

Computed Roll-Ahead Distances for Protective Vehicles

| BARRIER VEHICLE STATIONARY OPERATION | | | | | |
|---|---------------------------------------|--|------------------|------------------|------------------|
| Vehicle Weight (lb) | Prevailing Speed (mph) | Weight of Impacting Vehicle To Be Contained (a) | | | |
| | | 4,500 lb | 10,000 lb | 15,000 lb | 24,000 lb |
| 10,000 | 60-65 | 50 Ft. | 100 Ft. | 150 Ft. | 200 Ft. |
| | 50-55 | 25 Ft. | 75 Ft. | 100 Ft. | 150 Ft. |
| | 45 or less | 25 Ft. | 50 Ft. | 75 Ft. | 100 Ft. |
| 15,000 | 60-65 | 25 Ft. | 75 Ft. | 100 Ft. | 150 Ft. |
| | 50-55 | 25 Ft. | 50 Ft. | 75 Ft. | 100 Ft. |
| | 45 or less | 25 Ft. | 25 Ft. | 50 Ft. | 75 Ft. |
| 24,000 | 60-65 | 25 Ft. | 50 Ft. | 75 Ft. | 100 Ft. |
| | 50-55 | 25 Ft. | 25 Ft. | 50 Ft. | 75 Ft. |
| | 45 or less | 25 Ft. | 25 Ft. | 25 Ft. | 50 Ft. |

Notes:

- (a) Weights of typical vehicles: mid-size auto, 2,250 lb; full-size auto 3,500 lb; loaded ¾-ton pickup truck, 6,000 lb; loaded 1-ton cargo truck, 10,000 lb; **loaded 4-yard dump truck, 24,000lb.**
- (b) N/A
- (c) Values suggested as the appropriate buffer distance for vehicles equipped with TMIA's.

Source:

J.B. Humphreys and T.D. Sullivan, "Guidelines for the Use of Truck-Mounted Attenuators", Proceedings of the Symposium on the Work Zone Traffic Control, Federal Highway Administration, June 1991