

I-81 Rail Corridor Project Update

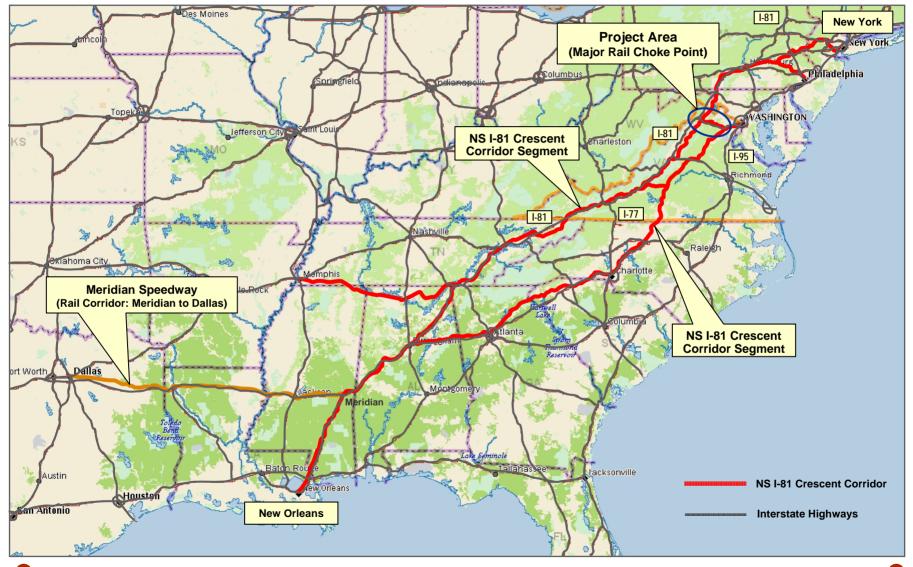
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I-81 Rail Improvements – Manassas to Front Royal

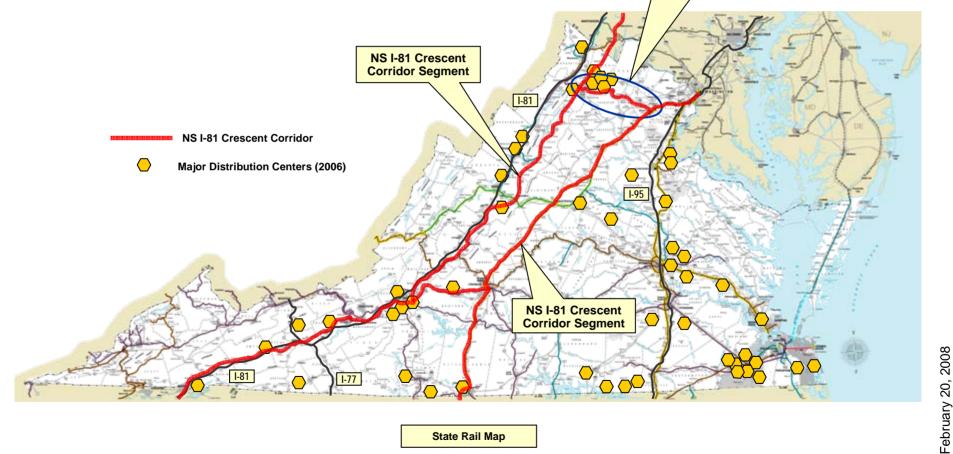
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NS I-81 Crescent Corridor





I-81 Rail Improvements – Manassas to Front Royal 3



NS I-81 Crescent Corridor in Virginia

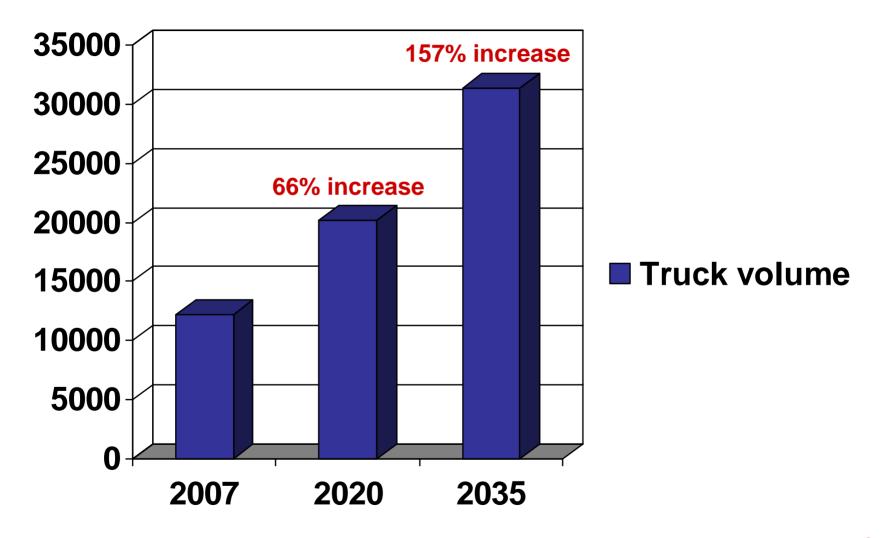
Manassas to Front Royal Improvement Project

