

Blake George



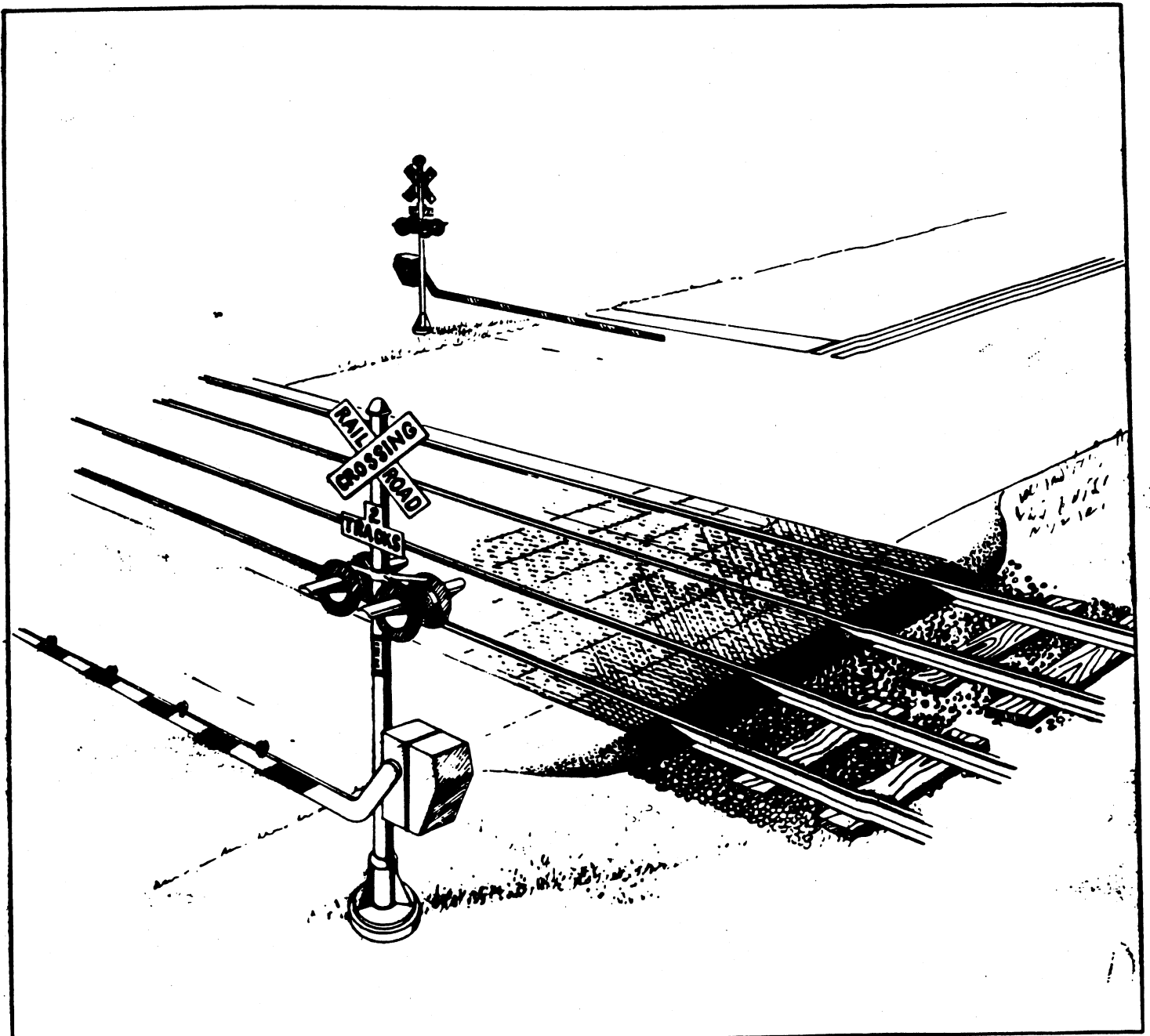
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LIST OF ABBREVIATIONS

ACC /INC	-	accident/incident
A/I	-	accident/incident
CONT	-	contractor employee
ENOD	-	employee not on duty
EOD	-	employee on duty
FA	-	Federal aid
HWY	-	highway
INJ	-	injury or casualty
K	-	thousands
KLD	-	killed
MUTCD	-	Manual on Uniform Traffic Control Devices
LOCO(S)	-	locomotive
NONT	-	non-trespasser
PSGR	-	passenger
SIG	-	signal
TRES	-	trespasser
VEH REG	-	vehicles registered

INTRODUCTION

This seventh annual report, issued by the Federal Railroad Administration (FRA) Office of Safety, combines rail-highway crossing accident/incident statistics with the National Rail-Highway Crossing Inventory. Accident/Incident data comprising accident/incident reports filed by all railroads were gathered from the FRA's Railroad Accident/Incident Reporting System (RAIRS). The National Rail-Highway Crossing Inventory contains sight-survey data about all U.S. rail-highway crossings.

The Federal Railroad Safety Act of 1970 (P. L. 91-458) and the Accident Reports Act (45 U.S.C. 38-34) require railroads to file accident/incident reports with the FRA. The National Rail-Highway Crossing Inventory was developed in response to the Federal Railroad Safety Act of 1970 and the Federal Highway Safety Acts of 1970 and 1973, requiring the Secretary of Transportation to work towards improving safety at rail-highway crossings.

Because of major revisions in reporting requirements, it is not possible to compare data collected after January 1, 1975, with information from prior years. These changes have resulted in an increase in the number of reported rail-highway accidents/incidents; casualty reports have also been increased but to a lesser extent. (Appendix A discusses current reporting requirements.)

* * * * *

Section 1 presents historical data on rail-highway crossing accidents/incidents for 1979 through 1984.

Section 2 contains 1984 accident/incident statistics obtained from the rail-highway crossing accident/incident file and the railroad casualty file.

Section 3 combines information from the rail-highway crossing accident/incident file with data in the National Rail-Highway Crossing Inventory and highlights relationships between certain grade-crossing characteristics and accident frequencies. (Not all data are reflected in the totals of tables 40 and 42, as a consequence of either missing or invalid statistics from the original inventory. These inconsistencies are currently being resolved.)

Section 4 gives the physical and operational statistics for all public, at-grade rail-highway crossings, described in the National Inventory, May 23, 1985.

The tables and figures in Sections 1, 2, 3, 4, and Appendix C furnish data on public rail-highway crossings. Appendix D and tables 33 and 34 present data on private crossings. Tables 1, 3, 7a, 9, 13, D-3, and figures 1 and 3 pertain to crossing accidents/incidents involving all types of highway users (bicycles, pedestrians, etc.). All the other tables show only those accidents/incidents in which motor vehicles are involved. Table S, a summary of all accidents and incidents at every public and private crossing, follows.

TABLE — S
SUMMARY OF RAIL—HIGHWAY CROSSING ACCIDENT/INCIDENTS, 1984

Type of CrossingTotal.....		Motor Vehicles.....		Non-Motor Vehicles.....		
	Accidents	Killed	Injured	Accidents	Killed	Injured	Accidents	Killed	Injured
Public	6,633	610	2,723	6,370	543	2,597	263	67	126
Private	648	39	187	605	32	174	43	7	13
Total	7,281	649	2,910	6,975	575	2,771	306	74	139

1. RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS: HISTORICAL DATA, LAST SIX YEARS

TABLE 1. SUMMARY OF ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS, LAST SIX YEARS

YEAR	NUMBER OF ACCIDENTS	KILLED	TOTAL INJURED	CASUALTIES	CASUALTIES PER ACCIDENT
1979	11,552	834	4,172	5,006	0.43
1980	9,763	788	3,662	4,450	0.46
1981	8,546	697	3,121	3,818	0.45
1982	7,158	580	2,508	3,088	0.43
1983	6,562	542	2,467	3,009	0.46
1984	6,633	610	2,733	3,333	0.51

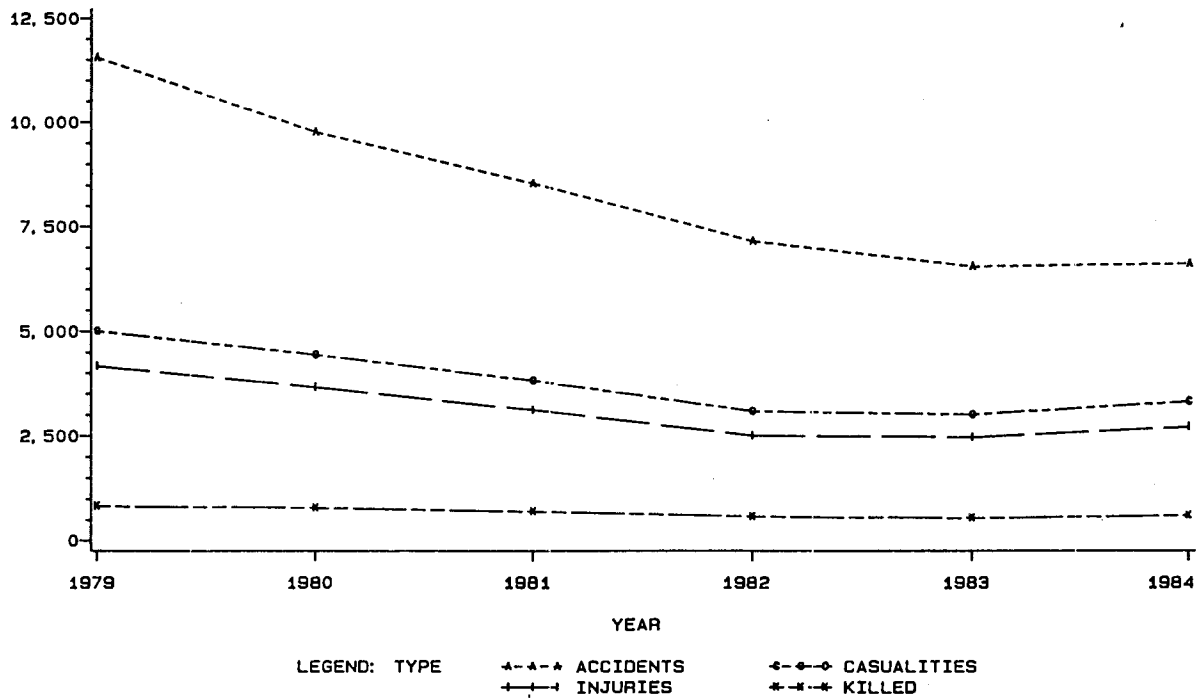


FIGURE 1. SUMMARY OF ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS, LAST SIX YEARS

TABLE 2. SUMMARY OF ACCIDENTS/INCIDENTS AND ACCIDENT RATES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES, LAST SIX YEARS

YEAR	ACCIDENTS	MOTOR VEHICLES REGISTERED (000) ¹	ACCIDENTS PER MILLION VEHICLES
1979	11,108	157,291	70.62
1980	9,422	161,614	58.30
1981	8,232	163,530	50.34
1982	6,882	164,660	41.80
1983	6,272	168,822	37.15
1984	6,370	173,583	36.70

¹Figures supplied by the Federal Highway Administration

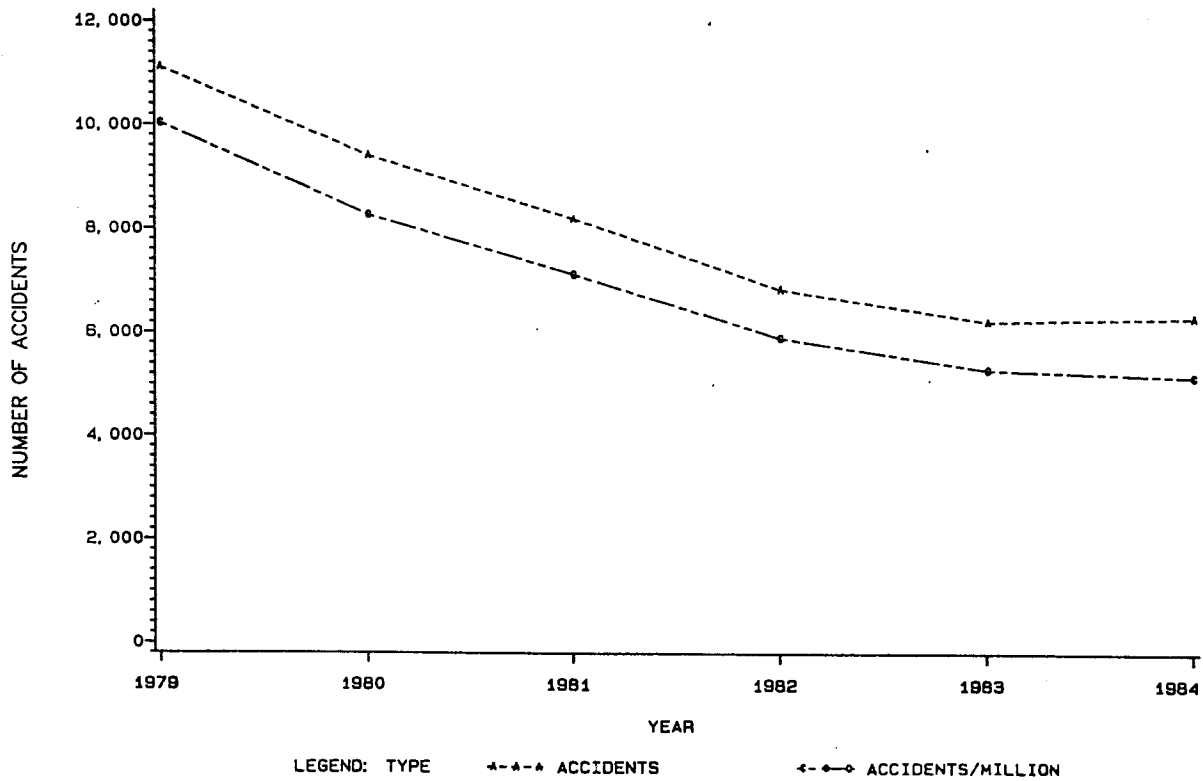


FIGURE 2. SUMMARY OF ACCIDENTS/INCIDENTS AND ACCIDENT RATES AT RAIL-HIGHWAY CROSSING INVOLVING MOTOR VEHICLES, LAST SIX YEARS

2. RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS 1984

STATE AND RAILROAD DATA

TABLE 3. SUMMARY OF ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY STATE

State	No. Of Acc/Inc	---Killed---		---Injured---		Total -Casualties--	
		No.	%	No.	%	No.	%
Alabama.....	162	6	.98	76	2.79	82	2.46
Alaska.....	18	3	.49	7	.26	10	.30
Arizona.....	33	4	.66	4	.15	8	.24
Arkansas.....	187	18	2.95	90	3.31	108	3.24
California.....	306	36	5.90	115	4.22	151	4.53
Colorado.....	93	12	1.97	33	1.21	45	1.35
Connecticut.....	13	1	.16	4	.15	5	.15
Delaware.....	13	1	.16	4	.15	5	.15
Dist. of Columbia	1	---	---	---	---	---	---
Florida.....	186	22	3.61	70	2.57	92	2.76
Georgia.....	193	8	1.31	68	2.50	76	2.28
Idaho.....	42	7	1.15	18	.66	25	.75
Illinois.....	386	50	8.20	179	6.57	229	6.87
Indiana.....	387	28	4.59	163	5.99	191	5.73
Iowa.....	136	7	1.15	55	2.02	62	1.86
Kansas.....	167	20	3.28	72	2.64	92	2.76
Kentucky.....	122	5	.82	52	1.91	57	1.71
Louisiana.....	335	24	3.93	138	5.07	162	4.86
Maine.....	30	2	.33	4	.15	6	.18
Maryland.....	38	5	.82	17	.62	22	.66
Massachusetts....	29	1	.16	14	.51	15	.45
Michigan.....	249	22	3.61	105	3.86	127	3.81
Minnesota.....	171	15	2.46	37	1.36	52	1.56
Mississippi.....	165	21	3.44	93	3.42	114	3.42
Missouri.....	150	23	3.77	55	2.02	78	2.34
Montana.....	38	4	.66	45	1.65	49	1.47
Nebraska.....	106	10	1.64	38	1.40	48	1.44
Nevada.....	3	---	---	---	---	---	---
New Hampshire.....	12	1	.16	7	.26	8	.24
New Jersey.....	43	1	.16	16	.59	17	.51
New Mexico.....	15	2	.33	7	.26	9	.27
New York.....	69	7	1.15	14	.51	21	.63
North Carolina...	187	14	2.30	69	2.53	83	2.49
North Dakota.....	28	2	.33	8	.29	10	.30
Ohio.....	450	49	8.03	180	6.61	229	6.87
Oklahoma.....	159	21	3.44	75	2.75	96	2.88
Oregon.....	76	6	.98	21	.77	27	.81
Pennsylvania.....	107	11	1.80	42	1.54	53	1.59
Rhode Island.....	2	---	---	2	.07	2	.06
South Carolina...	149	18	2.95	73	2.68	91	2.73
South Dakota.....	35	1	.16	15	.55	16	.48
Tennessee.....	143	4	.66	54	1.98	58	1.74
Texas.....	828	83	13.61	322	11.83	405	12.15
Utah.....	57	2	.33	33	1.21	35	1.05
Vermont.....	8	1	.16	5	.18	6	.18
Virginia.....	97	6	.98	60	2.20	66	1.98
Washington.....	110	9	1.48	35	1.29	44	1.32
West Virginia....	73	3	.49	45	1.65	48	1.44
Wisconsin.....	214	14	2.30	79	2.90	93	2.79
Wyoming.....	12	---	---	5	.18	5	.15
Unknown.....	---	---	---	---	---	---	---
Total.....	6,633	610	100.00	2,723	100.00	3,333	100.00

TABLE 4. ACCIDENTS/INCIDENTS AND CASUALTY RATES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY STATE

State	No. Of Acc/Inc	-----Casualties-----			Vehicles Registered	--Per 10,000 Registration--		
		Kld	Inj	Total		Acc/Inc	Kld	Inj
Alabama.....	161	6	76	82	3,217,275	.50	.02	.24
Alaska.....	16	2	6	8	361,067	.44	.06	.17
Arizona.....	29	2	3	5	2,378,905	.12	.01	.01
Arkansas.....	179	16	89	105	1,469,275	1.22	.11	.61
California.....	288	26	111	137	18,471,865	.16	.01	.06
Colorado.....	88	12	33	45	2,767,362	.32	.04	.12
Connecticut.....	13	1	4	5	2,381,507	.05	---	.02
Delaware.....	13	1	4	5	437,460	.30	.02	.09
Dist. of Columbia	1	---	---	---	238,932	.04	---	---
Florida.....	179	19	65	84	9,040,974	.20	.02	.07
Georgia.....	183	8	60	68	4,313,425	.42	.02	.14
Idaho.....	37	3	10	13	929,634	.40	.03	.11
Illinois.....	349	38	163	201	7,745,936	.45	.05	.21
Indiana.....	381	28	152	180	3,992,234	.95	.07	.38
Iowa.....	132	7	55	62	2,717,825	.49	.03	.20
Kansas.....	161	18	70	88	2,147,852	.75	.08	.33
Kentucky.....	118	5	50	55	2,679,460	.44	.02	.19
Louisiana.....	330	24	136	160	2,941,970	1.12	.08	.46
Maine.....	29	2	4	6	813,957	.36	.02	.05
Maryland.....	38	5	17	22	3,085,605	.12	.02	.06
Massachusetts....	29	1	14	15	3,952,304	.07	---	.04
Michigan.....	238	19	95	114	6,527,915	.36	.03	.15
Minnesota.....	159	11	36	47	3,453,978	.46	.03	.10
Mississippi.....	161	21	90	111	1,589,352	1.01	.13	.57
Missouri.....	146	21	53	74	3,527,411	.41	.06	.15
Montana.....	37	4	45	49	862,524	.43	.05	.52
Nebraska.....	100	8	38	46	1,281,153	.78	.06	.30
Nevada.....	3	---	---	---	752,411	.04	---	---
New Hampshire.....	11	1	7	8	855,511	.13	.01	.08
New Jersey.....	43	1	16	17	5,042,113	.09	---	.03
New Mexico.....	14	1	7	8	1,291,318	.11	.01	.05
New York.....	60	2	9	11	8,617,052	.07	---	.01
North Carolina...	181	11	67	78	4,719,541	.38	.02	.14
North Dakota.....	25	2	7	9	697,873	.36	.03	.10
Ohio.....	440	45	173	218	8,054,635	.55	.06	.21
Oklahoma.....	153	21	73	94	2,899,573	.53	.07	.25
Oregon.....	74	5	20	25	2,204,233	.34	.02	.09
Pennsylvania.....	103	9	41	50	7,071,977	.15	.01	.06
Rhode Island.....	2	---	2	2	625,207	.03	---	.03
South Carolina...	147	17	73	90	2,094,079	.70	.08	.35
South Dakota.....	31	1	14	15	668,793	.46	.01	.21
Tennessee.....	137	4	51	55	3,616,977	.38	.01	.14
Texas.....	798	82	305	387	12,021,771	.66	.07	.25
Utah.....	57	2	33	35	1,141,711	.50	.02	.29
Vermont.....	7	1	4	5	389,729	.18	.03	.10
Virginia.....	93	5	59	64	3,975,369	.23	.01	.15
Washington.....	109	9	35	44	3,477,841	.31	.03	.10
West Virginia....	68	2	41	43	1,327,244	.51	.02	.31
Wisconsin.....	207	14	76	90	3,424,668	.60	.04	.22
Wyoming.....	12	---	5	5	525,026	.23	---	.10
Unknown.....	---	---	---	---	---	---	---	---
Total.....	6,370	543	2,597	3,140	168,821,809	.38	.03	.15

Note: Vehicle registration figures are for 1983 and were supplied by the Federal Highway Administration. Registration figures for Hawaii are omitted because it does not have any reporting railroads.

TABLE 5. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY STATE AND TYPE OF MOTOR VEHICLE

TYPE OF MOTOR VEHICLE

State	---Automobile---			---Truck---			---Truck Trailer---			---Bus---			---School Bus---			---Motorcycle---		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Alabama.....	115	5	55	32	---	15	12	1	4	---	---	---	---	---	---	2	---	2
Alaska.....	11	2	4	4	---	1	1	---	1	---	---	---	---	---	---	---	---	---
Arizona.....	15	1	2	9	---	---	4	---	---	---	---	---	---	---	1	1	1	
Arkansas.....	113	8	65	46	7	21	17	---	3	---	---	---	---	---	3	1	---	
California.....	196	20	73	53	6	18	31	---	10	2	---	6	---	---	6	---	4	
Colorado.....	55	8	22	28	3	11	5	1	---	---	---	---	---	---	---	---	---	
Connecticut.....	11	1	3	1	---	1	---	---	---	---	---	---	---	---	1	---	---	
Delaware.....	11	1	4	1	---	---	1	---	---	---	---	---	---	---	---	---	---	
Dist. of Columbia	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Florida.....	121	12	32	40	4	19	13	---	10	1	---	---	1	2	1	3	1	3
Georgia.....	116	5	45	35	2	9	29	1	5	---	---	---	---	---	3	---	1	
Idaho.....	19	1	8	13	2	1	4	---	---	---	---	---	---	---	1	---	1	
Illinois.....	260	31	131	62	5	25	24	---	7	---	---	---	---	---	3	2	---	
Indiana.....	285	20	101	72	5	34	22	3	15	---	---	---	---	---	2	---	2	
Iowa.....	91	3	45	32	2	9	8	---	1	---	---	---	---	---	1	2	---	
Kansas.....	87	12	36	61	6	28	12	---	6	---	---	1	---	---	---	---	---	
Kentucky.....	74	3	33	35	2	13	8	---	3	---	---	---	---	---	1	---	1	
Louisiana.....	222	15	95	67	5	24	39	4	16	1	---	---	---	---	1	---	1	
Maine.....	17	1	2	9	1	1	3	---	1	---	---	---	---	---	---	---	---	
Maryland.....	32	3	17	4	2	---	2	---	---	---	---	---	---	---	---	---	---	
Massachusetts....	27	1	14	2	---	---	---	---	---	---	---	---	---	---	---	---	---	
Michigan.....	182	16	70	40	2	16	12	---	3	---	---	1	---	3	3	1	3	
Minnesota.....	110	8	25	38	2	9	10	---	2	---	---	---	---	---	1	1	---	
Mississippi.....	118	19	65	28	---	20	13	1	5	1	---	---	---	---	1	1	---	
Missouri.....	110	14	42	27	6	7	9	1	4	---	---	---	---	---	---	---	---	
Montana.....	20	2	6	12	1	2	5	1	37	---	---	---	---	---	---	---	---	
Nebraska.....	65	6	26	27	1	9	8	1	3	---	---	---	---	---	---	---	---	
Nevada.....	2	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	
New Hampshire.....	8	---	5	3	1	2	---	---	---	---	---	---	---	---	---	---	---	
New Jersey.....	34	---	13	7	1	2	2	---	1	---	---	---	---	---	---	---	---	
New Mexico.....	8	---	5	5	1	2	1	---	---	---	---	---	---	---	---	---	---	
New York.....	41	---	7	16	2	2	1	---	1	---	---	---	---	---	1	---	---	
North Carolina...	128	8	53	41	3	12	12	---	2	---	---	---	---	---	---	---	---	
North Dakota.....	16	2	1	6	---	5	3	---	1	---	---	---	---	---	4	---	3	
Ohio.....	323	36	116	79	6	41	34	3	13	---	---	---	---	---	---	---	---	
Oklahoma.....	87	12	42	41	4	14	22	4	16	---	---	1	---	---	2	1	1	
Oregon.....	50	5	12	18	---	8	6	---	---	---	---	---	---	---	---	---	---	
Pennsylvania.....	72	7	28	21	1	9	9	---	4	---	---	---	---	---	1	1	---	
Rhode Island.....	1	---	---	1	---	2	---	---	---	---	---	---	---	---	---	---	---	
South Carolina...	105	11	48	20	3	5	22	3	20	---	---	---	---	---	---	---	---	
South Dakota.....	20	1	11	8	---	1	3	---	2	---	---	---	---	---	---	---	---	
Tennessee.....	97	4	42	26	---	6	13	---	3	---	---	---	---	---	1	---	---	
Texas.....	490	54	195	218	23	81	87	4	28	1	---	---	---	---	2	1	1	
Utah.....	32	1	21	18	1	11	6	---	---	---	---	---	---	---	1	---	1	
Vermont.....	5	1	4	2	---	---	---	---	---	---	---	---	---	---	---	---	---	
Virginia.....	65	3	24	20	1	7	6	---	2	---	---	1	1	26	1	---	---	
Washington.....	69	3	13	33	6	17	7	---	5	---	---	---	---	---	---	---	---	
West Virginia....	49	2	15	14	---	6	2	---	1	---	---	2	---	18	1	---	1	
Wisconsin.....	159	12	56	28	1	12	17	1	5	---	---	---	---	---	3	---	3	
Wyoming.....	4	---	3	6	---	2	2	---	---	---	---	---	---	---	---	---	---	
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Total.....	4,349	380	1,735	1,410	118	540	547	29	239	7	---	6	7	3	48	50	13	29

