

Table of Contents

VOLUME 1

	<u>Page</u>
ES Executive Summary	
ES.1 Project Overview	ES.1
ES.2 Proposed Action	ES.3
ES.3 Other Alternatives Evaluated	ES.6
ES.4 Summary of Beneficial and Adverse Impacts of the Preferred Alternative	ES.7
ES.5 Other Government Actions Required to Implement the Preferred Alternative	ES.11
1.0 Introduction to the Project	
1.1 Project Introduction	1.1
1.2 Project History	1.3
1.3 General Description of the Study Area	1.5
1.4 Overview of Existing Roadway Network	1.7
1.5 Red List Bridges	1.10
1.6 Safety and Roadway Geometry Issues	1.11
1.7 Purpose and Need for the Project	1.12
1.7.1 Purpose	1.12
1.7.2 Need	1.12
2.0 Alternatives Screened and Evaluated	
2.1 Introduction	2.1
2.2 Part A Alternatives Summary	2.1
2.3 Part B Alternatives	2.3
2.3.1 No Build Alternative	2.3
2.3.2 Travel Demand Management	2.3
2.3.3 Transportation System Management	2.4
2.3.4 Development of Part B Build Alternatives	2.4
2.3.5 Interstate 93 Widening	2.5
2.3.6 Interstate 89 / Exit 1 Area	2.9
2.3.6.1 Interstate 89 Area Concept C	2.11
2.3.6.2 Interstate 89 Area Concept K	2.12
2.3.6.3 Interstate 89 Area Concept P	2.13
2.3.6.4 Interstate 89 Area Summary	2.14
2.3.7 Exit 12 Area	2.16
2.3.7.1 Exit 12 Area Concept E	2.16

2.3.7.2 Exit 12 Area Concept F	2.17
2.3.7.3 Exit 12 Area Summary	2.17
2.3.8 Exit 13 Area	2.18
2.3.8.1 Exit 13 Area Concept A	2.19
2.3.8.2 Exit 13 Area Concept B	2.20
2.3.8.3 Exit 13 Area Summary	2.20
2.3.9 Exit 14 / 15 Area	2.21
2.3.9.1 Exit 14/15 Concept D2	2.25
2.3.9.2 Exit 14/15 Concept F	2.26
2.3.9.3 Exit 14/15 Concept F2	2.30
2.3.9.4 Exit 14/15 Concept O3	2.31
2.3.9.5 Exit 14/15 Summary	2.33
2.4 Agency and Public Input Received on the Alternatives Considered	2.35
2.5 Preferred Alternative	2.36
2.5.1 Interstate 89 / Exit 1 Area Preferred Concept (Concept K)	2.36
2.5.2 Exit 12 Area Preferred Concept (Concept F)	2.37
2.5.3 Exit 13 Area Preferred Concept (Concept B)	2.37
2.5.4 Exit 14/15 Area Preferred Concept (Concept F2)	2.37
2.5.5 Preferred Alternative Summary	2.38

3.0 Affected Environment

3.1 Introduction	3.1
3.2 Traffic and Transportation	3.1
3.2.1 Traffic Data Collection	3.1
3.2.1.1 Origin-Destination Study	3.3
3.2.1.2 Vehicles Classifications	3.4
3.2.2.3 Commuting Patterns	3.5
3.2.2 Traffic Volumes	3.5
3.2.2.1 Traffic Volumes	3.5
3.2.2.2 Traffic Volume Trends	3.6
3.2.3 Existing Traffic Operations	3.7
3.2.4 Crash Statistics	3.14
3.2.5 Geometric Deficiencies	3.15
3.2.6 Infrastructure Deficiencies	3.17
3.2.7 Transportation Demand Management	3.17
3.2.7.1 Park-and-Ride Lots	3.18
3.2.7.2 Ride-Matching / Employer Measures / Congestion Pricing	3.18
3.2.7.3 Bus Transit Services	3.18
3.2.7.4 Rail Transit Services	3.19
3.2.8 Transportation System Management	3.19
3.3 Air Quality	3.19
3.4 Noise Environment	3.21

