

**University of New Hampshire**  
**Vice President for Research and Public Service Discretionary Fund Competition 2004**

**“Properties of Asphalt Mixtures Containing Recycled Asphalt Pavement”**

**Jo Sias Daniel – Civil Engineering**

**Final Report on Outreach Component**

The New Hampshire Department of Transportation (NHDOT) Bureau of Materials and Research was the external partner for this research. NHDOT personnel were involved in the project planning and design. They were consulted to determine the appropriate RAP percentages to test, the approach to mixture design, and assisted in the acquisition of the required materials. As questions arose during the mixture design process, the undergraduate student responsible for this project was able to contact research engineers at the DOT for advice. Once the testing was complete, the DOT research engineers were able to assist in deciphering some of the results. The end result of this collaboration between the PI and the DOT is a new research project funded by the DOT. In the new project, an additional source of RAP is to be tested where field cores of the RAP material and of the new RAP mixture are available. This new project is currently underway and is providing funding for one graduate student for one year.

The VPR&PS project provided funding for an undergraduate student during the summer and part time during the fall semester. The experience allowed the student to make a more informed decision about whether she wanted to pursue a masters degree right away or to find a consulting job after graduation.

The results of this project have been presented by the PI in various conferences in meetings, including:

- 2004 North East State Materials Engineers Association meeting in Portsmouth, NH
- 2005 Annual meeting of the Transportation Research Board in Washington, DC
- 2005 Petersen Asphalt Research Conference in Cheyenne, WY

The data are also included in a peer reviewed paper that will be published in the 2005 Transportation Research Record. In addition to the new NHDOT project, the findings of this project have been used by the PI in new proposals that have been funded by the Recycled Materials Resource Center and the New England Transportation Consortium.