



Virginia Department of Rail and Public Transportation

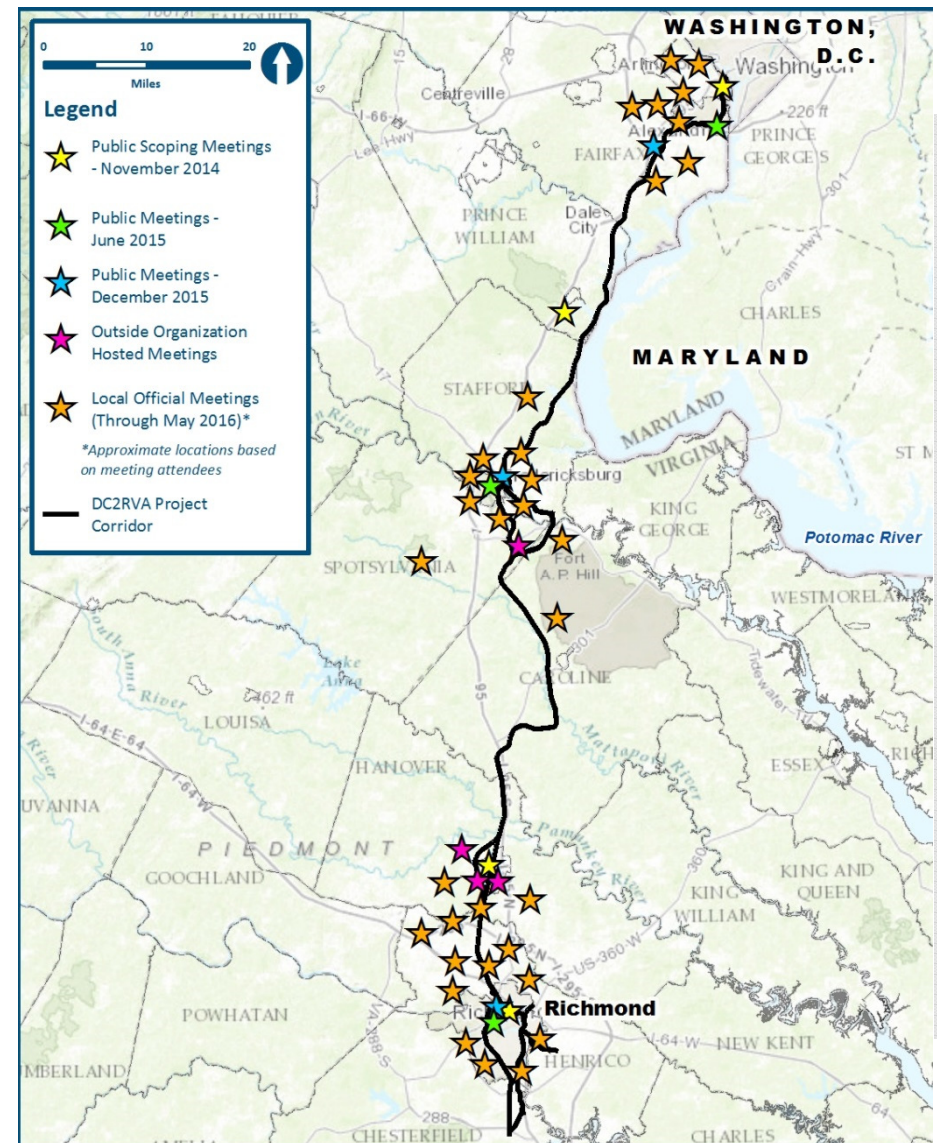
DC2RVA Briefing

December 6, 2016

Emily Stock
Manager of Rail
Planning

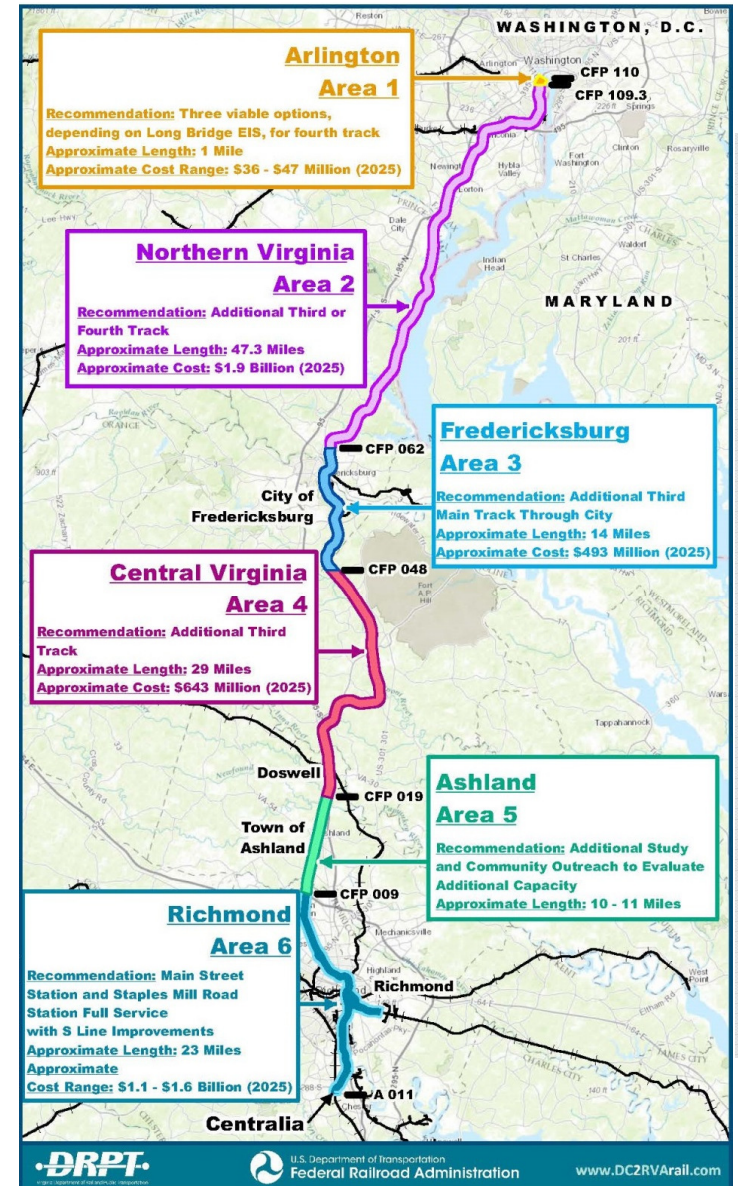
Public Process

- Mailings/emails to 15,000 including 300 government officials
- 31 newspapers
- Interactive project website and social media posts
- 2,500 project brochures mailed
- >10,000 property owner letters
- 46 meetings/workshops with local officials
- 20 informational meetings
- 9 federal/state regulatory agency coordination meetings
- 12 public meetings



