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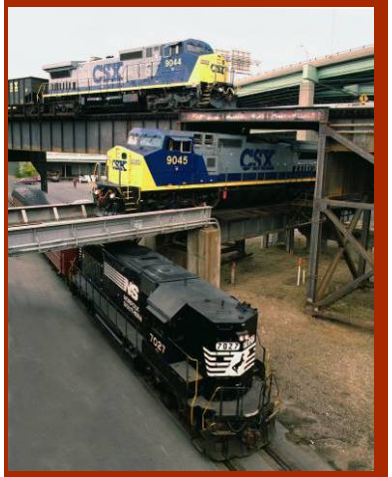

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Richmond/Hampton Roads Passenger Rail Project Tier I Draft EIS

Rail Advisory Board

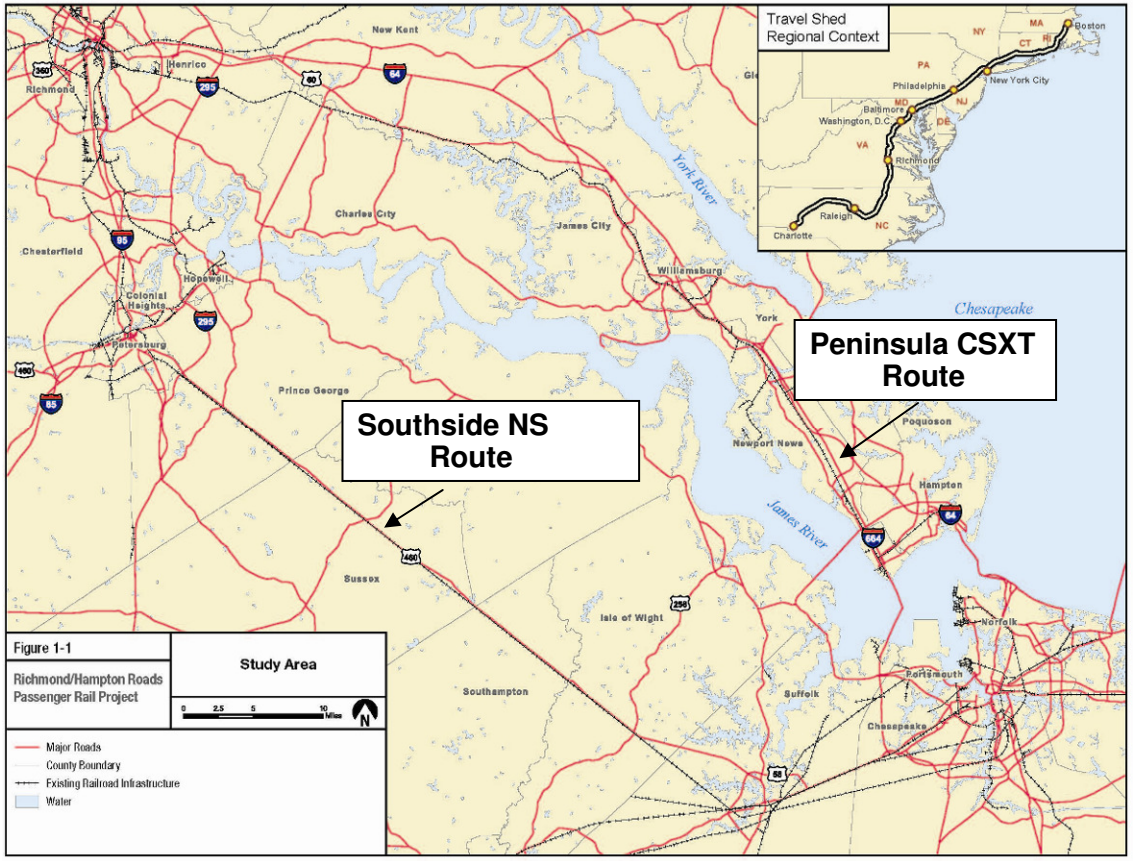
Kevin Page
Chief of Rail Transportation

Project Overview

- Tier I Environmental Impact Statement (EIS) to determine the best option to improve passenger rail service between Richmond and Hampton Roads.
- Several alternatives were evaluated and rated in key categories such as environmental impact, ridership, cost effectiveness, revenue and travel time.
- Public comment period on the Draft EIS is closed.
- Commonwealth Transportation Board selected the Preferred Alternative.

