

Automated Truck Mounted Attenuator Program

The Road to What's Next

VTTI has created an Automated TMA (ATMA) leader-follower dynamic work zone protection system that protects vulnerable road side workers from injury.

VTTI established a consortia that funded the development of an ATMA system that protects dynamic work zone operations and removes the TMA driver from the dangerous work environment. The system has been integrated into mobile operations on US-460 and I-64 and recent progress has enabled the ATMA to operate in GPS-denied environments such as tunnel maintenance in the I-564 Runway Tunnel. The system is currently undergoing a commercialization process transitioning the technology from research to practice.



- F E A T U R E S**
- Automated leader-follower TMA supports removing the driver from a dangerous operating environment
 - Accurate operation in GPS denied environments such as under overpasses or in tunnels
 - Commanded offsets of +/-12 ft. laterally and 50-400 ft. longitudinally
 - Operating speeds of up to 45 mph
 - LiDAR-based obstacle detection and avoidance
 - Tablet based control application provides real time control from lead vehicle
 - Designed to fit most common TMA chassis types
 - Lead platform package can be installed on any vehicle with a tow hitch and trailer wiring
 - Remote control allows for temporary manual operation of the ATMA for challenging navigation scenarios

- B E N E F I T S**
- Removing driver from at-risk vehicle protects them from potential injury
 - Operates in GPS-denied environments without interruption
 - Tablet-based control application allows for real time operating adjustments
 - Supports multiple configurations of temporary traffic control
 - Operates at speeds that integrate with the flow of traffic
 - Easily fitted to most common chassis designs for quick set up and transferability
 - Minimal training required for operating crews
 - Remote operation allows the vehicle to navigate any obstacle without a physical driver needing to enter the vehicle