Project Area (Major Rail Choke Point)



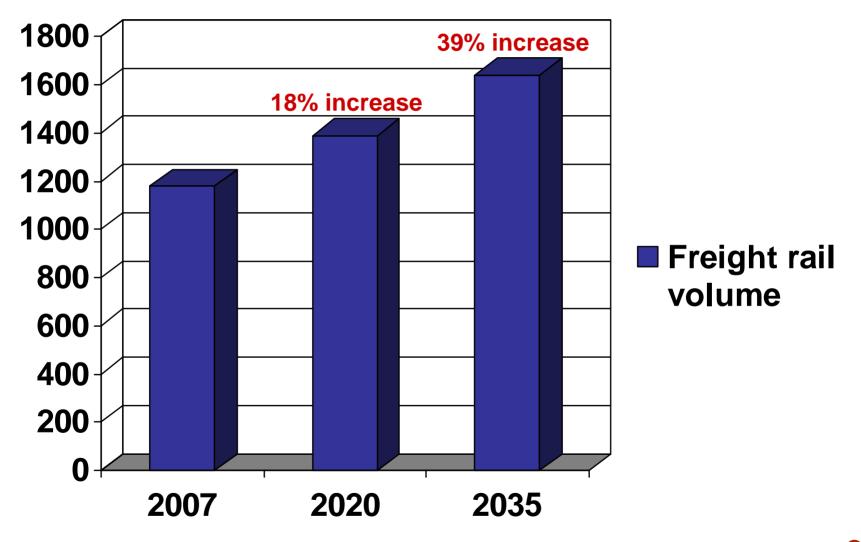
State Rail Map

I-81 Corridor Highway Traffic Projected Growth in Daily Truck Volume





I-81 Corridor Freight Rail Traffic Projected Growth in Daily Volume





Strategy for Improvement

- Both highway and rail corridors need additional capacity to meet future demand
- Improvement strategies are underway to:
 - provide additional passenger and freight capacity for both modes
 - divert additional freight traffic to rail
- □ Funding constraints necessitate the phasing of improvements:
 - Short term highway improvements:
 - Final environmental impact study
 - Highway improvements (ramp extensions, truck climbing lanes, and bridges):
 - \$72.7 million (underway)
 - \$416 million (in SYIP)
 - Short term rail improvements:
 - I-81 Freight Rail Study
 - Manassas to Front Royal corridor improvements: \$40 million



Previous Rail Study Results

- The Northeast–Southeast-Midwest Corridor Marketing Study (2003) [Reebie Associates]
 - Multi-state assessment of needs to divert freight from truck to rail
 - Long Term Capital Investment (Multi-State)
 - \$7.3 billion to \$7.9 billion (\$1.35 billion for Virginia)
 - Truck Diversion on I-81 in VA: 28.2% to 30.3% of total trucks
 - Medium Term Capital Investment (Virginia only)
 - Cost: \$492 million to \$501 million for Virginia
 - Truck Diversion on I-81 in VA: 9.8% to 10.4% of total trucks
 - Medium term capital rail investments (Virginia only) will provide capacity for 474,000 to 501,000 additional railcars per year
- Basis for \$40M in I-81 rail improvements for the Manassas to Front Royal rail segment



I-81 Freight Rail Study

- Will determine the maximum feasible diversion of truck traffic to rail
- Conducted by the Commonwealth in cooperation with Norfolk Southern
 - extends at least 500 miles, including Tennessee, Pennsylvania and New York
 - includes analysis of roll on/roll off and other rail technologies
- Includes coordination with other states in the I-81 Corridor
- □ Timeframe: fall 2006 spring 2008



