



13 INDEX



D.C. TO RICHMOND SOUTHEAST HIGH SPEED RAIL

13 INDEX

- Accidents 3.15.1.4, 3.17, 4.17, 4.18
- Abbreviations and Acronyms Chapter 10
- Aesthetics (Visual Quality) 3.9, 4.9
- Affected Environment Chapter 3
- Agency Coordination 6.2, 6.3, Appendix U, Appendix V
- Agency Scoping Meetings 6.2.1, 6.3.2
- Agricultural Lands 3.3, 4.3, 4.11.5
- Agricultural and Forestal Districts 3.3.2, 4.3.2
- Air Quality 1.5.2.7, 3.6, 4.6, Appendix T
- Air Travel/Aviation 1.5.2.4
- Alternatives Considered and Dismissed .. 2.4
- Alternatives Development Process.... 2.1, 2.3, 2.4
- Amtrak 2.2, 4.15.1
- Anadromous Fish..... 3.10.4.1, 4.10.2.3, 4.19.1
- Aquifers 3.1.7, 4.1.4, 4.1.6
- Aquatic Communities 3.10.4, 4.10.2.3
- Archaeological Resources 3.13.1, 4.13.1, Appendix R
- Ashland Bypass 2.3.3.1, 2.4.5, 2.5.2.5
- At-grade Crossings (*see* Grade Crossings/ Grade Separation)
- Avoidance Alternatives 5.5
- Bald Eagles 3.10.5, 4.10.3.1
- Basis of Design Appendix B
- Battlefields 3.13.2.2, 4.13.3
- Bicycle Facilities 3.15.1.3, 4.15.2.2, 4.20.1.4
- Biological Resources 3.10, 4.10
- Birds 3.10.3.1, 3.10.3.2, 4.10.2.1, 4.10.2.2
- Boulevard Station 2.4.3.1, 2.4.3.2, 2.5.2.6
- Bridges (over roadways)..... 2.3.2.3, 2.3.3.1, 2.4.1.1, 2.5.2
- Bridges (over water) ... 2.3.2.3, 2.3.3.1, 2.4.1.1, 2.5.1.1, 2.5.2
- Broad Street Station..... 2.4.3.1, 2.4.3.2, 2.5.2.6
- Build Alternatives 2.5.2
- Business Displacements 4.11.1, Appendix Q
- Capacity (Rail) 1.5.2.5
- Capacity (Roadway) 1.5.2.3
- Carbon Monoxide Emissions 4.6.3
- Chesapeake Bay Preservation Areas.. 3.1.3.4, 4.1.5.10
- Clean Air Act 3.6.2, 4.6.4
- Clean Air Nonroad Diesel Rule 3.6.3

Clean Water Act	3.1, 4.1
Coastal Zone Management Areas.....	3.1.3.5, 4.1.1.1
Community Facilities and Services	3.11.5, 4.11.3, Appendix Q
Compatibility with Future Land Use Plans...	4.11.5.2
Compatibility with Transportation Plans.....	4.11.5.3
Congestion	1.5.2.3, 1.5.2.4
Construction (Approach)	2.8
Construction (Impacts).....	4.19
Consulting Parties (Section 106)	6.3.1
Cooperating and Participating Agencies..	6.2
Corridor Description	1.3
Costs (Capital)	2.7.1, Appendix K
Costs (Operating and Maintenance).....	2.7.2
County and Municipal Planning	3.11.3.2, 4.11.5.3
Cultural Resources (<i>see also</i> Archaeological and Historical Resources).....	3.13, 4.13, Appendix R, Appendix U
Cumulative Impacts.....	4.20.2
Demand Forecasting.....	Appendix J
Demographics.....	3.11
Designated Waters.....	3.1.3
Displacements.....	4.11.4
Distribution of Draft EIS	Chapter 8
Drainage Basins.....	3.1.1
Drinking Water.....	3.1.7, 4.1.4
Economics.....	3.11.2.1, 4.11.1
Elderly & Disabled Populations	3.12, 4.12
Emergency Services.....	3.11
Employment and Income	3.11.2, 4.12
Energy	1.5.2.7, 3.8, 4.8
Environmental Consequences.....	Chapter 4
Environmental Justice	3.12, 4.12, Appendix Q
Evaluation Criteria	2.3.2, 2.4.1
Existing Conditions	Chapter 3
Farmland.....	3.3.1, 4.3.1
Farmland Conversion Impact Rating Forms	4.3.1, Appendix N
Fish.....	3.10.4.1, 4.10.2.3
Floodplains and Floodways	3.1.5, 4.1.1.2
Fredericksburg Bypass ...	2.3.3.1, 2.4.4, 2.5.2.3
Freight	1.5.2.2
Future Growth.....	2.5.1.2
Geology	3.2.2, 4.2.2
Grade Crossings/Grade Separation... 3.17.2, 4.15.2, Appendix S	2.3.2.3,
Greenhouse Gases.....	3.6.6, 4.6.4
Greenways	3.14.3, 3.14.5, 3.14.7, 3.15.1
Groundwater	3.1.4, 3.1.7, 4.1.1, 4.1.3, 4.1.4, 4.19.1.5
Hazardous Materials and Waste	3.5, 4.5, Appendix O
Health and Safety.....	3.17, 4.18
High Speed Rail	2.1

