

NEWS RELEASE

STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION

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POPSICLE STICK BRIDGES DESIGNED AND BROKEN AT THE NHDOT
THREE NH HIGH SCHOOLS COMPETE IN CIVIL ENGINEERING CHALLENGE

Teams from Pembroke Academy captured top honors for the strongest, the most original, and the most classic Popsicle stick bridges at the second annual TRAC (Transportation and Civil Engineering) Bridge Breaking Competition. Hosted by the New Hampshire Department of Transportation (NHDOT), the contest featured teams from Merrimack and Winnisquam High Schools as well as Pembroke Academy.

Under the rules of the Popsicle stick bridge competition, groups of students had to use no more than 500 Popsicle Sticks and hot melt glue to build a structure to bridge a gap of three feet. All bridges were judged for their design and tested for their strength. During the strength tests, students used their own body weight on a testing device to load-test and break the bridges they had created.

The Pembroke Academy winning entry in the strength category, with the highest strength to weight ratio, held 169 pounds. Sharing first place honors were Nathan Carson, Craig Dostie, and Christopher Tirone. Pembroke Academy dominated this year's competition, also winning the "Second place in Strength", "Most Original", and "Most Classic" awards. The strength competition was very close. Merrimack's team of Kolleen Fortin, Thomas MacPherson, and Keegan Chasse managed to grab third place with a classic "K-Truss" bridge design.

The competition was part of the TRAC Program that promotes the values of math, science, and social studies in education and applies them to real Civil Engineering tasks. The NHDOT continues to be a strong supporter of the program by reaching out to high schools in New Hampshire.

"By working as a design team, students begin to understand that something as complex as a bridge design can involve a lot of planning, compromise, and coordination, besides the hard math and science usually associated with engineering," said Matt Hill, an NHDOT engineer and TRAC volunteer at Pembroke Academy.