Third Track Feasibility Study 2006

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Matthew O. Tucker
I-95 Rail Corridor

Proposed Future Strategic Approach

- Provide $20 million to complete remaining 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
$20 Million to Complete Remaining Projects Funded Through VTA 2000

- **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.

- **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.

- **Franconia Third Track**: build 7 miles of third track between Alexandria and Fairfax County.

- **Fredericksburg Third Track**: upgrade a 3-mile controlled siding to mainline track conditions.

- **Additional Richmond Area Improvements**: upgrade signal and track between Staples Mill and Main St. Stations.
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

<table>
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<tr>
<th>Phase</th>
<th>Projects</th>
<th>Trains Added</th>
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| I     | AF Interlocking  
       | Consolidation of dispatch functions | 1 experimental mid-day Mon – Thurs  
       |                                      | 1 Regular mid-day Friday only |
| II    | Arkendale Crossovers  
       | 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  
       | Franconia 3rd Main  
       | Completion of Quantico Bridge | 1 regular round trip Fredericksburg train |
| V     | Fredericksburg to HA 3rd Main | 1 regular round trip Fredericksburg train |
Additional Funds for 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 preliminary engineering for original estimates
  - Cost escalations
  - Project refinements
2006 General Assembly Directive

Third Track Feasibility Study (HB 5012):
- Analyze feasibility of a third track
- Identify needed Right-of Way
- Develop implementation plan based on optimal options, including schedules for each phase and project financing
- Review legal and regulatory issues
- Estimate cost of powering passenger trains by electricity for Third Track from Washington, DC to Richmond
Definition of the Third Track and Anticipated Operation

- Not constructed as completely separate track and not dedicated to passenger service only.
- Would be a mainline track along with two other mainline tracks in an integrated system.
- New track built on east or west side of existing track.
- Crossovers would be located at key locations.
- Both passenger and freight train access throughout the day.
- Facilitates bi-directional traffic if one track occupied or blocked, anticipated reduced delays for VRE.
- Would not eliminate CSX heat restriction policy that limits train speeds during hot days.
Assumptions for Minimum/Partial Construction Costs: Items Included

- Assumes construction of a nearly continuous third track along the entire corridor.

- Includes substantial improvements between Main Street and Staples Mill Road Stations in Richmond Terminal Area.

- Assumes that third track and Richmond improvements can largely fit within the existing CSX Right-of-Way.

- Includes contingency of 30% of overall project construction costs.
Assumptions for Minimum/Partial Construction Costs: Items Excluded (1)

- Third track through Ashland or Fredericksburg
- New bridge across the Potomac River
- Electrification in the corridor
- Hampton Roads service connection
- Detailed environmental impacts and mitigation
- Costs for ROW acquisition or access costs, liability, maintenance and other legal issues
- Analysis of alternative ROW outside CSX corridor
- Costs for utility relocation or assessment of affected utility easement agreements
Assumptions for Minimum/Partial Construction Costs: Items Excluded (2)

- No preliminary engineering plans, field surveys or analyses available to develop cost estimate.

- No escalation to year of expenditure dollars, costs are in 2006 dollars.

- No consideration of unavoidable additional costs for construction of phased individual segments.
2006 General Assembly Report
Summary of Key Findings

- Feasibility of 3rd Track could not be determined from a cost and funding perspective.

- Incomplete cost estimate does not include several significant cost drivers:
  - Cost escalations due to phasing and inflation
  - Cost of electrification ($953 M minimum cost)
  - Purchase of right-of-way
  - Relocation of utilities
  - Route through Ashland or Fredericksburg
  - Potomac River bridge

- Total minimum/partial cost estimate:
  - Partial Third Track: $612.2 million
  - Richmond Terminal: $71.8 million
  - TOTAL: $684.0 million – major exclusions could dramatically increase this estimate

- Costs calculated in 2006 dollars.