3.4.1 Introduction	3.21
3.4.2 Methodology	3.21
3.4.2.1 Criteria for Determining Impacts	3.21
3.4.2.2 Existing Land Use and Noise Sensitive Areas	3.22
3.4.2.3 Noise Measurement Procedures	3.26
3.4.2.4 Traffic Analysis	3.26
3.4.2.5 Prediction of Noise Levels	3.26
3.4.2.6 Noise Impact Analysis	3.27
3.5 Water Resources	3.27
3.5.1 Groundwater	3.27
3.5.1.1 Aquifers	3.28
3.5.1.2 Public Drinking Water Systems	3.28
3.5.1.3 Wellhead Protection Areas	3.29
3.5.2 Surface Waters	3.30
3.5.2.1 Lakes and Ponds	3.30
3.5.2.2 Rivers and Streams	3.31
3.5.2.3 Federal and State Regulatory Jurisdiction	3.33
3.5.2.4 Surface Water Quality	3.36
3.5.3 Floodplains	3.39
3.5.4 Wetlands	3.40
3.5.4.1 New Hampshire Prime Wetlands	3.42
3.5.4.2 Description of Wetlands Functions and Values	3.42
3.5.4.3 Description of Wetlands in the Study Area	3.43
3.5.4.4 Vernal Pools	3.50
3.5.5 Coastal Zone Management	3.50
3.6 Land Resources	3.50
3.6.1 Geology and Soils	3.51
3.6.1.1 Bedrock Geology	3.51
3.6.1.2 Soils	3.51
3.6.2 Farmlands	3.51
3.6.2.1 Important Farmland Soils	3.51
3.6.2.2 Active Farmlands	3.52
3.6.3 Conservation and Public Recreational Lands	3.53
3.6.3.1 Conservation Lands	3.53
3.6.3.2 Section 6(f) Lands	3.54
3.6.3.3 Public Recreational Lands	3.54
3.6.3.4 Bicycles and Pedestrians	3.55
3.6.3.5 River Access	3.55
3.7 Wildlife and Fisheries	3.56
3.7.1 Wildlife	3.56
3.7.2 Fisheries	3.57
3.7.3 Essential Fish Habitat	3.57

3.8 Rare, Threatened and Endangered Species	3.57
3.8.1 Federal Jurisdictions	3.57
3.8.2 New Hampshire Jurisdictions	3.58
3.8.3 Exemplary Natural Communities/Critical Habitats	3.59
3.8.4 Plants	3.59
3.8.5 Wildlife	3.60
3.8.6 Invasive Species	3.61
3.9 Cultural Resources	3.63
3.10 Socio-economic Resources	3.65
3.10.1 Introduction	3.65
3.10.2 General Socio-economic Observations	3.67
3.10.3 The Influence Area and Characteristics	3.67
3.10.4 Profile of the Immediate Corridor Communities	3.72
3.10.5 Commuting Patterns	3.76
3.11 Land Use, Zoning and Public Policy	3.76
3.11.1 Regional Plans and Policy	3.78
3.11.2 Community Facilities	3.78
3.12 Visual Resources	3.79
3.13 Contaminated Properties and Structures	3.81
4.0 Environmental Consequences and Mitigation	
4.1 Introduction	4.1
4.2 Traffic and Transportation	4.1
4.2.1 Introduction	4.1
4.2.2 No-Build Alternative	4.1
4.2.3 Build Alternatives	4.5
4.2.3.1 Travel Demand Management	4.5
4.2.3.2 Transportation System Management	4.5
4.2.3.3 Interstate 89 Mainline Concepts	4.5
4.2.3.4 Interstate 89/Exit 1 Area Concepts	4.7
4.2.3.5 Exit 12 Area Concepts	4.10
4.2.3.6 Exit 13 Area Concepts	4.12
4.2.3.7 Exit 14/15 Area Concepts	4.12
4.2.3.8 Comparison of Alternatives	4.19
4.3 Air Quality	4.24
4.3.1 Methods	4.24
4.3.2 Results	4.25

