ET-PLUS RETESTING

FHWA’s commitment to safety is the principle that underlies all of our efforts with respect to the ET-Plus. We are proceeding to ensure that additional testing of the ET-Plus is prompt, credible, comprehensive, and transparent. If the ET-Plus end terminal fails the crash tests or the FHWA otherwise determines that the ET-Plus poses safety concerns to the traveling public, FHWA will revoke the eligibility letter for the device.

WHO

FHWA safety engineers and AASHTO representatives will observe all of the tests. Representatives from State DOTs (AZ, CA, DE, FL, OH, TX, VA) will observe all or some of the tests.

FHWA has retained an independent expert who will verify that proper testing protocols are followed and independently assess whether the ET-Plus meets crash test criteria.

Media: Trinity is permitting one print and one broadcast representative to observe the crash tests.

WHAT

Retesting of the ET-Plus with the 4-inch channel will help determine that the device meets crash test criteria applicable to this device—National Highway Cooperative Research Program (NCHRP) – 350 criteria, test level 3, which is the standard applicable to the ET-Plus and other guardrail end terminals developed before January 2011. 8 crash tests will take place:

- 4 tests at a guardrail height of 27.75 inches (the test height the Virginia Department of Transportation required of Trinity)
- 4 tests at a guardrail height of 31 inches (the height of the guardrail from the 2005 tests)

Each set of tests is independent. Passing all four tests at the designated height provides for eligibility at that height.

Additional testing? FHWA is reviewing multiple sources of information we have collected to assess whether the ET-Plus has vulnerabilities outside of the testing required by NCHRP 350. The review of this information will help FHWA determine whether to require additional testing of the ET-Plus or other devices in the same class.

Devices to be tested are representative samples of devices currently on roadways. The devices for the upcoming crash tests were selected from the California Department of Transportation’s inventory, measured by FHWA staff, and have been shipped to Southwest Research Institute (SwRI).

WHEN
Schedule: FHWA is committed to quickly answering the questions that have been raised about the performance of the ET-Plus. The first series of tests will occur in December, and the second series of tests will occur in January.

|------------------|------------------|------------------|------------------|
| Rail Height 27 ¾"  
Pickup Truck  
15 degree angle & head-on tests | Rail Height 27 ¼"  
Small Car  
15 degree angle & head-on tests | Rail Height 31"  
Pickup Truck  
15 degree angle & head-on tests | Rail Height 31"  
Small Car  
15 degree angle & head-on tests |

Results: We expect to receive, review, and make the crash test results public after each set of four tests is completed and we have reviewed the data. We would expect to release a determination on the first set of tests in early January and the second set in early February.

WHERE

Southwest Research Institute in San Antonio, Texas. FHWA required that the retest occur at a nationally accredited testing facility that had not previously tested the ET-Plus and that Trinity disclose the testing facility’s financial interests in roadside safety hardware. Trinity selected SwRI, and FHWA accepted the site only after we were satisfied that SwRI met all of our standards to conduct a thorough and credible examination of the ET-Plus. In addition to conducting the tests, SwRI will prepare test reports and evaluations. FHWA and the independent expert will then each review the test reports and evaluations. All of the reports and evaluations will be made publicly available.

WHY

We need to reach a conclusion about the performance of the ET-Plus. In conjunction with our review of all previous crash tests, the upcoming crash tests are designed to address any outstanding concerns that the ET-Plus devices on the system meet the applicable crash test criteria.

These tests are just one part of FHWA's efforts. FHWA also is collecting and reviewing a broad array of information to reach a data-driven conclusion about the real-world performance of the ET-Plus. More broadly, we also are reviewing our existing processes for assessing the safety of roadside safety hardware to determine whether we need to change any part of them. FHWA is committed to working with the transportation community to make any changes that would advance safety.