

# Specification for Truck Mounted Attenuators

(Dec 11. 2000)

Equipment, machinery, trucks, trailers, or any vehicle parked or utilizing the shoulder for a period of 30 minutes or more shall be protected by a shoulder closure and a truck mounted attenuator or "TMA". The specification for a TMA does not apply to vehicles or equipment that are positioned off the shoulder unless specifically required by the Tollway.

A truck mounted attenuator (TMA) capable of absorbing the impact of errant vehicles can be attached to the rear of a shadow or barrier vehicle to reduce the severity of rear-end crashes. These protective vehicles shall be equipped with flashing amber lights and may be equipped with an arrow board or message sign.

The TMA shall be positioned a sufficient distance ahead of the work zone to allow for the appropriate vehicle roll-ahead but not so far that errant vehicles can travel around the vehicle and strike workers or equipment. This distance shall not be less than 2 times the speed limit (in feet) or more than 4 times the speed limit (in feet) and ideally shall be 3 times the speed limit (in feet) (for 65 mph this distance is 200 feet).

The individual vehicles that are part of the work zone cannot be spaced more than 4 times the speed limit (in feet) to be considered part of the work zone protected by the TMA. In the event any vehicle is spaced more than 4 times the speed limit (in feet) an additional TMA must be positioned in front of the new work zone for (65 mph this distance 260 ft).

A stationary vehicle equipped with a TMA shall have the attenuator in the full down-and-locked position with the vehicle's parking brake set and the transmission in gear. The front wheels of the vehicle shall be turned away from the work zone and traffic to direct it towards a safe area in the event of an impact.

A shadow vehicle equipped with TMA protecting a moving work zone shall have the attenuator in the full down-and-locked position and shall maintain the position of the vehicle within the spacing guidelines given above.

The type of TMA shall be FHWA certified as meeting NCHRP 350 Level 3 test criteria.