

Resource	Impact Calculation	Alternative				
		A	B	C	D	F
Purpose and Need	Change in 2040 traffic through downtown Derry (NH 102) compared to 2040 No Build Conditions: NH 102 East of Griffin St.	-19%	-24%	-22%	-8%	+18%
	Incremental increase in employment in Derry and Londonderry	Derry: 346 Londonderry: 4,335	Derry: 346 Londonderry: 4,335	Derry: 0 Londonderry: 0	Derry: 0 Londonderry: 0	Derry: 0 Londonderry: 0
General	Length of roadway	5.30	5.59	6.25	5.64	2.44
	Additional lane miles ¹	9.1	12.6	12.0	8.1	1.8
	Construction Costs	\$37,100,000	\$37,800,000	\$34,700,000	\$33,800,000	\$4,300,000
	Transmission Line Relocation Costs	\$850,000	\$3,530,000	\$7,560,000	\$4,930,000	\$0
Socioeconomic Conditions ²	Potential residential total acquisitions (number)	12	19	13	0	0
	Potential business displacements (number)	25	11	2	2	16
	Potential commercial total acquisitions (number)	5	2	4	4	2
	Total area of ROW taking (acres)	32.62	52.81	53.35	34.17	1.17
Soils	Total area of disturbance (acres)	69.50	78.69	89.91	87.42	21.51
Contaminated Properties and Hazardous Materials	Known hazardous sites (number) within ASTM search radii	23	18	17	27	41
	Potential hazardous sites (number) within ASTM search radii	27	24	32	55	78
Surface Waters and Water Quality	New stream crossings (number)	4	6	0	0	1
	Existing stream crossings (number)	5	2	4	6	3
	Linear feet stream impacts	1,246	1,341	553	575	152
	Square feet stream impacts	9,658	20,524	16,202	16,171	2,060
	Lane-miles for chloride loading	7.6	11.1	10.6	8.3	1.3
Wetlands	Non-prime Non-vernal pool Wetlands (acres)	2.27	8.85	8.51	3.57	0.00
	Prime wetlands (acres)	0.03	0.06	0.06	0.03	0.00
	Vernal pools (acres)	1.12	1.09	0.27	0.29	0.00
	Wetlands total (acres)	3.43	10.00	8.84	3.89	0.00
	Vernal pools (number)	7	8	3	4	0
Groundwater	Aquifers, surface area of impacts, 0-1000 sq ft/day (acres)	23.13	13.56	32.67	37.58	19.15
	Aquifers, surface area of impacts, 1000-2000 sq ft/day (acres)	0.00	0.00	0.00	0.00	0.16
	Public wellhead protection areas (number)	6	5	5	7	0
	Wellhead protection areas (new impervious, acres)	0.16	1.16	1.16	0.16	0
	Private wells (number)	0	2	2	0	0
	Private wells (number within 150 ft)	21	16	14	18	4
Floodplains	Floodway (acres)	0.14	0.20	0.45	0.44	0.06
	100-year floodplain (acres)	0.43	0.90	1.87	1.82	0.31
	500-year floodplain (acres)	0.52	0.89	0.20	0.39	3.01
Plant Communities and Wildlife	WAP supporting landscapes (acres)	15.49	22.61	8.97	2.12	0.00
	WAP highest ranked wildlife habitat in biological region (acres)	0.00	0.00	0.17	0.17	0.00
Threatened and Endangered Species	State-listed rare plant and animal occurrences (number)	1	2	2	1	0
Cultural Resources ³	Pending Section 106 Consultation Process					
Parks, Recreation, and Conservation Lands	Parks and Conservation Lands (name, area)	Rider Field (0.05 acre)	Rider Field (0.96 acre)	Rockingham Road Conservation Site (0.035 acre) Dumont Conservation Site (0.048 acre) Rider Field (0.96 acre)	Rockingham Road Conservation Site (0.035 acre) Dumont Conservation Site (0.048 acre) Rider Field (0.05 acre)	Hoodcroft Golf Course (0.180 acre)
	Trails and Bicycle Paths (name)	Derry Rail Trail (Planned)	Derry Rail Trail (Planned)	Londonderry Rail Trail (Paved) Londonderry Rail Trail (Unpaved)	Londonderry Rail Trail (Paved) Londonderry Rail Trail (Unpaved)	Rail Trail / Path (On-Road Bicycle Route)

Notes:
 1. Additional lane miles have not been used for chloride application purposes.
 2. The value of the residential/relocation and business displacements will be evaluated.
 3. Eligible or potentially eligible historic resources will be evaluated in more detail, and those resources anticipated to experience "adverse effects" will be determined through additional analysis and coordination with NHDRM.