

designed during this program, deceleration forces are limited to the extent that they should cause only minor injury. The car is redirected parallel and close to the barrier, and it can be maneuvered after impact and redirection.

A rigid barrier, such as a concrete wall or an unyielding rail, does not absorb energy, and can cause fatal deceleration forces. For these reasons, we concentrated on developing barriers that not only contain the car but yield to control deceleration.

Initial deceleration is reduced by crushing of the car; however, to keep the deceleration to a tolerable level of less than ten times gravity, or ten g's, the

