenger Vehicles
  - Marginal Cost of Congestion – Trucks, Passenger Vehicles

- **Emission Cost Savings – Freight, Passenger Service**
  - VMT Avoided by Trucks, Passenger Vehicles
  - Marginal Cost of Emissions – Trucks, Passenger Vehicles

- **Accident Cost Savings – Freight, Passenger Service**
  - VMT Avoided by Trucks, Passenger Vehicles
  - Marginal Cost of Accidents – Trucks, Passenger Vehicles

- **Total Economic Benefits**
## Statewide Economic Analysis

### Total (Millions of 2016 Dollars)

<table>
<thead>
<tr>
<th>Impact Metric</th>
<th>Direct</th>
<th>Total</th>
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<tbody>
<tr>
<td>Output</td>
<td>$1,581.7</td>
<td>$2,725.3</td>
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<tr>
<td>Value Added</td>
<td>$730.2</td>
<td>$1,386.7</td>
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<tr>
<td>Labor Income</td>
<td>$427.5</td>
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<tr>
<td>Employment</td>
<td>5,438</td>
<td>12,463</td>
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<tr>
<td>Federal Taxes</td>
<td>$108.4</td>
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<tr>
<td>State / Local Taxes</td>
<td>$27.1</td>
<td>$82.2</td>
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### Benefit Value Measures*

<table>
<thead>
<tr>
<th>Benefit Value Measures</th>
<th>Freight Service</th>
<th>Passenger Service</th>
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<tbody>
<tr>
<td>VMT Avoided within VA Due to Use of Rail (in Millions)</td>
<td>1,701.1</td>
<td>271.0</td>
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<tr>
<td>User Cost Savings</td>
<td>$3,137.1</td>
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<td>Pavement Savings</td>
<td>$280.4</td>
<td>$0.2</td>
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<td>Congestion Savings</td>
<td>$424.8</td>
<td>$16.7</td>
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<tr>
<td>Auto and Truck Emissions**</td>
<td>$160.5</td>
<td>$9.7</td>
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<tr>
<td>Auto and Truck Safety**</td>
<td>$139.7</td>
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<tr>
<td><strong>Total</strong></td>
<td>$4,142.4</td>
<td>$26.5</td>
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Regional Economic Analysis

Baseline Demand Assessment
- Business Sectors & Locations
- Volume & Commodity Type
- Existing Network

Demand Trend Data
- Projected Volume & Commodity Type
- Population & Employment Projections
- Labor Market Trends & Initiatives

Improvement Scenario Data
- Potential Rail Diversion Scenario
- Benefits Based on Mode Shift
Regional Economic Analysis

Freight Volumes Moved In and Out of PDC

- Agriculture, Forestry, and Fishing
- Manufacturing
- Mining
- Transp., Sanitary Svcs. & Other
- Other Sectors / Industries

*2012 Data
ScENARIO ANALYSIS

• Characterize rail investment types with potential to capture additional rail travel
  • (i.e. sidings, industrial spur, etc.)

• Evaluate economic benefits of freight diversion
  • (i.e. vmt diversion, jobs, output, etc.)
Thank You