TABLE 6. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY STATE AND TYPE OF TRAIN

State	TYPE OF TRAIN											
	----Freight----			---Passenger---			-Yard Switching			-----Other-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Alabama.....	121	6	55	1	---	1	28	---	13	11	---	7
Alaska.....	7	1	4	2	---	---	5	1	2	2	---	---
Arizona.....	18	2	2	---	---	---	8	---	1	3	---	---
Arkansas.....	153	16	79	2	---	---	16	---	6	8	---	4
California.....	183	17	72	17	7	10	41	1	16	47	1	13
Colorado.....	61	12	26	7	---	---	11	---	3	9	---	4
Connecticut.....	5	---	1	7	1	3	1	---	---	---	---	---
Delaware.....	11	1	4	---	---	---	1	---	---	1	---	---
Dist. of Columbia	---	---	---	---	---	---	1	---	---	---	---	---
Florida.....	131	17	51	13	1	4	21	1	8	14	---	2
Georgia.....	122	7	39	1	---	1	36	---	11	24	1	9
Idaho.....	32	2	9	---	---	---	1	---	---	4	1	1
Illinois.....	241	32	119	43	6	18	29	---	11	36	---	15
Indiana.....	284	27	125	27	1	9	19	---	4	51	---	14
Iowa.....	82	7	39	---	---	---	24	---	7	26	---	9
Kansas.....	132	16	60	5	2	---	14	---	3	10	---	7
Kentucky.....	95	3	42	---	---	---	9	2	4	14	---	4
Louisiana.....	229	20	98	17	3	3	45	---	23	39	1	12
Maine.....	23	2	4	---	---	---	4	---	---	2	---	---
Maryland.....	28	5	12	---	---	---	2	---	1	8	---	4
Massachusetts....	12	---	8	13	1	4	1	---	---	3	---	2
Michigan.....	173	18	81	6	---	2	37	1	3	22	---	9
Minnesota.....	114	11	34	2	---	1	19	---	---	24	---	1
Mississippi.....	128	20	75	8	1	6	12	---	6	13	---	3
Missouri.....	110	19	42	5	1	2	17	1	4	14	---	5
Montana.....	20	1	7	5	3	35	4	---	2	8	---	1
Nebraska.....	82	7	30	---	---	---	10	---	5	8	1	3
Nevada.....	2	---	---	---	---	---	---	---	---	1	---	---
New Hampshire.....	7	1	5	1	---	1	2	---	---	1	---	1
New Jersey.....	16	1	5	19	---	9	4	---	---	4	---	2
New Mexico.....	10	1	5	1	---	1	1	---	---	2	---	1
New York.....	31	1	4	19	1	3	1	---	---	9	---	2
North Carolina...	141	7	56	12	4	---	16	---	5	12	---	6
North Dakota.....	16	1	6	3	1	---	4	---	---	2	---	1
Ohio.....	376	37	154	11	5	5	22	---	6	31	3	8
Oklahoma.....	127	19	61	---	---	---	12	2	5	14	---	7
Oregon.....	53	3	20	2	2	---	11	---	---	8	---	---
Pennsylvania.....	64	7	18	15	2	14	4	---	1	20	---	8
Rhode Island.....	1	---	2	1	---	---	---	---	---	---	---	---
South Carolina...	117	10	51	8	6	13	8	---	4	14	1	5
South Dakota.....	23	1	12	---	---	---	4	---	1	4	---	1
Tennessee.....	96	4	36	1	---	---	26	---	8	14	---	7
Texas.....	544	71	232	6	3	5	147	3	45	101	5	23
Utah.....	48	2	31	1	---	---	5	---	---	3	---	2
Vermont.....	7	1	4	---	---	---	---	---	---	---	---	---
Virginia.....	71	3	56	2	2	---	8	---	---	12	---	3
Washington.....	72	9	30	3	---	---	19	---	3	15	---	2
West Virginia....	51	2	21	1	---	---	5	---	---	11	---	20
Wisconsin.....	128	13	65	---	---	---	48	1	7	31	---	4
Wyoming.....	11	---	4	---	---	---	1	---	1	---	---	---
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	4,609	463	1,996	287	53	150	764	13	219	710	14	232

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 7. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY RAILROAD AND WARNING DEVICE CATEGORY

WARNING DEVICE CATEGORY

Railroad	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross-Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alabama Great Southern Railroad.....	6	7	2	---	9	---	---	4	28
Amtrak (National Railroad Passenger Corp.)	56	34	8	---	66	---	---	---	164
Atchison, Topeka and Santa Fe Railway Co..	82	117	8	1	145	---	1	1	355
Baltimore and Ohio Railroad Company.....	29	60	5	6	110	---	---	4	214
Bangor And Aroostook Railroad Company.....	---	1	---	---	2	---	---	---	3
Bessemer & Lake Erie Railroad Company.....	---	---	---	---	---	---	---	---	---
Boston and Maine Corporation.....	15	5	1	9	7	1	---	---	38
Burlington Northern.....	72	140	45	2	362	7	---	15	643
Canadian Pacific Lines In Maine.....	---	---	---	---	1	---	---	---	1
Carolina And Northwestern Rwy Company.....	---	1	---	---	3	---	---	---	4
Central of Georgia Railroad Company.....	3	10	10	1	13	---	---	1	38
Central Vermont Railway Incorporated.....	---	4	---	---	3	---	---	---	7
Chesapeake and Ohio Railway Company.....	11	63	3	2	67	---	---	---	146
Chicago and Northwestern Transportation Co	33	82	21	5	92	1	---	4	238
Chicago And Illinois Midland Railway Co...	---	1	---	---	---	---	---	---	1
Chicago South Shore And South Bend RR.....	6	5	1	---	3	---	---	---	15
Chicago, Milwaukee, St. Paul & Pacific RR.	15	45	13	3	57	3	---	3	139
Cincinnati, New Orleans & Texas Pacific RR	3	3	---	---	3	---	---	1	10
Consolidated Rail Corporation.....	115	164	10	13	201	5	1	5	514
Delaware and Hudson Railroad Company.....	---	3	---	---	---	---	---	---	3
Denver and Rio Grande Western Railroad Co.	7	16	1	---	14	---	---	---	38
Duluth Winnipeg And Pacific Railway Co....	---	---	---	---	1	---	---	---	1
Duluth, Missabe and Iron Range Railway Co.	---	---	---	---	2	---	---	---	2
Elgin, Joliet and Eastern Railway Company.	---	4	---	---	4	---	---	---	8
Florida East Coast Railway Company.....	28	---	---	1	2	---	---	---	31
Georgia Southern And Florida Railway.....	---	1	---	---	9	---	---	---	10
Grand Trunk Western Railroad Company.....	26	41	---	---	35	---	2	2	106
Green Bay And Western Railroad.....	---	4	4	---	10	---	---	---	18
Illinois Central Gulf Railroad.....	20	122	9	6	145	---	---	5	307
Kansas City Southern Railway Company.....	1	19	1	4	30	---	---	---	55
Louisiana & Arkansas Railway Company.....	11	33	7	---	31	---	---	1	83
Maine Central Railroad Company.....	4	6	---	3	2	---	---	---	15
Michigan Interstate Railroad.....	---	1	1	---	---	---	---	---	2
Missouri Pacific Railroad Company.....	55	221	8	8	259	1	11	4	567
Missouri-Kansas-Texas Railroad Company....	7	46	3	2	43	1	---	1	103
Monogahela Railway.....	---	1	---	---	---	---	---	---	1
Norfolk and Western Railway Company.....	62	107	7	---	199	---	1	3	379
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---	---	---
Oklahoma, Kansas And Texas Railroad Co....	1	6	---	---	8	---	---	---	15
Pittsburgh & Lake Erie Railroad.....	---	---	---	---	1	---	---	---	1
Richmond, Frederickburg And Potomac.....	1	---	---	---	---	---	---	---	1
Seaboard System Railroad.....	104	191	53	21	347	9	1	7	733
Soo Line Railroad.....	5	37	3	1	40	---	---	1	87
Southern Pacific Transportation Company...	128	85	50	19	158	6	---	7	453
Southern Railway Company.....	27	69	14	5	153	---	---	8	276
Spokane International Railroad.....	---	---	---	---	7	---	---	---	7
St. Louis Southwestern Railway Company....	13	31	3	4	59	---	---	---	110
Texas Northern Railroad Company.....	---	---	---	1	---	---	---	---	1
Texas, Mexican Railway Company.....	---	4	---	---	7	---	---	---	11
Union Pacific Railroad.....	37	46	4	5	119	3	1	3	218
All Other Railroads.....	78	108	18	11	99	3	3	10	330
Total.....	1,061	1,944	313	133	2,928	40	21	90	6,530

Note: "Special" are crossings protected by watchmen or members of train crew.

The totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

TABLE 7A. ACCIDENTS/INCIDENTS AND CASUALTIES BY RAILROAD

Railroad	-----Motor Vehicle-----			-----Other Highway Users-----			-----Total-----		
	Acc/Inc	Killed	Injured	Acc/Inc	Killed	Injured	Acc/Inc	Killed	Injured
Alabama Great Southern Railroad.....	28	---	8	1	---	---	29	---	8
Amtrak (National Railroad Passenger Corp.)	164	---	42	5	---	---	169	---	42
Atchison, Topeka and Santa Fe Railway Co..	355	42	149	18	9	2	373	51	151
Baltimore and Ohio Railroad Company.....	214	15	116	2	---	1	216	15	117
Bangor And Aroostook Railroad Company.....	3	---	---	---	---	---	3	---	---
Bessemer & Lake Erie Railroad Company.....	---	---	---	---	---	---	---	---	---
Boston and Maine Corporation.....	38	---	9	1	---	---	39	---	9
Burlington Northern.....	643	80	213	21	4	5	664	84	218
Canadian Pacific Lines In Maine.....	1	1	---	---	---	---	1	1	---
Carolina And Northwestern Rwy Company.....	4	---	5	---	---	---	4	---	5
Central of Georgia Railroad Company.....	38	2	19	1	---	1	39	2	20
Central Vermont Railway Incorporated.....	7	1	4	1	---	1	8	1	5
Chesapeake and Ohio Railway Company.....	146	10	91	5	3	7	151	13	98
Chicago and Northwestern Transportation Co	238	13	87	16	3	5	254	16	92
Chicago And Illinois Midland Railway Co...	1	---	---	---	---	---	1	---	---
Chicago South Shore And South Bend RR.....	15	---	2	1	---	---	16	---	2
Chicago, Milwaukee, St. Paul & Pacific RR.	139	8	32	8	3	1	147	11	33
Cincinnati, New Orleans & Texas Pacific RR	10	---	3	1	---	---	11	---	3
Consolidated Rail Corporation.....	514	45	112	9	3	7	523	48	119
Delaware and Hudson Railroad Company.....	3	---	---	---	---	---	3	---	---
Denver and Rio Grande Western Railroad Co.	38	1	18	---	---	---	38	1	18
Duluth Winnipeg And Pacific Railway Co....	1	---	1	---	---	---	1	---	1
Duluth, Missabe and Iron Range Railway Co.	2	---	---	---	---	---	2	---	---
Elgin, Joliet and Eastern Railway Company.	8	2	5	---	---	---	8	2	5
Florida East Coast Railway Company.....	31	3	13	2	2	2	33	5	15
Georgia Southern And Florida Railway.....	10	1	2	2	---	1	12	1	3
Grand Trunk Western Railroad Company.....	106	14	65	10	2	5	116	16	70
Green Bay And Western Railroad.....	18	4	7	---	---	---	18	4	7
Illinois Central Gulf Railroad.....	307	20	171	15	4	5	322	24	176
Kansas City Southern Railway Company.....	55	3	16	2	1	---	57	4	16
Louisiana & Arkansas Railway Company.....	83	1	35	1	---	1	84	1	36
Maine Central Railroad Company.....	15	1	2	1	---	---	16	1	2
Michigan Interstate Railroad.....	2	---	---	---	---	---	2	---	---
Missouri Pacific Railroad Company.....	567	86	357	36	4	18	603	90	375
Missouri-Kansas-Texas Railroad Company....	103	6	43	3	---	2	106	6	45
Monogahela Railway.....	1	---	1	---	---	---	1	---	1
Norfolk and Western Railway Company.....	379	29	187	16	2	17	395	31	204
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---	---	---
Oklahoma, Kansas And Texas Railroad Co....	15	1	7	1	---	1	16	1	8
Pittsburgh & Lake Erie Railroad.....	1	---	2	1	1	---	2	1	2
Richmond, Fredericksburg And Potomac.....	1	2	---	---	---	---	1	2	---
Seaboard System Railroad.....	733	61	237	22	5	12	755	66	249
Soo Line Railroad.....	87	4	44	5	1	3	92	5	47
Southern Pacific Transportation Company...	453	40	133	14	6	3	467	46	136
Southern Railway Company.....	276	12	135	6	---	4	282	12	139
Spokane International Railroad.....	7	---	4	---	---	---	7	---	4
St. Louis Southwestern Railway Company....	110	8	24	4	---	5	114	8	29
Texas Northern Railroad Company.....	1	---	---	---	---	---	1	---	---
Texas, Mexican Railway Company.....	11	---	---	---	---	---	11	---	---
Union Pacific Railroad.....	218	16	63	19	7	11	237	23	74
All Other Railroads.....	330	11	133	18	7	6	348	18	139
Total.....	6,530	543	2,597	268	67	126	6,798	610	2,723

Note: A/I totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

TABLE 8. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY STATE AND WARNING DEVICE CATEGORY

WARNING DEVICE CATEGORY

State	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross-Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alabama.....	10	22	29	6	87	4	---	3	161
Alaska.....	---	11	1	---	3	---	1	---	16
Arizona.....	9	4	2	2	11	---	---	1	29
Arkansas.....	11	62	1	3	91	---	11	---	179
California.....	121	65	22	7	65	5	3	---	288
Colorado.....	11	30	6	---	38	3	---	---	88
Connecticut.....	3	8	---	---	2	---	---	---	13
Delaware.....	2	9	---	---	2	---	---	---	13
Dist. of Columbia	---	---	---	1	---	---	---	---	1
Florida.....	68	52	4	3	52	---	---	---	179
Georgia.....	24	29	18	4	104	1	---	3	183
Idaho.....	2	3	1	---	31	---	---	---	37
Illinois.....	98	135	7	5	98	---	---	6	349
Indiana.....	81	129	11	6	149	3	---	2	381
Iowa.....	16	45	9	---	60	---	1	1	132
Kansas.....	19	35	3	---	102	2	---	---	161
Kentucky.....	17	46	12	3	33	1	1	5	118
Louisiana.....	32	128	26	6	130	---	---	8	330
Maine.....	5	8	---	6	9	1	---	---	29
Maryland.....	8	10	2	2	12	1	---	3	38
Massachusetts....	13	5	1	6	4	---	---	---	29
Michigan.....	37	100	5	3	90	---	2	1	238
Minnesota.....	11	50	7	3	81	3	---	4	159
Mississippi.....	4	42	7	3	98	2	---	5	161
Missouri.....	14	49	12	2	68	---	---	1	146
Montana.....	6	2	6	---	23	---	---	---	37
Nebraska.....	17	27	2	1	50	1	---	2	100
Nevada.....	1	---	---	1	1	---	---	---	3
New Hampshire.....	2	3	---	1	4	1	---	---	11
New Jersey.....	15	18	---	5	2	---	---	3	43
New Mexico.....	6	1	---	1	6	---	---	---	14
New York.....	29	17	1	2	11	---	---	---	60
North Carolina...	18	34	3	4	117	---	---	5	181
North Dakota.....	4	4	1	---	16	---	---	---	25
Ohio.....	62	115	8	2	252	---	1	---	440
Oklahoma.....	14	50	5	2	82	---	---	---	153
Oregon.....	13	8	5	1	38	4	---	5	74
Pennsylvania.....	18	28	3	4	46	2	---	2	103
Rhode Island.....	1	1	---	---	---	---	---	---	2
South Carolina...	11	35	7	7	86	1	---	---	147
South Dakota.....	---	9	1	---	21	---	---	---	31
Tennessee.....	16	48	7	4	59	1	---	2	137
Texas.....	108	277	24	24	355	2	---	8	798
Utah.....	6	11	3	1	34	---	1	1	57
Vermont.....	---	3	---	---	4	---	---	---	7
Virginia.....	14	25	4	---	46	---	---	4	93
Washington.....	9	20	4	2	63	1	---	10	109
West Virginia....	12	22	3	---	30	---	---	1	68
Wisconsin.....	9	73	30	---	91	1	---	3	207
Wyoming.....	1	3	2	---	5	---	---	1	12
Unknown.....	---	---	---	---	---	---	---	---	---
Total.....	1,008	1,911	305	133	2,862	40	21	90	6,370

Note: "Special" are crossings protected by watchmen or members of train crew

HIGHWAY USER AND VEHICLE DATA

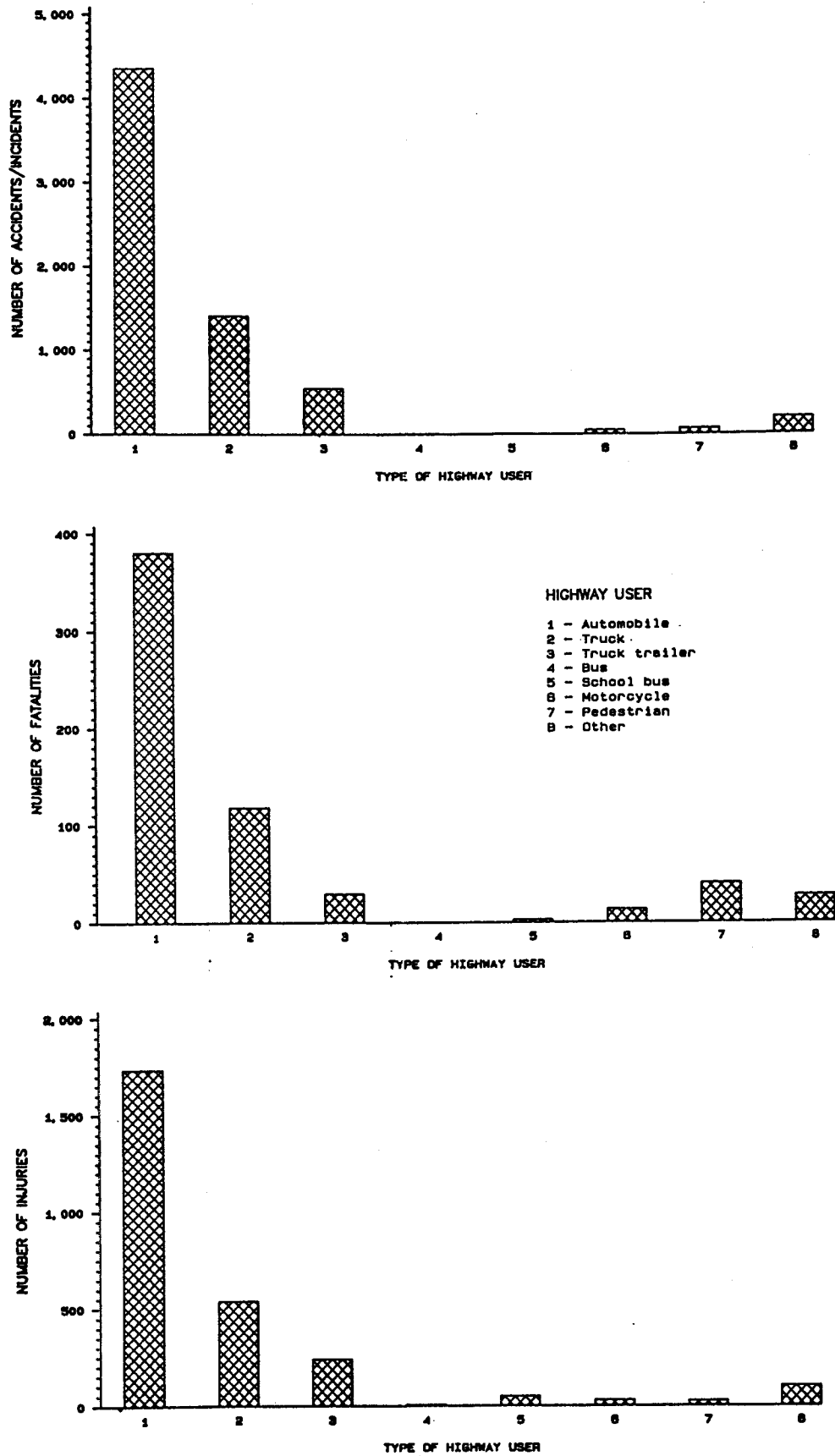
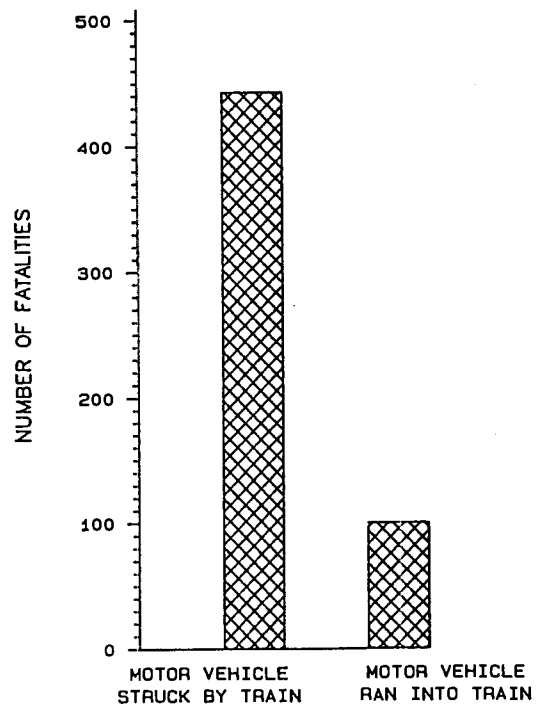
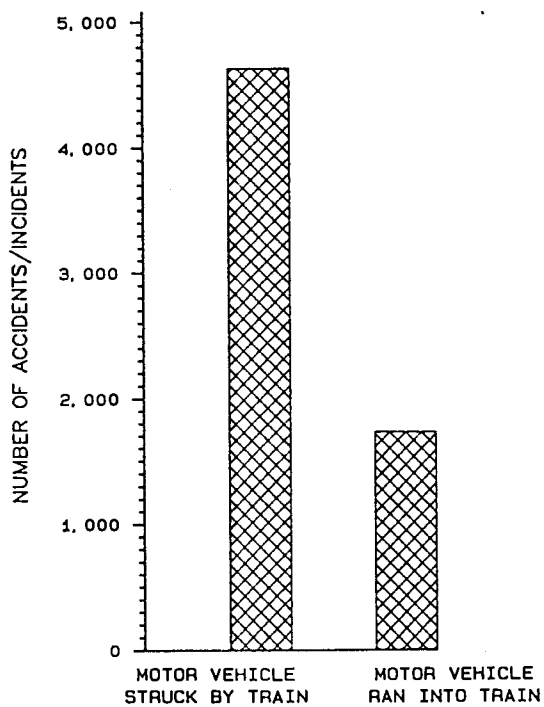
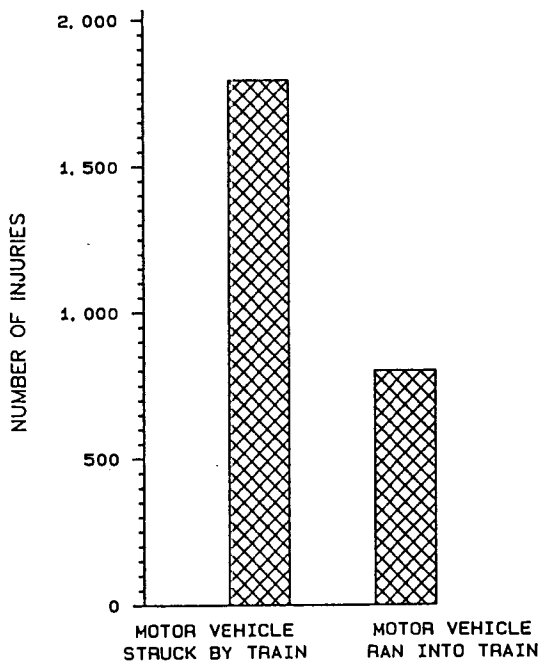


FIGURE 3. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS BY TYPE OF HIGHWAY USER



TYPE OF CIRCUMSTANCE

TYPE OF CIRCUMSTANCE



TYPE OF CIRCUMSTANCE

FIGURE 4. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY CIRCUMSTANCE

TABLE 9. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS BY TYPE OF HIGHWAY USER

Type Of Vehicle	----Acc/Inc----		-----Killed-----		----Injured----		Fatal Acc/Inc	Injury Acc/Inc
	No.	%	No.	%	No.	%		
Automobile.....	4,349	65.57	380	62.30	1,735	63.72	297	1,201
Truck.....	1,410	21.26	118	19.34	540	19.83	102	395
Truck-trailer....	547	8.25	29	4.75	239	8.78	25	139
Bus.....	7	.11	---	---	6	.22	---	1
School bus.....	7	.11	3	.49	48	1.76	2	2
Motorcycle.....	50	.75	13	2.13	29	1.07	12	23
Pedestrian.....	66	1.00	40	6.56	25	.92	40	24
Other.....	197	2.97	27	4.43	101	3.71	20	61
Total.....	6,633	100.00	610	100.00	2,723	100.00	498	1,846

TABLE 10. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY CIRCUMSTANCE

Circumstance	----Acc/Inc----		-----Killed-----		----Injured----		Fatal Acc/Inc	Injury Acc/Inc
	No.	%	No.	%	No.	%		
Struck by consist	4,637	72.79	443	81.58	1,795	69.12	349	1,176
Ran into consist.	1,733	27.21	100	18.42	802	30.88	89	585
Total.....	6,370	100.00	543	100.00	2,597	100.00	438	1,761

TABLE 11. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TYPE OF VEHICLE, NUMBER OF OCCUPANTS, CASUALTY RATES, DAMAGE RATES, AND ACCIDENT RATES

Type of Vehicle	# of A/I	Occupants Per A/IOccupants....		Vehicle Damage Per A/I(\$)	Vehicles Resigtered	Accidents Per Million Vehicles
			Killed Per A/I	Injured Per A/I			
Automobiles..	4,349	1.25	.09	.39	1,641	126,169,994	34.47
Trucks.....	1,957	1.13	.08	.33	4,806	36,492,854	53.63
Buses.....	14	11.22	.22	3.86	2,908	581,906	24.06
Motorcycles..	50	1.06	.26	.58	892	5,577,055	8.97
Total.....	6,370	1.24	.09	.38	2,610	168,821,809	37.74

NOTE: Vehicle registration figures are for 1983 and were supplied by the Federal Highway Administration. They do not include counts for the State of Hawaii.

