# I-95 Rail Corridor Study Update

Commonwealth Transportation Board
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DRPT
Virginia Department of Rail and Public Transportation
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# I-95 Rail Corridor
# Why is it Important?

- Nationally significant
  - Key link to the Southeast Corridor
  - Feeds into Washington, D.C. and points north
- A significant portion of Virginia's population lives in the jurisdictions adjacent to this corridor. Population is expected to grow 28% by 2025.
- State of the Commute on I-95
  - Without improvements, Level of Service expected to be F by 2025
  - Capacity improvements will be costly
- Major freight corridor

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# Background
# I-95 Rail Corridor

- Owned by CSX Railroad, 118 miles from Union Station to Main Street Station
- VRE Operations
  - 14 trains/day on Fredericksburg Line
  - 16 trains/day on Manassas Line – join CSX in Alexandria
  - 12 Stations on the CSX Line
  - Ridership: 14,400 Total/Day
    7,600 Fredericksburg Line/Day
    6,800 Manassas Line/Day
- Amtrak Operations
  - Washington to Richmond: 18 trains/day
  - Approximately 600,000 riders/year
- CSX Operations
  - 25–30 through trains/day. Additional local trains throughout the corridor.
  - Primary North-South freight route on the East Coast
  - Richmond to Doswell line section has second highest rail tonnage on the entire I-95 corridor line (134.5 million Gross Tons – 2005 CSX Railroad Tonnage map)

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# History of Passenger Rail Operations

- Amtrak Operations
  - Service began in 1971
  - Amtrak has statutory right of access to freight railroads
  - Amtrak pays railroads only avoidable costs
- VRE Agreement
  - Service began June 1992
  - Operating Agreement requires construction of a third track at no expense to CSX before additional trains can be operated
  - CSX and VRE currently negotiating new agreement
- Passenger Rail Performance
  - On-time performance – VRE and Amtrak both at less than 50% this summer
  - Ridership has declined in 2006
    - VRE down by 7.5%
    - Amtrak down by 2.7%

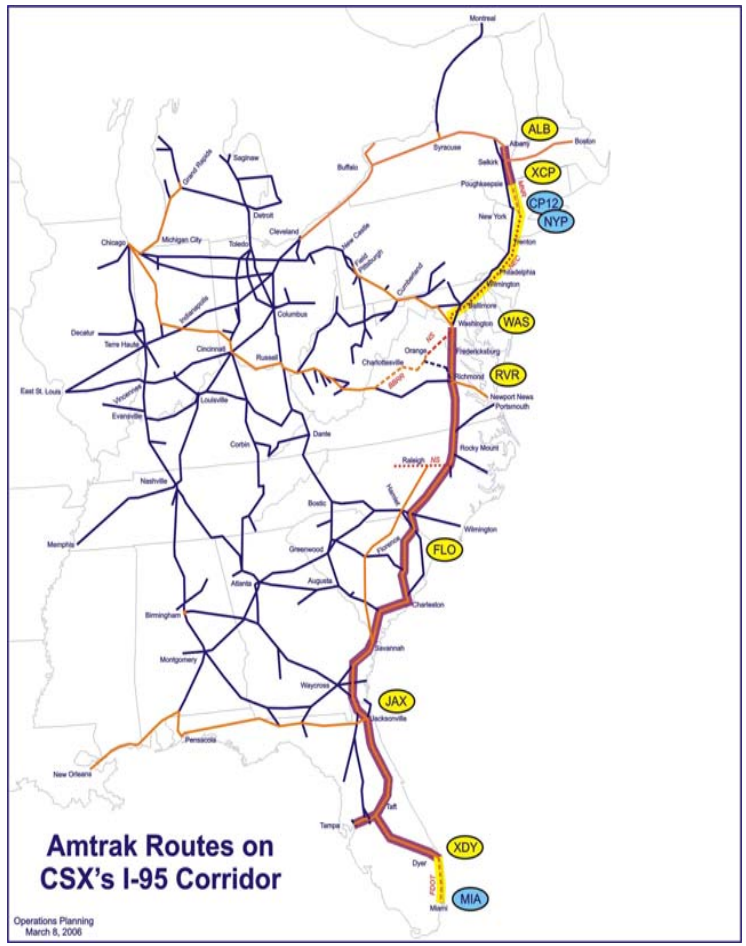
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# I-95 Rail Corridor Traffic Summary

Washington to Richmond:

- 48 daily passenger trains
  - 18 Amtrak trains
  - 30 VRE trains
- 25-30 daily freight trains
- Average of 80/day




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# I-95 Rail Corridor Previous Studies