4.3.3 Conclusions	4.25
4.4 Noise	4.26
4.4.1 Noise Analysis Results	4.26
4.4.2 Noise Abatement Measures	4.27
4.4.3 NHTI Barrier	4.28
4.4.4 Conclusions	4.29
4.5 Water Resources Impact	4.33
4.5.1 Groundwater Resources	4.33
4.5.1.1 Mitigation	4.33
4.5.2 Surface Waters	4.33
4.5.2.1 Regulatory Framework	4.34
4.5.2.2 Receiving Waters	4.34
4.5.3 Water Quality Analysis	4.34
4.5.4 Water Quantity Analysis	4.36
4.5.5 Water Supply Areas	4.37
4.5.6 Chloride Loading	4.37
4.6 Floodplain Impacts	4.39
4.6.1 Mitigation	4.39
4.6.2 Floodplain Finding	4.39
4.7 Wetlands and Waterway Impacts	4.40
4.7.1 Wetland Impact	4.40
4.7.2 Wetland Impact Analysis Methodology	4.40
4.7.3 Wetland Impact Analysis Results	4.40
4.7.4 New Hampshire Prime Wetland Impacts	4.43
4.7.5 Waterway Impacts	4.43
4.7.6 Compensatory Wetlands (and Waterway) Mitigation	4.44
4.7.6.1 Land Preservation	4.44
4.7.6.2 In-Lieu Fee	4.44
4.7.7 Wetland Finding	4.44
4.8 Land Resources	4.45
4.8.1 Farmlands	4.45
4.8.2 Conservation Lands	4.45
4.8.2.1 Impact Analysis Methodology	4.45
4.8.2.2 Impact Analysis Results	4.45
4.8.2.3 Mitigation	4.45
4.8.3 Section 4(f) Properties	4.46
4.8.4 Section 6(f) Properties	4.46
4.9 Wildlife	4.46
4.9.1 Short-Term and Long-Term Impacts	4.46
4.9.1.1 Direct Mortality	4.47
4.9.1.2 Tree Clearing	4.47
4.9.2 Highest Ranked Wildlife Habitat Impacts	4.48

4.9.3 Indirect Impacts	4.48
4.9.4 Mitigation	4.48
4.10 Fisheries	4.49
4.10.1 Impacts to Fish Habitat	4.49
4.10.2 Essential Fish Habitat	4.49
4.10.3 Mitigation	4.49
4.11 Threatened and Endangered Species	4.50
4.11.1 Plants	4.50
4.11.1.1 Federally Threatened and Endangered Plant Species	4.50
4.11.1.2 State Rare, Threatened and Endangered Plant Species	4.50
4.11.1.3 New Hampshire Exemplary Communities	4.50
4.11.2 Wildlife	4.50
4.11.2.1 Federally Threatened and Endangered Wildlife Species	4.50
4.11.2.2 State Rare, Threatened and Endangered Plant Species	4.51
4.11.3 Invasive Species	4.53
4.12 Cultural Resources	4.53
4.12.1 Historic Architectural Resources	4.53
4.12.2 Archaeological Resources	4.55
4.13 Socio-Economic Impacts	4.55
4.13.1 Property Acquisitions	4.55
4.13.2 Property Value Impacts	4.58
4.13.3 Impacts on Growth and Development	4.59
4.13.4 Analysis	4.59
4.13.5 Community Facilities	4.60
4.13.6 Community Cohesion	4.60
4.13.7 Environmental Justice	4.60
4.14 Visual Resources	4.61
4.14.1 Interstate 89/Exit 1 Area	4.62
4.14.2 Exit 12 Area	4.62
4.14.3 Exit 13 Area	4.63
4.14.4 Exit 14/15 Area	4.63
4.14.5 Mitigation	4.64
4.15 Contaminated Properties and Structures	4.64
4.16 Energy Impacts	4.65
4.17 Indirect and Cumulative Impacts	4.65
4.17.1 Indirect Impacts	4.66
4.17.2 Cumulative Impacts	4.67

