

## Road Asset Impacts: Town of Exeter **Road Name Road Name Road Name** Miles Impacted Miles Impacted Dewey Street 0.01 0.03 Webster Ave Green Street 0.01 Jady Hill Road 0.00 Newfields Road 0.06 NH Route 101 E 0.02 NH Route 101 W 0.00 Park Street 0.01 Spring Street 0.04 String Bridge Swazey Parkway

State & Municipal Roadways (miles)					
Roadway Type	Sea Level Scenarios				
	1.7 feet	4.0 feet	6.3 feet		
State	0.01	0.07	0.48		
Local	0.02	0.48	0.59		
Private	0.00	0.00	0.00		
Not Maintained	0.00	0.00	0.00		
Total Road Miles	0.03	0.55	1.07		

Impacted Asset	Metric	Metric Impact	General Location and Name	
Urban Compact Areas	Acres	77.9	Downtown - Squamscott River and Wheelwright Creek	
			Route 101	
Evacuation Routes	#	3	Route 85	
			Water Street	
Bridges	#	1	Over the Squamscott River	
NIIIDOT Business	#	4	String Bridge Road over Squamscott River	
			Varoius paving of roadways in District 6	
NHDOT Projects	#	4	Median barrier protection	
			NH 27, Main Street, B&M RR to Water Street	

Other Transportation Asset Impacts: Town of Exeter

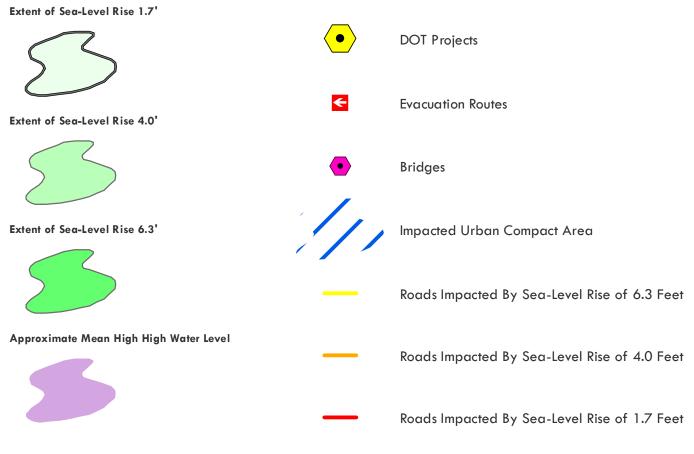


The Climate Risk in the Seacoast: Assessing Vulnerability of Municipal Assets and Resources to Climate Change (C-RiSe) project provides maps and assessments of flood impacts to infrastructure and natural resources in the coastal Great Bay region associated with projected increases in storm surge, sea level, and precipitation.

