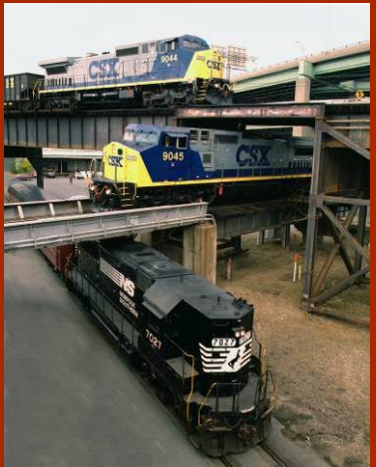




# Richmond/Hampton Roads Passenger Rail Project Tier I Draft EIS

Commonwealth Transportation Board



**Kevin Page**

**Chief of Rail Transportation**



# Project Overview

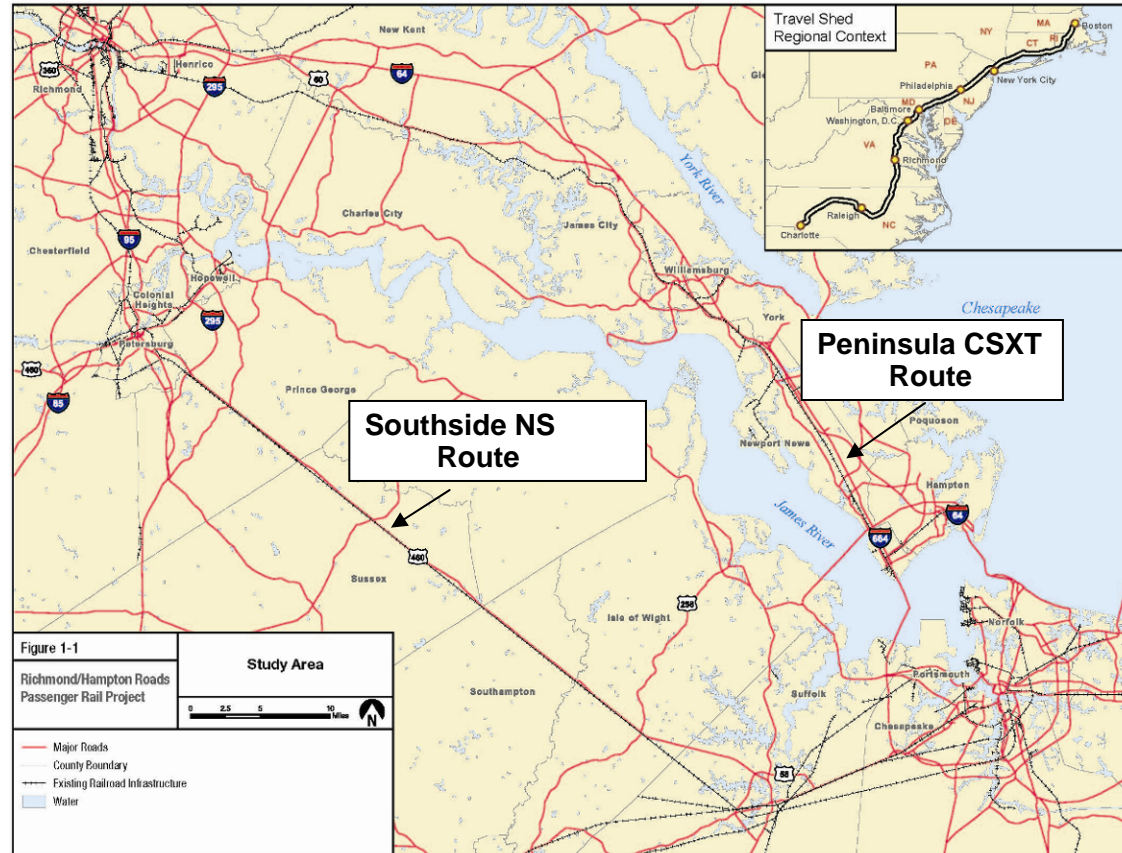
- ❑ Tier I Environmental Impact Statement (EIS) to determine the best option to improve passenger rail service between Richmond and Hampton Roads.
- ❑ The Federal Railroad Administration (FRA) is the lead federal agency and DRPT is the lead state agency.
- ❑ The Draft EIS document is now available for agency and public comment.
- ❑ Several alternatives were evaluated and rated in key categories such as environmental impact, capital and operating cost, ridership, revenue and travel time.
- ❑ Once public comments have been received and considered, the Commonwealth Transportation Board will select the Preferred Alternative.