4.18 Construction Impacts	4.71
4.18.1 No Build Alternative	4.71
4.18.2 Preferred Alternative	4.71
4.18.2.1 Traffic and Transportation	4.71
4.18.2.2 Other Construction Related Impacts	4.72
4.18.2.3 Mitigation	4.72

5.0 Draft Section 4(f) Evaluation

5.1 Introduction	5.1
5.2 Purpose and Need	5.2
5.3 Existing Conditions	5.2
5.3.1 Capacity Concerns	5.2
5.3.2 Safety and Roadway Geometry Issues	5.3
5.4 Overview of Alternatives	5.4
5.5 Description of Proposed Action	5.5
5.5.1 Interstate 89/Exit 1 Area Concept K	5.5
5.5.2 Exit 12 Area Concept F	5.7
5.5.3 Exit 13 Area Concept B	5.7
5.5.4 Exit 14/15 Area Concept F2	5.8
5.6 Description of Section 4(f) Properties	5.8
5.7 Impact to Section 4(f) Properties	5.9
5.7.1 Historic Sites	5.9
5.7.2 Parks and Recreation Areas	5.10
5.7.3 <i>De Minimis</i> Impact Determinations	5.10
5.8 Avoidance Alternatives	5.13
5.8.1 Corridor Alternatives	5.14
5.8.1.1 No Build	5.14
5.8.1.2 Passenger Rail Service	5.14
5.8.1.3 Travel Demand Management/Travel System Management	5.14
5.8.1.4 Interstate 89/Exit 1 Area Alternatives	5.15
5.8.2 Interstate 89/Exit 1 Area Concept C	5.15
5.8.2.1 Avoidance Alternatives Summary	5.16
5.9 Use Alternatives	5.16
5.9.1 Interstate 89/Exit 1 Area Concept P	5.16
5.10 Least Harm Analysis	5.17
5.11 Measures to Minimize Harm	5.19
5.12 Coordination and Public Participation	5.19
5.13 Concluding Statement	5.19

6.0 Environmental Commitments

6.1 Commitments to be Carried Out During Final Design	6.1
6.2 Commitments to be Carried Out Prior to Earth Disturbance	6.3
6.3 Commitments to be Carried Out During Construction	6.3

7.0 Agency Consultation and Public Involvement

7.1

List of Tables

<u>Table #</u>	<u>Title</u>	
ES.1	Preferred Alternative	ES.5
1.1	NHDOT Project Development Process for I-93 Bow Concord	1.2
1.2	Average Annual Daily Traffic Between Exits 12 and 13	1.8
2.1	I-93 Traffic Volumes	2.6
2.2	LOS Criteria for Freeway Segments	2.7
2.3	Build Concepts for each Segment	2.9
2.4	I-89 Comparison Matrix	2.15
2.5	Exit 12 Comparison Matrix	2.18
2.6	Exit 13 Comparison Matrix	2.21
2.7	Exit 14/15 Comparison Matrix	2.33
2.8	Preferred Alternative	2.38
3.1	Percentage of Trucks	3.5
3.2	LOS Criteria for Freeway Segments	3.10
3.3a	2014 Existing Conditions I-93 Freeway Segments for AM/PM Peak Period (Northbound)	3.11
3.3b	2014 Existing Conditions I-93 Freeway Segments for AM/PM Peak Period (Southbound)	3.12
3.4	2014 Existing Conditions I-89 Freeway Segments for AM/PM Peak Period	3.13
3.5	2014 Existing Conditions I-393 Freeway Segments for AM/PM Peak Period	3.13
3.6	Crashes within Study Limits (2007 – 2016)	3.14
3.7	Crashes by Weather Conditions (2007 – 2016)	3.14
3.8	Crashes by Roadway Conditions (2007 – 2016)	3.15
3.9	Crashes by Year (2007 – 2016)	3.15
3.10	Existing Geometric Deficiencies	3.16
3.11	Existing Infrastructure Deficiencies	3.17
3.12	Noise Abatement Criteria	3.24
3.13	Noise Sensitive Areas (NSAs)	3.25
3.14	Impaired Waters in Study Area	3.37
3.15	Wetland Functions and Values	3.49
3.16	Conservation Lands	3.54
3.17	Properties/Districts Eligible for the National Register of Historic Places	3.64
3.18	Population Trends	3.69
3.19	Housing Trends	3.70