DRPT Recommendations for DC2RVA

- Must have additional track capacity to support passenger, commuter, and freight growth on the corridor
- Northern Virginia is most congested area, needs to be implementation priority
- Expanding capacity on the Long Bridge across the Potomac River is critical
- Improvements to central and Richmond areas needed, but less critical in short term



December 6, 2016

Area 1: Arlington (~1 mile)

DRPT Recommendation - Add Two Tracks Within Existing Right-of-Way consistent with Long Bridge Study Recommendation (\$36-\$47 Million)

- 1A. Add two tracks east
- 1B. Add two tracks west
- 1C. Add one track west and one track east

Rationale:

- Supports expanded intercity passenger service, VRE commuter service, CSX freight service, including for Port of Virginia
- Project improvements within existing CSX-owned ROW

Notes:

- Final decision tied to DDOT Long Bridge EIS Recommendation



Area 2: Northern VA (47 miles)

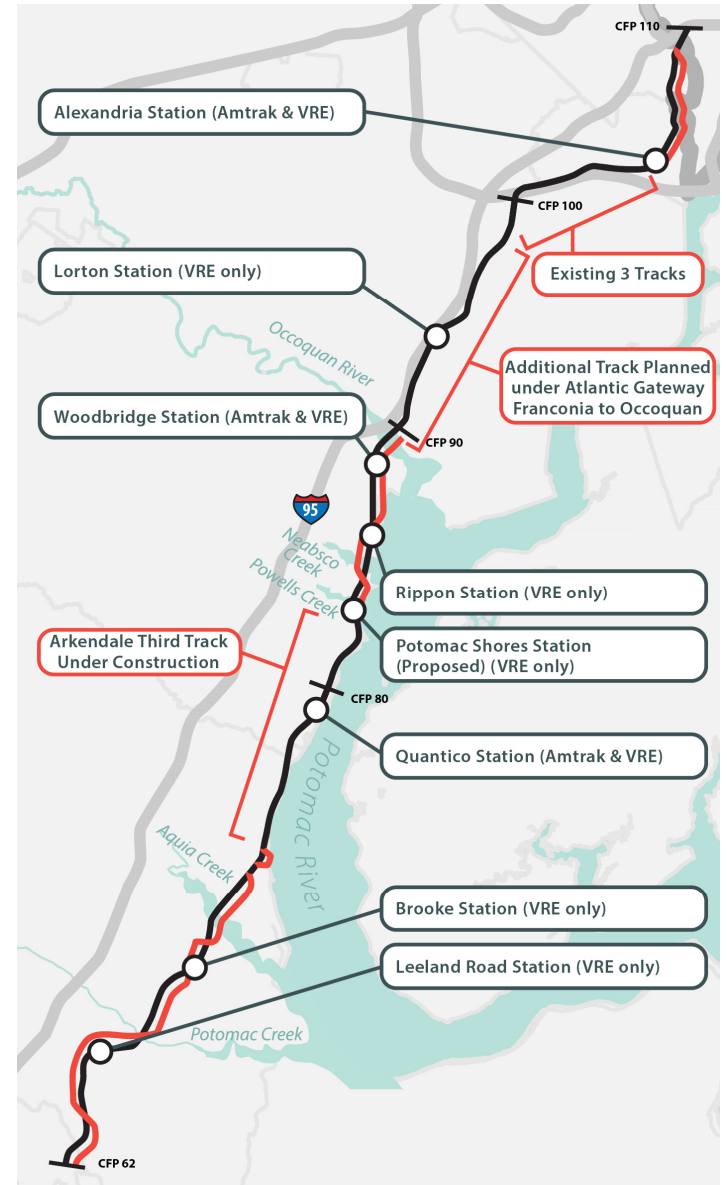
DRPT Recommendation - Add Fourth Track Crystal City to Alexandria; Add Third Track Alexandria to Fredericksburg within Existing Right-of-Way (\$1.4 Billion)

Rationale:

- Supports expanded intercity passenger service, VRE commuter service, CSX freight service, including for Port of Virginia
- Project improvements largely within existing CSX-owned ROW

Notes:

- Major water crossings at Occoquan, Neabsco, Powells, and Aquia (New bridges parallel to existing rail bridges)



Area 3: Fredericksburg (14 miles)



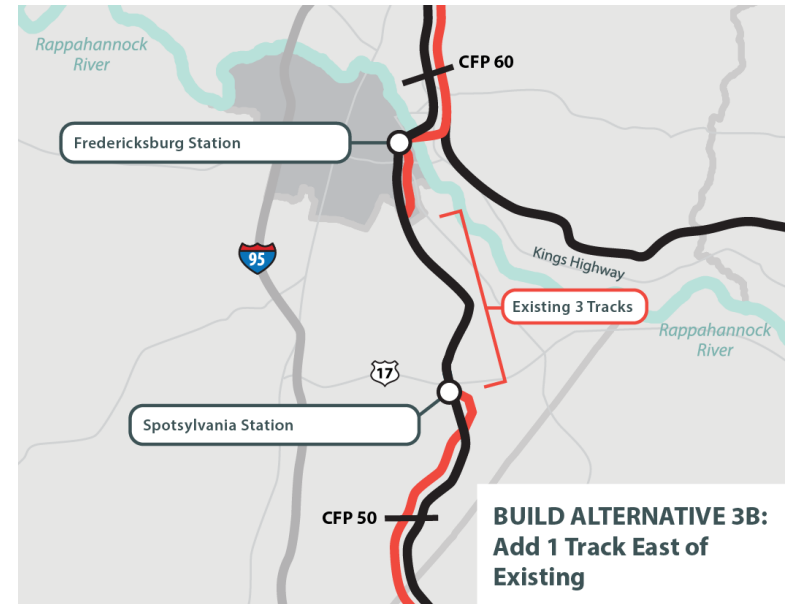
DRPT Recommendation - Add Third Track through City of Fredericksburg on Existing Right-of-Way (\$493 Million)

Rationale:

