Highway Design Speed (mph)	Average Running Speed, V_a (mph)	L = Deceleration Length (ft)							
		For Design Speed of First Governing Geometric Control (mph)							
		Stop	15	20	25	30	40	45	50
		For Average Running Speed, V'_a (mph)							
		0	10	17	22	26	32	39	43
30	29	250	230	200	150	--	--	--	--
40	34	320	300	270	220	180	--	--	--
45	39	360	350	310	280	230	180	--	--
50	43	430	410	380	360	300	270	180	--
55	48	480	460	450	400	360	330	250	200
60	53	560	550	510	480	450	400	330	280
70	57	590	590	560	530	500	460	400	350

Notes:

1. *Value is for a grade of 3% or less. See Figure 54-3B for steeper upgrades or downgrades.*

2. *The deceleration lengths are calculated from the distance needed for a passenger car to decelerate from the highway mainline speed to the speed of the first governing geometric control on the exit ramp. The basic assumptions within the AASHTO deceleration model are as follows.*

   a. *The vehicle is initially traveling at the average running speed of the highway mainline.*

   b. *The vehicle decelerates in gear for 3 s of travel time.*

   c. *The motorist brakes the vehicle at a comfortable rate until it reaches the average running speed of the first governing geometric control.*

   The AASHTO deceleration model is discussed in detail in A Policy on Geometric Design of Rural Highways, *1965, pp. 348-351.*

LENGTH FOR DECELERATION

Figure 54-3A