TABLE 12. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TYPE OF VEHICLE, CIRCUMSTANCE, AND VISIBILITY

Type Of Vehicle	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER												
Automobile.....	80	5	30	1,630	163	636	94	10	50	1,355	144	485
Truck.....	27	1	16	667	65	242	36	2	12	266	28	84
Truck-trailer....	13	1	1	365	18	163	6	---	1	75	---	23
Bus.....	---	---	---	4	---	6	---	---	---	2	---	---
School bus.....	1	2	1	3	1	44	---	---	---	---	---	---
Motorcycle.....	---	---	---	9	1	1	---	---	---	4	2	---
Total.....	121	9	48	2,678	248	1,092	136	12	63	1,702	174	592
HIGHWAY USER STRUCK RAIL CONSIST												
Automobile.....	22	---	12	474	13	181	30	1	21	664	44	320
Truck.....	9	---	2	204	7	86	6	---	2	195	15	96
Truck-trailer....	1	---	---	71	6	41	---	---	---	16	4	10
Bus.....	---	---	---	1	---	---	---	---	---	---	---	---
School bus.....	---	---	---	3	---	3	---	---	---	---	---	---
Motorcycle.....	---	---	---	13	1	11	---	---	---	24	9	17
Total.....	32	---	14	766	27	322	36	1	23	899	72	443
GRAND TOTAL												
Automobile.....	102	5	42	2,104	176	817	124	11	71	2,019	188	805
Truck.....	36	1	18	871	72	328	42	2	14	461	43	180
Truck-trailer....	14	1	1	436	24	204	6	---	1	91	4	33
Bus.....	---	---	---	5	---	6	---	---	---	2	---	---
School bus.....	1	2	1	6	1	47	---	---	---	---	---	---
Motorcycle.....	---	---	---	22	2	12	---	---	---	28	11	17
Total.....	153	9	62	3,444	275	1,414	172	13	86	2,601	246	1,035

TABLE 13. CASUALTIES AT RAIL-HIGHWAY CROSSINGS BY TYPE OF PERSON INVOLVED, TYPE OF HIGHWAY USER, AND CIRCUMSTANCE

TYPE OF PERSON

Type Of Vehicle	---EOD---		---ENOD---		---PSGR---		---NONT---		---TRES---		---CONT---		-----Total-----		
	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	A/I
RAIL CONSIST STRUCK HIGHWAY USER															
Automobile.....	---	20	---	1	---	8	278	1,059	44	113	---	---	322	1,201	3,159
Truck.....	2	24	---	---	---	1	90	307	4	22	---	---	96	354	996
Truck-trailer....	1	72	---	---	---	26	16	85	2	5	---	---	19	188	459
Bus.....	---	---	---	---	---	---	---	6	---	---	---	---	---	6	6
School bus.....	---	---	---	---	---	---	3	45	---	---	---	---	3	45	4
Motorcycle.....	---	---	---	---	---	---	2	1	1	---	---	---	3	1	13
Pedestrian.....	---	---	---	---	---	---	17	11	21	11	---	---	38	22	61
Other.....	---	7	---	---	---	---	19	70	2	2	---	---	21	79	160
Total.....	3	123	---	1	---	35	425	1,584	74	153	---	---	502	1,896	4,858
HIGHWAY USER STRUCK RAIL CONSIST															
Automobile.....	---	11	2	---	---	---	51	479	5	44	---	---	58	534	1,190
Truck.....	---	9	---	---	---	---	20	162	2	15	---	---	22	186	414
Truck-trailer....	---	9	---	---	---	---	10	40	---	2	---	---	10	51	88
Bus.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1
School bus.....	---	---	---	---	---	---	---	3	---	---	---	---	---	3	3
Motorcycle.....	---	---	---	---	---	---	9	25	1	3	---	---	10	28	37
Pedestrian.....	---	---	---	---	---	---	1	1	1	2	---	---	2	3	5
Other.....	---	---	---	---	---	---	4	21	2	1	---	---	6	22	37
Total.....	---	29	2	---	---	---	95	731	11	67	---	---	108	827	1,775
GRAND TOTAL															
Automobile.....	---	31	2	1	---	8	329	1,538	49	157	---	---	380	1,735	4,349
Truck.....	2	33	---	---	---	1	110	469	6	37	---	---	118	540	1,410
Truck-trailer....	1	81	---	---	---	26	26	125	2	7	---	---	29	239	547
Bus.....	---	---	---	---	---	---	---	6	---	---	---	---	---	6	7
School bus.....	---	---	---	---	---	---	3	48	---	---	---	---	3	48	7
Motorcycle.....	---	---	---	---	---	---	11	26	2	3	---	---	13	29	50
Pedestrian.....	---	---	---	---	---	---	18	12	22	13	---	---	40	25	66
Other.....	---	7	---	---	---	---	23	91	4	3	---	---	27	101	197
Total.....	3	152	2	1	---	35	520	2,315	85	220	---	---	610	2,723	6,633

Note: EOD = Employee on duty ENOD = Employee not on duty
 PSGR = Passenger on train NONT = Nontrespasser
 TRES = Trespasser CONT = Contractor employee

TABLE 14. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY SPEED OF VEHICLE, CIRCUMSTANCE, AND VISIBILITY

Speed Of Vehicle	VISIBILITY														
	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER															
Standing.....	45	3	7	861	30	251	52	1	21	697	32	112	1,655	66	391
1-9.....	25	---	6	560	48	207	27	---	15	257	28	90	869	76	318
10-19.....	20	---	16	536	79	267	25	2	10	285	35	165	866	116	458
20-29.....	12	3	7	299	20	130	16	4	7	161	9	73	488	36	217
30-39.....	6	2	5	163	19	88	7	1	6	110	17	57	286	39	156
40-49.....	2	---	---	61	12	40	3	3	---	43	16	26	109	31	66
50-59.....	1	1	---	37	11	31	1	---	1	22	6	18	61	18	50
60 and over.....	1	---	---	9	8	2	1	---	2	4	1	3	15	9	7
Unknown.....	9	---	7	152	21	76	4	1	1	123	30	48	288	52	132
Total.....	121	9	48	2,678	248	1,092	136	12	63	1,702	174	592	4,637	443	1,795
HIGHWAY USER STRUCK RAIL CONSIST															
Standing.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-9.....	8	---	2	174	2	37	7	---	---	155	5	43	344	7	82
10-19.....	7	---	2	180	4	50	13	---	5	200	2	81	400	6	138
20-29.....	6	---	2	137	4	58	5	---	4	158	7	89	306	11	153
30-39.....	2	---	---	88	5	58	3	---	3	116	12	70	209	17	131
40-49.....	2	---	3	62	4	51	2	1	2	66	13	45	132	18	101
50-59.....	4	---	2	35	2	28	5	---	7	37	16	34	81	18	71
60 and over.....	---	---	---	14	4	9	---	---	---	15	7	20	29	11	29
Unknown.....	3	---	3	76	2	31	1	---	2	152	10	61	232	12	97
Total.....	32	---	14	766	27	322	36	1	23	899	72	443	1,733	100	802
GRAND TOTAL															
Standing.....	45	3	7	861	30	251	52	1	21	697	32	112	1,655	66	391
1-9.....	33	---	8	734	50	244	34	---	15	412	33	133	1,213	83	400
10-19.....	27	---	18	716	83	317	38	2	15	485	37	246	1,266	122	596
20-29.....	18	3	9	436	24	188	21	4	11	319	16	162	794	47	370
30-39.....	8	2	5	251	24	146	10	1	9	226	29	127	495	56	287
40-49.....	4	---	3	123	16	91	5	4	2	109	29	71	241	49	167
50-59.....	5	1	2	72	13	59	6	---	8	59	22	52	142	36	121
60 and over.....	1	---	---	23	12	11	1	---	2	19	8	23	44	20	36
Unknown.....	12	---	10	228	23	107	5	1	3	275	40	109	520	64	229
Total.....	153	9	62	3,444	275	1,414	172	13	86	2,601	246	1,035	6,370	543	2,597

TABLE 15. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY POSITION AND TYPE OF VEHICLE

Vehicle	-----Position On Crossing-----								
	--Stalled On--			--Stopped On--			--Moving Over--		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Automobile.....	584	19	80	626	29	186	3,139	332	1,469
Truck.....	132	3	17	175	10	49	1,103	105	474
Truck-trailer....	54	---	13	76	2	19	417	27	207
Bus.....	---	---	---	2	---	---	5	---	6
School bus.....	1	2	1	1	1	26	5	---	21
Motorcycle.....	2	---	---	2	---	---	46	13	29
Total.....	773	24	111	882	42	280	4,715	477	2,206

TRAIN AND TRACK DATA

TABLE 16. ACCIDENT/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY SPEED OF TRAIN, CIRCUMSTANCE, AND VISIBILITY

Speed Of Consist	VISIBILITY														
	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER															
Standing.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-9.....	22	---	---	613	---	95	29	---	12	410	8	90	1,074	8	197
10-19.....	20	---	10	475	1	145	21	---	7	289	8	111	805	9	273
20-29.....	20	---	8	570	28	253	24	3	19	297	9	156	911	40	436
30-39.....	25	4	19	404	56	246	17	1	14	283	35	110	729	96	389
40-49.....	16	2	9	346	90	165	29	5	4	224	49	68	615	146	246
50-59.....	8	1	1	169	48	103	11	3	4	117	40	31	305	92	139
60-69.....	6	2	1	62	12	44	2	---	---	44	13	16	114	27	61
70-79.....	2	---	---	33	12	41	3	---	3	31	12	9	69	24	53
80-89.....	1	---	---	1	---	---	---	---	---	2	---	---	4	---	---
90 and over.....	---	---	---	1	1	---	---	---	---	1	---	---	2	1	---
Unknown.....	1	---	---	4	---	---	---	---	---	4	---	1	9	---	1
Total.....	121	9	48	2,678	248	1,092	136	12	63	1,702	174	592	4,637	443	1,795
HIGHWAY USER STRUCK RAIL CONSIST															
Standing.....	2	---	---	22	---	7	2	---	2	123	10	71	149	10	80
1-9.....	10	---	3	226	---	57	14	---	11	299	11	126	549	11	197
10-19.....	8	---	1	167	4	65	7	---	2	192	13	98	374	17	166
20-29.....	6	---	4	125	1	65	5	---	3	116	8	52	252	9	124
30-39.....	3	---	2	105	10	50	4	---	2	77	12	43	189	22	97
40-49.....	3	---	4	83	7	52	3	1	2	55	13	24	144	21	82
50-59.....	---	---	---	21	4	19	---	---	---	19	2	16	40	6	35
60-69.....	---	---	---	8	1	6	---	---	---	5	---	1	13	1	7
70-79.....	---	---	---	1	---	1	---	---	---	3	1	5	4	1	6
80-89.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
90 and over.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unknown.....	---	---	---	8	---	---	1	---	1	10	2	7	19	2	8
Total.....	32	---	14	766	27	322	36	1	23	899	72	443	1,733	100	802
GRAND TOTAL															
Standing.....	2	---	---	22	---	7	2	---	2	123	10	71	149	10	80
1-9.....	32	---	3	839	---	152	43	---	23	709	19	216	1,623	19	394
10-19.....	28	---	11	642	5	210	28	---	9	481	21	209	1,179	26	439
20-29.....	26	---	12	695	29	318	29	3	22	413	17	208	1,163	49	560
30-39.....	28	4	21	509	66	296	21	1	16	360	47	153	918	118	486
40-49.....	19	2	13	429	97	217	32	6	6	279	62	92	759	167	328
50-59.....	8	1	1	190	52	122	11	3	4	136	42	47	345	98	174
60-69.....	6	2	1	70	13	50	2	---	---	49	13	17	127	28	68
70-79.....	2	---	---	34	12	42	3	---	3	34	13	14	73	25	59
80-89.....	1	---	---	1	---	---	---	---	---	2	---	---	4	---	---
90 and over.....	---	---	---	1	1	---	---	---	---	1	---	---	2	1	---
Unknown.....	1	---	---	12	---	---	1	---	1	14	2	8	28	2	9
Total.....	153	9	62	3,444	275	1,414	172	13	86	2,601	246	1,035	6,370	543	2,597

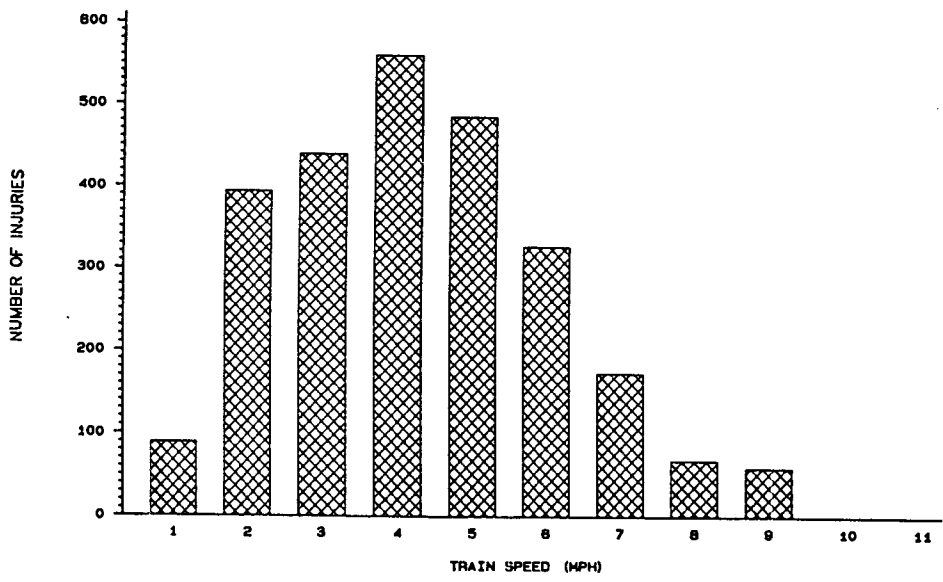
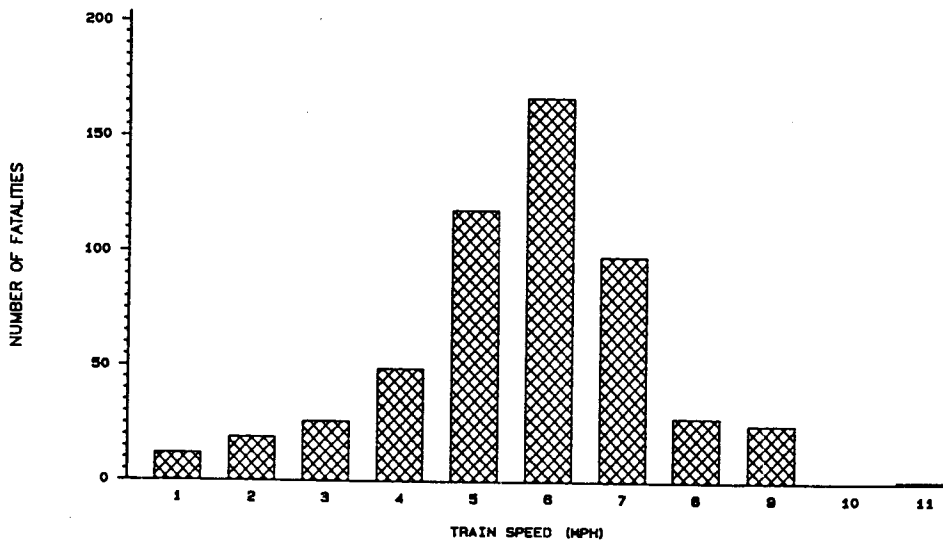
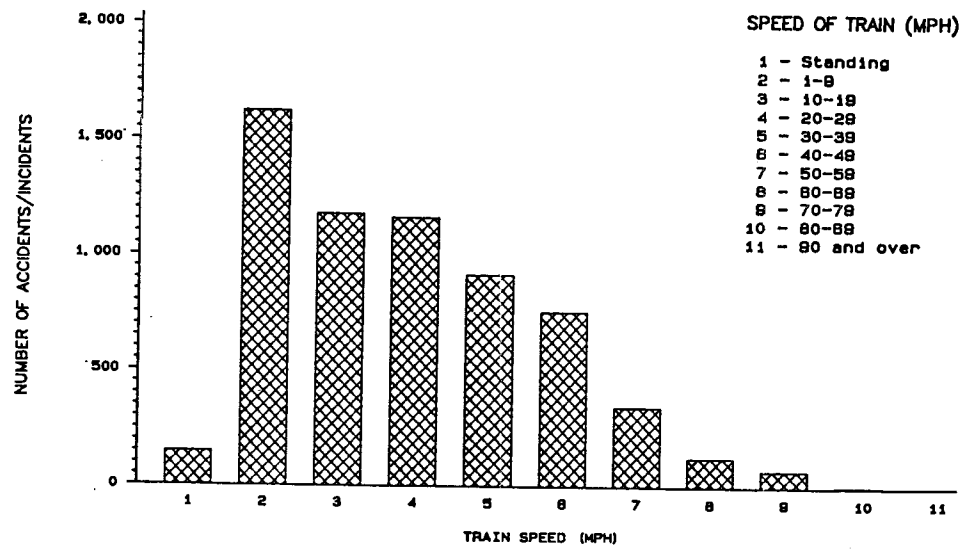


FIGURE 5. ACCIDENTS/ INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY SPEED OF TRAIN

TABLE 17. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY RAILROAD EQUIPMENT INVOLVED, PART OF TRAIN STRUCK, CIRCUMSTANCE, AND VISIBILITY

Type	CIRCUMSTANCE												
	Consist	Consist	Vehicle Struck	Lead Unit	-----Part Of Consist Struck-----				Unknown	-----Visibility-----			
					-----Quarter-----					Dawn	Day	Dusk	Dark
Consist	Vehicle	Struck	Unit	1	2	3	4						
Train (Units Pulling).	3,953	1,254	745	215	102	77	85	30	122	2,861	153	2,071	
Train (Units Pushing).	282	143	75	11	12	11	31	3	12	185	9	219	
Train (Standing).....	---	130	13	29	32	22	30	4	2	10	2	116	
Cars (Moving).....	81	59	58	---	---	---	1	---	2	131	2	5	
Cars (Standing).....	---	13	11	---	---	---	2	---	---	9	---	4	
Light Locos (Moving)..	316	120	111	---	---	1	5	3	15	233	6	182	
Light Locos (Standing)	---	5	5	---	---	---	---	---	---	2	---	3	
Other.....	5	9	8	---	---	---	---	1	---	13	---	1	
Total.....	4,637	1,733	1,026	255	146	111	154	41	153	3,444	172	2,601	

Note: The "Lead" unit is the first unit to occupy the crossing.

TABLE 18. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TRAIN SPEED AND TYPE OF TRAIN

Speed Of Consist	----Freight----			----Passenger----			-Yard Switching			-----Other-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Standing.....	96	8	54	1	---	---	32	1	20	20	1	6	149	10	80
1-9.....	688	12	177	16	---	12	539	6	125	380	1	80	1,623	19	394
10-19.....	834	22	310	31	---	9	146	3	54	168	1	66	1,179	26	439
20-29.....	1,031	46	498	34	---	6	34	2	15	64	1	41	1,163	49	560
30-39.....	844	112	446	37	2	17	4	---	2	33	4	21	918	118	486
40-49.....	694	152	309	42	10	9	2	1	---	21	4	10	759	167	328
50-59.....	306	88	153	27	8	15	---	---	---	12	2	6	345	98	174
60-69.....	84	20	40	41	8	27	---	---	---	2	---	1	127	28	68
70-79.....	21	1	4	52	24	55	---	---	---	---	---	---	73	25	59
80-89.....	---	---	---	4	---	---	---	---	---	---	---	---	4	---	---
90 and over.....	---	---	---	2	1	---	---	---	---	---	---	---	2	1	---
Unknown.....	11	2	5	---	---	---	7	---	3	10	---	1	28	2	9
Total.....	4,609	463	1,996	287	53	150	764	13	219	710	14	232	6,370	543	2,597

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 19. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY NUMBER OF CARS IN TRAIN AND TYPE OF TRAIN

Number Of Cars	----Freight----			---Passenger---			-Yard Switching			-----Other-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
1-9.....	796	58	321	179	26	93	411	10	106	232	1	63	1,618	95	583
10-19.....	449	40	212	72	23	31	187	2	49	21	2	6	729	67	298
20-29.....	302	30	116	4	1	3	72	---	33	8	2	4	386	33	156
30-39.....	320	50	143	1	---	---	25	---	3	4	---	2	350	50	148
40-49.....	309	34	116	---	---	---	20	1	11	2	---	1	331	35	128
50-59.....	337	45	147	---	---	---	10	---	4	2	---	---	349	45	151
60-69.....	347	46	150	---	---	---	7	---	2	---	---	---	354	46	152
70-79.....	335	34	144	---	---	---	7	---	6	---	---	---	342	34	150
80-89.....	283	32	111	---	---	---	4	---	3	1	---	---	288	32	114
90-99.....	306	28	131	---	---	---	---	---	---	---	---	---	306	28	131
100-109.....	257	31	166	---	---	---	1	---	---	1	---	---	259	31	166
110-119.....	236	14	109	1	---	---	1	---	---	2	---	---	240	14	109
120-129.....	122	7	52	---	---	---	---	---	---	---	---	---	122	7	52
130-139.....	66	5	24	---	---	---	1	---	---	1	---	---	68	5	24
140-149.....	47	3	15	---	---	---	---	---	---	---	---	---	47	3	15
150 And over.....	69	4	30	---	---	---	---	---	---	---	---	---	69	4	30
Locomotives only.	28	2	9	30	3	23	18	---	2	436	9	156	512	14	190
Total.....	4,609	463	1,996	287	53	150	764	13	219	710	14	232	6,370	543	2,597

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 20. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY WARNING DEVICE CATEGORY AND MOTORIST ACTION

VISIBILITY

Number Of Cars	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER															
1-9.....	20	---	3	823	50	301	31	1	16	292	26	102	1,166	77	422
10-19.....	12	2	---	306	27	123	17	1	6	178	23	58	513	53	187
20-29.....	11	1	6	148	15	55	7	2	1	100	5	38	266	23	100
30-39.....	10	3	8	144	28	62	3	1	---	104	16	37	261	48	107
40-49.....	8	---	---	117	16	49	11	---	9	106	14	30	242	30	88
50-59.....	8	---	5	152	22	62	6	---	1	100	15	36	266	37	104
60-69.....	6	---	5	155	21	54	7	2	4	123	19	54	291	42	117
70-79.....	7	2	2	119	15	38	9	1	2	106	8	42	241	26	84
80-89.....	5	---	2	98	4	31	10	2	1	86	18	27	199	24	61
90-99.....	8	1	3	115	14	60	6	---	4	92	6	30	221	21	97
100-109.....	6	---	8	97	12	79	8	---	8	83	11	39	194	23	134
110-119.....	1	---	---	93	10	43	8	---	7	75	2	21	177	12	71
120-129.....	3	---	1	41	5	17	2	---	---	45	2	12	91	7	30
130-139.....	---	---	---	20	1	9	1	---	1	24	1	6	45	2	16
140-149.....	1	---	---	23	1	11	3	---	---	11	2	2	38	3	13
150 And over.....	4	---	1	25	1	15	1	---	---	25	2	6	55	3	22
Locomotives only.	11	---	4	202	6	83	6	2	3	152	4	52	371	12	142
Total.....	121	9	48	2,678	248	1,092	136	12	63	1,702	174	592	4,637	443	1,795
HIGHWAY USER STRUCK RAIL CONSIST															
1-9.....	4	---	---	261	4	94	10	---	3	177	14	64	452	18	161
10-19.....	2	---	---	102	2	51	4	---	5	108	12	55	216	14	111
20-29.....	1	---	1	53	3	25	2	---	---	64	7	30	120	10	56
30-39.....	3	---	1	37	---	14	2	---	1	47	2	25	89	2	41
40-49.....	1	---	1	40	1	17	4	---	4	44	4	18	89	5	40
50-59.....	3	---	---	33	4	16	---	---	---	47	4	31	83	8	47
60-69.....	2	---	2	22	---	13	5	1	4	34	3	16	63	4	35
70-79.....	1	---	1	35	4	23	2	---	2	63	4	40	101	8	66
80-89.....	2	---	2	27	2	11	---	---	---	60	6	40	89	8	53
90-99.....	4	---	2	27	---	13	1	---	1	53	7	18	85	7	34
100-109.....	---	---	---	23	4	6	3	---	2	39	4	24	65	8	32
110-119.....	1	---	---	21	---	14	---	---	---	41	2	24	63	2	38
120-129.....	1	---	---	5	---	2	1	---	---	24	---	20	31	---	22
130-139.....	1	---	1	6	1	4	---	---	---	16	2	3	23	3	8
140-149.....	1	---	---	2	---	1	---	---	---	6	---	1	9	---	2
150 And over.....	1	---	2	2	---	1	---	---	---	11	1	5	14	1	8
Locomotives only.	4	---	1	70	2	17	2	---	1	65	---	29	141	2	48
Total.....	32	---	14	766	27	322	36	1	23	899	72	443	1,733	100	802
GRAND TOTAL															
1-9.....	24	---	3	1,084	54	395	41	1	19	469	40	166	1,618	95	583
10-19.....	14	2	---	408	29	174	21	1	11	286	35	113	729	67	298
20-29.....	12	1	7	201	18	80	9	2	1	164	12	68	386	33	156
30-39.....	13	3	9	181	28	76	5	1	1	151	18	62	350	50	148
40-49.....	9	---	1	157	17	66	15	---	13	150	18	48	331	35	128
50-59.....	11	---	5	185	26	78	6	---	1	147	19	67	349	45	151
60-69.....	8	---	7	177	21	67	12	3	8	157	22	70	354	46	152
70-79.....	8	2	3	154	19	61	11	1	4	169	12	82	342	34	150
80-89.....	7	---	4	125	6	42	10	2	1	146	24	67	288	32	114
90-99.....	12	1	5	142	14	73	7	---	5	145	13	48	306	28	131
100-109.....	6	---	8	120	16	85	11	---	10	122	15	63	259	31	166
110-119.....	2	---	---	114	10	57	8	---	7	116	4	45	240	14	109
120-129.....	4	---	1	46	5	19	3	---	---	69	2	32	122	7	52
130-139.....	1	---	1	26	2	13	1	---	1	40	3	9	68	5	24
140-149.....	2	---	---	25	1	12	3	---	---	17	2	3	47	3	15
150 And over.....	5	---	3	27	1	16	1	---	---	36	3	11	69	4	30
Locomotives only.	15	---	5	272	8	100	8	2	4	217	4	81	512	14	190
Total.....	153	9	62	3,444	275	1,414	172	13	86	2,601	246	1,035	6,370	543	2,597

TABLE 21. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TRACK TYPE AND TRACK CLASS

TRACK TYPE

Track Class	-----Main-----			-----Yard-----			-----Siding-----			-----Industry-----			-----Unknown-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
1.....	819	21	246	284	3	79	70	3	11	154	4	37	2	---	1	1,329	31	374
2.....	1,219	46	499	61	1	14	9	---	5	27	1	9	---	---	---	1,316	48	527
3.....	1,873	185	883	34	---	13	8	---	2	7	1	3	---	---	---	1,922	186	901
4.....	1,478	242	706	4	---	1	5	---	---	9	---	2	---	---	---	1,496	242	709
5.....	130	22	37	---	---	---	---	---	---	---	---	---	---	---	---	130	22	37
6.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unknown.....	80	11	29	54	---	9	14	---	4	29	3	7	---	---	---	177	14	49
Total.....	5,599	527	2,400	437	4	116	106	3	22	226	9	58	2	---	1	6,370	543	2,597

WARNING DEVICE DATA

TABLE 22. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY WARNING DEVICE CATEGORY AND MOTORIST ACTION

Warning Device	--Drove Around-- -Or Thru Gate--			--Stopped And-- -Then Proceeded			-Did Not Stop--			-----Other-----			-----Unknown-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Gates.....	431	55	181	24	1	6	161	8	57	371	7	63	21	---	7	1,008	71	314
Cantilever flshrs	---	---	---	20	---	10	284	41	168	87	2	12	5	---	---	396	43	190
Standard flashers	---	---	---	119	3	40	1,018	96	482	361	18	80	17	1	4	1,515	118	606
Hwy Sig, W W, Bells	---	---	---	24	---	1	204	11	81	72	4	14	5	---	2	305	15	98
Special Devices..	---	---	---	12	---	---	93	2	24	25	---	8	3	---	---	133	2	32
Crossbucks.....	---	---	---	137	12	59	1,912	228	992	751	39	232	62	4	23	2,862	283	1,306
Stopsigns.....	---	---	---	3	---	2	23	4	9	13	---	4	1	---	---	40	4	15
Other Signs.....	---	---	---	3	---	3	11	2	4	7	2	4	---	---	---	21	4	11
No Signs Or Signl	---	---	---	5	---	2	46	3	12	36	---	10	3	---	1	90	3	25
Total.....	431	55	181	347	16	123	3,752	395	1,829	1,723	72	427	117	5	37	6,370	543	2,597

Note: "Special" are crossings protected by watchmen or members of train crew.
 "Hwy Sig" = Highway signals, W W = Wigwags.