- Washington, DC–Richmond Corridor Study, DRPT 1996
  - Concept and feasibility study
  - Identified 3rd track concept
- Washington–Richmond Supplement to NEC Transportation Plan, FRA 1999
  - Performed operational modeling
  - Identified specific Improvements
- Southeast High Speed Rail Corridor Draft Tier I EIS, DRPT/NCDOT 2002
  - Included as segment of Washington, D.C. to Charlotte, NC corridor
- Third Track Feasibility Study, DRPT 2006

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# Washington, DC to Richmond Corridor




Six projects to improve passenger and freight rail capacity and reliability in the corridor

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# Projects Funded Through VTA 2000

- **Arkendale Crossover:** add a crossover halfway between existing crossovers at Quantico and Dahlgren (near Fredericksburg) and update the signal system. Completed in August 2005.
- **Elmont Crossover:** add a crossover between Doswell and Greendale, about six miles north of Elmont and update the signal system. Completed in July 2006.
- **L'Enfant Third Track:** build 1 mile of third track from the west portal of Virginia Ave tunnel in Washington, DC southward to increase capacity. To be completed in spring 2007.
- **SRO-RO Third Track:** build 1 mile of third track between the south end of Long Bridge over the Potomac River to where the third track begins. Add a new crossover at Slater's Lane. To be completed in fall 2007.
- **Franconia Third Track:** build 7 miles of third track between Alexandria and Fairfax County. To be completed by end of 2007.
- **Fredericksburg Third Track:** upgrade a 3-mile controlled siding to mainline track conditions. To be completed in spring 2008.

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# Additional Funds for VTA 2000 Projects

- DRPT is conducting an audit to validate project management, costs and schedule issues for the VTA 2000 projects
- At this point, approximately $20 million will be needed to supplement the $65.7 million originally provided
- Costs have increased due to:
  - Lack of PE for original estimates
  - Cost escalations
  - Project refinements

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# Importance of Completing VTA 2000 Projects

- Improve reliability and on-time performance
- MOU allows addition of 4 VRE and/or Amtrak trains upon completion of 6 projects
- Reduce travel time between Staples Mill Station and Main St. Station in Richmond

| Phase | Projects | Trains Added |
|---|---|---|
| I | • AF Interlocking<br>• Consolidation of dispatch functions | • 1 experimental mid-day Mon – Thurs<br>• 1 Regular mid-day Friday only |
| II | • Arkendale Crossovers<br>• Elmont Crossovers | • Phase 1 experimental Monday – Thursday Train becomes regular |
| III | • L'Enfant 3rd Main | • 1 regular round trip Manassas Train |
| IV | • Slater's Lane to RO 3rd Main, retiring SRO<br>• Franconia 3rd Main<br>• Completion of Quantico Bridge | • 1 regular round trip Fredericksburg train |
| V | • Fredericksburg to HA 3rd Main | • 1 regular round trip Fredericksburg train |

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# 2006 General Assembly Report

- General Assembly directive (HB 5012):
  - Advance the Third Track Study
  - Define project limits and conceptual design
  - Identify preliminary minimum cost
  - Address other related issues
  - Update approach and preliminary implementation schedule

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# 2006 General Assembly Report Key Findings

- Feasibility of 3rd Track could not be determined from a cost or engineering perspective
- Minimum/partial cost estimate does not include:
  - Cost escalations due to inflation
  - Cost of electrification ($953 M minimum cost)
  - Purchase of right-of-way
  - Relocation of utilities
  - Route through Ashland or Fredericksburg
  - Potomac bridge
- Total minimum/partial cost estimate:
  - Partial Third Track: $612.2 million
  - Richmond Terminal: $71.8 million
  - TOTAL: $684.0 million– excluding items listed above, which could dramatically increase this estimate.
- Costs calculated in 2006 dollars

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# Current and Ongoing Challenges

**Current project issues:**

- Commonwealth is paying the full cost
- Estimates made without engineering: unrealistic cost, schedule and lack of well-defined scope

**Ongoing challenges:**

- Lack of a mechanism to guarantee public benefits
- Limited funding
- No comprehensive plan for corridor operations
- Growing freight traffic limits availability for passenger service
- Heat restrictions
- VRE operational performance
- Amtrak service uncertainties

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# I-95 Rail Corridor
# Future Strategic Approach

- Provide $20 million to complete VTA 2000 projects
- Conduct a comprehensive Alternatives Analysis
- Include:
  - Operational modeling
  - Review of alternative right-of-way
  - Determination of public and private benefits
- Conduct environmental review and preliminary engineering
- Develop realistic cost estimates by conducting 30% engineering
- Establish governance agreements
- Identify a dedicated source of funding for capital and operating

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