# Federal Funding

- ❑ Federal funding is a critical component of project financial plan.
- ❑ The Commonwealth will apply for federal funds to support project costs.
- ❑ The Richmond/Hampton Roads Passenger Rail Project must have “independent utility”, which means that it does not depend on the completion of any other projects.
  - Can be developed as a complete and independent project.
  - Each alternative has logical termini.
  - No alternative depends on completion of any other project.

# Two Routes and Five Alternatives

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



# Alternatives Under Consideration

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

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# Status Quo and No Action Alternatives

## □ Status Quo Alternative

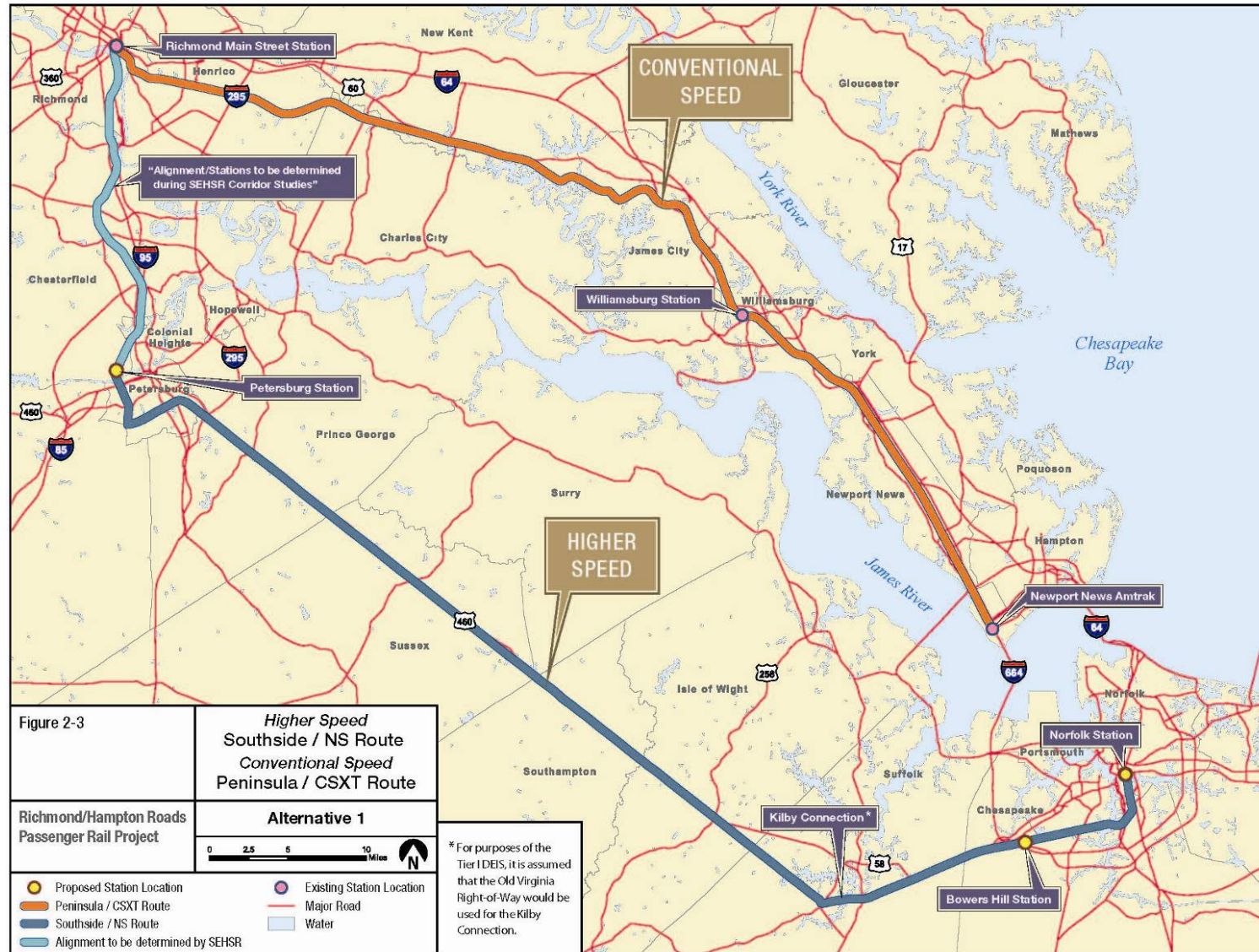
- Existing Amtrak service (2 trains) on the Peninsula route
- Existing highways
- Existing local transit service
- Existing air travel
- Projects in financially constrained regional long range plans