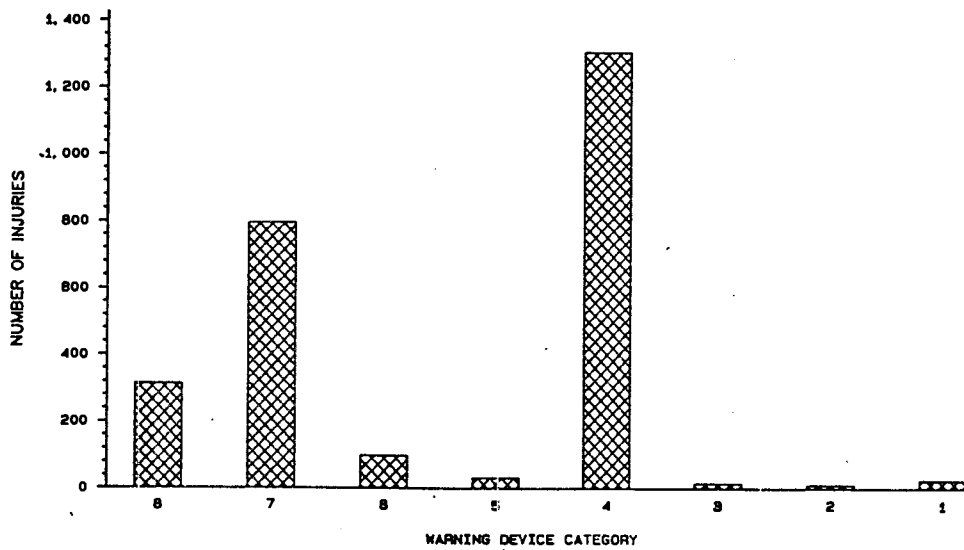
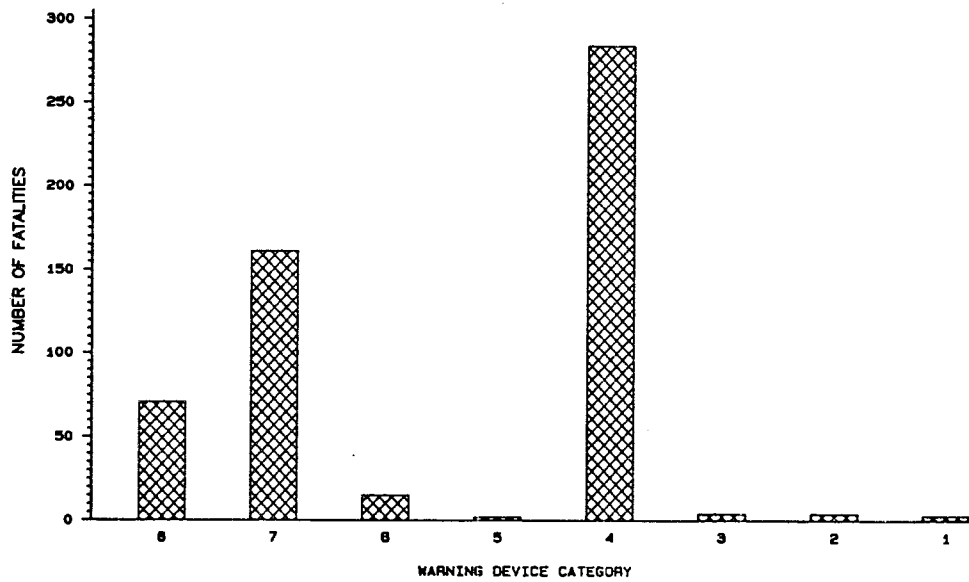
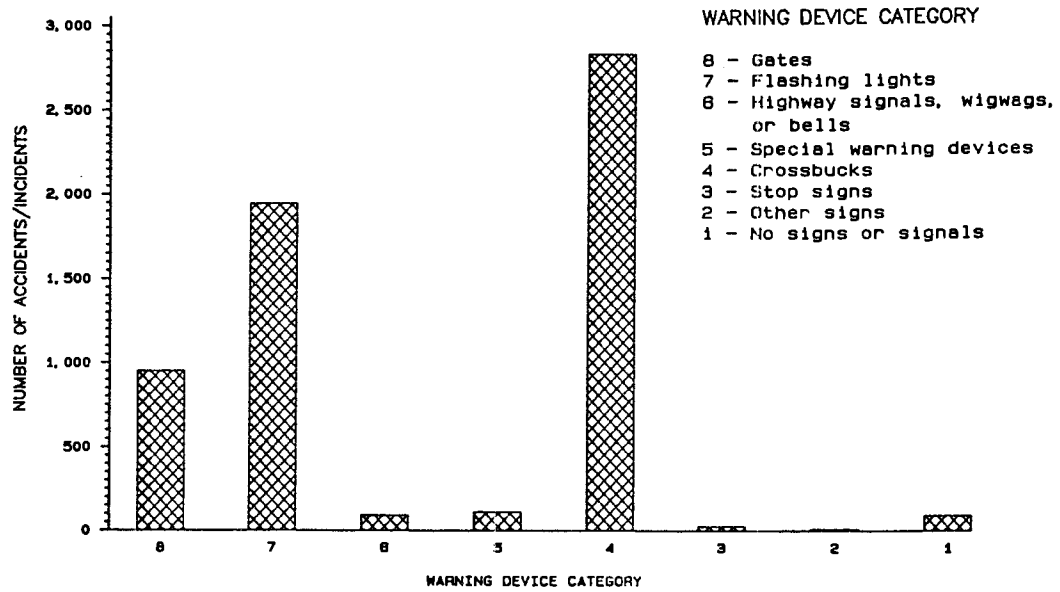


FIGURE 6. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY WARNING DEVICE CATEGORY

TABLE 23. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TYPE AND OPERATIONAL STATUS OF WARNING DEVICE, CIRCUMSTANCE, AND VISIBILITY

Warning Device	-Device Working--			-----Highway User-----							
	Yes	No	N/A	----Struck By Consist----				----Ran Into Consist----			
				Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Gates.....	968	12	28	18	323	23	436	3	72	4	129
Cantilever flshrs	387	1	8	7	158	5	86	5	67	2	66
Standard flashers	1,472	10	33	23	622	34	375	9	220	9	223
Hwy Sig,W W,Bells	250	4	51	11	130	7	67	1	43	1	45
Special Devices..	----	----	133	1	39	4	37	----	16	1	35
Crossbucks.....	----	----	2,862	55	1,340	62	653	13	341	17	381
Stopsigns.....	----	----	40	----	16	----	11	1	3	1	8
Other Signs.....	----	----	21	----	9	1	5	----	1	1	4
No Signs Or Signl	----	----	90	6	41	----	32	----	3	----	8
Total.....	3,077	27	3,266	121	2,678	136	1,702	32	766	36	899

Note: If a rail consist is intentionally grounded to prevent activation of the warning device, these are reported as "N/A."

TABLE 24. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES DURING DUSK AND DARK HOURS BY ILLUMINATION OF CROSSING AND CIRCUMSTANCE

	CIRCUMSTANCE								
	Struck By Consist			Ran Into Consist			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Lighted.....	1,077	86	360	464	20	208	1,541	106	568
Not Lighted.....	2,490	265	1,015	883	52	411	3,373	317	1,426
Not Reported.....	991	83	380	356	26	167	1,347	109	547
Total.....	4,637	443	1,795	1,733	100	802	6,370	543	2,597

TABLE 25. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY LOCATION AND TYPE OF WARNING DEVICE, CIRCUMSTANCE, AND VISIBILITY

Warning Device	VISIBILITY														
	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER															
Automatic, Both Sides.....	58	5	15	1,169	76	387	68	6	21	920	101	332	2,215	188	755
Automatic, Side Of Approach.	1	---	---	57	2	15	1	---	---	39	4	8	98	6	23
Automatic, Opposite Side....	---	---	---	5	2	2	---	---	---	2	2	1	7	4	3
Automatic, Side Not Reported	---	---	---	2	---	---	---	---	---	3	---	---	5	---	---
Manual, Both Sides.....	1	1	---	31	---	8	2	---	---	25	---	5	59	1	13
Manual, Side Of Approach....	---	---	---	3	---	1	2	---	---	10	---	1	15	---	2
Manual, Opposite Side.....	---	---	---	3	---	---	---	---	---	---	---	---	3	---	---
Manual, Side Not Reported...	---	---	---	2	---	---	---	---	---	2	---	1	4	---	1
Other, Both Sides.....	52	2	27	1,232	155	610	61	6	41	622	61	220	1,967	224	898
Other, Side Of Approach.....	2	---	6	104	8	40	2	---	1	29	5	6	137	13	53
Other, Opposite Side.....	1	---	---	23	2	11	---	---	---	15	1	8	39	3	19
Other, Side Not Reported....	---	---	---	6	2	8	---	---	---	3	---	---	9	2	8
No Signs Or Signals.....	6	1	---	41	1	10	---	---	---	32	---	10	79	2	20
Total.....	121	9	48	2,678	248	1,092	136	12	63	1,702	174	592	4,637	443	1,795
HIGHWAY USER STRUCK RAIL CONSIST															
Automatic, Both Sides.....	18	---	5	376	15	170	14	---	9	437	33	211	845	48	395
Automatic, Side Of Approach.	---	---	---	19	---	7	2	---	2	25	1	18	46	1	27
Automatic, Opposite Side....	---	---	---	6	---	4	---	---	---	1	---	1	7	---	5
Automatic, Side Not Reported	---	---	---	1	---	---	---	---	---	---	---	---	1	---	---
Manual, Both Sides.....	---	---	---	13	---	4	1	---	3	27	1	6	41	1	13
Manual, Side Of Approach....	---	---	---	1	---	---	---	---	---	6	---	1	7	---	1
Manual, Opposite Side.....	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---
Manual, Side Not Reported...	---	---	---	2	---	---	---	---	---	1	---	2	3	---	2
Other, Both Sides.....	13	---	9	315	12	125	19	1	9	349	34	185	696	47	328
Other, Side Of Approach.....	1	---	---	22	---	8	---	---	---	39	1	14	62	1	22
Other, Opposite Side.....	---	---	---	7	---	3	---	---	---	4	1	---	11	1	3
Other, Side Not Reported....	---	---	---	1	---	1	---	---	---	1	---	---	2	---	1
No Signs Or Signals.....	---	---	---	3	---	---	---	---	---	8	1	5	11	1	5
Total.....	32	---	14	766	27	322	36	1	23	899	72	443	1,733	100	802
GRAND TOTAL															
Automatic, Both Sides.....	76	5	20	1,545	91	557	82	6	30	1,357	134	543	3,060	236	1,150
Automatic, Side Of Approach.	1	---	---	76	2	22	3	---	2	64	5	26	144	7	50
Automatic, Opposite Side....	---	---	---	11	2	6	---	---	---	3	2	2	14	4	8
Automatic, Side Not Reported	---	---	---	3	---	---	---	---	---	3	---	---	6	---	---
Manual, Both Sides.....	1	1	---	44	---	12	3	---	3	52	1	11	100	2	26
Manual, Side Of Approach....	---	---	---	4	---	1	2	---	---	16	---	2	22	---	3
Manual, Opposite Side.....	---	---	---	3	---	---	---	---	---	1	---	---	4	---	---
Manual, Side Not Reported...	---	---	---	4	---	---	---	---	---	3	---	3	7	---	3
Other, Both Sides.....	65	2	36	1,547	167	735	80	7	50	971	95	405	2,663	271	1,226
Other, Side Of Approach.....	3	---	6	126	8	48	2	---	1	68	6	20	199	14	75
Other, Opposite Side.....	1	---	---	30	2	14	---	---	---	19	2	8	50	4	22
Other, Side Not Reported....	---	---	---	7	2	9	---	---	---	4	---	---	11	2	9
No Signs Or Signals.....	6	1	---	44	1	10	---	---	---	40	1	15	90	3	25
Total.....	153	9	62	3,444	275	1,414	172	13	86	2,601	246	1,035	6,370	543	2,597

Note: Automatic devices include gates, flashing lights, and other devices which are activated by the approach of a rail consist. Manual devices include "Watchmen" and "Flagged by crew". "Other" devices include crossbucks, stop signs, etc.

TIME, DAY AND WEATHER DATA

TABLE 26. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY VISIBILITY AND CIRCUMSTANCE

Visibility	CIRCUMSTANCE								
	Struck By Consist			Ran Into Consist			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Dawn.....	121	9	48	32	---	14	153	9	62
Day.....	2,678	248	1,092	766	27	322	3,444	275	1,414
Dusk.....	136	12	63	36	1	23	172	13	86
Dark.....	1,702	174	592	899	72	443	2,601	246	1,035
Total.....	4,637	443	1,795	1,733	100	802	6,370	543	2,597

TABLE 27. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TEMPERATURE, CIRCUMSTANCE, AND VISIBILITY

Temperature	----Struck By Consist----				----Ran Into Consist-----				-----Total-----			
	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Over 100.....	---	9	---	---	---	2	---	---	---	11	---	---
80 To 100.....	9	671	19	89	2	201	5	43	11	872	24	132
60 To 79.....	47	851	42	502	13	250	15	279	60	1,101	57	781
40 To 59.....	31	666	39	594	7	150	9	303	38	816	48	897
20 To 39.....	29	394	30	412	5	119	6	225	34	513	36	637
0 To 19.....	5	80	5	91	5	39	1	42	10	119	6	133
-20 To -1.....	---	6	1	14	---	4	---	7	---	10	1	21
Under -20.....	---	1	---	---	---	1	---	---	---	2	---	---
Not Reported.....	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	121	2,678	136	1,702	32	766	36	899	153	3,444	172	2,601

TABLE 28. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY TIME OF DAY AND CIRCUMSTANCE

TIME	CIRCUMSTANCE								
	Struck By Consist			Ran Into Consist			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
MID TO 12:59 AM..	153	13	47	82	10	57	235	23	104
1 TO 1:59 AM...	141	17	41	99	12	52	240	29	93
2 TO 2:59 AM...	119	19	31	94	11	51	213	30	82
3 TO 3:59 AM...	65	2	19	54	5	28	119	7	47
4 TO 4:59 AM...	62	4	14	38	1	12	100	5	26
5 TO 5:59 AM...	77	2	38	36	2	22	113	4	60
6 TO 6:59 AM...	153	20	40	51	---	19	204	20	59
7 TO 7:59 AM...	192	16	72	56	2	33	248	18	105
8 TO 8:59 AM...	233	22	81	72	---	37	305	22	118
9 TO 9:59 AM...	210	22	67	60	7	26	270	29	93
10 TO 10:59 AM.	236	24	129	68	5	21	304	29	150
11 TO 11:59 AM.	262	17	122	63	1	23	325	18	145
NOON TO 12:59 PM.	212	15	87	88	---	38	300	15	125
1 TO 1:59 PM...	244	17	108	64	1	28	308	18	136
2 TO 2:59 PM...	286	31	109	73	3	31	359	34	140
3 TO 3:59 PM...	251	19	123	77	2	29	328	21	152
4 TO 4:59 PM...	253	34	77	78	5	30	331	39	107
5 TO 5:59 PM...	260	20	88	63	4	23	323	24	111
6 TO 6:59 PM...	261	31	132	80	4	28	341	35	160
7 TO 7:59 PM...	191	10	79	78	7	37	269	17	116
8 TO 8:59 PM...	200	33	90	86	5	31	286	38	121
9 TO 9:59 PM...	192	22	75	82	---	40	274	22	115
10 TO 10:59 PM.	190	18	62	90	5	35	280	23	97
11 TO 11:59 PM.	194	15	64	101	8	71	295	23	135
Unknown.....	---	---	---	---	---	---	---	---	---
Total.....	4,637	443	1,795	1,733	100	802	6,370	543	2,597

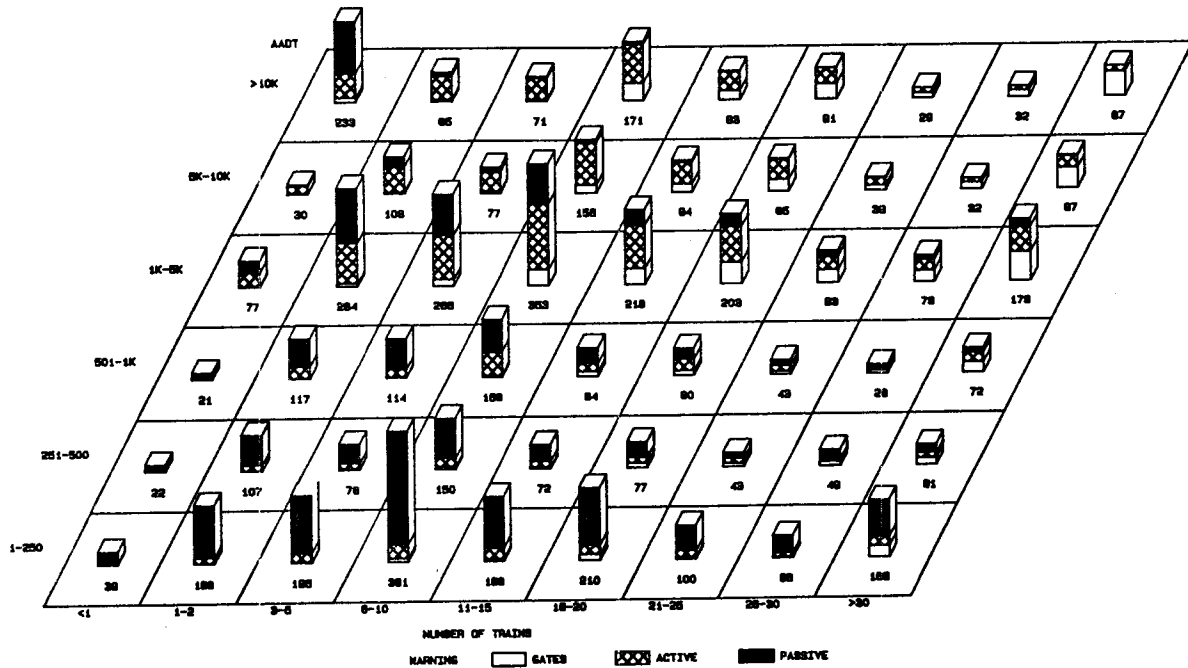
TABLE 29. ACCIDENTS/INCIDENTS AND CASUALTIES AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY MONTH AND CIRCUMSTANCE

Month	CIRCUMSTANCE								
	Struck By Consist			Ran Into Consist			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
January.....	505	45	190	219	7	100	724	52	290
February.....	441	26	175	155	13	56	596	39	231
March.....	410	50	191	144	10	63	554	60	254
April.....	331	29	142	122	12	63	453	41	205
May.....	365	42	159	131	7	63	496	49	222
June.....	324	24	129	122	8	81	446	32	210
July.....	296	36	102	131	8	57	427	44	159
August.....	343	20	140	126	5	51	469	25	191
September.....	353	42	132	132	8	60	485	50	192
October.....	376	38	135	140	4	75	516	42	210
November.....	425	43	149	138	11	66	563	54	215
December.....	468	48	151	173	7	67	641	55	218
Total.....	4,637	443	1,795	1,733	100	802	6,370	543	2,597

TABLE 30. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY WEATHER CONDITIONS, CIRCUMSTANCE, AND VISIBILITY

Weather	CIRCUMSTANCE											
	---Struck By Consist---				---Ran Into Consist---				-----Total-----			
	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Clear.....	70	1,882	76	1,021	18	517	23	539	88	2,399	99	1,560
Cloudy.....	27	560	43	391	10	160	6	206	37	720	49	597
Rain.....	10	151	12	186	2	55	5	80	12	206	17	266
Fog.....	14	25	2	51	1	12	---	48	15	37	2	99
Sleet.....	---	3	---	5	---	2	---	5	---	5	---	10
Snow.....	---	57	3	47	1	20	2	21	1	77	5	68
Not Reported.....	---	---	---	1	---	---	---	---	---	---	---	1
Total.....	121	2,678	136	1,702	32	766	36	899	153	3,444	172	2,601

FIGURE 7. ACCIDENTS/INCIDENTS BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC (AADT)



MOTORIST ACTION DATA

TABLE 31. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY OBSTRUCTION OF MOTORISTS' VIEW, CIRCUMSTANCE, AND VISIBILITY

Type Obstruction	CIRCUMSTANCE											
	----Struck By Consist----				----Ran Into Consist----				-----Total-----			
	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Permanent structure...	4	91	7	53	1	28	1	13	5	119	8	66
Standing RR Equipment.	3	30	1	11	---	2	---	2	3	32	1	13
Passing Train.....	1	12	1	8	---	4	1	4	1	16	2	12
Topography.....	---	25	1	7	---	14	1	4	---	39	2	11
Vegetation.....	2	58	2	10	---	24	---	9	2	82	2	19
Highway Vehicle.....	1	13	2	2	---	3	---	2	1	16	2	4
Other.....	1	16	3	4	---	5	---	6	1	21	3	10
Not Obstructed.....	109	2,430	119	1,606	31	686	33	856	140	3,116	152	2,462
Unknown.....	---	3	---	1	---	---	---	3	---	3	---	4
Total.....	121	2,678	136	1,702	32	766	36	899	153	3,444	172	2,601

TABLE 32. ACCIDENTS/INCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES BY MOTORIST ACTION AND TYPE OF VEHICLE

Type Of Vehicle	MOTORIST ACTION					
	Struck By Second Train			Passed Standing Vehicle		
	Yes	No	Unknown	Yes	No	Unknown
Automobile.....	136	4,139	74	149	3,828	372
Truck.....	36	1,351	23	46	1,269	95
Truck-trailer....	20	520	7	17	485	45
Bus.....	1	6	---	2	5	---
School bus.....	---	7	---	---	6	1
Motorcycle.....	2	45	3	2	38	10
Total.....	195	6,068	107	216	5,631	523