Highway Transportation	3.15
Highway Vehicle Operations	3.15
Historical Resources	3.13, 4.13.2, Appendix R
I ndirect and Cumulative Impacts	4.20
Invasive Species.....	3.10.2, 4.10.1.2
Irreversible Commitment of Resources ..	4.22
L and Use	3.11.3, 4.11.5
Limited English Proficiency	3.11.1
Local Officials Coordination.....	6.2.3
Local and Regional Plans and Policies.....	
3.11.3.2, 4.11.5	
Locomotive Operations	4.6.1
Long Bridge.....	1.6.4
M ailing List.....	6.1.6
Main Street Station.....	2.4.3.1, 2.4.3.2, 2.5.2.6
Minority Communities.....	3.12, 4.12
Migratory Birds	3.10.3.2, 4.10.2.2
Migratory Bird Treaty Act	3.10.3.2
Mineral Resources.....	3.4, 4.4
Mitigation.....	4.1.6, 4.2.4, 4.4.2, 4.5.2, 4.7.1, 4.7.2, 4.9.2, 4.10.1.4, 4.10.2.4, 4.10.3.2, 4.13.4, 4.14.2, 5.6
Mobile Source Air Toxics	3.6.4, 4.6.2, Appendix T
MS4 Permit.....	4.1.5.8
N ational Ambient Air Quality Standards ...	
3.6.1	
National Environmental Policy Act.....	3.6.6
National High Speed Rail Program.....	1.6.1
National Register of Historic Places.....	3.13, 4.13
Navigable Waters	3.1.3.1, 4.1.1.1, 4.1.5
Neighborhood and Communities	3.11.4, 4.11.2
Newsletters	6.1.8
No Build Alternative	2.5.1
Noise	3.7.1, 4.7.1, Appendix P
Noise Mitigation	4.7.1.5
Numbers of Trains.....	2.2.1.2, 2.2.2, 2.2.3, 2.5.1.2
O pen Space Easements	3.10.1.4
Operating and Maintenance Costs	2.7.2
Operations Analysis	2.6.1
Operational Impacts	Chapter 4
Parks (federal, state and local).....	3.14, 4.14
Participating Agencies	6.2
Patronage/Ridership.....	2.6.2
Pedestrian Facilities..	3.14.3, 3.15.1.3, 4.15.2.2
Pedestrian Safety.....	4.17
Permits.....	4.1.5
Places of Worship and Cemeteries	3.11.5, 4.11.3
Particulate Matter (Hot-Spot Analysis)	
3.6.5, 4.6.2, 4.6.3, 4.19.2.3	
Population Characteristics.....	1.5.2.1, 3.11.1, 4.12
Preferred Alternative.....	Chapter 7
Preparers	Chapter 9