## □ No Action Alternative (Baseline for Comparison)

- Improved Amtrak service (3 trains) on the Peninsula route
- Existing highways
- Existing local transit service
- Existing air travel
- Projects in financially constrained regional long range plans

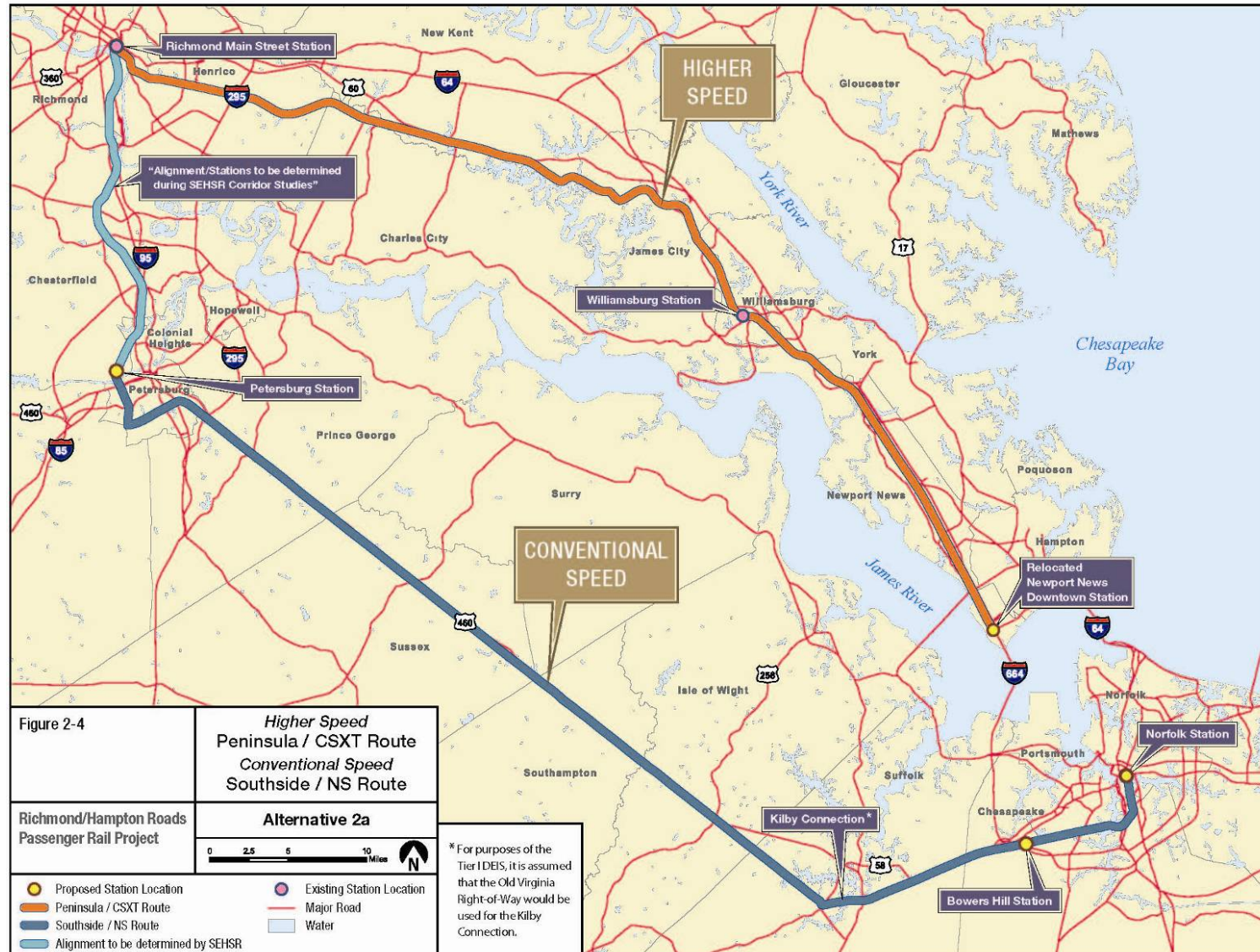


# Alternative 1



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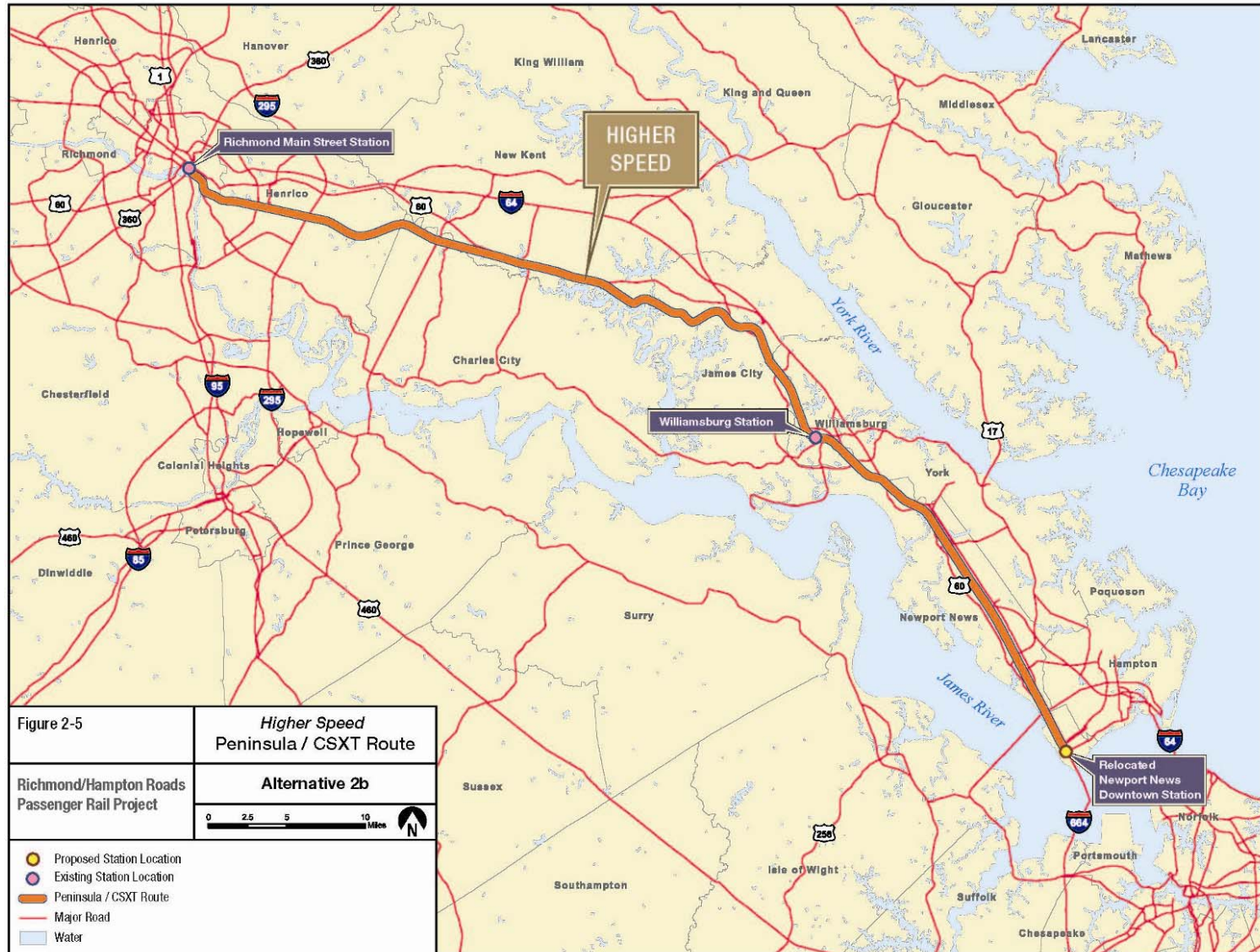
# Alternative 2a