Two Routes and Five Alternatives

- Two routes:
  - Peninsula/CSXT
  - Southside/NS
- Five alternatives with varied characteristics:
  - Routes
  - Frequencies
  - Speeds



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Alternatives Considered

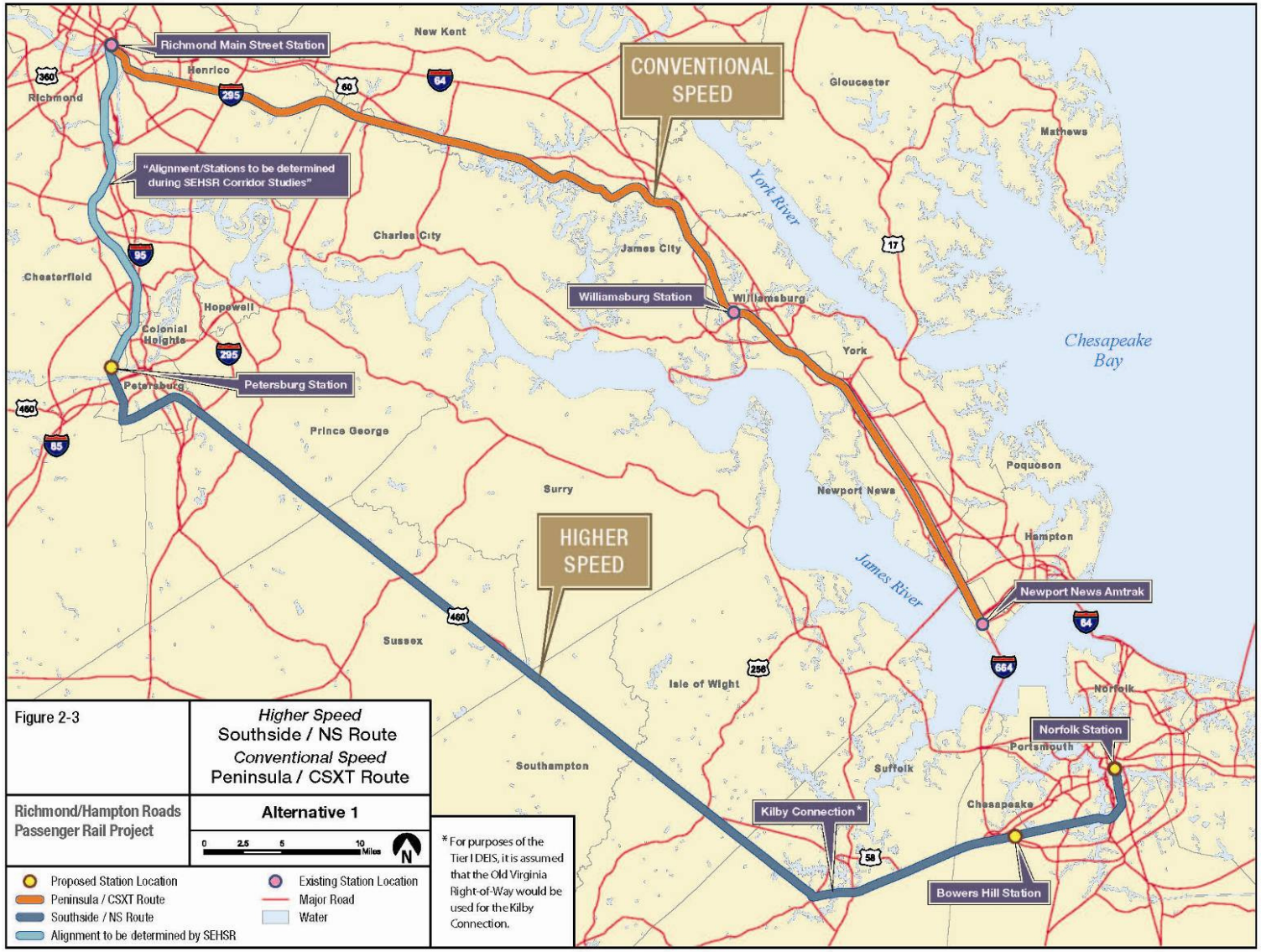
Alternative	Route	Route Miles	Trains	Maximum Speeds
Status Quo	Peninsula/CSXT Southside/NS	73.9 0	2 n/a	79 mph No train
No Action (Baseline)	Peninsula/CSXT Southside/NS	73.9 0	3 n/a	79 mph No train
Alternative 1	Peninsula/CSXT Southside/NS	73.9 101.0	3 6	79 mph 90-110 mph
Alternative 2a	Peninsula/CSXT Southside/NS	75.9 101.0	6 3	90-110 mph 79 mph
Alternative 2b	Peninsula/CSXT Southside/NS	75.9 0	9 0	90-110 mph No service