3. RAIL-HIGHWAY CROSSING ACCIDENT RATES

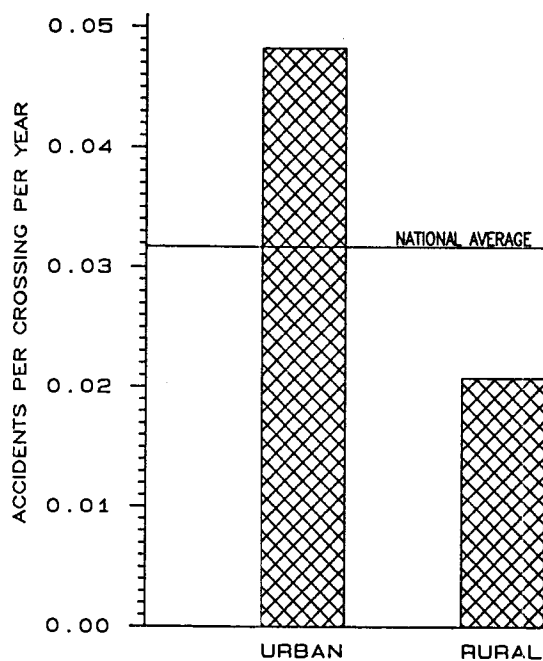


FIGURE 8. CROSSING ACCIDENT RATE BY LOCATION: URBAN OR RURAL

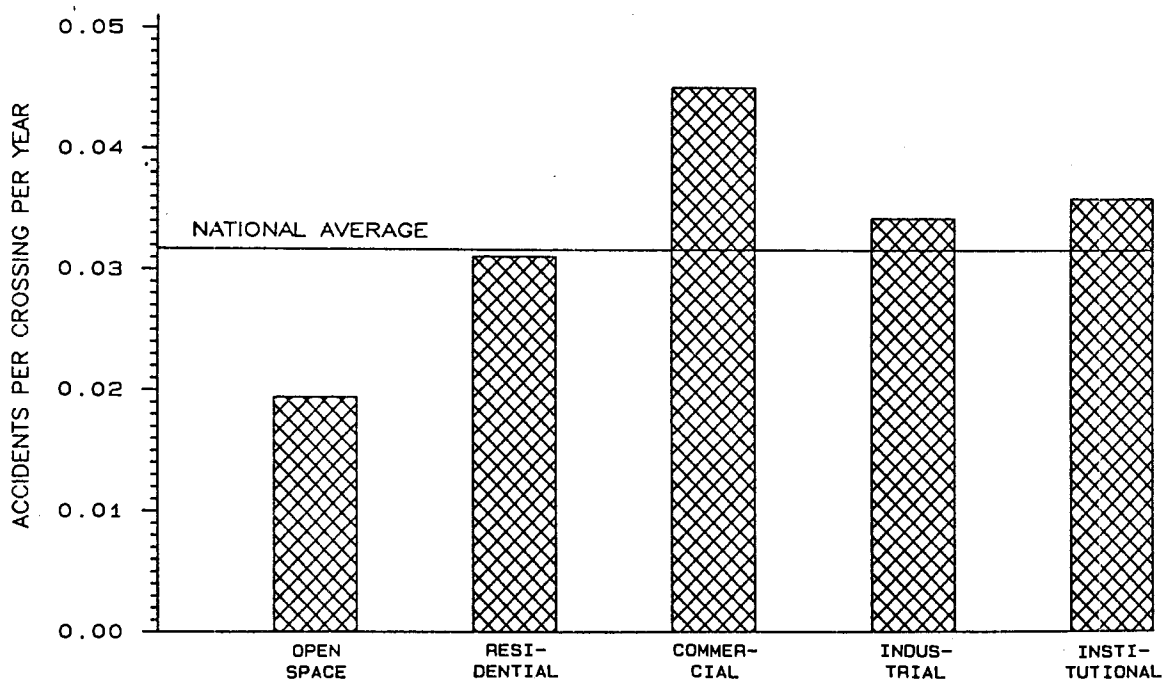


FIGURE 9. CROSSING ACCIDENT RATE BY TYPE OF DEVELOPMENT

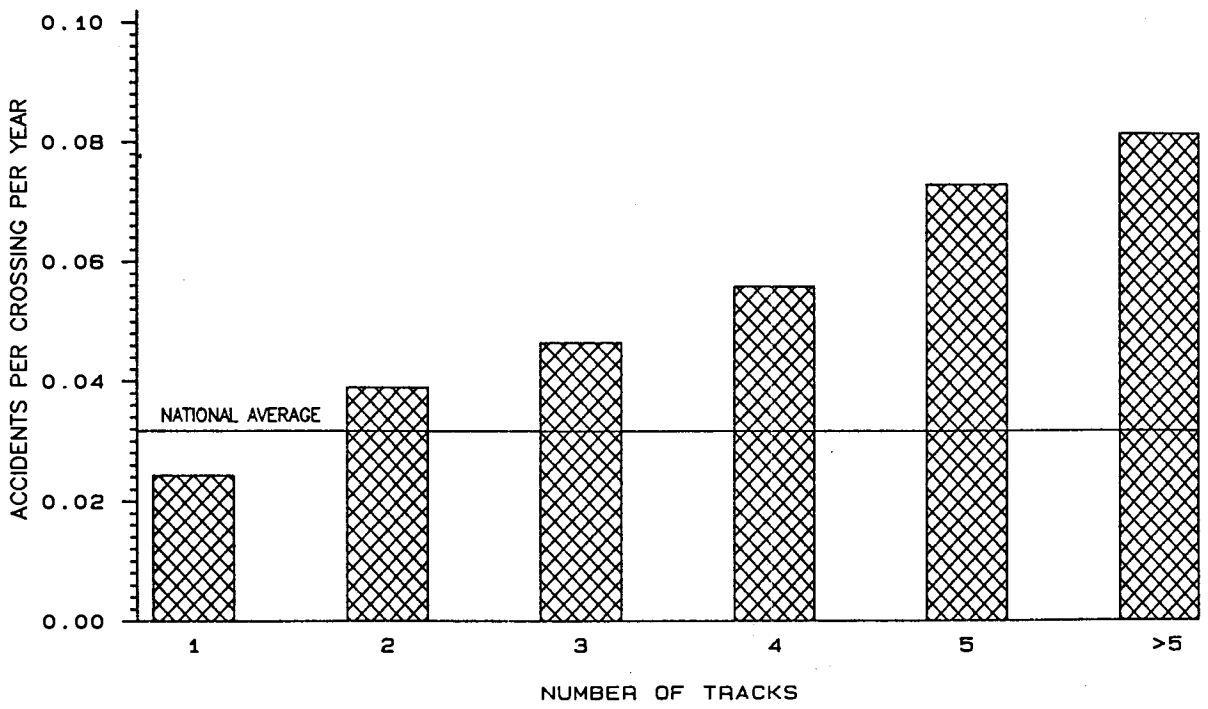


FIGURE 10. CROSSING ACCIDENT RATE BY NUMBER OF TRACKS

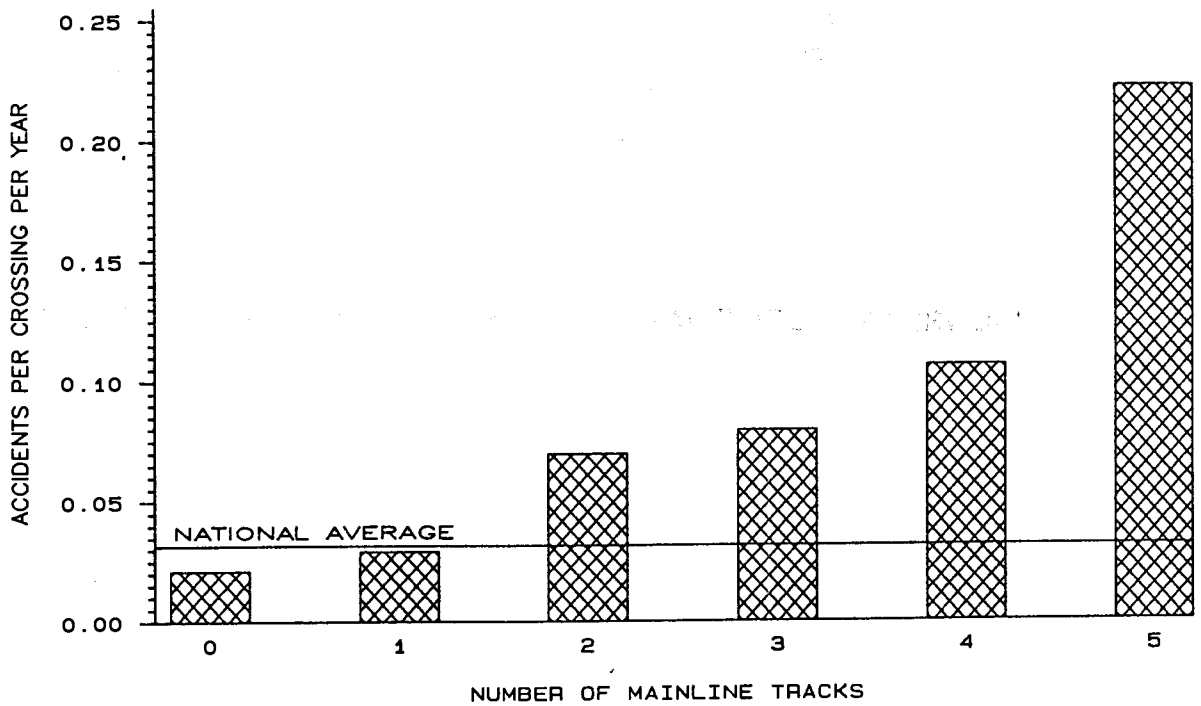


FIGURE 11. CROSSING ACCIDENT RATE BY NUMBER OF MAINLINE TRACKS

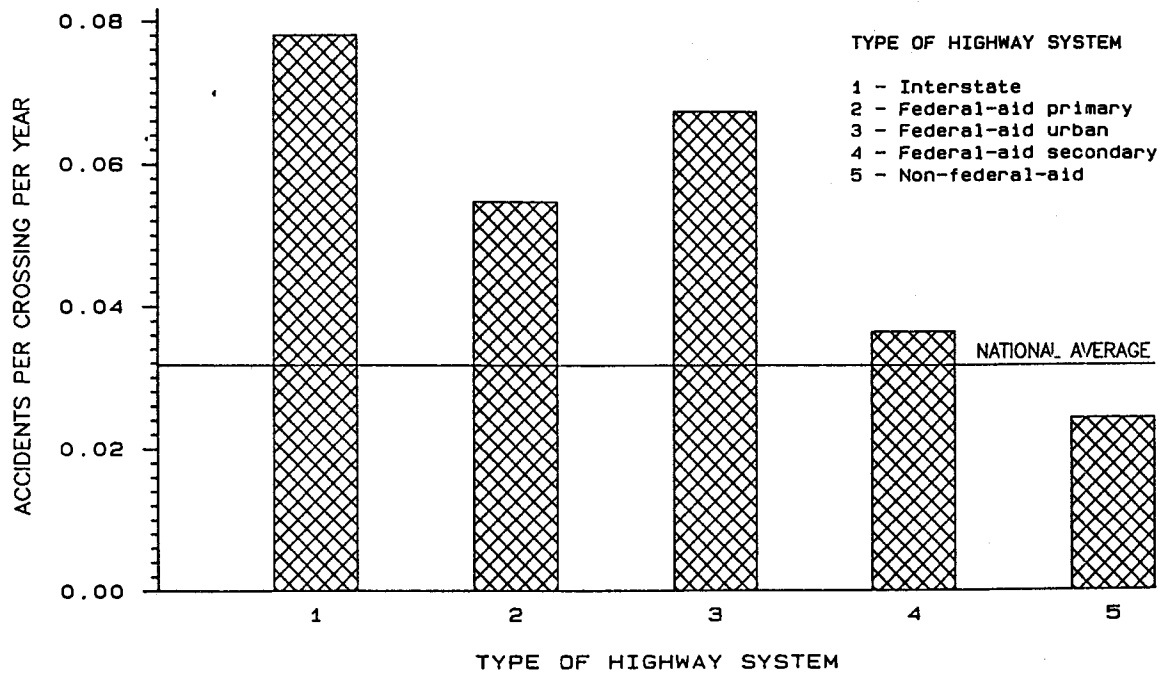


FIGURE 12. CROSSING ACCIDENT RATE BY HIGHWAY SYSTEM

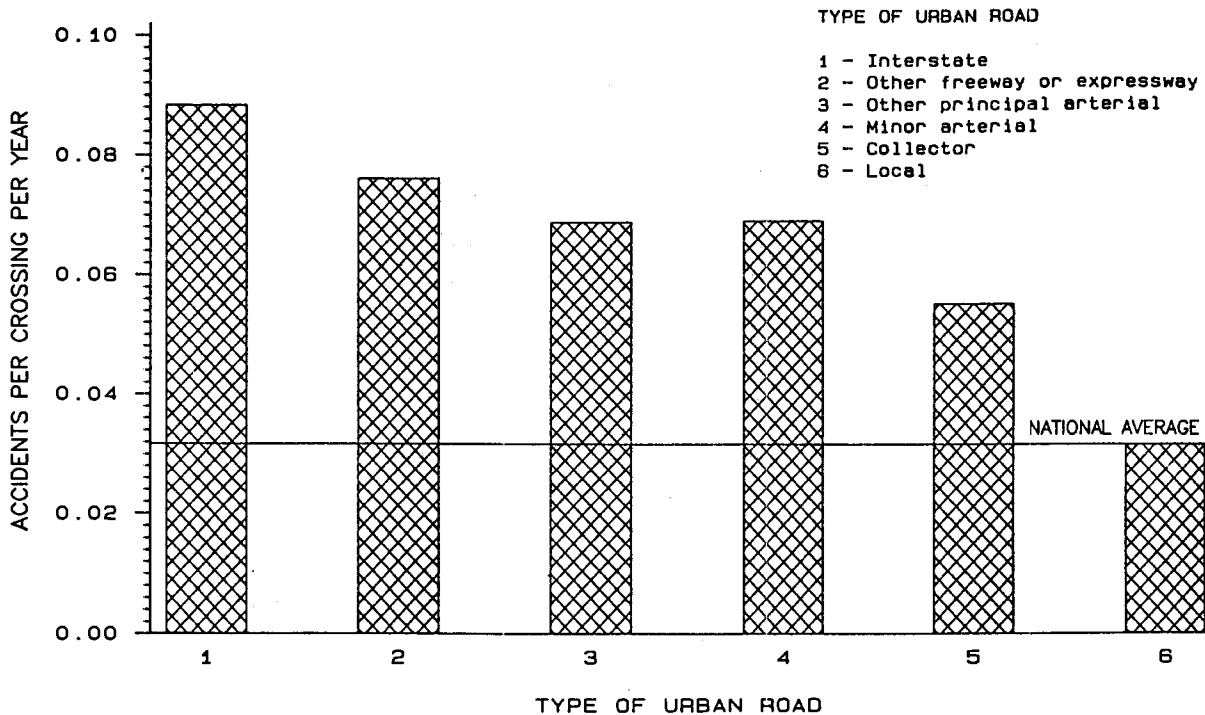


FIGURE 13. CROSSING ACCIDENT RATE BY TYPE OF URBAN ROAD

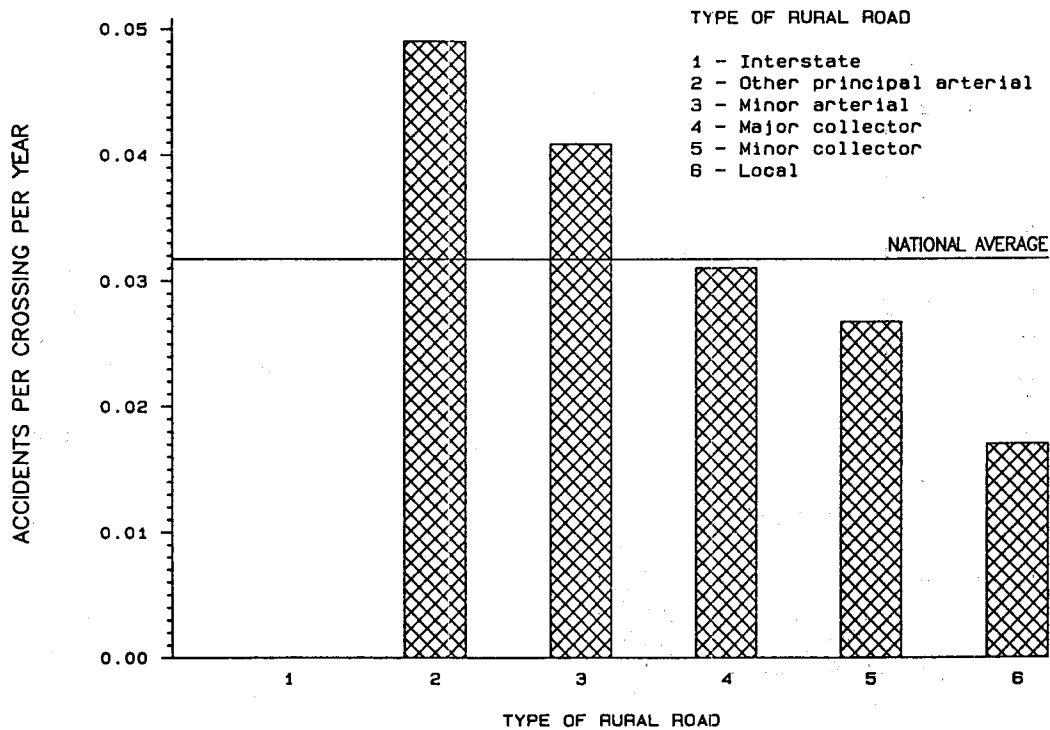


FIGURE 14. CROSSING ACCIDENT RATE BY TYPE OF RURAL ROAD

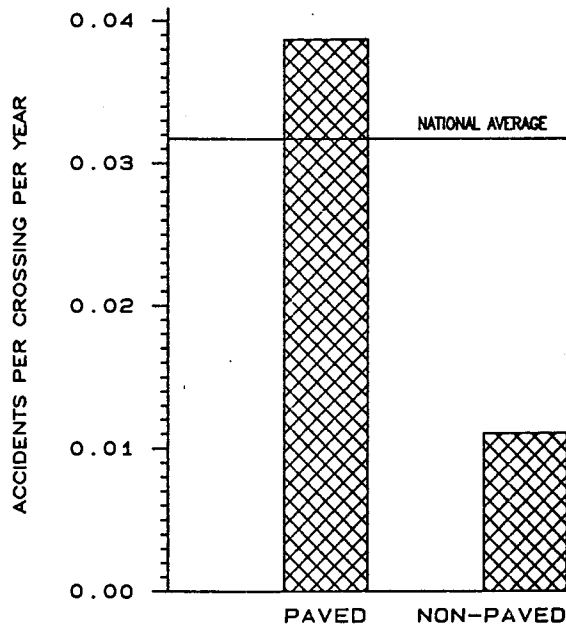


FIGURE 15. CROSSING ACCIDENT RATE BY PAVED OR NON-PAVED ROAD SURFACE

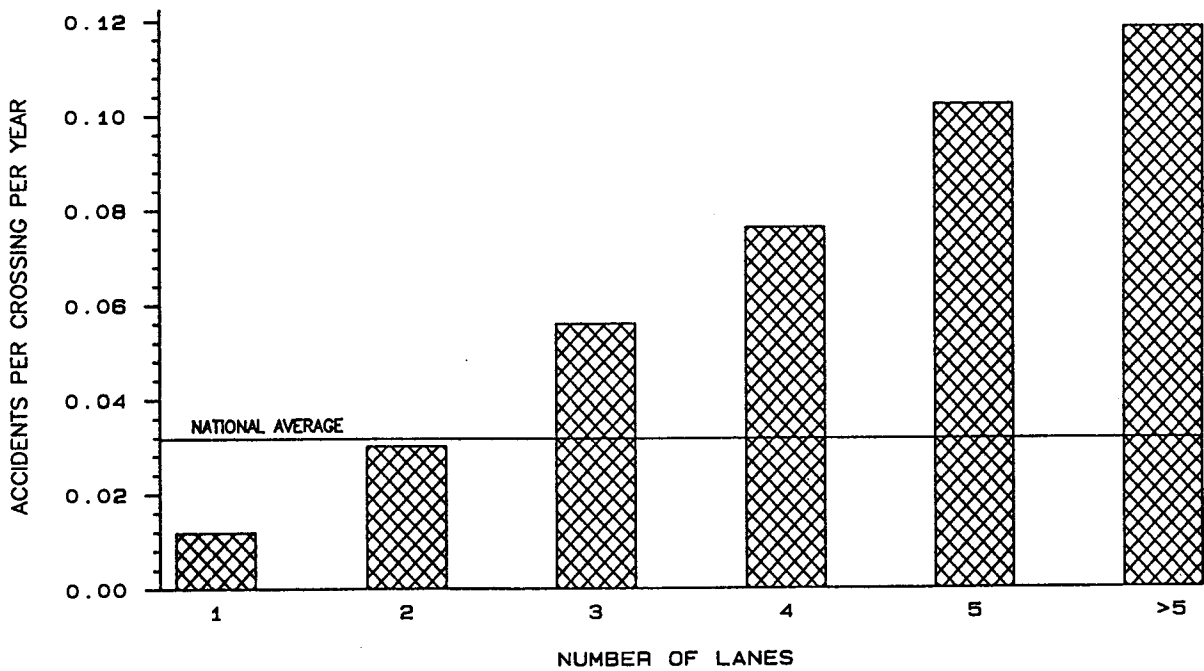


FIGURE 16. CROSSING ACCIDENT RATE BY NUMBER OF TRAFFIC LANES

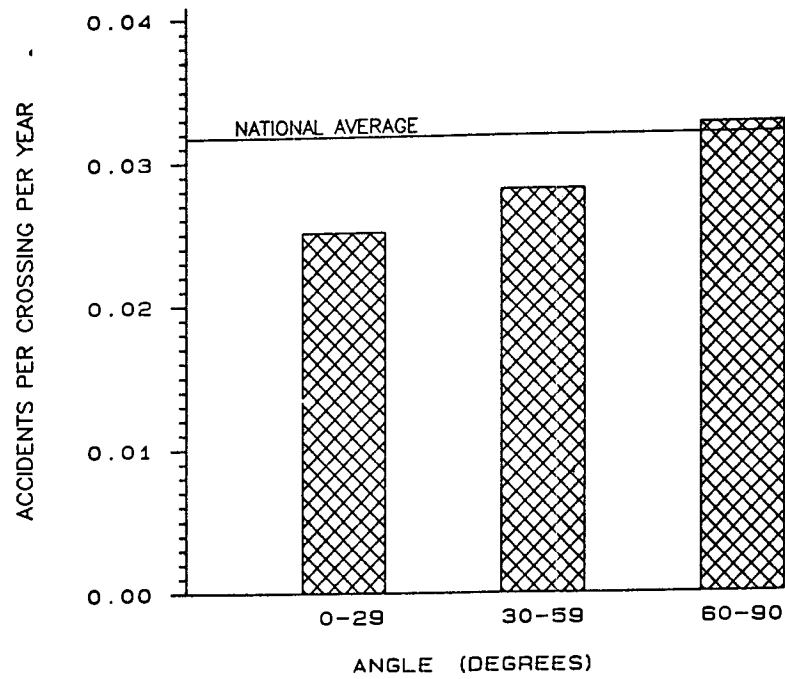


FIGURE 17. CROSSING ACCIDENT RATE BY SMALLEST CROSSING ANGLE

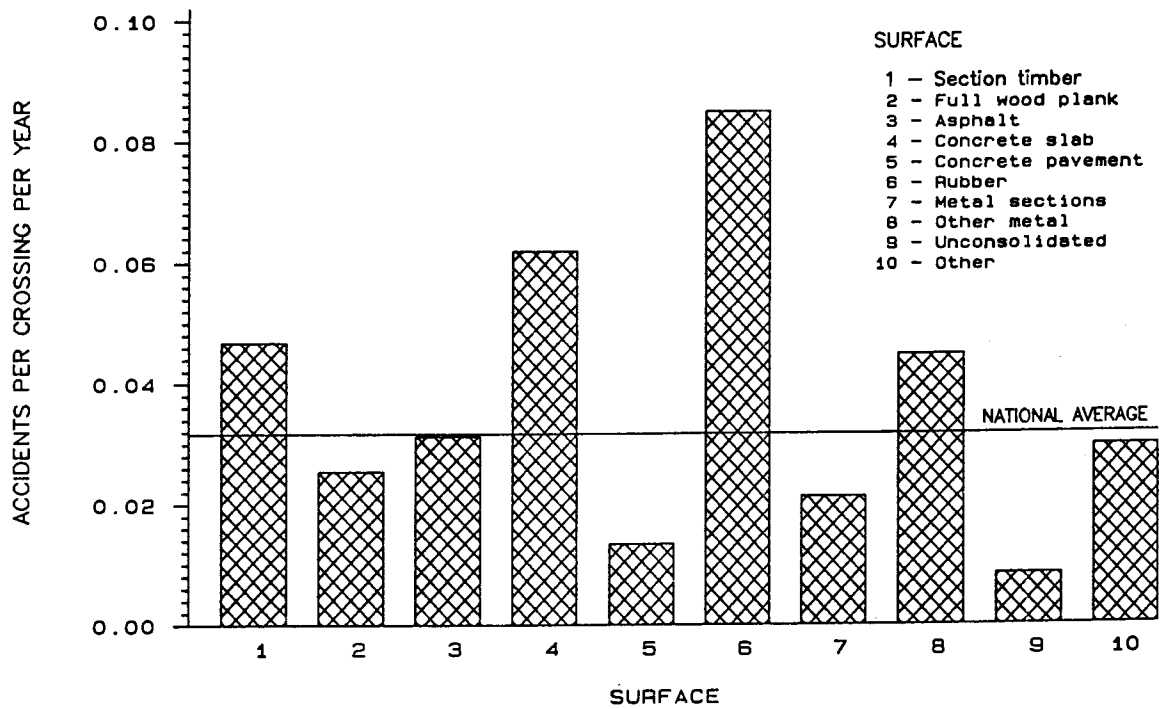


FIGURE 18. CROSSING ACCIDENT RATE BY CROSSING SURFACE

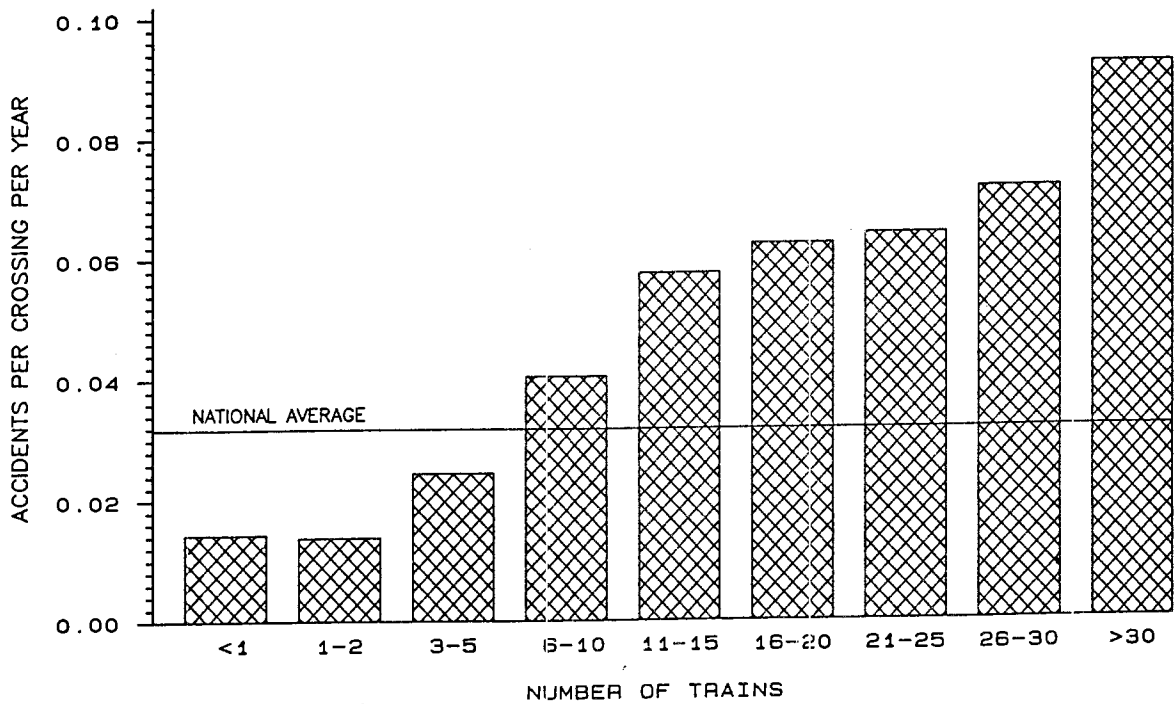


FIGURE 19. CROSSING ACCIDENT RATE BY NUMBER OF TRAINS PER DAY

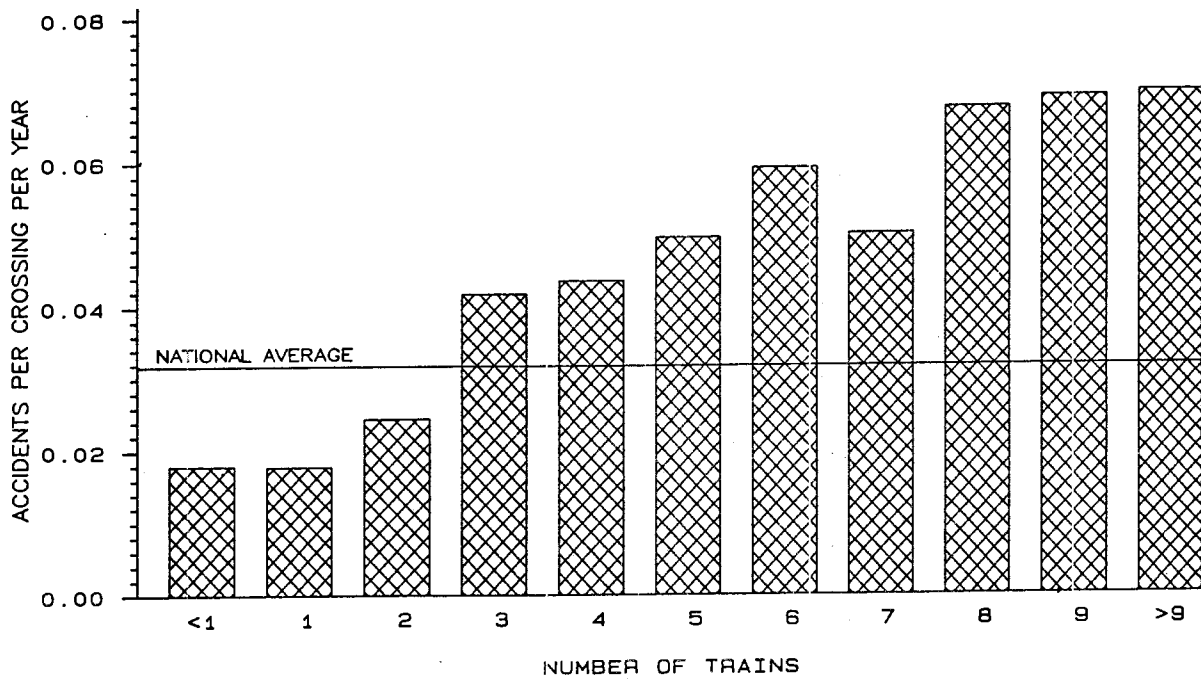


FIGURE 20. CROSSING ACCIDENT RATE BY NUMBER OF THRU-TRAINS DURING DAYLIGHT HOURS (6AM TO 6PM)