3.20	Rental Housing	3.70
3.21	Median Home Value	3.70
3.22	Median Household Income	3.71
3.23	2017 Racial Composition	3.71
3.24	Corridor Community Profile (Bow and Concord)	3.72
3.25	Corridor Covered Employment Trends	3.73
3.26	Corridor Employment Projections	3.74
3.27	Population Projections	3.75
4.1	2035 No Build I-93 Freeway Segments	4.2
4.2	2035 No Build Intersection Operations	4.4
4.3	I-93 Projected Traffic Volumes	4.6
4.4	I-93 Auxiliary Lane Comparison	4.7
4.5	I-89 Area Concept C Weaving Comparison	4.7
4.6	I-89 Area Concept C Intersection Operations	4.8
4.7	I-89 Area Concept K Weaving Comparison	4.8
4.8	I-89 Area Concept K Intersection Operations	4.9
4.9	I-89 Area Concept P Weaving Comparison	4.10
4.10	I-89 Area Concept P Intersection Operations	4.10
4.11	Exit 12 Area Concept E Intersection Operations	4.11
4.12	Exit 12 Area Concept F Intersection Operations	4.11
4.13	Exit 14/15 Area Concept D2 Weaving Comparison	4.13
4.14	Exit 14/15 Area Concept D2 Intersection Operations	4.14
4.15	Exit 14/15 Area Concept F Weaving Comparison	4.15
4.16	Exit 14/15 Area Concept F Intersection Operations	4.16
4.17	Exit 14/15 Area Concept F2 Weaving Comparison	4.17
4.18	Exit 14/15 Area Concept F2 Intersection Operations	4.18
4.19	Exit 14/15 Area Concept O3 Weaving Comparison	4.19
4.20a	I-89 Area Alternatives Comparison Matrix	4.20
4.20b	Exit 12 Area Alternatives Comparison Matrix	4.21
4.20c	Exit 13 Area Alternatives Comparison Matrix	4.22
4.20d	Exit 14/15 Area Alternatives Comparison Matrix	4.23
4.21	Measured, Existing, and Predicted Noise Levels	4.31
4.22	Noise Barrier Analysis Results	4.32
4.23	Potential Stormwater BMPs	4.36
4.24	Existing and Proposed Salt Application	4.38
4.25	Wetl56and Impact Areas	4.41
4.26	Wetland Function and Value Impacts	4.42
4.27	National Register eligible properties with Adverse Effects	4.54
4.28	Property Acquisitions	4.56
4.29	Environmental Justice Populations	4.61
4.30	Summary of Transportation Projects in the Foreseeable Future	4.70
5.1	Range of Build Alternatives	5.5
5.2	Section 4(f) Impacts from Proposed Alternative	5.12
5.3	Least Harm Analysis	5.18
7.1	Part B Public Participation Activities	7.1