Press Releases	6.1.10	Richmond to Hampton Roads Rail	1.6.2.4
Prime and Unique Farmland.....	3.3.1, 4.3.1	Richmond to Raleigh High Speed Rail	
Priority Conservation Areas	3.10.1.4, 4.10.1.1	1.6.2.3	
Project Alternatives.....	2.5.2	Right-of-Way	4.11.4, Appendices C-H
Project Areas and Segments	2.3.1	Riparian Areas.....	3.1.4, 3.10.1, 4.1.1, 4.10.1
Project Benefits	1.7	Rivers	3.1.2, 4.1.1
Project Description.....	1.3, 1.6	Roads	2.3.2.3, 3.15, 4.11.2.2
Project Location.....	1.2	Safety and Security.....	3.17.2, 4.17
Property Owner Notifications.....	6.1.7	Scenic Rivers.....	3.1.3.2
Proposed Action.....	1.4	Scoping	6.1.4
Public Comments	1.5.3, 6.1.3	Screening Process.....	2.3, 2.4
Public Education Facilities/Schools	3.11.5 4.11.3	Section 4(f)	3.14.7, 4.14, Chapter 5
Public Involvement.....	6.1, Appendix V	Section 6(f)	3.14.6, 4.14.1
Public Meetings	6.1.5	Section 401 – Point Source Permit	4.1.5.1
Public Water Supplies	3.1.6, 4.1.4	Section 402 – Water Quality Certificate	
Purpose and Need.....	1.4, 1.5, 2.3.2.2	4.1.5.2	
Rail Alignment Alternatives	2.3.3.1, 2.4, 2.5.2	Section 404 – Dredge and Fill Permit ..	4.1.5.3
Recreational Areas	3.14, 4.14	Section 9 of the Rivers and Harbors Act.....	
References	Chapter 12	4.1.5.5	
Regional Planning	3.11.3.2, 4.11.5.2	Section 10 of the Rivers and Harbors Act.....	
Related Studies and Plans.....	1.6	4.1.5.6	
Residential Displacements/Relocation.....	4.11.4, Appendix Q	Section 106 of National Historic Preservation Act	3.13, 4.13
Resource Maps	Chapter 3, Appendix M, Appendix N, Appendix O, Appendix Q, Appendix R	Segment Descriptions.....	2.3.1
Ridership	2.6.2, 4.15.1, Appendix J	Selection of the Preferred Alternative Chapter 7	
		Service Options	2.2.3, 2.3.3.3, 2.4.3.1, 2.5.2.6, Appendix G
		Service Plan.....	2.2, Appendix I
		Short-Term Effects and Long-Term Benefits 4.21	

Simulation Modeling	2.6.1	Transportation Facilities	3.15, 4.15
Soils	3.2.3, 4.2.3	Transportation/Multimodal Connectivity....	
Southeast High Speed Rail.....	1.5.1, 1.6.2	4.15.1, 4.15.2	
Southeast High Speed Rail Corridor	1.1,	Travel Time/Service Reliability.....	1.5
1.5, 2.1.1		Tribal Lands.....	3.13.2.3
Solid Wastes.....	3.5, 4.5	Trout Waters.....	3.10.4.1, 4.10.2.3
Speed Assumptions	Appendix I	Tunnels.....	2.4.5, 2.6.1.2
Staples Mill Station	2.4.3.1, 2.4.3.2, 2.5.2.6	Utilities	3.16, 4.16
State Scenic Rivers.....	3.1.3.2, 4.1.1.1	Vehicle Delay	4.15.1, 4.15.2
Stations	3.15.1.3	VDOT Relocation Policies.....	4.11.1
Stormwater Management/Drainage... <td>4.1.1.3</td> <td>Vibration</td> <td>3.7.2, 4.7.2, Appendix P</td>	4.1.1.3	Vibration	3.7.2, 4.7.2, Appendix P
Streams	3.1.2, 4.1.1	Vibration Mitigation.....	4.7.2.5
Study Area	3.0	Virginia Outdoors Foundation	3.10.1.4
Subaqueous Stream Bed Bottom Permit	4.1.5.4	Virginia Avenue Tunnel	1.6.3
Submerged Aquatic Vegetation	3.10.5, 4.10.3	Virginia Railway Express	3.15.1.2
Surface Waters	3.1.2, 4.1.1	Virginia Water Protection Permit	4.1.5.7
Task Force.....	6.2.2	Visual Quality	3.9, 4.9
Terrestrial Communities	3.10	Vulnerable Populations	
Threatened and Endangered Species ..	3.10.5, 4.10.3	<i>(see Environmental Justice)</i>	
Time of Year Restrictions	4.19.2.6	Washington Union Station.....	1.6.5
Title VI	3.12, 4.12, Appendix Q	Water Quality	3.1.6, 4.1.3
Topography.....	3.2.1, 4.2.1	Water Resources.....	3.1, 4.1
Track Geometry	Appendices C-H	Water Supply.....	3.1.7, 4.1.4
Traffic Conditions	Appendix S	Waters of the U.S.	3.1
Trails	3.14.5, 4.14.1	Website	6.1.9
Train Types	2.2.1.1	Wildlife and Waterfowl Refuges	3.10.1, 3.14.4, 4.14.1
Transit.....	3.15.1, 3.11.3.2, 4.15.1	Wildlife Habitats.....	3.10.3, 4.10.2
		WMATA.....	3.11.3.2, 3.15.1.3

TIER II DRAFT ENVIRONMENTAL IMPACT STATEMENT

Wetlands..... 3.1.4, 4.1.2, Appendix M

Wild and Scenic Rivers..... 3.1.3.2, 4.1.1.1