

## Road Safety Hardware Testing

Applus+ IDIADA has over **17 years' experience in testing highway hardware and security barrier products**. We are an **ISO 17025 accredited laboratory** able to perform testing according to **the Manual for Assessing Safety Hardware (MASH)**, the **European Standard EN 1317**, the **ASTM F2656** for Crash Testing of Security Barriers, and several more.



IDIADA is an **independent test lab dedicated to the testing of safety hardware** and maintains no financial interest in any product.

Our testing facilities are located in the U.S. in Adelanto (CA), in the Mojave Desert, which allows us to perform testing outdoors, all year round. The dry weather also provides us great soil conditions ideal for testing products such as guardrails, which need to be embedded in soil foundations.

Our Adelanto facility has a total of **five test tracks** and **up to nine testing areas**. This amount of space is optimal for conducting a large volume of tests to meet client demands.

### Highway Hardware Testing: Approved MASH laboratory

Highway hardware devices are intended to protect the public from injury by cushioning an impact, redirecting vehicles, or informing drivers of upcoming road restrictions.

Applus+ IDIADA maintains continuous participation in the industry and is **recognized by the Federal Highway Administration (FHWA)** as an **approved MASH laboratory**. We are also contributing members to **Task Force 13**, resulting in:



- MASH updates
- FHWA policy changes

Additionally, Applus+ IDIADA is an **active participant in the Transportation Research Board** in which we have given presentations at previous meetings to inform/drive the industry, as well as working with the top experts in the field, such as the **writers of MASH** and other personnel/companies heavily involved in the industry.

The U.S. industry leading test standard is the Manual for Assessing Safety Hardware. In order to achieve a full approval, the number of tests required varies by type of highway hardware device:

- Roadside barriers (2 test modes)
- Crash cushions (9 test modes)
- Terminals (9 test modes)
- Work-zone devices (2 test modes)

## **Security Barriers Testing: ASTM F2656**

Security barriers are intended to stop an incoming vehicle from entering a guarded facility or roadway. Applus+ IDIADA maintains involvement in the innovation and changes to the industry and is a voting member of the **ASTM F12 committee**. The recognized test standard in the U.S. is the **ASTM F2656 at the M test level**.

Our facility in Adelanto has **five test tracks** to accommodate several product installations to condense product testing and approval times.