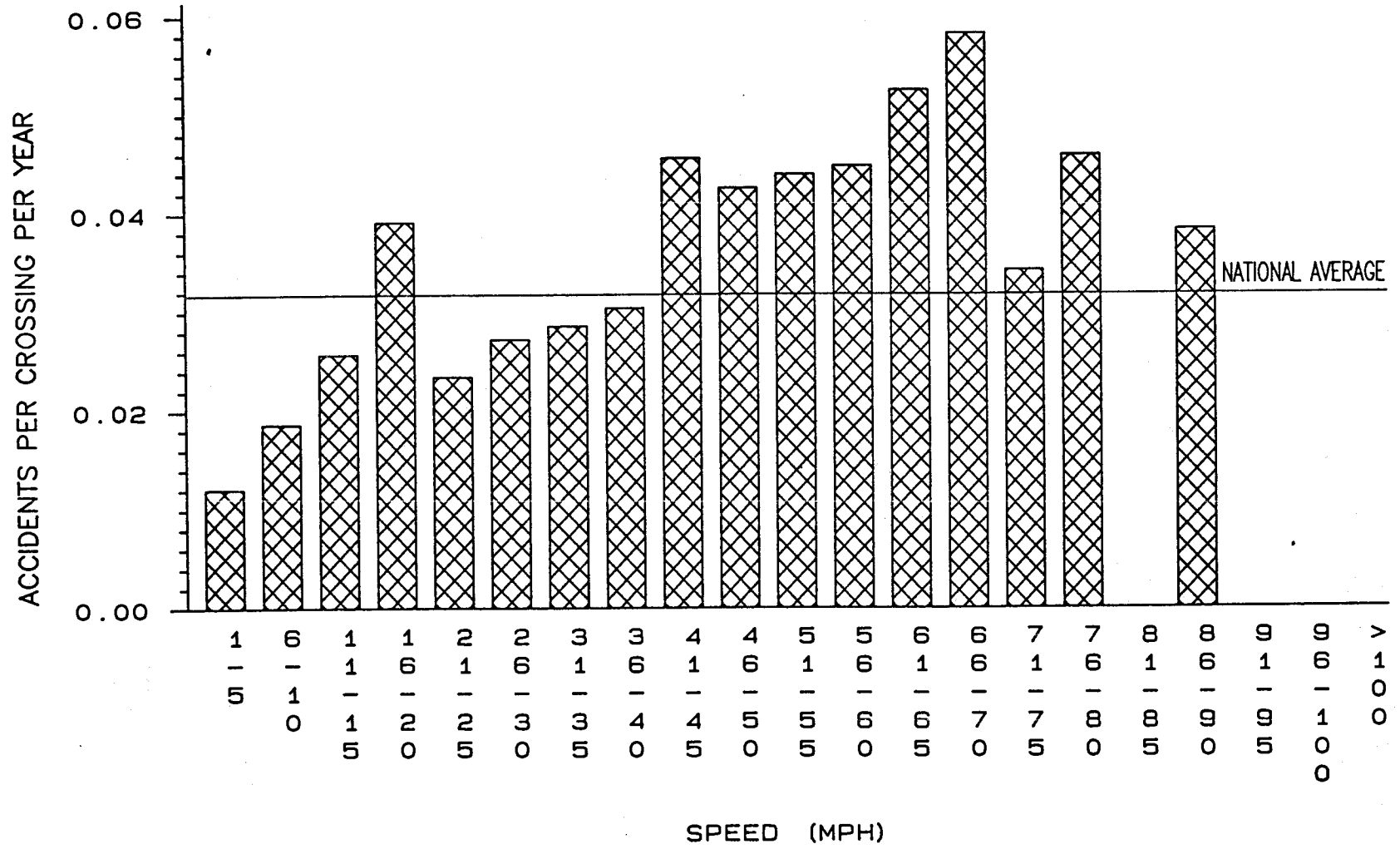


FIGURE 21. CROSSING ACCIDENT RATE BY MAXIMUM TIMETABLE SPEED

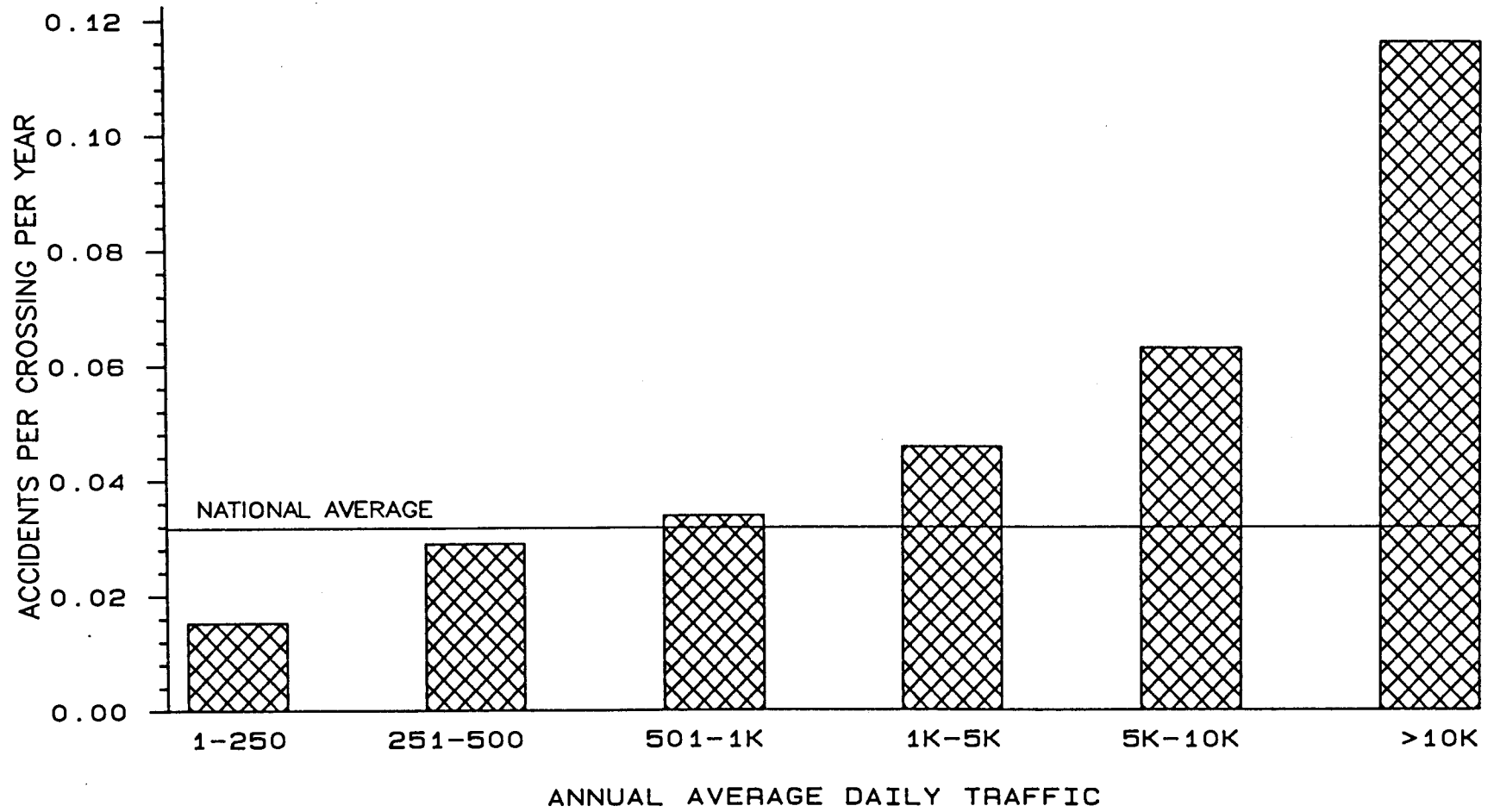
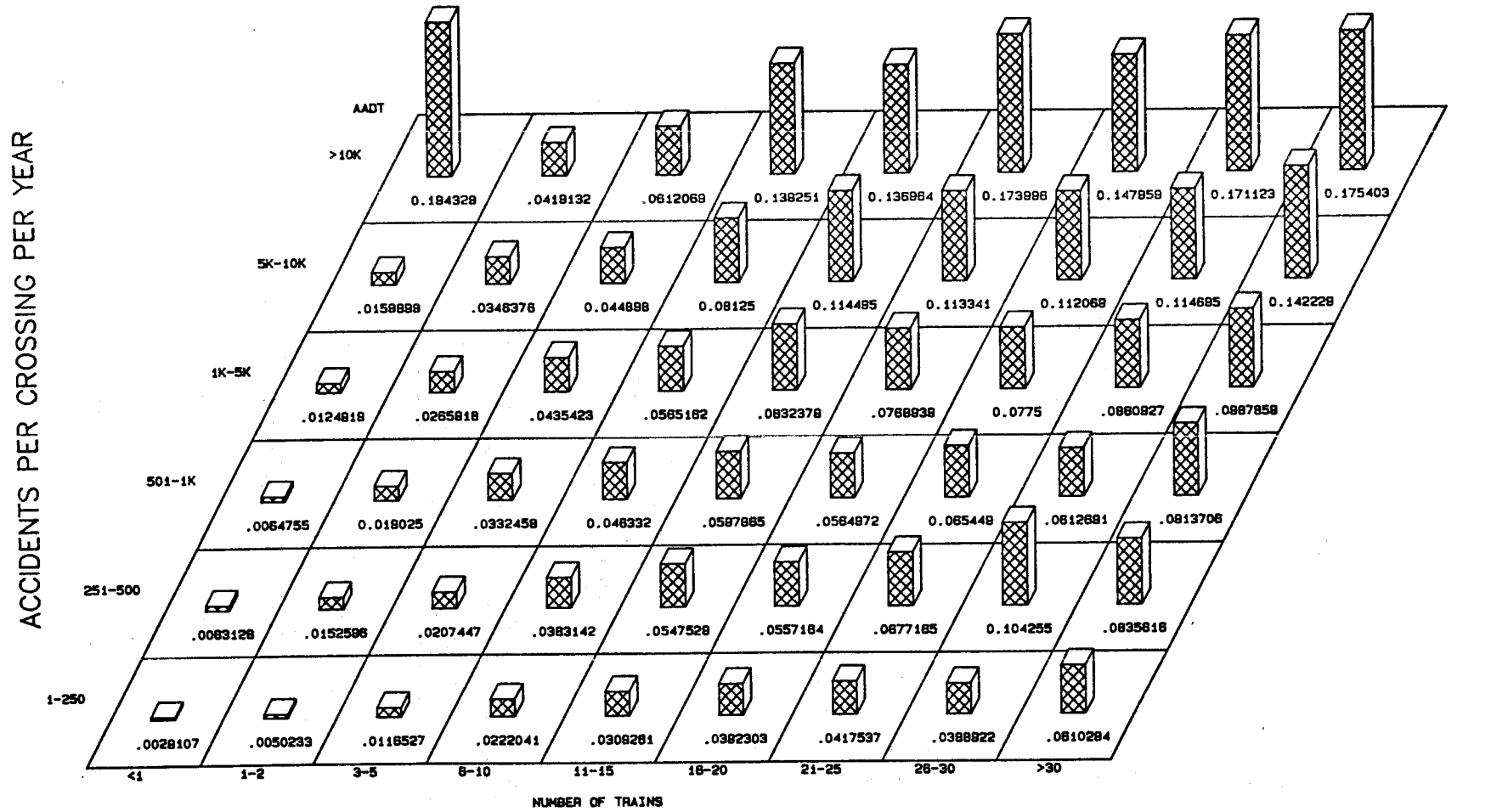


FIGURE 22. CROSSING ACCIDENT RATE BY ANNUAL AVERAGE DAILY TRAFFIC



NATIONAL AVERAGE .03054

FIGURE 23. CROSSING ACCIDENT RATE BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC

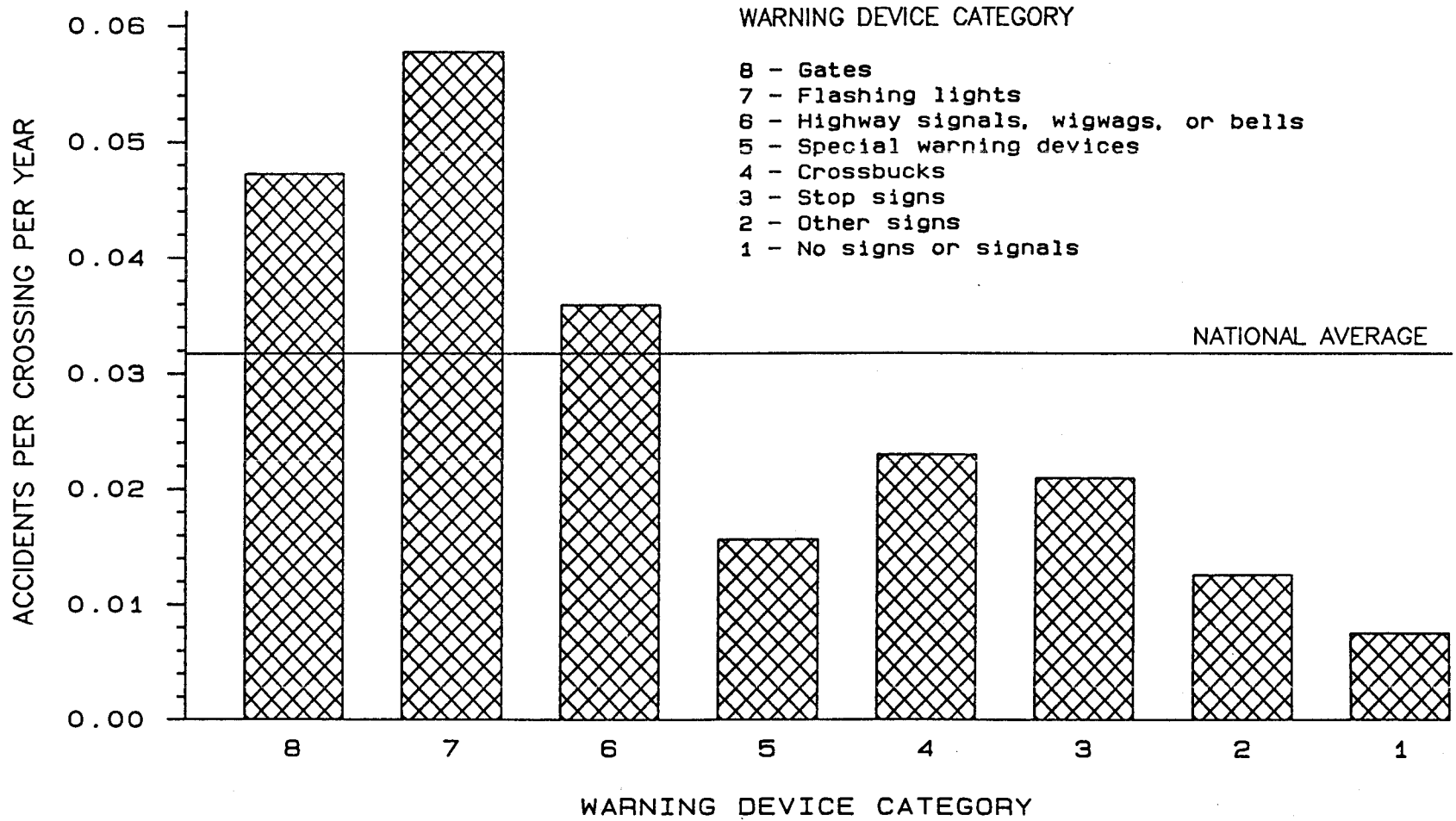


FIGURE 24. CROSSING ACCIDENT RATE BY WARNING DEVICE CATEGORY

4. CURRENT YEAR RAIL-HIGHWAY CROSSING INVENTORY

PHYSICAL CHARACTERISTICS

TABLE 33. TOTAL PUBLIC AND PRIVATE CROSSINGS BY STATE AND TYPE

State	Public	Public		Private	Pedestrian	Total
	At Grade	Grade RR Under	Separated RR Over			
ALABAMA	4,760	501	192	2,476	34	7,963
ALASKA	208	11	1	65	---	285
ARIZONA	1,001	84	80	855	7	2,027
ARKANSAS	3,678	176	131	1,752	15	5,752
CALIFORNIA	8,946	935	567	5,607	254	16,309
COLORADO	2,378	195	111	1,712	13	4,409
CONNECTICUT	504	332	256	474	54	1,620
DELAWARE	260	44	56	175	4	539
DIST OF COLUMBIA	56	30	38	15	13	152
FLORIDA	5,424	230	57	2,212	73	7,996
GEORGIA	6,836	576	258	3,090	39	10,799
HAWAII	6	---	---	---	---	6
IDAHO	1,964	94	64	1,739	10	3,871
ILLINOIS	12,215	984	1,972	7,223	418	22,812
INDIANA	9,006	498	633	3,668	121	13,926
IOWA	6,645	503	370	4,738	61	12,317
KANSAS	9,176	348	217	4,655	35	14,431
KENTUCKY	3,610	470	483	3,783	114	8,460
LOUISIANA	4,664	217	129	3,921	46	8,977
MAINE	1,000	125	79	1,088	13	2,305
MARYLAND	932	327	212	817	29	2,317
MASSACHUSETTS	1,199	796	436	588	102	3,121
MICHIGAN	7,814	359	416	3,450	108	12,147
MINNESOTA	6,570	515	406	4,138	82	11,711
MISSISSIPPI	3,252	241	116	2,772	20	6,401
MISSOURI	5,882	712	443	4,454	99	11,590
MONTANA	1,823	128	81	2,481	22	4,535
NEBRASKA	4,883	224	145	3,588	23	8,863
NEVADA	357	50	37	302	2	748
NEW HAMPSHIRE	657	159	66	522	23	1,427
NEW JERSEY	2,111	545	738	730	125	4,249
NEW MEXICO	820	68	80	590	4	1,562
NEW YORK	4,386	1,437	1,188	4,019	305	11,335
NORTH CAROLINA	5,496	525	301	4,299	76	10,697
NORTH DAKOTA	5,370	81	89	2,620	37	8,197
OHIO	8,939	1,206	1,177	5,206	106	16,634
OKLAHOMA	5,056	270	207	1,982	20	7,535
OREGON	2,864	290	180	3,348	106	6,788
PENNSYLVANIA	6,591	1,681	2,012	4,208	343	14,835
RHODE ISLAND	132	101	43	81	4	361
SOUTH CAROLINA	4,324	403	131	1,797	17	6,672
SOUTH DAKOTA	2,635	102	58	1,658	7	4,460
TENNESSEE	4,136	517	500	2,408	37	7,598
TEXAS	14,206	810	804	7,290	52	23,162
UTAH	1,357	126	53	989	7	2,532
VERMONT	597	78	86	790	51	1,602
VIRGINIA	2,636	641	480	3,761	68	7,586
WASHINGTON	4,104	404	357	4,259	116	9,240
WEST VIRGINIA	2,430	291	379	2,942	110	6,152
WISCONSIN	6,168	460	360	3,893	166	11,047
WYOMING	611	97	54	1,024	8	1,794
PUERTO RICO	55	---	---	2	---	57
FINAL TOTALS	200,730	19,997	17,329	130,256	3,599	371,911

TABLE 34. TOTAL PUBLIC AND PRIVATE CROSSINGS BY CLASS I RAILROAD AND TYPE

Railroad	Public	Public		Private	Pedestrian	Total
	At Grade	RR Under	RR Over			
Amtrak (National RR Passenger Corp)...	209	527	491	130	74	1,431
Atchison, Topeka And Santa Fe Rwy Co..	11,571	690	647	6,929	92	19,929
Baltimore And Ohio Railroad Co.....	5,066	818	698	3,505	125	10,212
Bangor And Aroostook Railroad Co.....	185	11	22	478	3	699
Bessemer And Lake Erie Railroad Co....	143	32	49	94	2	320
Boston And Maine Corporation.....	1,134	483	238	593	56	2,504
Burlington Northern Incorporated.....	25,064	1,557	1,307	17,444	353	45,725
Canadian Pacific Lines In Maine.....	97	11	18	164	40	330
Central Vermont Railway Inc.....	215	55	49	273	10	602
Chesapeake And Ohio Railway Company...	4,463	375	457	4,179	147	9,621
Chicago And Illinois Midland Rwy Co...	112	4	4	65	---	185
Chicago And North Western.....	9,334	688	827	6,026	195	17,070
Chicago South Shore And South Bend RR.	128	13	18	28	3	190
Chicago, Milw, St. Paul And Pacific...	3,485	335	325	2,201	98	6,444
Consolidated Rail Corporation.....	17,450	3,448	3,622	9,093	451	34,064
Delaware And Hudson Railway.....	523	99	106	727	28	1,483
Denver And Rio Grande Western RR Co...	1,151	136	71	825	7	2,190
Duluth, Missabe And Iron Range Rwy Co.	205	26	34	144	8	417
Duluth, Winnipeg And Pacific Rwy Co...	93	13	14	29	---	149
Elgin, Joliet And Eastern Railway Co..	250	32	28	102	---	412
Florida East Coast Railway Co.....	793	33	3	112	10	951
Grand Trunk Western Railroad Co.....	1,661	111	154	730	27	2,683
Green Bay And Western Railroad.....	318	10	3	251	---	582
Illinois Central Gulf Railroad Co.....	8,911	821	753	6,512	190	17,187
Kansas City Southern Railway Co.....	1,010	97	78	477	6	1,668
Louisiana And Arkansas Rwy Company...	722	60	33	563	5	1,383
Maine Central Railroad Company.....	585	72	38	448	7	1,150
Michigan Interstate Railroad.....	97	11	6	73	2	189
Missouri Pacific Railroad Co.....	12,292	699	520	7,757	116	21,384
Missouri-Kansas-Texas Railroad Co....	2,092	168	142	1,189	7	3,598
Monogahela Railway.....	96	23	50	135	1	305
Norfolk And Western Railway Co.....	8,009	788	1,062	6,102	115	16,076
Northwestern Pacific Railroad.....	183	38	6	309	7	543
Oklahoma, Kansas Texas Railroad.....	303	18	8	103	---	432
Pittsburg And Lake Erie Railroad Co...	112	46	27	107	18	310
Richmond, Frederickburg And Potomac...	103	42	24	57	22	248
Seaboard System Railroad.....	20,296	1,759	989	10,841	336	34,221
Soo Line Railroad Company.....	4,331	151	159	2,711	46	7,398
Southern Pacific Transportation Co....	11,322	995	652	7,892	257	21,118
Southern Railway Company.....	13,109	1,348	770	8,015	73	23,315
St. Louis Southwestern Railway Co.....	2,346	124	92	991	2	3,555
Texas And Northern Railway Company....	3	---	---	12	---	15
Texas, Mexican Railway Company.....	230	9	2	197	---	438
Union Pacific Railroad Co.....	8,490	688	343	6,666	78	16,265
* The Estates.....	1,096	124	114	895	18	2,247
All Other Railroads.....	21,342	2,409	2,276	14,082	564	40,673
FINAL TOTALS	200,730	19,997	17,329	130,256	3,599	371,911

NOTE: The "Estates" are crossings on predecessor lines that were not merged into Conrail.