Status Quo and No Action Alternatives

- Status Quo Alternative
  - Existing Amtrak service (2 trains) on the Peninsula route
  - Existing highways
  - Existing local transit service
  - Existing air travel
  - Projects in financially constrained regional long range plans

- No Action Alternative (Baseline for Comparison)
  - Improved Amtrak service (3 trains) on the Peninsula route
  - Improved railroad infrastructure increasing on-time performance
  - Existing plus committed highway improvements
  - Existing plus committed local transit service
  - Existing air travel
  - Other projects in financially constrained regional long range plans

Alternative 1



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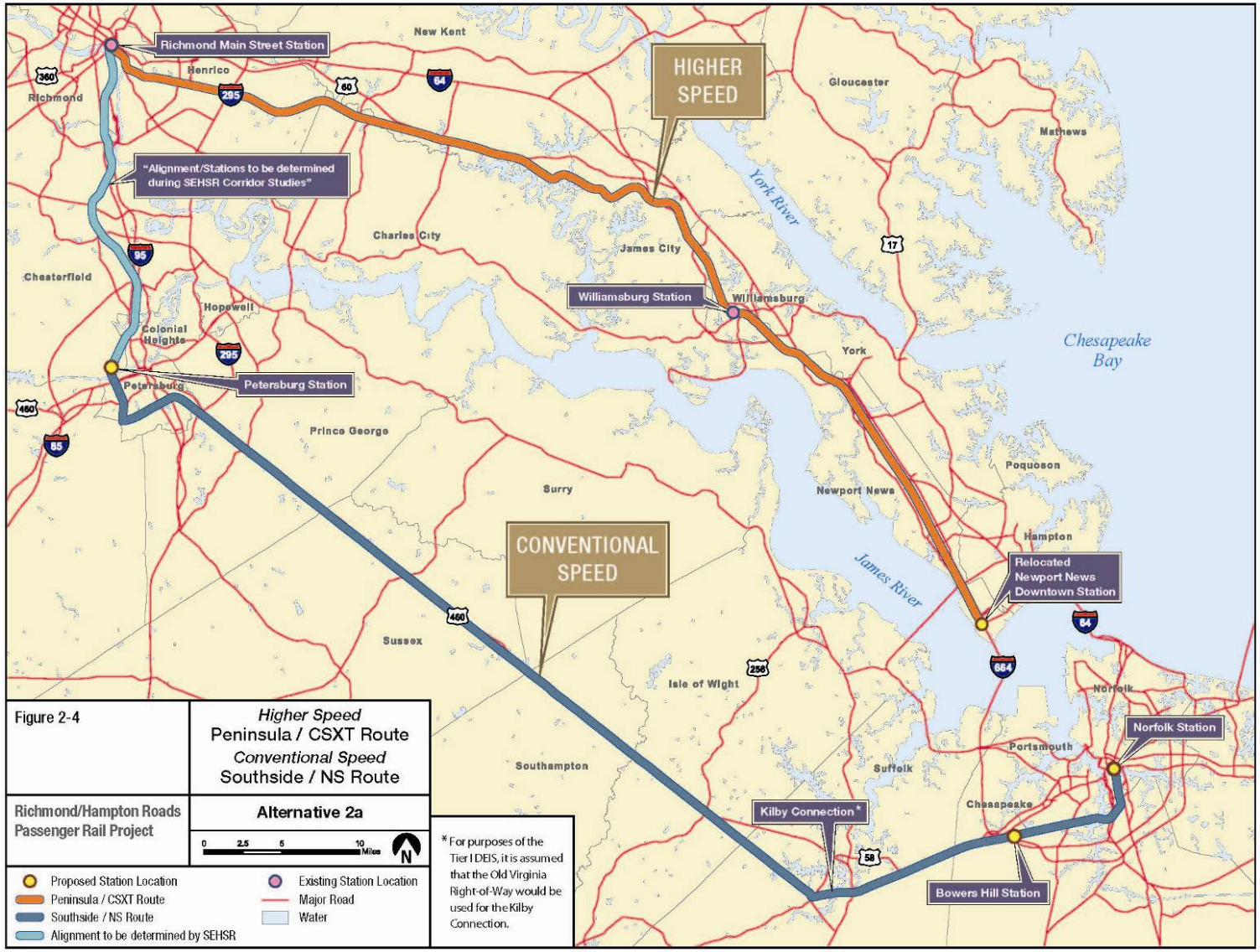
Alternative 2a