- Less property impacts, wetland impacts & cost compared to bypass alternative
- Supports expanded intercity passenger service, CSX freight service, including for Port of Virginia
- Consistent with City Comprehensive Plan
- Improvements address future station/platform/parking needs
- Project improvements largely within CSX-owned ROW

Notes:

- Major water crossing at Rappahannock River (New bridge parallel to existing rail bridge)



Area 4: Central VA (29 miles)

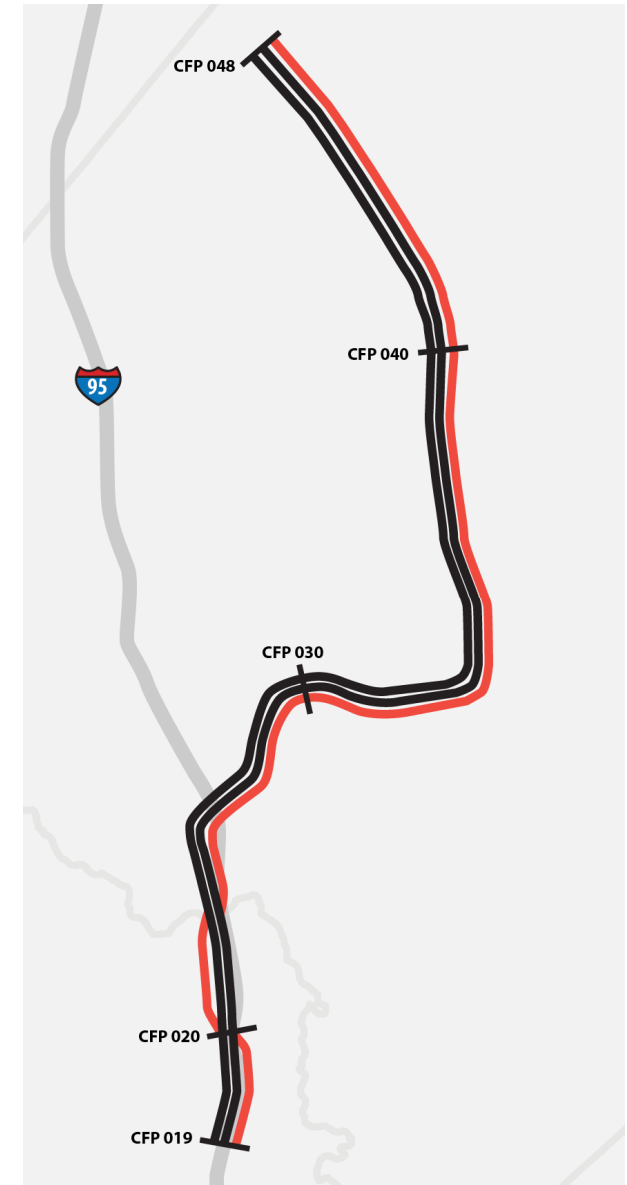
DRPT Recommendation - Add Third Track in Existing Right-of-Way, Spotsylvania to Doswell (\$643 Million)

Rationale:

- Supports expanded intercity passenger service, VRE commuter service, CSX freight service, including for Port of Virginia
- Project improvements largely within existing CSX-owned ROW

Notes:

- Multiple small waterway crossings, wetlands



Ashland Area Considerations

- Need additional capacity in the long term (by 2040)
- Limited existing ROW through town
- Pedestrian and crossing safety issues



