

Critical Crash Rate:  $F_c = F_a + k(Fa/M)^{1/2} + 0.5/M$

where: Fa = Average Crash Rate of Facility  
k = probability constant, NCDOT has  
M = vehicle exposure (100mvmt)

For more information see TRR 1542, pp.44-48

Type (crashes per 100mvmt)  
chosen  $k=1.645$  for the 95% level of confidence

TIME PERIOD:		1/1/2000		TO		12/31/2002		CRASHES				TOTAL CRASH RATE				TRUCK CRASH RATE			
COUNTY	ROUTE	LOCATION	LENGTH (Miles)	ADT	TIME (YEARS)	EXPOSURE (100MVM)	TOTAL NO. OF ACC.	NO. OF TRUCK ACC.	TOTAL ACC. RATE	STATEWIDE ACC. RATE	CRITICAL RATE	EXCEEDS CRITICAL RATE?	TRUCK ACC. RATE	STATEWIDE ACC. RATE	CRITICAL RATE	EXCEEDS CRITICAL RATE?			
Person	SR 1401	From: MILEPOST 0.000 To: MILEPOST 0.920	0.92	24,000	3.00	0.2418	145	5	599.73	417.7	488.13	YES	20.68	7.3	18.47	YES			
<b>TOTAL</b>							<b>145</b>	<b>5</b>	<b>599.73</b>	<b>417.7</b>	<b>488.13</b>	<b>YES</b>	<b>20.68</b>	<b>7.3</b>	<b>18.47</b>	<b>YES</b>			

RATES COME FROM THE TRAFFIC RATES BY ROAD TYPES AND SYSTEMS FOR 2003 THRU 2005.  
 ALL RATES ARE IN ACCIDENTS PER 100 MILLION VEHICLE MILES  
 Critical Crash Rate:  $F_c = F_a + k(F_a/M)^{1/2} + 0.5/M$   
 REVISED: 4/2008