List of Figures

<u>Figure #</u>	<u>Title</u>	
ES.1	Study Area Overview	ES.13
ES.2	I-93 Typical Sections	ES.3
ES.3	Preferred Alternative	ES.14
1.1	Study Area Overview	1.15
1.2	Existing Rail Facilities	1.16
1.3	Crash History for the I-89 Area (2007 to 2016)	1.17
1.4	Crash History for the Exit 12 Area (2007 to 2016)	1.18
1.5	Crash History for the Exit 13 Area (2007 to 2016)	1.19
1.6	Crash History for the Exit 14/15 Area (2007 to 2016)	1.20
2.1	Part A Screening Scoring System	2.2
2.2	I-93 Typical Sections	2.8
2.3	I-93 Segments	2.39
2.4	I-89 Area Existing Conditions	2.40
2.5	I-89 Area Concept C	2.41
2.6	I-89 Area Concept K	2.42
2.7	I-89 Area Concept P	2.43
2.8	Exit 12 Area Existing Conditions	2.44
2.9	Exit 12 Area Concept E	2.45
2.10	Exit 12 Area Concept F	2.46
2.11	Exit 13 Area Existing Conditions	2.47
2.12	Exit 13 Area Concept A	2.48
2.13	Exit 13 Area Concept B	2.49
2.14a	Exits 14/15 Area Existing Conditions	2.50
2.14b	Exits 14/15 Existing Conditions	2.51
2.14c	I-393 Exit 1 Existing Conditions	2.51
2.15a	Exits 14/15 Concept D2	2.52
2.15b	Exits 14/15 Concept D2	2.53
2.15c	I-393 Concept D2, F & F2	2.53
2.16a	Exits 14/15 Concept F	2.54
2.16b	Exits 14/15 Concept F	2.55
2.16c	I-393 Concept D2, F & F2	2.55
2.17	I-93 Typical Section with C-D Roads	2.27
2.18a	Stickney Avenue Access Option A	2.29
2.18b	Stickney Avenue Access Option B	2.29
2.18c	Stickney Avenue Access Option C	2.30
2.19a	Exits 14/15 Concept F2	2.56
2.19b	Exit 14/15 Concept F2	2.57
2.19c	I-393 Concept D2, F & F2	2.57
2.20a	Exits 14/15 Concept O3	2.58
2.20b	Exits 14/15 Concept O3	2.59
2.20	I-393 Exit 1 Concept O3	2.59
2.21	Preferred Alternative	2.60

3.1	Project Transportation Elements	3.87
3.2	Regional Model Limits	3.2
3.3	Microsimulation Model Limits	3.3
3.4	Bluetooth Monitoring Locations	3.4
3.5	Base Year 2014 Peak Hour Traffic Volumes	3.88
3.6	I-93 Monthly Variation between Exits 12 and 13	3.6
3.7	I-93 AADT between Exits 12 and 13 (1981 to 2017)	3.7
3.8	LOS Examples for Basic Freeway Segments	3.9
3.9	Groundwater Resources Overview	3.89
3.10	Public Water Supply Overview	3.90
3.11	Surface Water Overview	3.91
3.12	Impaired Waters Overview	3.92
3.13	Flood Hazard Areas Overview	3.93
3.14	Delineated Wetlands	3.94
3.15	NWI Wetlands	3.95
3.16	Soils and Bedrock Overview	3.96
3.17	Agricultural Resources Overview	3.97
3.18	Conservation and Public Lands	3.98
3.19	Plants and Wildlife Overview	3.99
3.20	Socio-Economic Influence Areas	3.68
3.21	Zoning and Land Use	3.100
3.22	Community Resources Overview	3.101
3.23-1	Noise Sensitive Areas	3.102
3.23-2	Noise Sensitive Areas	3.103
4.1	No Build 2035 Peak Hour Traffic Volumes	4.73
4.2-1	Environmental Consequences - Preferred Alternative (Concept "K") I-89/Exit 1 Area	4.74
4.2-2	Environmental Consequences - Preferred Alternative (Concept "K") I-89/Exit 1 Area	4.75
4.2-3	Environmental Consequences - Preferred Alternative (Concept "F") Exit 12 Area	4.76
4.2-4	Environmental Consequences - Preferred Alternative (Concept "B") Exit 13 Area	4.77
4.2-5	Environmental Consequences - Preferred Alternative (Concept "F2") Exit 14 & 15 Area	4.78
4.2-6	Environmental Consequences - Preferred Alternative (Concept "F2") Exit 14 & 15 Area	4.79
4.2-7	Environmental Consequences - Preferred Alternative (Concept "F2") Exit 14 & 15 Area	4.80
4.2-8	Environmental Consequences - Preferred Alternative (Concept "F2") Exit 14 & 15 Area	4.81
4.3-1	Modeled Noise Barriers	4.82
4.3-2	Modeled Noise Barriers	4.83
4.4	Preferred Alternative Year 2035 Peak Hour Traffic Volumes	4.84
5.1	Section 4(f) Resources Overview	5.20
5.2	Lamora's Garage and House	5.21