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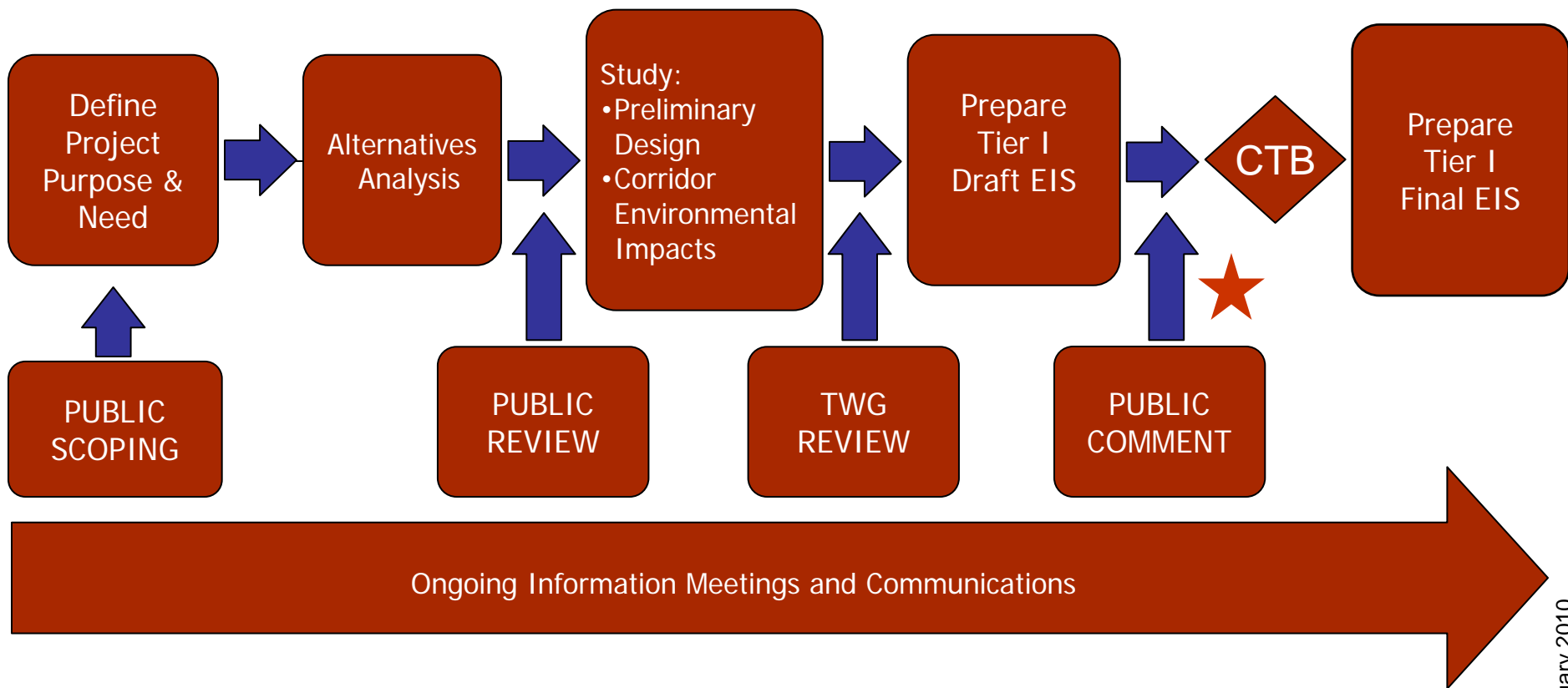
# Alternative 2b