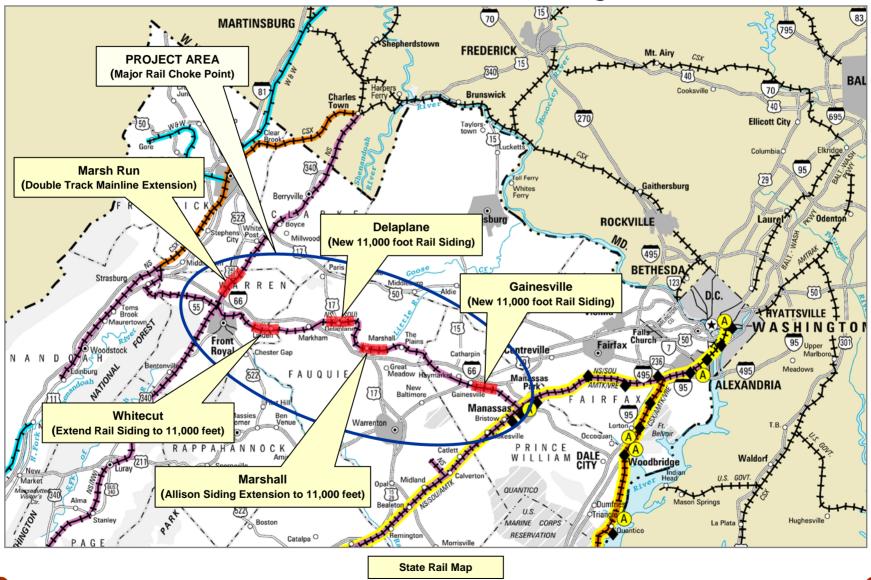
Current I-81 Rail Corridor Project

Project area conditions today:

- The most congested portion of the rail corridor
- Mainly one-way track
- Limited opportunities for trains to pass each other through passing sidings
- No signal system to control rail traffic
- No commuter rail service in Gainesville/Haymarket area



Project Location



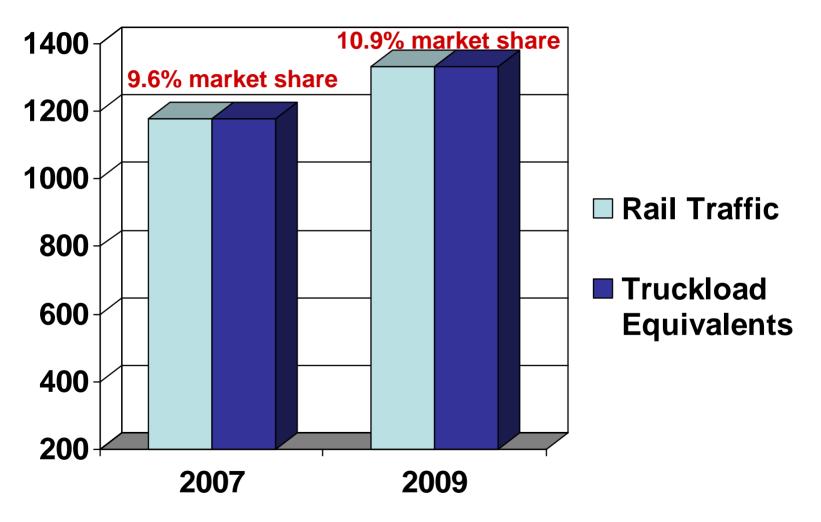


Project Description

- □ Four 11,000-foot rail sidings for passing trains
 - Gainesville: \$6.2 million
 - Marshall: \$5.3 million
 - Delaplane: \$7.2 million
 - Whitecut: \$12.2 million
- Rail traffic control system from Manassas to Front Royal (Riverton Junction): 50.9 miles, \$18.5 million
- Marsh run extension: new mainline combined with existing siding at Front Royal (including new signal system): 5 miles, \$11.6 million
- Provides potential capacity for VRE commuter rail expansion in the Gainesville/Haymarket area
- Project completion in late 2008



Project Benefits - Truck Diversion Daily Rail Volumes Before and After Improvements





Project Benefits- Economic Impact

Project Costs

- Commonwealth REF = \$40,000,000 (70%)
- NS matching share = $\frac{17,142,857}{(30\%)}$
- Project total = \$57,142,857
- Public Benefits (over 15 years)
 - Benefit/cost ratio= 1.03
 - Project will pay for itself in 15 years



Additional Benefits

Fuel savings

- Average of 4 million gallons/year
- More than 60 million gallons over a 15-year period
- CO₂ emissions avoided
 - Average of 10,100 tons/year (equivalent to 2,230 vehicles)
 - 151,800 tons over 15 years (equivalent to 33,500 vehicles)
- Employment: 9 full-time new jobs
- Additional rail capacity:
 - Allows the addition of 6-10 new trains and increases capacity of train service by 60% to 100%
 - Allows the potential for VRE commuter rail service expansion



Project Schedule

Planning, Design and Engineering	January 2008
Construction	February 2008
Completion	Late 2008

Project Schedule pending environmental approvals



Conclusion

- This project eliminates a major rail chokepoint on the I-81 rail corridor and provides the potential capacity for VRE service expansion in the Gainesville/Haymarket area
- A first step and "down-payment" for corridor-wide rail improvements
 - Multi-state improvements outlined in the Reebie study estimate significantly higher diversion of trucks to rail
- Next steps will be identified in the I-81 Freight Rail Study this spring