TABLE 35. TOTAL CROSSINGS BY STATE AND LOCATION: URBAN OR RURAL

State	Urban	Rural	Total
Alabama.....	2,072	2,688	4,760
Alaska.....	71	137	208
Arizona.....	520	481	1,001
Arkansas.....	1,420	2,258	3,678
California.....	6,483	2,463	8,946
Colorado.....	845	1,533	2,378
Connecticut.....	395	109	504
Delaware.....	82	178	260
Dist of Columbia.	56	---	56
Florida.....	2,490	2,934	5,424
Georgia.....	2,469	4,367	6,836
Hawaii.....	---	6	6
Idaho.....	361	1,603	1,964
Illinois.....	4,354	7,861	12,215
Indiana.....	3,826	5,180	9,006
Iowa.....	1,893	4,752	6,645
Kansas.....	1,691	7,485	9,176
Kentucky.....	1,020	2,590	3,610
Louisiana.....	2,037	2,627	4,664
Maine.....	265	735	1,000
Maryland.....	436	496	932
Massachusetts....	848	351	1,199
Michigan.....	3,125	4,689	7,814
Minnesota.....	1,740	4,830	6,570
Mississippi.....	1,137	2,115	3,252
Missouri.....	1,898	3,984	5,882
Montana.....	362	1,461	1,823
Nebraska.....	719	4,164	4,883
Nevada.....	92	265	357
New Hampshire....	287	370	657
New Jersey.....	1,495	616	2,111
New Mexico.....	242	578	820
New York.....	1,963	2,423	4,386
North Carolina...	2,121	3,375	5,496
North Dakota.....	330	5,040	5,370
Ohio.....	3,532	5,407	8,939
Oklahoma.....	323	4,733	5,056
Oregon.....	1,258	1,606	2,864
Pennsylvania....	3,308	3,283	6,591
Rhode Island....	123	9	132
South Carolina...	1,658	2,666	4,324
South Dakota.....	344	2,291	2,635
Tennessee.....	1,697	2,439	4,136
Texas.....	7,550	6,656	14,206
Utah.....	685	672	1,357
Vermont.....	198	399	597
Virginia.....	1,218	1,418	2,636
Washington.....	1,955	2,149	4,104
West Virginia....	507	1,923	2,430
Wisconsin.....	2,436	3,732	6,168
Wyoming.....	52	559	611
Puerto Rico.....	8	47	55
Unknown.....	---	---	---
Total.....	75,997	124,733	200,730

NOTE: The classification of a crossing as urban or rural is now based on the functional classification code. In previous publications it was based on the highway system code.

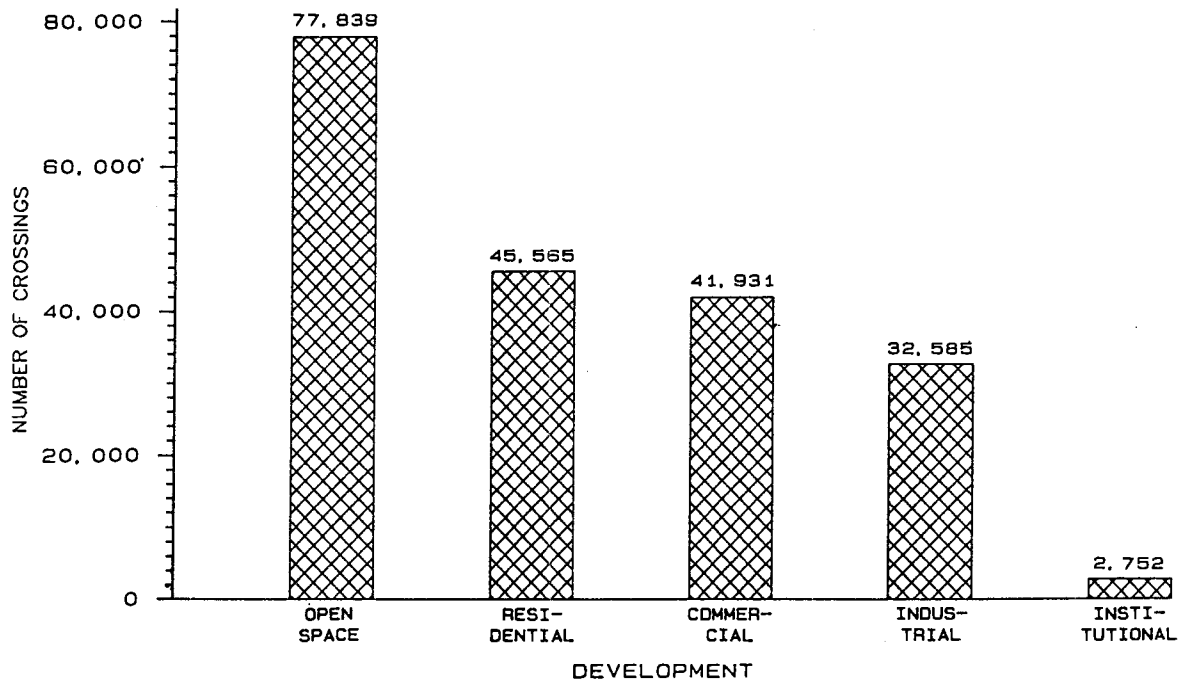


FIGURE 26. CROSSINGS BY TYPE OF DEVELOPMENT

TRACK DATA

TABLE 36. TOTAL CROSSINGS BY NUMBER OF MAIN AND OTHER TRACKS

Other Tracks	Number of main tracks							Total
	0	1	2	3	4	5	>5	
0	71	117,330	10,063	323	87	5	3	127,882
1	22,836	24,747	2,810	95	21	---	---	50,509
2	5,263	8,424	1,248	40	12	2	---	14,989
3	1,605	2,526	418	25	7	---	---	4,581
4	439	884	197	12	7	---	---	1,539
5	180	332	106	8	3	---	1	630
>5	165	328	100	1	4	2	---	600
Total	30,559	154,571	14,942	504	141	9	4	200,730

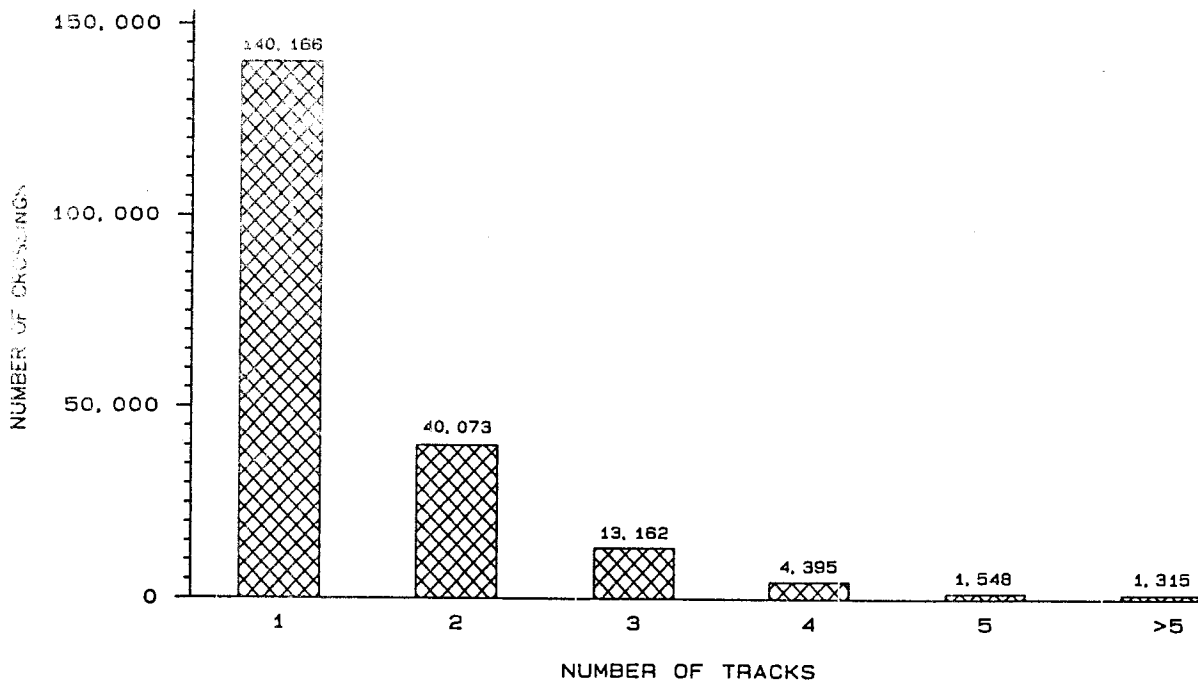


FIGURE 27. CROSSINGS BY NUMBER OF TRACKS

TABLE 37. TOTAL CROSSINGS BY NUMBER OF TRACKS AND WARNING DEVICE CATEGORY

Warning device	NUMBER OF TRACKS						Total
	1	2	3	4	5	>5	
Gates.....	7,490	7,496	3,086	1,208	434	422	20,136
Flashing lights.....	22,287	7,093	2,671	965	356	302	33,674
Hwy. signals, wigwags, bells	1,504	594	258	85	44	22	2,507
Special warning devices.....	5,074	1,275	448	162	65	70	7,094
Crossbucks.....	92,936	21,193	6,029	1,747	571	478	122,959
Stop signs.....	923	245	78	27	8	9	1,290
Other signs.....	650	153	34	20	10	7	874
No signs or signals.....	9,302	2,019	558	181	60	76	12,196
Total.....	140,166	40,073	13,162	4,395	1,548	1,386	200,730

TABLE 38. TOTAL CROSSINGS BY NUMBER OF TRACKS AND TRAFFIC LANES

Traffic Lanes	NUMBER OF TRACKS						Total
	1	2	3	4	5	>5	
1	26,131	5,126	987	248	62	74	32,628
2	106,086	32,121	11,095	3,747	1,337	1,176	155,562
3	731	305	115	40	10	14	1,215
4	6,361	2,281	885	329	131	113	10,100
5	335	97	34	17	4	1	488
>5	522	143	46	14	4	8	737
Total	140,166	40,073	13,162	4,395	1,548	1,386	200,730

TABLE 39. TOTAL CROSSINGS BY NUMBER OF TRACKS AND STATE

State	NUMBER OF TRACKS						Total
	1	2	3	4	5	>5	
Alabama.....	3,476	816	312	86	35	35	4,760
Alaska.....	165	34	6	1	1	1	208
Arizona.....	717	184	67	21	7	5	1,001
Arkansas.....	2,537	767	249	73	32	20	3,678
California.....	6,229	1,681	627	211	102	96	8,946
Colorado.....	1,641	468	156	49	31	33	2,378
Connecticut.....	378	90	24	8	4	---	504
Delaware.....	212	33	10	3	2	---	260
Dist of Columbia.	36	14	6	---	---	---	56
Florida.....	3,641	1,179	376	115	43	70	5,424
Georgia.....	5,052	1,201	362	142	38	41	6,836
Hawaii.....	6	---	---	---	---	---	6
Idaho.....	1,370	357	133	55	24	25	1,964
Illinois.....	7,372	3,265	1,009	354	113	102	12,215
Indiana.....	5,865	2,215	578	222	78	48	9,006
Iowa.....	4,527	1,315	534	162	57	50	6,645
Kansas.....	6,709	1,474	635	221	73	64	9,176
Kentucky.....	2,435	840	225	72	17	21	3,610
Louisiana.....	3,359	875	272	90	32	36	4,664
Maine.....	771	171	40	13	3	2	1,000
Maryland.....	645	199	54	24	3	7	932
Massachusetts....	942	191	42	15	5	4	1,199
Michigan.....	5,533	1,586	428	159	55	53	7,814
Minnesota.....	4,642	1,229	459	139	47	54	6,570
Mississippi.....	2,167	697	229	98	31	30	3,252
Missouri.....	3,893	1,226	505	147	56	55	5,882
Montana.....	1,304	334	126	29	14	16	1,823
Nebraska.....	3,359	975	365	103	41	40	4,883
Nevada.....	233	86	23	7	3	5	357
New Hampshire....	554	86	11	3	2	1	657
New Jersey.....	1,489	454	126	22	12	8	2,111
New Mexico.....	578	162	50	19	4	7	820
New York.....	3,170	892	223	65	17	19	4,386
North Carolina...	4,007	993	313	117	35	31	5,496
North Dakota.....	4,369	696	238	45	18	4	5,370
Ohio.....	5,015	2,610	809	332	106	67	8,939
Oklahoma.....	3,746	753	344	124	44	45	5,056
Oregon.....	2,088	506	198	51	14	7	2,864
Pennsylvania.....	4,426	1,510	411	157	45	42	6,591
Rhode Island.....	81	41	8	2	---	---	132
South Carolina...	3,254	755	223	52	26	14	4,324
South Dakota.....	2,102	343	123	42	15	10	2,635
Tennessee.....	2,836	880	273	84	29	34	4,136
Texas.....	10,531	2,448	773	270	101	83	14,206
Utah.....	969	252	87	20	20	9	1,357
Vermont.....	481	85	21	4	1	5	597
Virginia.....	1,740	607	191	65	22	11	2,636
Washington.....	2,861	757	307	119	31	29	4,104
West Virginia....	1,737	493	156	28	6	10	2,430
Wisconsin.....	4,447	1,131	376	133	46	35	6,168
Wyoming.....	416	115	49	22	7	2	611
Puerto Rico.....	53	2	---	---	---	---	55
Unknown.....	---	---	---	---	---	---	---
Total.....	140,166	40,073	13,162	4,395	1,548	1,386	200,730

HIGHWAY SYSTEM DATA

TABLE 40. TOTAL CROSSINGS BY TYPE OF HIGHWAY SYSTEM AND STATE

State	01	02	03	04	08	Total
Alabama.....	---	449	29	438	3,844	4,760
Alaska.....	---	23	14	31	140	208
Arizona.....	12	35	189	73	692	1,001
Arkansas.....	1	146	276	179	3,076	3,678
California.....	---	1,136	830	718	6,262	8,946
Colorado.....	---	108	431	107	1,732	2,378
Connecticut.....	---	30	185	19	270	504
Delaware.....	---	35	11	115	99	260
Dist of Columbia.	---	4	1	3	48	56
Florida.....	---	162	87	766	4,370	5,385
Georgia.....	3	414	166	816	5,437	6,836
Hawaii.....	---	---	---	---	6	6
Idaho.....	---	58	117	149	1,640	1,964
Illinois.....	---	729	1,483	927	9,076	12,215
Indiana.....	---	361	393	1,658	6,594	9,006
Iowa.....	5	384	783	617	4,856	6,645
Kansas.....	1	373	481	1,186	7,135	9,176
Kentucky.....	2	113	320	323	2,852	3,610
Louisiana.....	1	169	36	444	4,014	4,664
Maine.....	---	94	21	94	791	1,000
Maryland.....	---	59	202	83	588	932
Massachusetts....	---	117	315	121	646	1,199
Michigan.....	4	372	863	1,193	5,382	7,814
Minnesota.....	1	248	118	1,047	5,156	6,570
Mississippi.....	1	145	231	475	2,400	3,252
Missouri.....	3	116	280	721	4,762	5,882
Montana.....	5	75	59	157	1,527	1,823
Nebraska.....	---	245	304	531	3,803	4,883
Nevada.....	---	19	11	31	296	357
New Hampshire....	---	73	125	39	418	655
New Jersey.....	---	69	212	179	1,651	2,111
New Mexico.....	---	23	60	56	681	820
New York.....	---	272	8	800	3,306	4,386
North Carolina...	---	125	215	420	4,736	5,496
North Dakota.....	1	183	98	667	4,421	5,370
Ohio.....	---	405	127	1,801	6,604	8,937
Oklahoma.....	---	163	325	414	4,154	5,056
Oregon.....	---	160	319	294	2,091	2,864
Pennsylvania.....	---	452	448	545	5,146	6,591
Rhode Island.....	---	7	27	22	76	132
South Carolina...	1	271	104	1,345	2,603	4,324
South Dakota.....	---	119	123	312	2,081	2,635
Tennessee.....	---	178	11	377	3,570	4,136
Texas.....	86	381	1,489	893	11,357	14,206
Utah.....	1	24	6	166	1,160	1,357
Vermont.....	---	58	6	73	460	597
Virginia.....	---	108	344	435	1,749	2,636
Washington.....	---	85	216	614	3,189	4,104
West Virginia....	---	146	48	422	1,814	2,430
Wisconsin.....	---	402	887	456	4,423	6,168
Wyoming.....	---	33	14	58	506	611
Puerto Rico.....	---	14	---	3	38	55
Unknown.....	---	---	---	---	---	---
Total.....	128	9,970	13,448	23,413	153,728	200,687

HIGHWAY SYSTEM CODES

Code	System	Code	System
01	Interstate	02	Federal-aid primary
03	Federal-aid urban	04	Federal-aid secondary
08	Non-federal-aid		

See Appendix A for explanation of revision in codes.

TABLE 41. TOTAL CROSSINGS BY HIGHWAY SYSTEM GROUP AND STATE

HIGHWAY SYSTEM GROUP			
State	On-State	Off-State	Total
Alabama.....	331	4,429	4,760
Alaska.....	90	118	208
Arizona.....	64	937	1,001
Arkansas.....	588	3,090	3,678
California.....	386	8,560	8,946
Colorado.....	276	2,102	2,378
Connecticut.....	89	415	504
Delaware.....	249	11	260
Dist of Columbia.....	55	1	56
Florida.....	1,037	4,387	5,424
Georgia.....	785	6,051	6,836
Hawaii.....	---	6	6
Idaho.....	138	1,826	1,964
Illinois.....	1,478	10,737	12,215
Indiana.....	837	8,169	9,006
Iowa.....	395	6,250	6,645
Kansas.....	508	8,668	9,176
Kentucky.....	1,016	2,594	3,610
Louisiana.....	985	3,679	4,664
Maine.....	200	800	1,000
Maryland.....	153	779	932
Massachusetts....	44	1,155	1,199
Michigan.....	489	7,325	7,814
Minnesota.....	374	6,196	6,570
Mississippi.....	294	2,958	3,252
Missouri.....	822	5,060	5,882
Montana.....	289	1,534	1,823
Nebraska.....	378	4,505	4,883
Nevada.....	66	291	357
New Hampshire....	191	466	657
New Jersey.....	201	1,910	2,111
New Mexico.....	177	643	820
New York.....	467	3,919	4,386
North Carolina...	3,560	1,936	5,496
North Dakota.....	263	5,107	5,370
Ohio.....	1,198	7,741	8,939
Oklahoma.....	384	4,672	5,056
Oregon.....	202	2,662	2,864
Pennsylvania.....	2,270	4,321	6,591
Rhode Island.....	29	103	132
South Carolina...	2,862	1,462	4,324
South Dakota.....	179	2,456	2,635
Tennessee.....	273	3,863	4,136
Texas.....	2,694	11,512	14,206
Utah.....	146	1,211	1,357
Vermont.....	144	453	597
Virginia.....	1,659	977	2,636
Washington.....	237	3,867	4,104
West Virginia....	1,478	952	2,430
Wisconsin.....	536	5,632	6,168
Wyoming.....	96	515	611
Puerto Rico.....	38	17	55
Unknown.....	---	---	---
Total.....	31,700	169,030	200,730

TABLE 42. TOTAL CROSSINGS BY FUNCTIONAL CLASSIFICATION OF ROAD AT RAIL-HIGHWAY CROSSING

Rural	Crossings	Urban	Crossings
Interstate.....	21	Interstate.....	147
Other principal arterial	1,529	Other freeway/expressway	538
Minor arterial.....	4,548	Other principal arterial	7,403
Major collector.....	13,433	Minor arterial.....	12,704
Minor collector.....	12,816	Collector.....	11,375
Local.....	92,342	Local.....	43,830
Total.....	124,689	Total.....	75,997

TABLE 43. TOTAL CROSSINGS BY NUMBER OF TRAFFIC LANES AND STATE

NUMBER OF LANES (BOTH DIRECTIONS)

State	1	2	3	4	5	>5	Total
Alabama.....	973	3,516	25	226	9	11	4,760
Alaska.....	19	175	1	12	1	---	208
Arizona.....	20	848	12	90	19	12	1,001
Arkansas.....	865	2,741	13	58	---	1	3,678
California.....	473	6,291	176	1,617	164	225	8,946
Colorado.....	177	2,036	16	139	6	4	2,378
Connecticut.....	29	443	7	22	3	---	504
Delaware.....	2	235	4	18	---	1	260
Dist of Columbia.	2	48	1	3	---	2	56
Florida.....	307	4,448	67	445	39	118	5,424
Georgia.....	1,388	5,202	28	210	1	7	6,836
Hawaii.....	---	6	---	---	---	---	6
Idaho.....	530	1,345	10	74	2	3	1,964
Illinois.....	2,572	8,872	52	687	12	20	12,215
Indiana.....	1,711	6,827	46	405	6	11	9,006
Iowa.....	800	5,571	42	220	7	5	6,645
Kansas.....	2,277	6,592	8	297	---	2	9,176
Kentucky.....	1,143	2,396	8	62	1	---	3,610
Louisiana.....	664	3,757	13	206	8	16	4,664
Maine.....	61	922	4	13	---	---	1,000
Maryland.....	119	735	8	62	4	4	932
Massachusetts....	44	1,089	8	57	1	---	1,199
Michigan.....	583	6,480	70	600	36	45	7,814
Minnesota.....	1,137	5,139	17	273	3	1	6,570
Mississippi.....	423	2,704	8	109	3	5	3,252
Missouri.....	1,485	4,238	12	136	4	7	5,882
Montana.....	255	1,537	4	26	1	---	1,823
Nebraska.....	1,122	3,665	5	87	1	3	4,883
Nevada.....	132	198	1	25	---	1	357
New Hampshire....	39	586	4	25	2	1	657
New Jersey.....	115	1,835	11	142	2	6	2,111
New Mexico.....	269	507	1	37	3	3	820
New York.....	424	3,787	23	142	4	6	4,386
North Carolina...	347	4,890	37	201	12	9	5,496
North Dakota.....	1,259	4,074	1	36	---	---	5,370
Ohio.....	1,249	7,291	59	314	13	13	8,939
Oklahoma.....	924	3,843	7	275	5	2	5,056
Oregon.....	338	2,377	47	95	4	3	2,864
Pennsylvania.....	1,031	5,210	120	200	2	28	6,591
Rhode Island.....	5	106	---	21	---	---	132
South Carolina...	713	3,392	15	185	7	12	4,324
South Dakota.....	836	1,737	3	55	1	3	2,635
Tennessee.....	757	3,135	20	202	16	6	4,136
Texas.....	2,497	10,333	73	1,166	42	95	14,206
Utah.....	249	1,008	---	88	1	11	1,357
Vermont.....	135	450	4	8	---	---	597
Virginia.....	37	2,449	25	105	10	10	2,636
Washington.....	383	3,272	74	330	31	14	4,104
West Virginia....	1,228	1,181	9	11	---	1	2,430
Wisconsin.....	327	5,561	15	255	---	10	6,168
Wyoming.....	151	429	1	28	2	---	611
Puerto Rico.....	2	53	---	---	---	---	55
Unknown.....	---	---	---	---	---	---	---
Total.....	32,628	155,562	1,215	10,100	488	737	200,730

TABLE 44. TOTAL CROSSINGS BY NUMBER OF TRAFFIC LANES AND WARNING DEVICE CATEGORY

Warning device	NUMBER OF LANES (BOTH DIRECTIONS)						Total
	1	2	3	4	5	>5	
Gates.....	335	16,233	293	2,802	200	273	20,136
Flashing lights.....	707	28,356	378	3,790	189	254	33,674
Hwy. signals, wigwags, bells	201	1,967	33	238	26	42	2,507
Special warning devices.....	488	5,805	125	617	15	44	7,094
Crossbucks.....	27,478	92,967	289	2,085	44	96	122,959
Stop signs.....	212	1,025	8	43	---	2	1,290
Other signs.....	186	660	4	21	---	3	874
No signs or signals.....	3,021	8,549	85	504	14	23	12,196
Total.....	32,628	155,562	1,215	10,100	488	737	200,730