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# Evaluating Alternatives

## Richmond/Hampton Roads Passenger Rail Project Tier 1 Draft Environmental Impact Statement



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# Travel Time between Terminal City and Richmond, VA

| Alternatives  | Terminal City                 | Travel Time          | Miles |
|---|-------------------------------|----------------------|-------|
| Status Quo<br>79 mph Peninsula                            | Existing Newport News Station | 1:25                 | 73.9  |
| No Action<br>79 mph Peninsula                             | Existing Newport News Station | 1:11                 | 73.9  |
| 90 mph Peninsula<br>110 mph Peninsula                     | Downtown Newport News         | 1:03<br>0:57         | 75.9  |
| 79 mph Southside<br>90 mph Southside<br>110 mph Southside | Downtown Norfolk              | 1:38<br>1:35<br>1:27 | 101.0 |

1 hour 25 minutes = 1:25

- ❑ 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.

# Projected 2025 Ridership

| Alternative                | Estimate Range | Total Ridership<br>90 mph MAS | Total Ridership<br>110 mph MAS |
|----------------------------|----------------|-------------------------------|--------------------------------|
| Status Quo<br>(79 mph MAS) | High           | 262,300                       | 262,300                        |
|                            | Low            | 245,500                       | 245,000                        |
| No Action<br>(79 mph MAS)  | High           | 464,800                       | 464,800                        |
|                            | Low            | 425,700                       | 425,700                        |
| Alternative 1              | High           | 1,110,100                     | 1,162,200                      |
|                            | Low            | 939,600                       | 984,200                        |
| Alternative 2a             | High           | 1,124,300                     | 1,161,400                      |
|                            | Low            | 924,700                       | 955,000                        |
| Alternative 2b             | High           | 1,101,100                     | 1,147,000                      |
|                            | Low            | 897,800                       | 937,000                        |



# Estimated Capital Cost

| Alternative           | Route                   | 90 MPH<br>MAS  | 110 MPH<br>MAS |
|-----------------------|-------------------------|----------------|----------------|
| <b>Alternative 1</b>  | Peninsula CSXT (79 mph) | 0.0            | 0.0            |
|                       | Southside NS (HSR)      | 475.4          | 543.0          |
|                       | <b>Total</b>            | <b>\$475.4</b> | <b>\$543.0</b> |
| <b>Alternative 2a</b> | Peninsula CSXT (HSR)    | 330.0          | 431.9          |
|                       | Southside NS (79 mph)   | 412.3          | 412.3          |
|                       | <b>Total</b>            | <b>\$742.3</b> | <b>\$844.2</b> |
| <b>Alternative 2b</b> | Peninsula CSXT (HSR)    | 330.0          | 431.9          |
|                       | Southside NS (No train) | 0.0            | 0.0            |
|                       | <b>Total</b>            | <b>\$330.0</b> | <b>\$431.9</b> |

Year of Expenditure Estimated in 2008 Dollars (In Millions)

# Estimated Operating Cost

| Alternative           | Route                   | 90 MPH<br>MAS | 110 MPH<br>MAS |
|-----------------------|-------------------------|---------------|----------------|
| <b>Alternative 1</b>  | Peninsula CSXT (79 mph) | 21.3          | 21.3           |
|                       | Southside NS (HSR)      | 58.7          | 60.1           |
|                       | <b>Total</b>            | <b>\$80.0</b> | <b>\$81.4</b>  |
| <b>Alternative 2a</b> | Peninsula CSXT (HSR)    | 53.4          | 54.9           |
|                       | Southside NS (79 mph)   | 24.5          | 24.5           |
|                       | <b>Total</b>            | <b>\$77.9</b> | <b>\$79.4</b>  |
| <b>Alternative 2b</b> | Peninsula CSXT (HSR)    | 71.7          | 72.4           |
|                       | Southside NS (No Train) | 0.0           | 0.0            |
|                       | <b>Total</b>            | <b>\$71.7</b> | <b>\$72.4</b>  |