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Alternative 2b

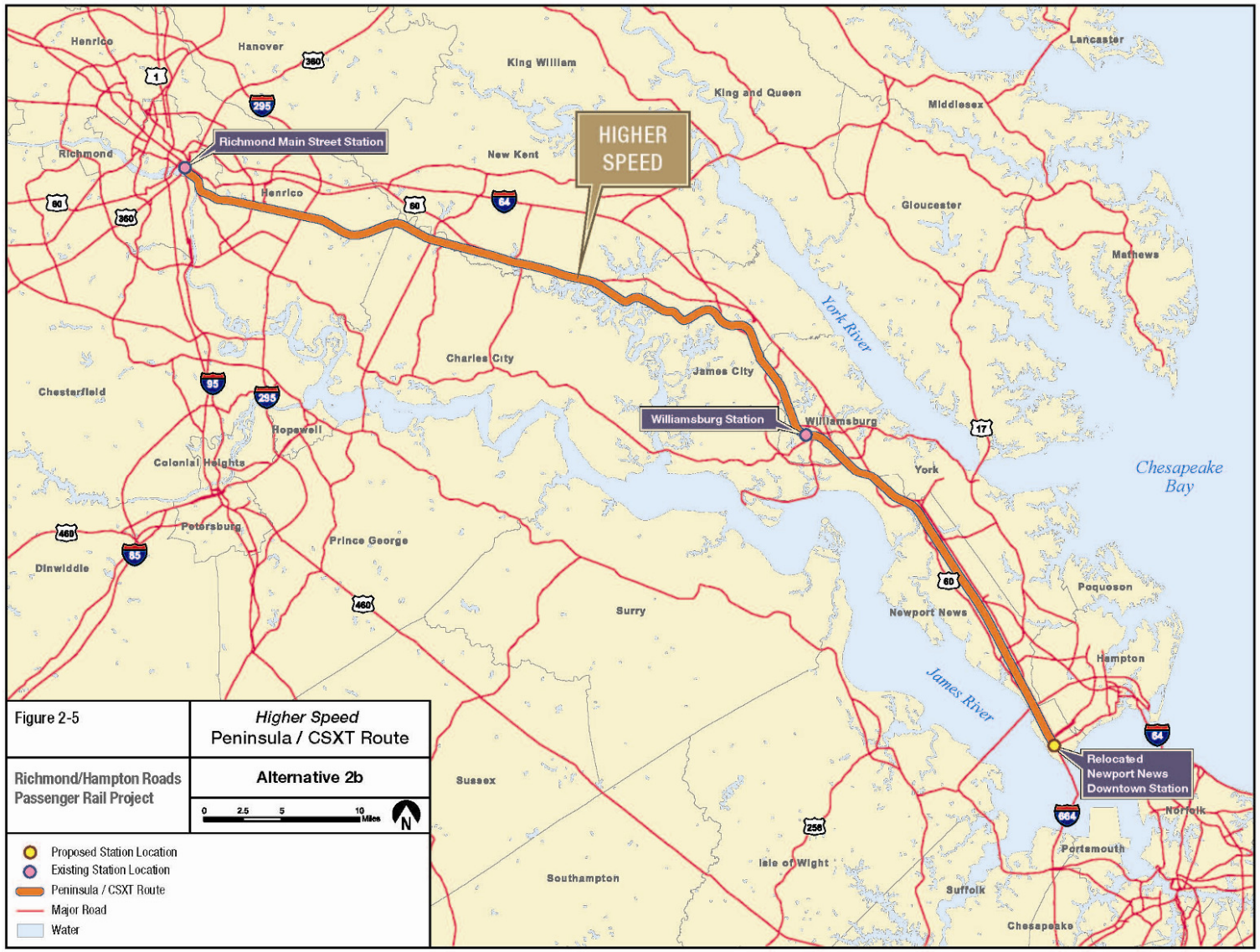

Figure 2-5 | *Higher Speed* Peninsula / CSXT Route

Richmond/Hampton Roads Passenger Rail Project | Alternative 2b

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Cost Effectiveness

Annualized Cost per Rider

Alternative	Route	90 MPH MAS	110 MPH MAS
Alternative 1 **(with Petersburg costs)**	Peninsula CSXT (79 mph)	95.34	95.82
	Southside NS (HSR)	108.72	109.76
	Cost per Rider	**$106.03**	**$107.09**
Alternative 1 **(without Petersburg costs)**	Peninsula CSXT (79 mph)	95.34	95.82
	Southside NS (HSR)	95.40	97.19
	Cost per Rider	**$95.39**	**$96.93**
Alternative 2a	Peninsula CSXT (HSR)	87.00	92.06
	Southside NS (79 mph)	272.75	296.35
	Cost per Rider	**$121.64**	**$126.01**
Alternative 2b	Peninsula CSXT (HSR)	88.88	92.98
	Southside NS (no trains)	n/a	n/a
	Cost per Rider	**$88.88**	**$92.98**

Cost effectiveness is calculated by annualizing capital costs, adding annual operating and maintenance costs and dividing the total by the high ridership estimate.

Environmental Comparison

Resource	Peninsula/CSXT Route	Southside/NS Route
Great Dismal Swamp	No effects.	Tracks are adjacent to resource. Proximity effects likely such as noise and vibration, more detailed analysis would occur during Tier 2 to determine any specific impacts. 47.75 acres of existing roadbed and surrounding area studied.
Wetlands	601 total wetland acres. Impacts would be limited to where new track bed, stations and parking expansions at stations are proposed.	475 total wetland acres. Impacts would be limited to where new track bed, stations and parking expansions at stations are proposed.
Section 4(f)/6(f)	16 resources (total of 275 acres within study boundary). No direct effects have been identified at this phase of the study. Proximity effects such as noise/vibration could occur.	4 resources (total of 79 acres within study boundary). No direct effects have been identified at this phase of the study. Proximity effects such as noise/vibration could occur.