December 6, 2016

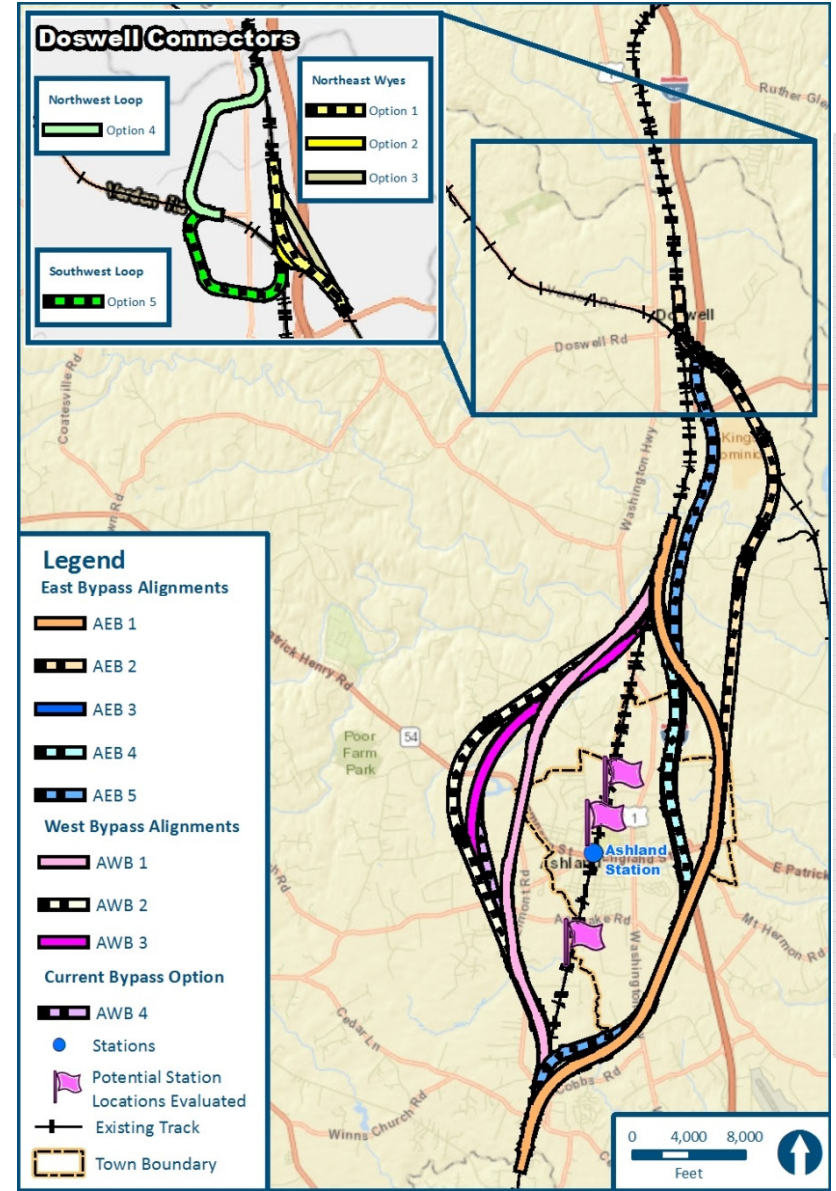
Ashland Alternatives Evaluation

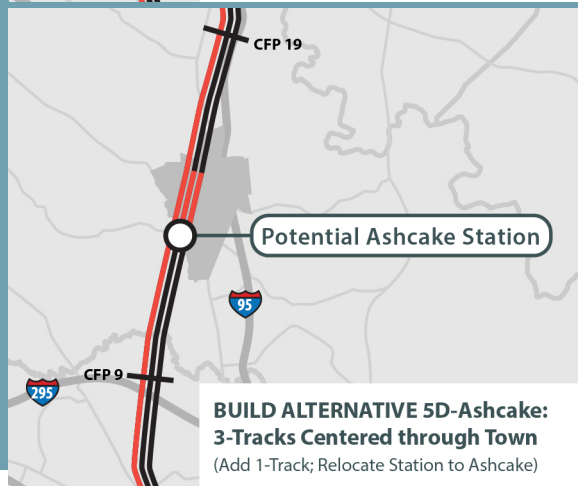
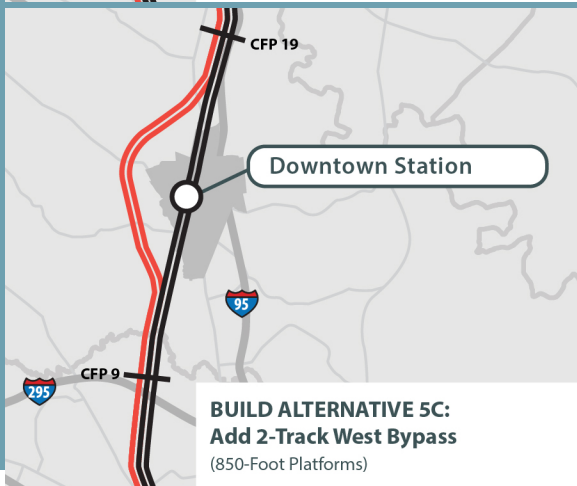
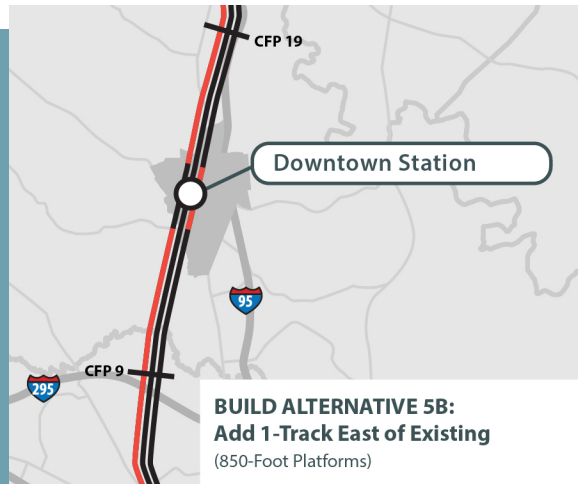
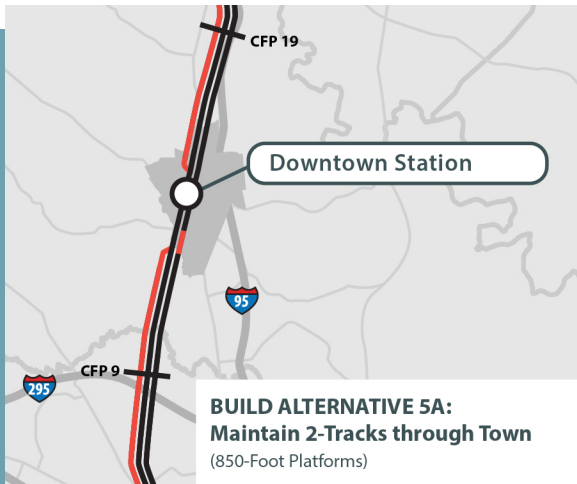


Considered Wide Range of Alternatives

- No Additional Track
- Add Track At-Grade (3 options)
- Add Track Above Grade (3 options)
- Add Track in Tunnel
 - Cut and Cover (3 options)
 - Deep bore (4 options)
- East Bypass (5 routes)
- West Bypass (4 routes)
- Buckingham Branch RR Freight Diversion