Year of Expenditure Estimated in 2008 Dollars (In Millions)

# Cost Effectiveness

## Annualized Cost per Rider

| Alternative           | Route                    | 90 MPH<br>MAS   | 110 MPH<br>MAS  |
|-----------------------|--------------------------|-----------------|-----------------|
| <b>Alternative 1</b>  | Peninsula CSXT (79 mph)  | 95.34           | 95.82           |
|                       | Southside NS (HSR)       | 108.72          | 109.76          |
|                       | <b>Average</b>           | <b>\$106.03</b> | <b>\$107.09</b> |
| <b>Alternative 2a</b> | Peninsula CSXT (HSR)     | 87.00           | 92.06           |
|                       | Southside NS (79 mph)    | 272.75          | 296.35          |
|                       | <b>Average</b>           | <b>\$121.64</b> | <b>\$126.01</b> |
| <b>Alternative 2b</b> | Peninsula CSXT (HSR)     | 88.88           | 92.98           |
|                       | Southside NS (no trains) | n/a             | n/a             |
|                       | <b>Average</b>           | <b>\$88.88</b>  | <b>\$92.98</b>  |

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

# Environmental Considerations

- ❑ Potential physical impacts primarily limited to areas where additional right of way may be required, such as:
  - Sidings for passing trains
  - New or improved rail connections
  - Parking expansions
  - New stations
  
- ❑ Proximity impacts may result from:
  - New passenger rail service
  - Increased frequencies of passenger rail service
  - Increased speeds of passenger rail service
  - Train horn noise at grade crossings



# Potential Effects: Status Quo and No Action Alternatives

| Alternative                           | Limit Highway Congestion          | Probable Air Quality Impacts | Probable Wetland, Floodplain and Wildlife Habitat Impacts | Probable Noise Impacts | Probable Vibration Impacts | Sensitive Land Uses, Historic Properties and Open Space Impacts |
|---------------------------------------|-----------------------------------|------------------------------|---|------------------------|----------------------------|---|
| <b><u>Status Quo</u></b><br>Peninsula | Does not support purpose and need | No impacts                   | No impacts  | No impacts             | No impacts                 | No impacts  |
| Southside                             | No train                          | No train                     | No train  | No train               | No train                   | No train  |
| <b><u>No Action</u></b><br>Peninsula  | Does not support purpose and need | Baseline                     | Baseline  | Baseline               | Baseline                   | Baseline  |
| Southside                             | No train                          | No train                     | No train  | No train               | No train                   | No train  |

Potential effects stated relative to project goal or objective when compared to No Action

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# Potential Effects: Alternative 1

| Route                     | Limit Highway Congestion | Probable Air Quality Impacts | Probable Wetland, Floodplain and Wildlife Habitat Impacts | Probable Noise Impacts | Probable Vibration Impacts | Sensitive Land Uses, Historic Properties and Open Space Impacts |
|---------------------------|--------------------------|------------------------------|---|------------------------|----------------------------|---|
| Peninsula (79 mph)        | No impacts               | No impacts                   | No impacts  | No impacts             | No impacts                 | No impacts  |
| Southside (90 or 110 mph) | Supports                 | Supports                     | Potentially severe impacts                                | Impacts                | Impacts                    | Supports economic development, impacts open space               |
| <b>Overall rating</b>     | <b>+</b>                 | <b>+</b>                     | <b>- -</b>  | <b>- -</b>             | <b>- -</b>                 | <b>+</b>  |

Potential effects stated relative to project goal or objective and No Action baseline alternative.

