

ICNet Members' New England Research & Project Survey



Research/Project Focus	Rising Sea Level Impacts of Road Infrastructure in Coastal New Hampshire
Research/Project Description	The overall research goal was to evaluate the influence of rising groundwater (due to SLR) on sections of two coastal roads in NH. Evaluate change in asphalt concrete material properties with inundation times; determine frequency of inundation of pavement layers for two pavements.
Primary Category*	Pavement
Geographic Location	Two coastal roads in NH: Rte. 101 and Rte. 286 in Hampton, NH
Funding	UNH Advance
Contact	Jo Daniel, UNH: Jo.Daniel@unh.edu
Infrastructure sectors effected, subject area	Roads
For modeled climate or sea level rise projections, AOGCM or other sources used	N/A
Other Information, data, models, used	Hourly sea level data was provided by NOAA. Measurements were taken at the gauge at Seavey Island, ME

Time periods analyzed	1925-1985
Status /Date submitted to ICNet	Completed. Submitted to ICNet Oct, 2013
Brief key findings to date	Asphalt concrete mixture tested was not susceptible to changes in properties, even with long inundation times. Analysis of sea level data shows that these pavement sections are becoming inundated more frequently.
Key publications/reports?	Rob Chase Honors Thesis – available from J. Daniel
Other information (e.g., web links to technical reports).	None

*** Categories: Roads, bridges, and culverts; Pavement and/or soils; Hydrology (study of data/floods); Environmental/water resources (stormwater, drinking water); Transportation assets (network); Climate model output**