December 6, 2016





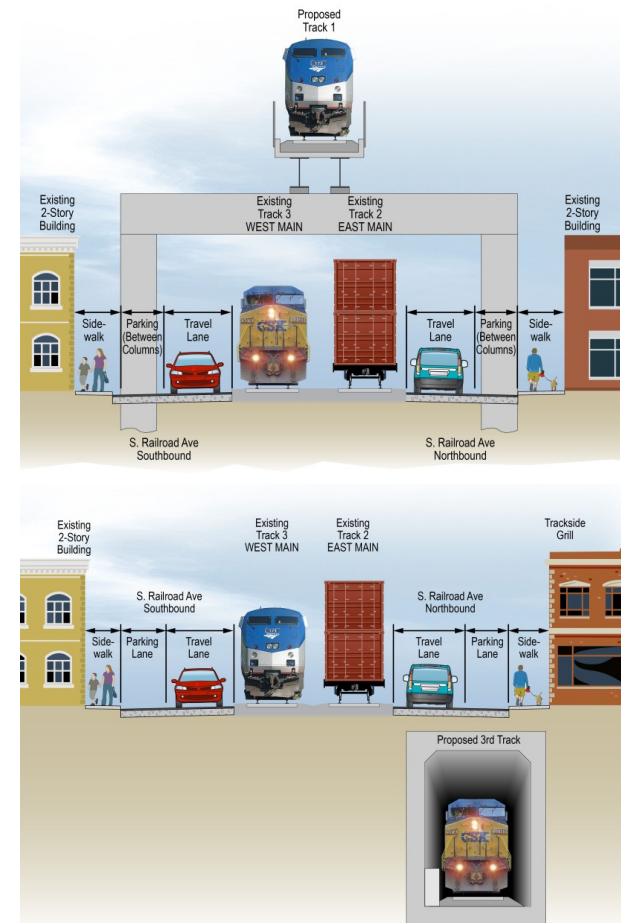
Ashland Area Alternatives

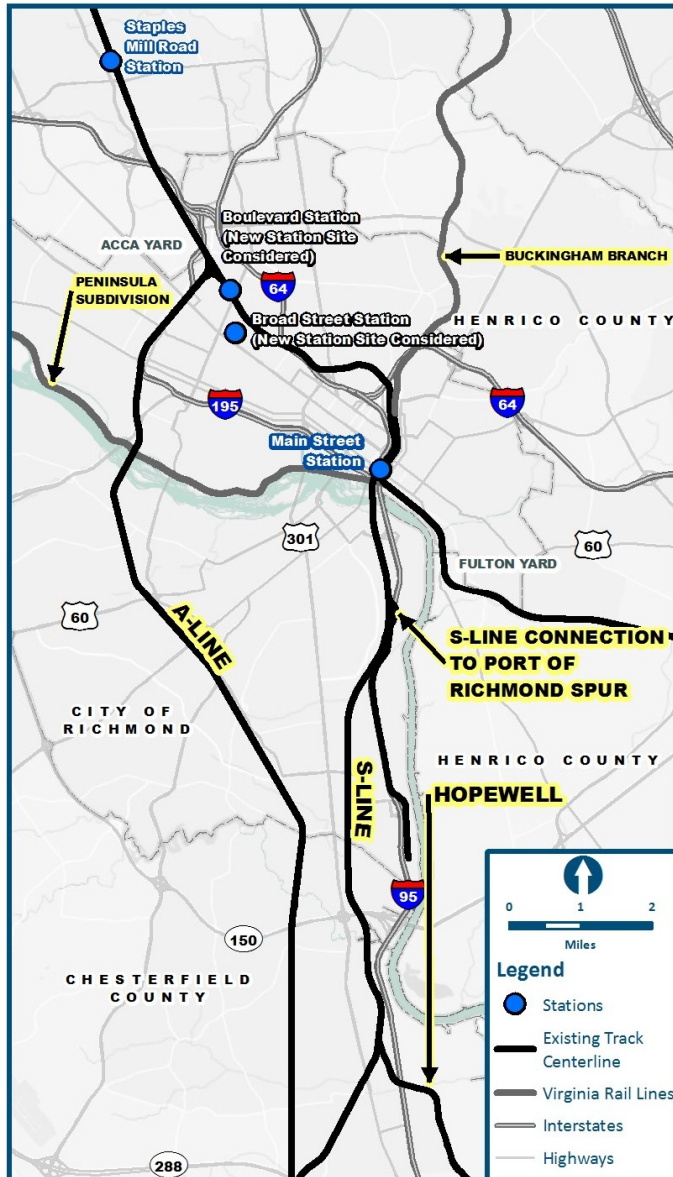
Area 5: Ashland Area

DRPT Recommendation - Additional Study of Capacity Improvements

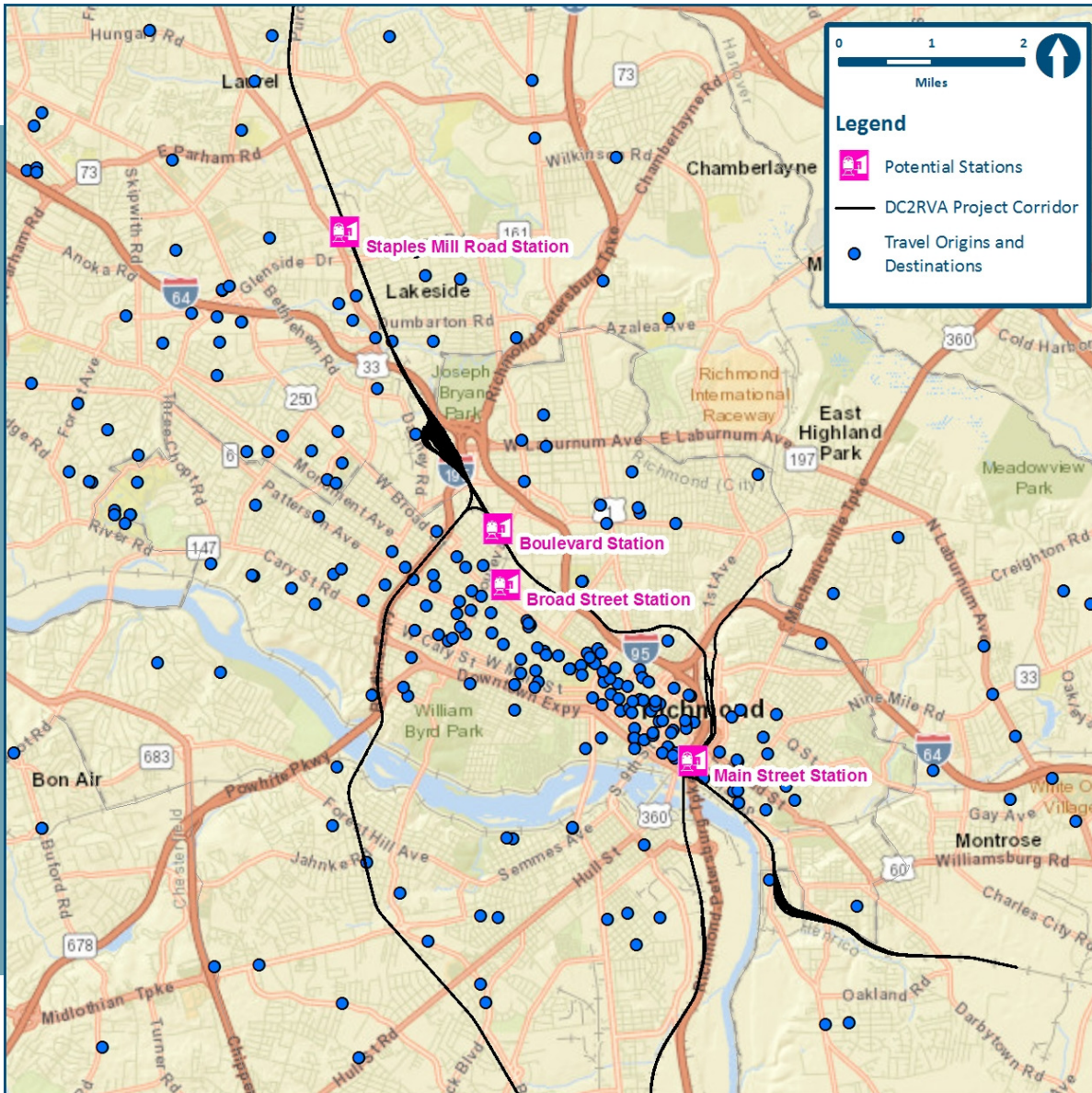
Rationale:

