Design Element	Factor	Cars	Cars/ Trailers	Trucks	Total
Mainline Traffic Data					
20 Year ADT (A)					
20 Year ADT, Directional (B)	A x 0.60				
DHV, Directional (DHV)	B x 0.135 (1)				
Traffic Composition (20-year projected) Cars (D_1) …… 1-(D_2+D_3) Cars/Trailers (D_2)……..….. 5% Trucks (D_3)……...……. %	*(D_1)* ___ Cars *(D_2)* ___ Cars/Trailers *(D_3)* ___ Trucks	C_1=DHV x D_1	C_2=DHV x D_2	C_3=DHV x D_3	C=C_1+C_2 + C_3
Vehicles Per Hour @ Rest Area (VPH)					
Cars Stopping (E_1) Normal Routes……...…… .09 Tourist Routes……..… .13 Information & Welcome Centers ……..…. .15 Cars/Trailers (E_2) Normal Stopping ……..…. .15 Trucks (E_3) Normal Stopping ……..…. .15	*(E_1)* ___ Cars *(E_2)* ___ Cars/Trailers *(E_3)* ___ Trucks	VPH_1=E_1 x C_1	VPH_2=E_2 x C_2	VPH_3=E_3 x C_3	VHP=VHP_1+ VHP_2 + VHP_3
Parking Spaces					
Cars (T_1) – Average Stop …….. .25 to .33 hr. @ info. centers … .33 to .50 hr. Cars/Trailers (T_2)….. .50 hr. Trucks (T_3) (2)…….. .50 hr.	*(T_1)* ___ Cars *(T_2)* ___ Cars/Trailers *(T_3)* ___ Trucks	P_1=VPH_1 x T_1	P_2=VPH_2 x T_2	P_3=VPH_3 x T_3	P=P_1+P_2 + P_3
Rest Room Requirements					
Persons/Hour (PH)	VPH x 3.0 occupancy x .75 use				
Number of Comfort Facilities – Men's Room (M)	PH x 0.5				
Number of Comfort Facilities – Women's Room (W)	PH x 0.5				

(1) Assume 13.5% or the 20-year projected DHV, whichever is greater.
(2) Maximum of 80 truck and recreational vehicle parking spaces.

DESIGN GUIDE FOR REST AREA FACILITIES
(Interstates and Freeways)
Figure 51-2A