5.3	Upton House and Store	5.22
5.4	Boston, Concord, & Montreal Railroad Historic District	5.23
5.5	NH Highway Garage Complex Historic District	5.24
5.6	NH Technical Institute Historic District	5.25
5.7	Concord Shoe Company/Ralph Pill Building	5.26
5.8	Concord Electric Light Station	5.27
5.9	Bike/Pedestrian Path	5.28
5.10	East Concord Heritage Trail	5.29

Appendices

Volume 1

Appendix A	List of Preparers
Appendix B	Agency Correspondence
Appendix C	Cowardin Classification System
Appendix D	Visual Resource Renderings
Appendix E	Distribution List and Notice of Availability

Volume 2 (Separate Document)

Appendix F	Air Quality Report
Appendix G	Technical Feasibility Report
Appendix H	Hazardous Materials Report
Appendix I	Traffic Analysis
Appendix J	Rail and Transit Report

List of Acronyms

AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
BMPs	Best Management Practices
CERCLA	Comprehensive Environmental Response, Compensation, Liability Act
CMAQ	Congestion Mitigation and Air Quality
CO	Carbon Monoxide
dBA	A-weighted decibels
DOE	Determination of Eligibility
DOI	Department of Interior
DNCR	New Hampshire Department of Cultural and Natural Resources
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
FHWA	US Department of Transportation, Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GPS	Global Positioning System
HOV	High Occupancy Vehicles
HUD	Housing and Urban Development
ISA	Initial Site Assessment
LEDPA	Least Environmentally Damaging Practicable Alternative
LOS	Level-of-Service
LRS	Limited Reuse Soils
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
NAAQS	National Ambient Air Quality Standards
NB	Northbound
NEPA	Natural Environmental Policy Act
NHARD	New Hampshire Air Resources Division
NHDES	New Hampshire Department of Environmental Services
NHDHR	New Hampshire Division of Historical Resources
NHDOT	New Hampshire Department of Transportation
NHF&GD	New Hampshire Fish and Game Department
NHNHB	New Hampshire Natural Heritage Bureau
NHOSP	New Hampshire Office of State Planning
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NOx	Nitric Oxide and Nitrogen Dioxide
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
OHM	Oil and/or Hazardous Materials
PFAS	Per- and polyfluoroalkyl Substances

PSI	Preliminary Site Investigation
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
ROW	Right-of-Way
RSA	Revised Statues Annotated
SB	Southbound
SCS	Soil Conservation Service (currently NRCS)
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
SPUI	Single Point Urban Interchange
STIP	Statewide Transportation Improvement Program
TDM	Transportation (or Travel) Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Association
TMO	Transportation Management Organization
TSM	Transportation Systems Management
USACOE	US Army Corps of Engineers
USDA	US Department of Agriculture
USDOT	US Department of Transportation
USEPA	US Environmental Protection Agency
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WHPA	Wellhead Protection Area