- Consistent with Richmond to Raleigh Tier II Final EIS (Petersburg Station Study)
- Put all capacity alternatives on the table, including BBRR and east bypasses, tunnels, etc.
- Community Advisory Committee (Localities, Randolph-Macon College, other stakeholders, plus CSX and BBRR)





Richmond Area Rail Network



Richmond Area Travel Origins and Destinations from Ridership Survey

- Approximately half are inside the urban core

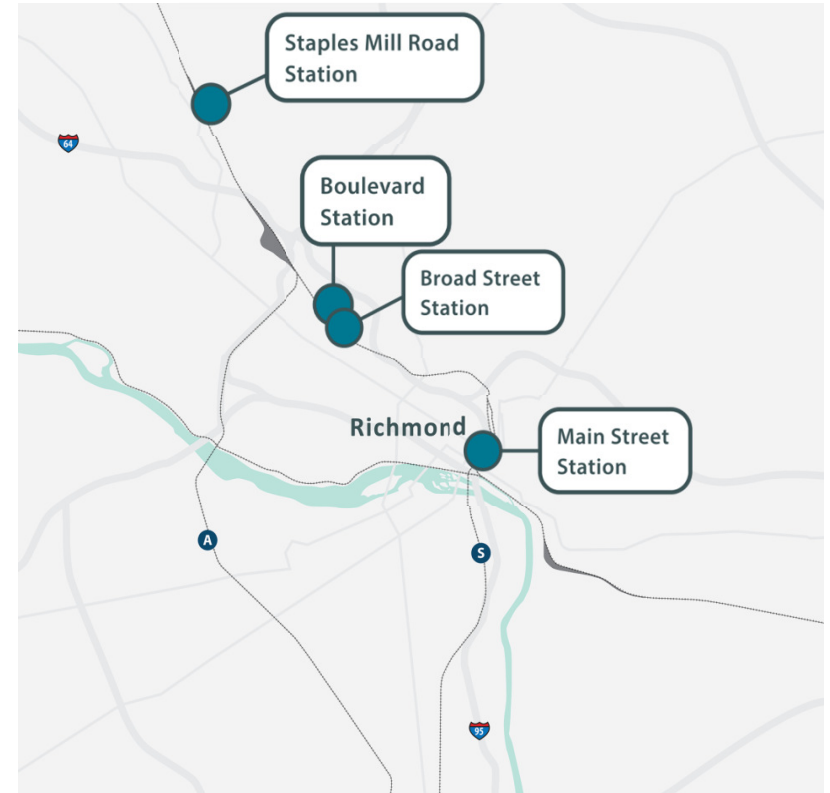
Richmond Area Alternative Considerations



- Meets Federal standard of 90% on-time performance
- Meets FRA guidance and ridership demand to be “in or near Central Business District”
- Consistent with prior FRA and CTB decisions (SEHSR Tier I EIS/ROD, R2HR Tier I EIS/ROD, R2R Tier II EIS)
- Supports increased passenger train frequency and ridership
- Accommodates freight operations and growth
- Accessible to passengers (parking, transit)
- Leverage previous investments in stations and track
- Impacts to human and natural resources
- Cost (Capital and Operating)

Richmond Station Concepts

- Single-station options:
 - Boulevard (new)
 - Broad Street (new)
 - Main Street
 - Staples Mill Road
- Two-station option:
 - Staples Mill Road & Main Street



Area 6: Richmond Area

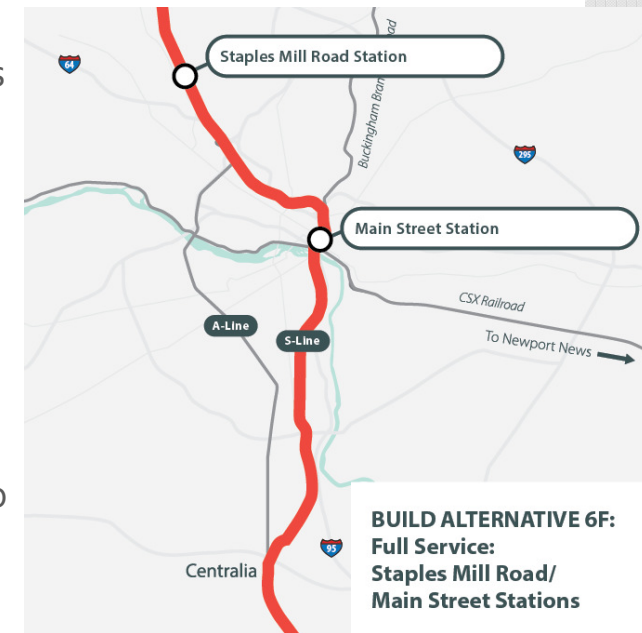
DRPT Recommendation - Main Street Station & Staples Mill Road Station: Full Service Option to Both Stations via S-Line within Existing Right-of-Way (\$1.482 Billion)