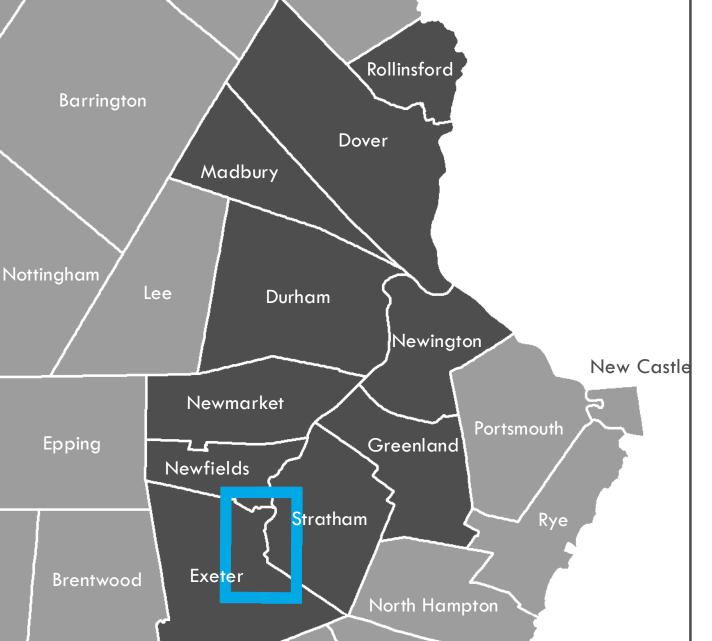
## **TRANSPORTATION ASSETS:** TOWN OF EXETER

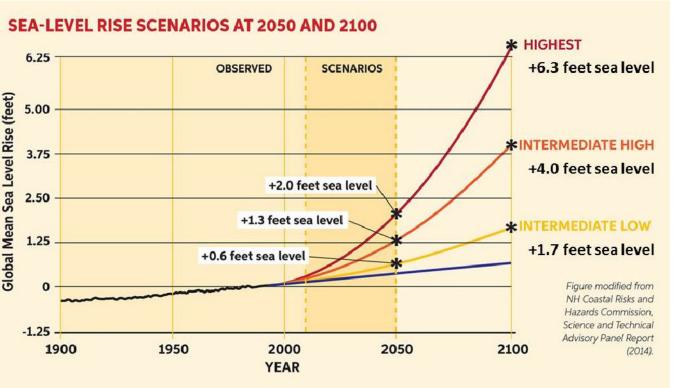
Extent of Projected Tidal Flooding Sea-Level Rise 1.7', 4.0', 6.3'

## SLR Legend Impact Legend



NHDOT projects were derived from various sources within the New Hampshire Department of Transportation and may have been updated at different times and with varying levels of accuracy. Given redundancies and the need to provide meaningful maps for planning purposes, SRPC generalized projects according to vulnerable areas. A more comprehensive list of impacted projects can be viewed within the community's vulnerability assessment chapter.





## Sea-Level Rise Scenarios

Please note that the sea-level rise scenarios used in this assessment were derived from the Wake, 2011 report (refer to table of values below from this report). These scenarios were selected prior to the release of the Science and Technical Advisory Panel Report to the N.H. Coastal Risks & Hazards Commission, in August, 2014 [1]. While slightly different than the scenarios cited in that report, they yield coverage estimates that are within the mapping margin of error.

[1] Wake CP, Kirshen P, Huber M, Knuuti K, and Stampone M (2014) Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends, prepared by the Science and Technical Advisory Panel (STAP) for the New Hampshire Coastal Risks and Hazards Commission.

	2050		2100	
	Lower	Higher	Lower	Higher
Current Elevation of MHHW a,b	4.4	4.4	4.4	4.4
100-Year Flood Height	6.8	6.8	6.8	6.8
Subsidence	0.0	0.0	0.0	0.0
Eustatic SLR	1.0	1.7	2.5	6.3
Total Stillwater Elevation a.c	12.2	12.9	13.7	17.5

c - Total Stillwater Elevation may not equal total of components due to rounding

Table 13. Estimates (in feet) of future 100-year flood Stillwater elevations at Fort Point under lower and higher emission scenarios (relative to NAVD88) based on the statistical analysis presented in this report. Wake CP, E Burakowski, E Kelsey, K Hayhoe, A Stoner, C Watson, E Douglas (2011) Climate Change in the Piscataqua/Great Bay Region: Past, Present, and Future. Carbon Solutions New England Report for the Great Bay (New Hampshire) Stewards."

Prepared by the Strafford Regional Planning Commission

150 Wakefield St. Suite 12 Rochester, NH 03867 T: (603) 994-3500 E: srpc@strafford.org

Date: 7/29/2016 Author: MS/RP/JL/KP

Data sets were retrieved from the NH GRANIT database, December, 2015. Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Earth Systems Research Center (ESRC), under contract to the Office of Energy & Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OEP nor ERSC make any claim as to the validity or reliability or to any implied uses of these data.

The C-RiSe project is funded by the National Oceanic and Atmospheric Administration under the Coastal Zone Management Act (CZMA) Enhancement Program Projects of Special Merit for FY 2015, authorized

under Section 309 of the CZMA

(16 U.S.C. § 1456b).









0.41

Water Street