

## **No Further Testing Warranted for ET Plus® According to FHWA/AASHTO Task Force**

After months of reviewing real-world crash data from around the country, a joint task force of federal and state transportation safety experts found no reason for further testing of the ET Plus® guardrail end-terminal system (ET Plus) and similar systems meeting National Cooperative Highway Research Program (NCHRP) Report 350 testing criteria.

The task force was comprised of individuals from the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO). The report, released today, did note that for guardrail end-terminal systems approved under NCHRP Report 350 there were performance limitations of all of those guardrail end-terminal systems when impacted outside of the NCHRP Report 350 test criteria. The report concluded that the “evidence did not suggest that these performance limitations are limited to the ET Plus 4-inch device.”

The task force reviewed information provided by the states on the performance of several guardrail end-terminal systems from multiple manufacturers, including the ET Plus (4-inch and 5-inch versions), ET 2000, SKT and FLEAT. The information reviewed included 1,231 crash cases, as well as federal safety data provided by multiple sources and systems. The report also compared crash statistics from 2005, which was the year the ET Plus 4-inch guide channel was approved for use by FHWA, to 2013 and found that fatalities from crashes into guardrail ends decreased by 12 percent.

The executive summary of the report stated that “even with the ‘best’ practice of terminal design, with the wide variety of traffic and field conditions and applications, there will be crashes that exceed the performance expectations for the terminals.” These conditions include, but are not limited to, installation, maintenance or repair issues; terrain features; and guardrail placement, in addition to physical laws; vehicle stability; vehicle crashworthiness; and site conditions.

The task force also recommended moving to full implementation of the newer Manual for Assessing Safety Hardware (MASH) testing criteria for all new installations of guardrail terminals, which will help address an element of some of the performance limitations of NCHRP Report 350 products.

“We are extremely pleased that the task force has recommended no further testing for the ET Plus,” said Dr. Dean Alberson, TTI’s assistant agency director and a senior research engineer. “We at TTI greatly appreciate the commitment of the task force, which evaluated an enormous amount of data over many months. The ET Plus has undergone the most rigorous testing ever applied to any guardrail end-terminal system and has an unbroken chain of eligibility for federal-aid reimbursement from the FHWA. This, plus 15 years of roadside experience, vindicate our confidence in the ET Plus.”

The report can be found here: <http://www.fhwa.dot.gov/guardrailsafety/isptf.cfm>.

The ET Plus is manufactured by Trinity Industries of Dallas under a license agreement with The Texas A&M University System.