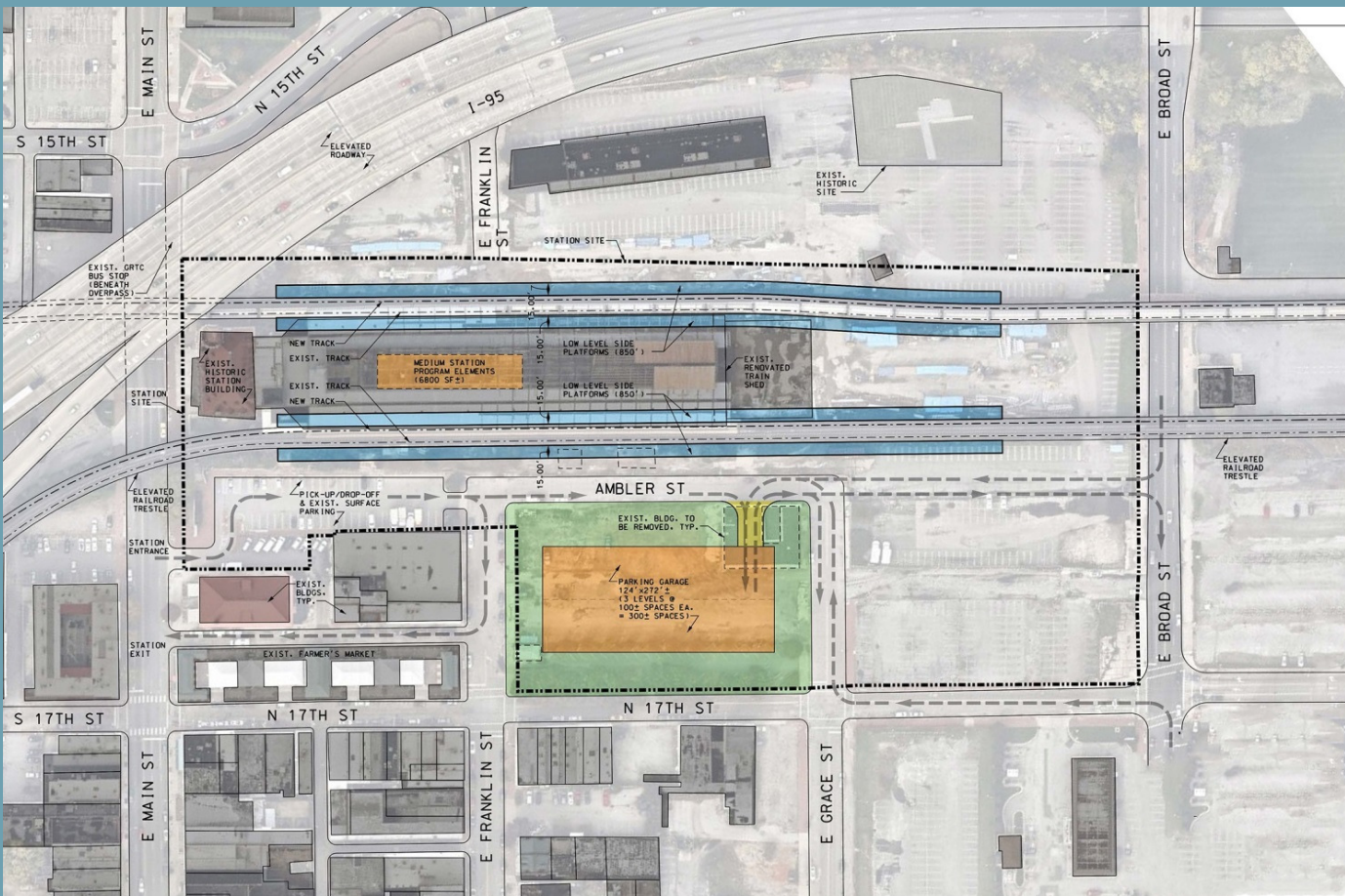
Rationale:

- Staples Mill Road Station needed for Main Street Station to operate efficiently
- 90% on-time performance with increased service
- Enhances passenger access with 2 stations, serves Central Business District and suburbs
- Consistent with prior FRA and CTB decisions
- Shifts passenger trains to S-Line, opens capacity on A-Line for freight growth, including Port of Virginia

Notes:

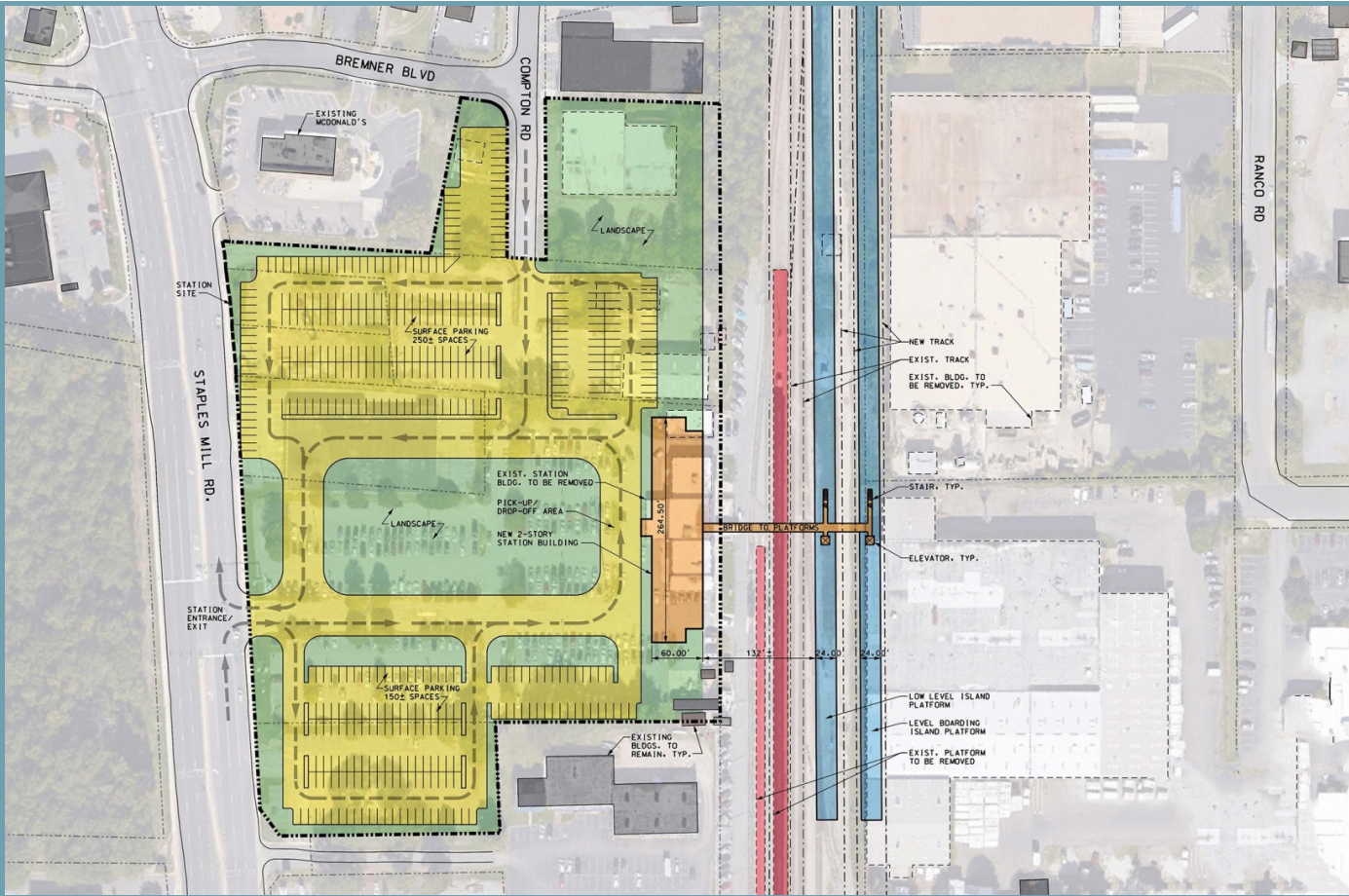
- Requires new bridge across James River parallel to existing S-Line bridge
- Requires new east platforms at Staples Mill Road