Key Findings

- Status Quo and No Action Alternatives do not meet Purpose and Need.
- 90 mph is the optimum higher speed. Marginal ridership increases and minimal travel time savings at 110 mph require substantially more capital investment than 90 mph.
- Of the Build Alternatives:
  - Alternatives 1 and 2a serve the greatest population base with trains on both routes.
  - Alternatives 1 and 2a provide new passenger rail service to the Southside.
  - Alternatives 1 and 2a have the highest ridership.
  - Alternative 2b has the lowest capital and operating costs.
  - Alternative 2b is the most cost effective at $88.88 per rider at 90 mph.
  - Alternative 2b has the least potential for negative environmental effects of the Build alternatives because improvements would only occur along one route and primarily within that route's existing right of way.

Public Comment Period

- Public comment period: December 23, 2009-February 11, 2010
- January 26: Richmond
  - 53 attendees
- January 27: Newport News
  - 99 attendees
- January 28: Norfolk
  - 584 attendees

Summary of Public Comments Received

- Alternative 1 is the locally preferred alternative.
  - Six high-speed trains on the Southside route.
  - Three conventional speed trains on the Peninsula route.

- Total of 758 public commenters (there are some double counts):
  - 0% Status Quo
  - 0% No Action
  - 9% Support for high speed rail
  - 25% No Preference
  - 58% Alternative 1
  - 6% Alternative 2a
  - 2% Alternative 2b

- Other comments received:
  - On-time performance of existing trains should be improved.
  - Draft EIS should not consider the Richmond/Petersburg costs.
  - Ridership forecast should not consider the Third Crossing.
  - Speed options higher than 110 mph should be considered.
  - True high-speed train technologies should be considered.
  - Norfolk Southern commented on how to begin 79 mph service on the Southside route.

Summary of Agency Comments Received

- The preference for high-speed trains on Southside/NS route was the most frequent comment received through metropolitan planning organizations, local governments and business leaders.
  - Alternative 1 was endorsed by Hampton Roads Transportation Planning Organization.
  - Alternative 1 was endorsed by Tri-Cities Metropolitan Planning Organization.
  - Alternative 1 was endorsed by the Richmond Area Metropolitan Planning Organization.

Final Analysis and Recommendations

- 90 mph is the optimum higher speed. Marginal ridership increases and minimal travel time savings at 110 mph require substantially more capital investment than 90 mph.
  - Travel time savings range between 6-8 minutes by increasing the operating speed from 90 mph to 110 mph.
  - Capital cost for 110 mph is significantly higher than 90 mph and ranges between $68 and $101 million depending on route selected.
- Eliminating the Richmond/Petersburg capital cost from the cost effectiveness calculation results in an annualized cost per rider for Alternative 1 of $95.39 at 90 mph and $96.93 at 110 mph, compared to $88.88 at 90 mph and $92.98 at 110 mph for Alternative 2b.
- Although Alternative 2b is the most cost effective, Alternative 1 serves the greatest population base and enhances mobility to the Southside of Hampton Roads.
- Alternative 1 has the most public support of any alternative.
- On Wednesday, February 17, 2010, the Commonwealth Transportation Board approved Alternative 1 as the preferred alternative with an incremental approach toward the maximum operating speed of 90 mph where practical and feasible.

Next Steps

- DRPT will apply for federal funds to advance the alternative selected by the CTB.
- DRPT will prepare and submit the Final Tier I EIS to the FRA.
  - Response to comments will be detailed in the Final EIS.
- The FRA will issue a Record of Decision on the Final Tier I EIS.
- Additional federal guidance will define the next step in the federal review process for this specific project, however next steps generally include:
  - Tier II federal review (a more detailed analysis of the preferred alternative)
  - Preliminary engineering
  - Final design
  - Construction
- Additional funding will be required to advance this project beyond the Final Tier I EIS phase.

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Thank You!

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