



NEWS RELEASE

VirginiaDOT.org



Nov. 12, 2015

RELEASE: **IMMEDIATE**
CONTACT: Ann Overton, 434-293-1912 (office)
Ann.Overton@VDOT.Virginia.gov

Cecilia Leonard, VTTI
540-231-1015 (office)
cleonard@vti.vt.edu

NEW VDOT PROGRAM AT VIRGINIA TECH WILL ACCELERATE PAVEMENT TESTING

'Heavy vehicle simulator' will help save time, money for road maintenance, rehabilitation

BLACKSBURG, Va. – The Virginia Department of Transportation (VDOT) today flipped the switch to start a new program that will cut years off the time needed to test the response of innovative pavements to the daily impacts of heavy traffic.

VDOT's "accelerated pavement testing" program, which launched today at the Virginia Tech Transportation Institute (VTTI), employs a "heavy vehicle simulator" as its technological centerpiece.

"We located this program at VTTI because VDOT has a long and productive relationship of collaborating with Virginia Tech on transportation projects, especially through our respective research programs," said VDOT Commissioner Charlie Kilpatrick. "The accelerated pavement testing program will provide VDOT and Virginia Tech with training and education benefits as we study more strategic and cost-effective options to save money on longer-wearing pavements. We also are gratified to have Virginia Tech as our partner in this new venture."



This heavy vehicle simulator is the technological heart of VDOT's new 'accelerated pavement testing' program (VTTI photo).

“VDOT and VTTI have a successful and extensive record of partnering to bring about substantial improvements in the transportation system, said Dr. Tom Dingus, director of VTTI.

“Collectively, we have created the resources necessary to test and develop myriad applications, from next-generation vehicular technology to infrastructure improvements. By launching the use of a state-of-the-art accelerated pavement testing program today, we will expand on this work by helping to maintain and sustain the literal foundation of driving.”

The heavy vehicle simulator will run a wheel assembly – which applies a heavily weighted load to a test pavement – back and forth, day and night, for several months over a 10-foot-wide by 100-foot-long pavement section to simulate the wear and tear induced by repeated passes of heavy trucks on a highway.



The weighted wheel assembly is on the underside of the heavy vehicle simulator (VDOT photo).

Other states with similar accelerated pavement testing programs have realized significant savings in their road maintenance and rehabilitation projects. The savings come primarily from being able to more quickly implement the recommended changes in pavement designs and paving schedules.

The accelerated pavement testing program will enable VDOT to determine how different pavement designs and new materials respond to load testing before putting them on the road.

These include:

- Pavements with increased content of recycled paving materials;
- Different additives or binders to increase a pavement’s service life; and
- Improved configurations of pavement layers under the driving surface for better performance.

The program also will allow VDOT’s and Virginia Tech’s pavement experts to develop better methods of placing instrumentation in new and rehabilitated pavements to monitor their response to heavy vehicle traffic.

Most importantly, the new program will help increase safety for road workers and the traveling public. Using the simulator to test new pavements will reduce the need to close travel lanes to drill pavement cores or conduct other testing, reducing the risk of injuries to VDOT workers as well as motorists.

(END)