Full Service Main Street Station Concept

- 475,000 passengers on/off in 2045
- 45,000 passengers on/off in 2015



Full Service Staples Mill Road Station Concept

- 562,000 passengers on/off in 2045
- 362,000 passengers on/off in 2015

Richmond Alternatives Evaluation



Richmond Area Alternatives	Meets On-Time Performance of 90%	Serves Central Business District	Consistent with FRA and CTB Prior Decisions	Accommodate Freight Operations and Growth
Main Street Station & Staples Mill Road Station: Full Service (via S-Line)	✓	✓	✓	✓
Staples Mill Road Only (via A-Line)	X	X	X	X
Boulevard Station Only (via A-Line)	X	○	X	X
Boulevard Station Only (via S-Line)	✓	○	X	✓
Broad Street Station Only (via A-Line)	X	○	X	X
Main Street Station Only (via S-Line)	X	✓	✓	X
Main Street Station & Staples Mill Road Station: Split Service (via A-Line)	X	✓	X	X
Main Street Station & Staples Mill Road Station: Shared Service (via A-Line & S-Line)	X	✓	○	X

Richmond Alternatives – Infrastructure Costs

Richmond Area Alternatives	Approximate Comparative Capital Cost (2025 \$, millions)	Additional Infrastructure Cost Potentially Required to Mitigate Passenger and Freight Delay (2025 \$, millions)
Main Street Station & Staples Mill Road Station: Full Service (via S-Line)	\$1,482	None required
Staples Mill Road Only (via A-Line)	\$1,087	\$850
Boulevard Station Only (via A-Line)	\$1,524	\$850
Boulevard Station Only (via S-Line)	\$1,451	None required
Broad Street Station Only (via A-Line)	\$1,488	\$850
Main Street Station Only (via S-Line)	\$1,323	No feasible mitigation available
Main Street Station & Staples Mill Road Station: Split Service (via A-Line)	\$1,266	\$850
Main Street Station & Staples Mill Road Station: Shared Service (via A-Line & S-Line)	\$1,599	\$850



Staples Mill Road Station Only is not practical

- Does not meet Federal standard of 90% on-time performance
- Not in or near the Central Business District, does not serve the urban core
- Not consistent with prior FRA or CTB decisions
- Creates passenger and freight bottleneck in 2-track section in I-195 trench
- Alternative cannot work without three tracks
- Adding third track in trench plus new James River bridge adds ~\$850 million in infrastructure costs, and numerous property impacts



Main Street Station Only is not practical

- Single station does not work without three tracks
- Cannot accommodate necessary three tracks/platforms due to I-95
- Station dwell times delay passenger and freight trains
- Does not meet Federal standard of 90% on-time performance
- 1200' platforms extend over Broad Street
- Increased traffic and parking footprint



December 6, 2016

Boulevard Station S-Line – Potential Single Station



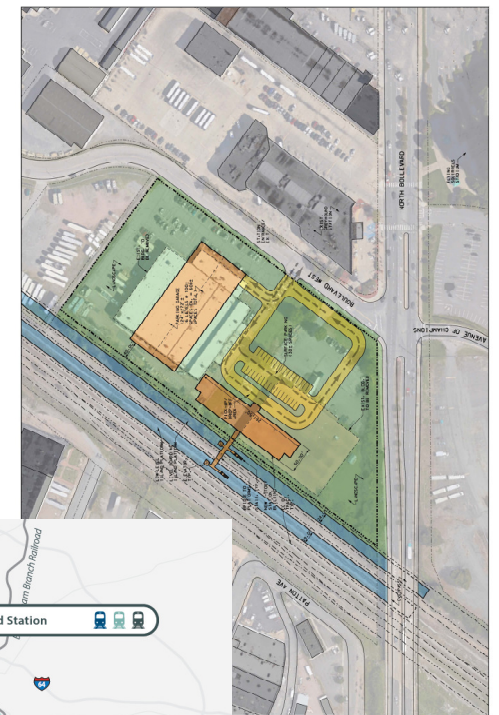
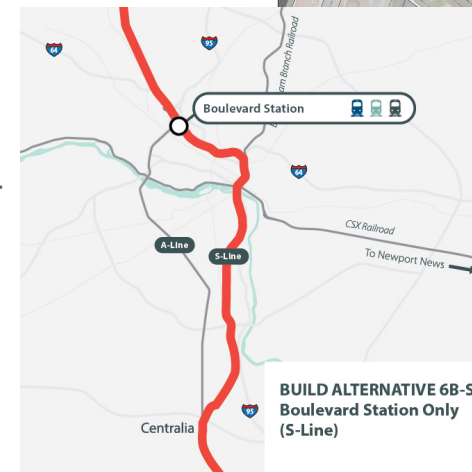
December 6, 2016

Rationale:

- Meets 90% on-time performance standard
- All new station with modern design elements
- Possible link to area development
- Shifts passenger trains to S-Line, opens capacity on A-Line for freight growth, including Port of Virginia

Notes:

- Not in the downtown area
- Not consistent with prior FRA or CTB decisions
- Closes both existing stations



DRPT's Prioritized Recommendation Summary

Area in Order of Construction Priority	Recommendation	Approximate Comparative Cost (millions 2025 \$)
Northern Virginia	Additional third or fourth track	\$1,941
Arlington	Three options depending on Long Bridge	\$36 to \$47
Fredericksburg	Additional third track through City	\$493
Richmond	Main Street Station and Staples Mill Road Station – Full Service via S-Line	\$1,482
Central Virginia	Additional third track	\$643
Ashland	Separate study to evaluate additional capacity	\$388 to \$599*
Total Cost		\$4,983 to \$5,205

* Costs for existing capacity alternatives, not supplemental study.



DC₂RVA Project – Anticipated Next Steps

- FRA DEIS review – ongoing
- Local briefings
- Draft EIS release – pending FRA review/approval
- 60-day public comment period
- Draft EIS Public Hearings during comment period
- Compile public comments
- CTB review
- Service development planning, preliminary engineering, and additional analysis
- Additional coordination with regulatory agencies, localities and stakeholders, Atlantic Gateway Program
- Final EIS
- Record of Decision to be issued by FRA
- Execute Atlantic Gateway (FASTLANE) Projects - ongoing



For more information, visit:
www.dc2rvarail.com