**Legend:**

**++** strongly supports, **+** supports; **0** no impacts; **-** Minor negative impacts; **- -** Severe impacts

# Potential Effects: Alternative 2a

| Route                       | Limit Highway Congestion | Probable Air Quality Impacts | Probable Wetland, Floodplain and Wildlife Habitat Impacts | Probable Noise Impacts | Probable Vibration Impacts | Sensitive Land Uses, Historic Properties and Open Space Impacts |
|-----------------------------|--------------------------|------------------------------|---|------------------------|----------------------------|---|
| Peninsula<br>(90 – 110 mph) | No impacts               | No impacts                   | Probable impacts  | Probable impacts       | Probable impacts           | Supports station area and economic development                  |
| Southside<br>(79 mph)       | Supports                 | Supports                     | Potentially severe impacts                                | Severe impacts         | Severe impacts             | Supports economic development, impacts open space               |
| <b>Overall rating</b>       | <b>+</b>                 | <b>+</b>                     | <b>- -</b>  | <b>- -</b>             | <b>- -</b>                 | <b>+</b>  |

Potential effects stated relative to project goal or objective and No Action baseline alternative.

**Legend:**

**++** strongly supports, **+** supports; **0** no impacts; **-** Minor negative impacts; **- -** Severe impacts

# Potential Effects: Alternative 2b

| Route                   | Limit Highway Congestion  | Probable Air Quality Impacts    | Probable Wetland, Floodplain and Wildlife Habitat Impacts | Probable Noise Impacts | Probable Vibration Impacts | Sensitive Land Uses, Historic Properties and Open Space Impacts |
|-------------------------|---------------------------|---------------------------------|---|------------------------|----------------------------|---|
| Peninsula (90 -110 mph) | Supports purpose and need | Supports goals, positive impact | Probable impacts  | Probable impacts       | Probable impacts           | Supports station area and economic development                  |
| Southside (no train)    | No train                  | No train                        | No train  | No train               | No train                   | No train  |
| <b>Overall rating</b>   | <b>+</b>                  | <b>+</b>                        | <b>-</b>  | <b>-</b>               | <b>- -</b>                 | <b>++</b>   |

Potential effects stated relative to project goal or objective and No Action baseline alternative.

**Legend:**

**++** strongly supports, **+** supports; **0** no impacts; **-** Minor negative impacts; **- -** Severe impacts



# Public Involvement and Agency Outreach

- ❑ Technical Working Group meetings
- ❑ Speakers Bureau meetings
- ❑ Newsletters and fact sheets
- ❑ Public information meetings
- ❑ Project Web site
- ❑ Postcards
- ❑ Display ads in newspapers
- ❑ Media contacts

**Higher-Speed Rail Service Could Be In Your Future!**

Please join us for an in-person meeting that could greatly impact your future. If you travel or live in or between a Hampton Roads, Richmond or other New England area, then you may join in discussions about possible Passenger Rail Service. These regions could ultimately be connected to the Southeast, Northeast and Mid-Atlantic United States as part of the Southeast High-Speed Rail Corridor being planned.

**Tell Us What You Think**  
The Virginia Department of Rail and Public Transportation wants to know what you think about possible rail transportation in your area. For meetings will be held in communities to give you your input about passenger rail service options. Two studies are being studied:

- Focused on Potomac to South Hampton Roads, between Virginia Beach, Norfolk, Portsmouth, Suffolk and Chesapeake
- The existing Atlantic route from Richmond to Washington to Newport News

**Your Opinion Makes A Big Difference**  
During these meetings, or "listening" sessions, your input is essential in helping identify the preferred passenger rail route and alternatives. The information we gather from you and other citizens will form the basis of our study.

**Richmond/Hampton Roads Passenger Rail Study**  
Virginia Department of Rail and Public Transportation  
Open Information Line available at 877-742-6227 (877-RID-1313)

Share your comments at meetings or online at [www.richznrrail.info](http://www.richznrrail.info)



# 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.

# Overview of Next Steps

- ❑ DRPT will present a summary of public comments received at the February Commonwealth Transportation Board (CTB) workshop.
- ❑ The CTB will be asked to select the Preferred Alternative at the February action meeting.
- ❑ DRPT will apply for Round 2 Track 2 ARRA funds to advance the Preferred Alternative.
- ❑ DRPT will prepare and submit the Final Tier I EIS to the FRA.
- ❑ The FRA will issue a Record of Decision on the alternative that is eligible for federal funding.

Thank You!