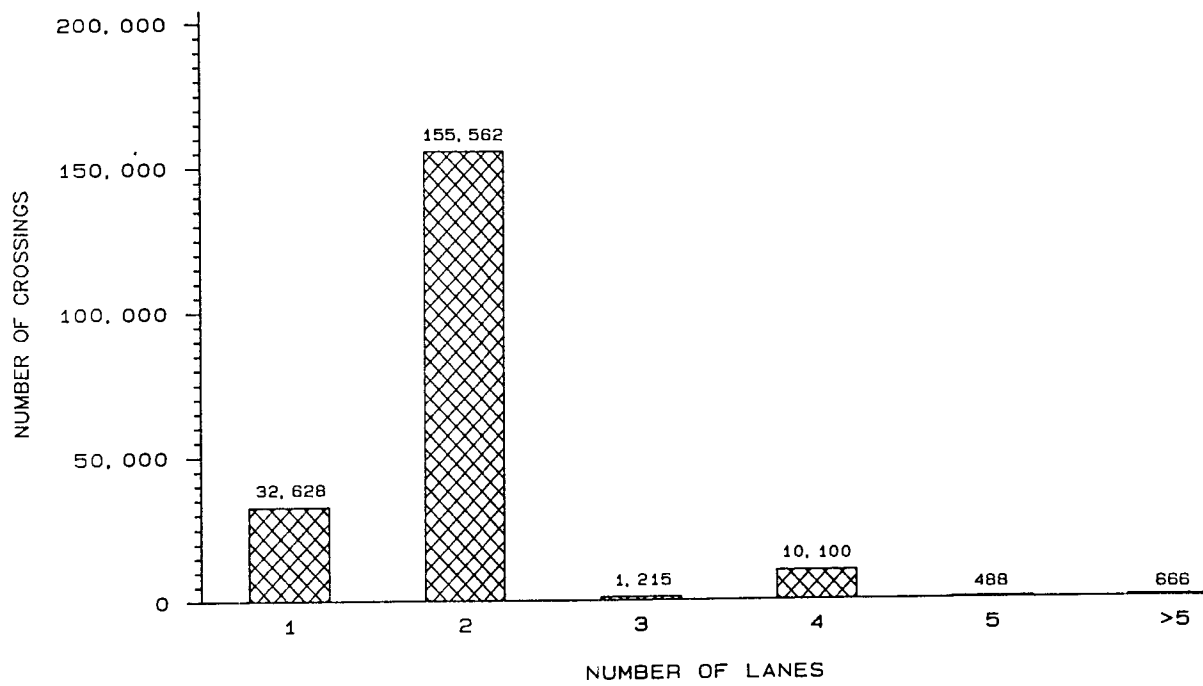


FIGURE 28. CROSSINGS BY NUMBER OF TRAFFIC LANES

WARNING DEVICE DATA

TABLE 45. TOTAL CROSSINGS BY WARNING DEVICE CATEGORY AND STATE

State	WARNING DEVICE CATEGORY								Total
	Gates	Flashing Lights	Hwy. Sig. Wigwags Bells	Special	Cross-Bucks	Stop Signs	Other Signs	No Signs or Signals	
Alabama.....	186	620	22	56	3,340	72	10	454	4,760
Alaska.....	1	52	---	17	129	2	---	7	208
Arizona.....	243	94	13	89	536	3	---	23	1,001
Arkansas.....	200	455	23	87	2,735	10	---	168	3,678
California.....	2,980	1,170	412	201	3,879	87	19	198	8,946
Colorado.....	167	357	40	78	1,574	25	1	136	2,378
Connecticut.....	51	170	8	93	65	9	2	106	504
Delaware.....	30	98	2	41	82	1	---	6	260
Dist of Columbia.....	---	3	---	7	15	11	---	20	56
Florida.....	1,437	952	12	138	2,509	32	74	270	5,424
Georgia.....	840	525	22	173	4,799	10	11	456	6,836
Hawaii.....	---	---	---	---	6	---	---	---	6
Idaho.....	66	211	11	21	1,362	81	5	207	1,964
Illinois.....	1,878	2,828	193	296	6,506	4	5	505	12,215
Indiana.....	819	2,174	145	263	4,978	76	11	540	9,006
Iowa.....	455	1,055	100	80	4,718	5	3	229	6,545
Kansas.....	452	760	88	253	7,392	2	2	227	9,176
Kentucky.....	248	726	38	110	2,056	5	---	427	3,610
Louisiana.....	252	771	12	70	3,121	32	22	384	4,664
Maine.....	65	376	1	134	409	---	4	11	1,000
Maryland.....	72	186	33	63	392	26	18	142	932
Massachusetts.....	188	453	38	229	235	2	3	51	1,199
Michigan.....	666	1,841	67	246	4,780	14	13	187	7,814
Minnesota.....	336	852	16	52	5,053	49	3	209	6,570
Mississippi.....	60	342	19	59	1,998	387	11	376	3,252
Missouri.....	361	1,136	119	143	3,696	15	2	410	5,882
Montana.....	103	190	5	24	1,346	2	1	152	1,823
Nebraska.....	408	459	26	25	3,767	5	2	191	4,883
Nevada.....	74	50	1	6	190	---	7	29	357
New Hampshire.....	26	154	16	165	260	9	4	23	657
New Jersey.....	382	658	27	386	535	6	3	114	2,111
New Mexico.....	149	103	8	11	527	---	5	17	820
New York.....	794	1,219	99	505	1,509	2	50	208	4,386
North Carolina.....	661	784	38	243	3,239	19	20	492	5,496
North Dakota.....	227	193	1	3	4,621	2	---	323	5,370
Ohio.....	814	2,136	72	104	5,428	12	13	360	8,939
Oklahoma.....	256	731	37	142	3,730	3	8	149	5,056
Oregon.....	339	164	68	115	1,728	100	12	338	2,864
Pennsylvania.....	645	1,353	117	780	2,621	71	423	581	6,591
Rhode Island.....	9	23	19	33	22	5	2	19	132
South Carolina.....	302	541	5	338	2,863	---	16	259	4,324
South Dakota.....	1	180	2	1	2,353	---	1	97	2,635
Tennessee.....	195	672	19	276	2,174	26	2	772	4,136
Texas.....	1,314	2,542	101	166	9,124	28	15	916	14,206
Utah.....	96	212	10	101	786	6	46	100	1,357
Vermont.....	25	204	4	58	284	1	6	15	597
Virginia.....	562	521	20	220	1,126	1	3	183	2,636
Washington.....	137	527	54	75	2,785	20	6	500	4,104
West Virginia.....	145	413	8	49	1,480	8	5	322	2,430
Wisconsin.....	351	1,310	313	219	3,735	1	3	236	6,168
Wyoming.....	64	127	1	2	361	3	2	51	611
Puerto Rico.....	4	1	2	48	---	---	---	---	55
Unknown.....	---	---	---	---	---	---	---	---	---
Total.....	20,136	33,674	2,507	7,094	122,959	1,290	874	12,196	200,730

NOTE: "Special" are warning systems that are not train activated, such as, a crossing being flagged by a member of the train crew.

TABLE 46. TOTAL CROSSINGS BY WARNING DEVICE CATEGORY AND RAILROAD

WARNING DEVICE CATEGORY

Railroad	Gates	Flashing Lights	Hwy. Sig.		Cross-Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
			Wigwags	Bells					
Amtrak (National RR Passenger Corp)...	109	27	---	23	34	2	2	12	209
Atchison, Topeka And Santa Fe Rwy Co..	1,698	1,544	202	565	7,509	6	11	36	11,571
Baltimore And Ohio Railroad Co.....	362	1,129	38	98	3,149	19	5	266	5,066
Bangor And Aroostook Railroad Co.....	5	92	---	10	75	---	---	3	185
Bessemer And Lake Erie Railroad Co....	36	25	---	3	77	---	---	2	143
Boston And Maine Corporation.....	194	255	27	244	351	4	4	55	1,134
Burlington Northern Incorporated.....	1,575	2,895	159	335	18,350	154	10	1,576	25,064
Canadian Pacific Lines In Maine.....	3	44	---	4	41	---	---	5	97
Central Vermont Railway Inc.....	17	101	2	---	83	2	2	8	215
Chesapeake And Ohio Railway Company...	378	938	12	79	2,796	6	2	252	4,463
Chicago And Illinois Midland Rwy Co...	6	44	1	3	58	---	---	---	112
Chicago And North Western.....	607	1,554	347	132	6,289	7	6	392	9,334
Chicago South Shore And South Bend RR.	31	49	9	---	18	20	---	1	128
Chicago, Milw, St. Paul And Pacific...	290	679	78	164	2,045	6	2	221	3,485
Consolidated Rail Corporation.....	1,942	4,621	323	1,445	7,172	121	364	1,462	17,450
Delaware And Hudson Railway.....	171	142	5	24	145	1	14	21	523
Denver And Rio Grande Western RR Co...	68	209	3	11	745	5	3	107	1,151
Duluth, Missabe And Iron Range Rwy Co.	9	37	---	3	154	1	1	---	205
Duluth, Winnipeg And Pacific Rwy Co...	3	17	---	4	57	2	---	---	93
Elgin, Joliet And Eastern Railway Co..	80	74	2	12	81	---	---	1	250
Florida East Coast Railway Co.....	480	115	---	7	181	---	---	10	793
Grand Trunk Western Railroad Co.....	307	446	13	99	780	2	---	14	1,661
Green Bay And Western Railroad.....	6	79	---	1	227	---	---	5	318
Illinois Central Gulf Railroad Co.....	479	1,421	170	164	5,848	235	10	584	8,911
Kansas City Southern Railway Co.....	37	170	6	1	736	---	1	59	1,010
Louisiana And Arkansas Rwy Company....	24	170	---	---	511	---	---	17	722
Maine Central Railroad Company.....	35	243	1	50	250	---	2	4	585
Michigan Interstate Railroad.....	4	30	3	---	57	---	---	3	97
Missouri Pacific Railroad Co.....	705	2,023	63	137	8,631	18	1	714	12,292
Missouri-Kansas-Texas Railroad Co.....	152	411	28	15	1,358	2	1	125	2,092
Monogahela Railway.....	---	13	1	---	72	1	---	9	96
Norfolk And Western Railway Co.....	930	1,872	94	179	4,696	14	5	219	8,009
Northwestern Pacific Railroad.....	79	26	8	---	69	---	1	---	183
Oklahoma, Kansas Texas Railroad.....	15	49	---	---	229	---	---	10	303
Pittsburg And Lake Erie Railroad Co...	18	10	2	3	64	---	---	15	112
Richmond, Frederickburg And Potomac...	28	5	2	51	16	---	---	1	103
Seaboard System Railroad.....	2,291	3,189	80	799	12,419	92	19	1,407	20,296
Soo Line Railroad Company.....	158	552	24	9	3,477	4	1	106	4,331
Southern Pacific Transportation Co....	2,854	1,324	398	42	5,950	72	20	622	11,322
Southern Railway Company.....	1,275	1,784	35	529	7,734	30	32	1,690	13,109
St. Louis Southwestern Railway Co.....	181	326	6	20	1,685	3	---	125	2,346
Texas And Northern Railway Company....	---	3	---	---	---	---	---	---	3
Texas, Mexican Railway Company.....	---	58	---	11	152	1	---	3	230
Union Pacific Railroad Co.....	908	946	96	173	5,576	112	55	624	8,490
* The Estates.....	27	222	12	121	529	3	70	112	1,096
All Other Railroads.....	1,559	3,711	257	1,524	12,423	345	230	1,293	21,342
FINAL TOTAL	20,136	33,674	2,507	7,094	122,959	1,290	874	12,195	200,730

NOTE: The "Estates" are crossings on predecessor lines that were not merged into Conrail.

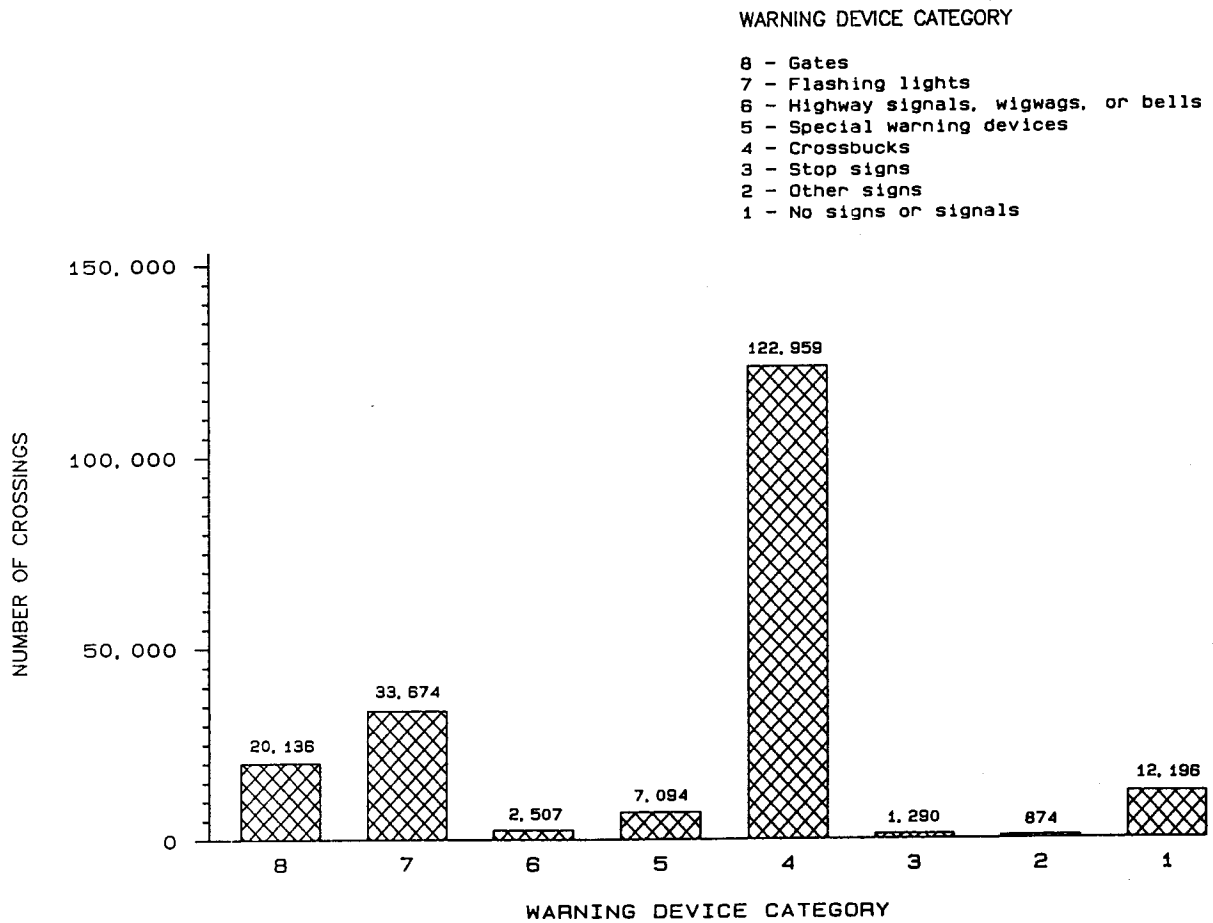


FIGURE 29. CROSSINGS BY WARNING DEVICE CATEGORY

TABLE 47. TOTAL CROSSINGS BY PAVEMENT MARKINGS AND STATE

PAVEMENT MARKING

State	Stop Lines	RR X-ing Symbol	BothNone.....		Total
				Paved	Unpaved	
Alabama.....	45	139	128	3,305	1,143	4,760
Alaska.....	2	2	25	81	98	208
Arizona.....	42	16	362	323	258	1,001
Arkansas.....	52	94	160	1,930	1,442	3,678
California.....	1,093	227	5,109	2,175	342	8,946
Colorado.....	21	24	102	1,281	950	2,378
Connecticut.....	18	2	97	381	6	504
Delaware.....	3	22	120	105	10	260
Dist of Columbia.	---	---	32	24	---	56
Florida.....	311	130	1,491	2,491	1,001	5,424
Georgia.....	113	149	610	3,847	2,117	6,836
Hawaii.....	2	---	---	4	---	6
Idaho.....	3	5	322	843	791	1,964
Illinois.....	72	140	1,327	5,142	5,534	12,215
Indiana.....	84	256	2,058	4,948	1,660	9,006
Iowa.....	59	156	604	2,513	3,313	6,645
Kansas.....	6	26	513	2,884	5,747	9,176
Kentucky.....	59	497	582	1,556	916	3,610
Louisiana.....	22	528	258	2,721	1,135	4,664
Maine.....	---	3	586	311	100	1,000
Maryland.....	21	27	153	661	70	932
Massachusetts....	53	44	120	948	34	1,199
Michigan.....	94	124	810	4,584	2,202	7,814
Minnesota.....	133	168	534	2,464	3,271	6,570
Mississippi.....	11	12	412	1,815	1,002	3,252
Missouri.....	78	128	574	2,523	2,579	5,882
Montana.....	5	21	233	402	1,162	1,823
Nebraska.....	19	236	213	1,267	3,148	4,883
Nevada.....	5	2	119	89	142	357
New Hampshire....	19	11	38	519	70	657
New Jersey.....	47	86	103	1,753	122	2,111
New Mexico.....	5	20	42	350	403	820
New York.....	135	259	291	3,310	391	4,386
North Carolina...	41	23	4,083	602	747	5,496
North Dakota....	14	15	167	713	4,461	5,370
Ohio.....	562	675	4,325	2,612	765	8,939
Oklahoma.....	25	26	51	2,637	2,317	5,056
Oregon.....	145	319	519	1,270	611	2,864
Pennsylvania.....	65	368	170	5,227	761	6,591
Rhode Island....	13	---	7	112	---	132
South Carolina...	94	98	1,267	2,098	767	4,324
South Dakota....	15	4	77	738	1,801	2,635
Tennessee.....	18	29	216	2,918	955	4,136
Texas.....	4	---	6,639	3,818	3,745	14,206
Utah.....	13	21	175	788	360	1,357
Vermont.....	26	15	61	310	185	597
Virginia.....	108	90	1,173	991	274	2,636
Washington.....	160	31	562	2,465	886	4,104
West Virginia....	26	15	106	1,476	807	2,430
Wisconsin.....	87	38	348	4,827	868	6,168
Wyoming.....	10	15	76	135	375	611
Puerto Rico.....	---	14	---	36	5	55
Unknown.....	---	---	---	---	---	---
Total.....	4,058	5,350	38,150	91,323	61,849	200,730

NOTE: The Manual On Uniform Traffic Control Devices does not require pavement markings at all crossings.

TABLE 48. TOTAL CROSSINGS BY RAILROAD ADVANCE WARNING AND STATE

RAILROAD ADVANCE WARNING			
State	Yes	No	Total
Alabama.....	914	3,846	4,760
Alaska.....	88	120	208
Arizona.....	547	454	1,001
Arkansas.....	723	2,955	3,678
California.....	7,055	1,891	8,946
Colorado.....	841	1,537	2,378
Connecticut.....	226	278	504
Delaware.....	224	36	260
Dist of Columbia.	31	25	56
Florida.....	2,359	3,065	5,424
Georgia.....	1,341	5,495	6,836
Hawaii.....	1	5	6
Idaho.....	1,600	364	1,964
Illinois.....	6,134	6,081	12,215
Indiana.....	5,689	3,317	9,006
Iowa.....	4,251	2,394	6,645
Kansas.....	3,814	5,362	9,176
Kentucky.....	834	2,776	3,610
Louisiana.....	2,695	1,969	4,664
Maine.....	971	29	1,000
Maryland.....	397	535	932
Massachusetts....	884	315	1,199
Michigan.....	5,339	2,475	7,814
Minnesota.....	3,409	3,161	6,570
Mississippi.....	605	2,647	3,252
Missouri.....	1,152	4,730	5,882
Montana.....	553	1,270	1,823
Nebraska.....	2,770	2,113	4,883
Nevada.....	272	85	357
New Hampshire....	465	192	657
New Jersey.....	748	1,363	2,111
New Mexico.....	167	653	820
New York.....	3,246	1,140	4,386
North Carolina...	4,276	1,220	5,496
North Dakota.....	927	4,443	5,370
Ohio.....	5,557	3,382	8,939
Oklahoma.....	993	4,063	5,056
Oregon.....	1,815	1,049	2,864
Pennsylvania.....	2,396	4,195	6,591
Rhode Island.....	21	111	132
South Carolina...	2,453	1,871	4,324
South Dakota.....	827	1,808	2,635
Tennessee.....	676	3,460	4,136
Texas.....	10,977	3,229	14,206
Utah.....	515	842	1,357
Vermont.....	351	246	597
Virginia.....	1,861	775	2,636
Washington.....	2,696	1,408	4,104
West Virginia....	504	1,926	2,430
Wisconsin.....	3,599	2,569	6,168
Wyoming.....	155	456	611
Puerto Rico.....	32	23	55
Unknown.....	---	---	---
Total.....	100,976	99,754	200,730

NOTE: The Manual On Uniform Traffic Control Devices does not require pavement markings at all crossings.

TABLE 49. TOTAL CROSSINGS MEETING THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' STANDARD FOR CROSSBUCKS BY STATE

State	Active Warning	X-buck meet standards		Total
		Yes	No	
Alabama.....	828	1,620	2,312	4,760
Alaska.....	53	69	86	208
Arizona.....	350	519	132	1,001
Arkansas.....	678	2,046	954	3,678
California.....	4,562	1,971	2,413	8,946
Colorado.....	564	931	883	2,378
Connecticut.....	229	116	159	504
Delaware.....	130	94	36	260
Dist of Columbia.	3	14	39	56
Florida.....	2,401	2,008	1,015	5,424
Georgia.....	1,387	4,239	1,210	6,836
Hawaii.....	---	4	2	6
Idaho.....	288	924	752	1,964
Illinois.....	4,899	5,638	1,678	12,215
Indiana.....	3,138	3,328	2,540	9,006
Iowa.....	1,610	3,620	1,415	6,645
Kansas.....	1,300	3,108	4,768	9,176
Kentucky.....	1,012	1,539	1,059	3,610
Louisiana.....	1,035	2,962	667	4,664
Maine.....	442	507	51	1,000
Maryland.....	291	248	393	932
Massachusetts....	679	305	215	1,199
Michigan.....	2,574	3,754	1,486	7,814
Minnesota.....	1,204	4,807	559	6,570
Mississippi.....	421	1,504	1,327	3,252
Missouri.....	1,616	1,527	2,739	5,882
Montana.....	298	1,060	465	1,823
Nebraska.....	893	2,886	1,104	4,883
Nevada.....	125	118	114	357
New Hampshire....	196	41	420	657
New Jersey.....	1,067	382	662	2,111
New Mexico.....	260	305	255	820
New York.....	2,112	1,026	1,248	4,386
North Carolina...	1,483	2,122	1,891	5,496
North Dakota....	421	2,830	2,119	5,370
Ohio.....	3,022	3,295	2,622	8,939
Oklahoma.....	1,024	1,328	2,704	5,056
Oregon.....	571	972	1,321	2,864
Pennsylvania.....	2,115	1,532	2,944	6,591
Rhode Island.....	51	2	79	132
South Carolina...	848	2,633	843	4,324
South Dakota....	183	2,095	357	2,635
Tennessee.....	886	1,210	2,040	4,136
Texas.....	3,957	3,995	6,254	14,206
Utah.....	318	521	518	1,357
Vermont.....	233	189	175	597
Virginia.....	1,103	966	567	2,636
Washington.....	718	1,803	1,583	4,104
West Virginia....	566	955	909	2,430
Wisconsin.....	1,974	2,955	1,239	6,168
Wyoming.....	192	207	212	611
Puerto Rico.....	7	16	32	55
Unknown.....	---	---	---	---
Total.....	56,317	82,846	61,567	200,730

NOTE: The manual requires two reflectorized crossbucks to be placed at all crossings.

For crossings with active warning devices, a determination has not been made as to whether crossbucks which are part of the device meet the MUTCD standard.

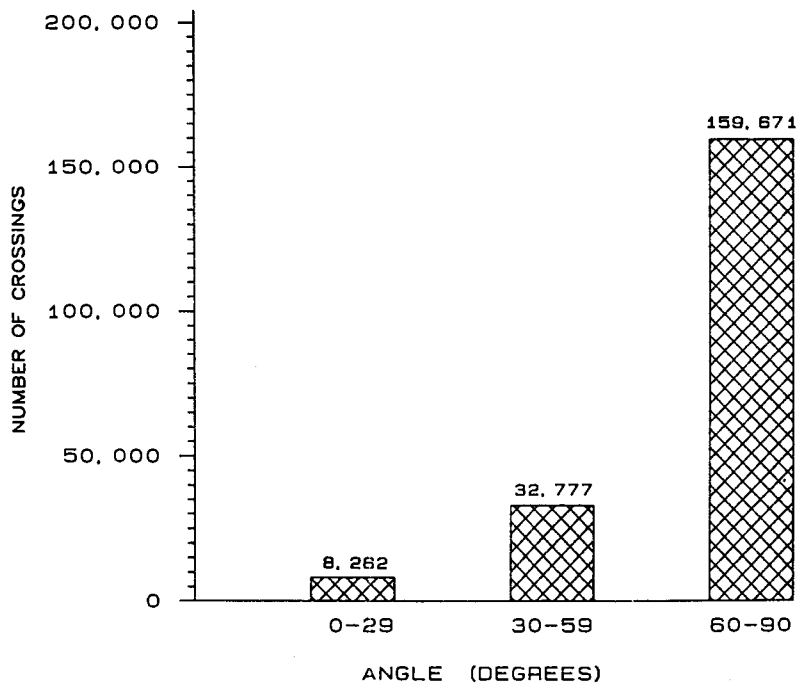


FIGURE 30. CROSSINGS BY SMALLEST CROSSING ANGLE

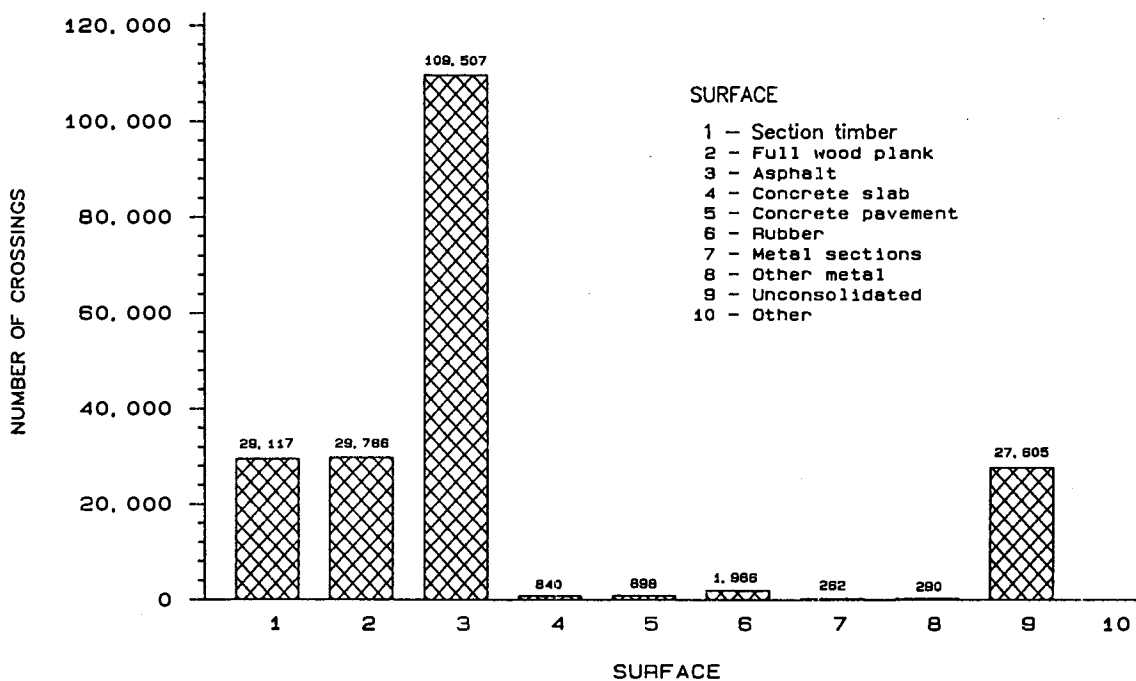


FIGURE 31. CROSSINGS BY CROSSING SURFACE

**OPERATIONAL CHARACTERISTICS
TRAIN TRAFFIC DATA**

TABLE 50. TOTAL CROSSINGS BY TOTAL NUMBER OF TRAINS PER DAY

<u>Trains</u>	<u>Crossings</u>
<1	29,378
1-5	95,597
6-10	34,094
11-15	12,845
16-20	12,161
21-25	5,431
26-30	3,996
31-35	2,528
36-40	1,434
41-45	746
46-50	862
51-55	339
56-60	374
61-65	268
66-70	87
71-75	80
76-80	236
81-85	33
86-90	14
91-95	14
96-100	63
>100	150
Total	200,730

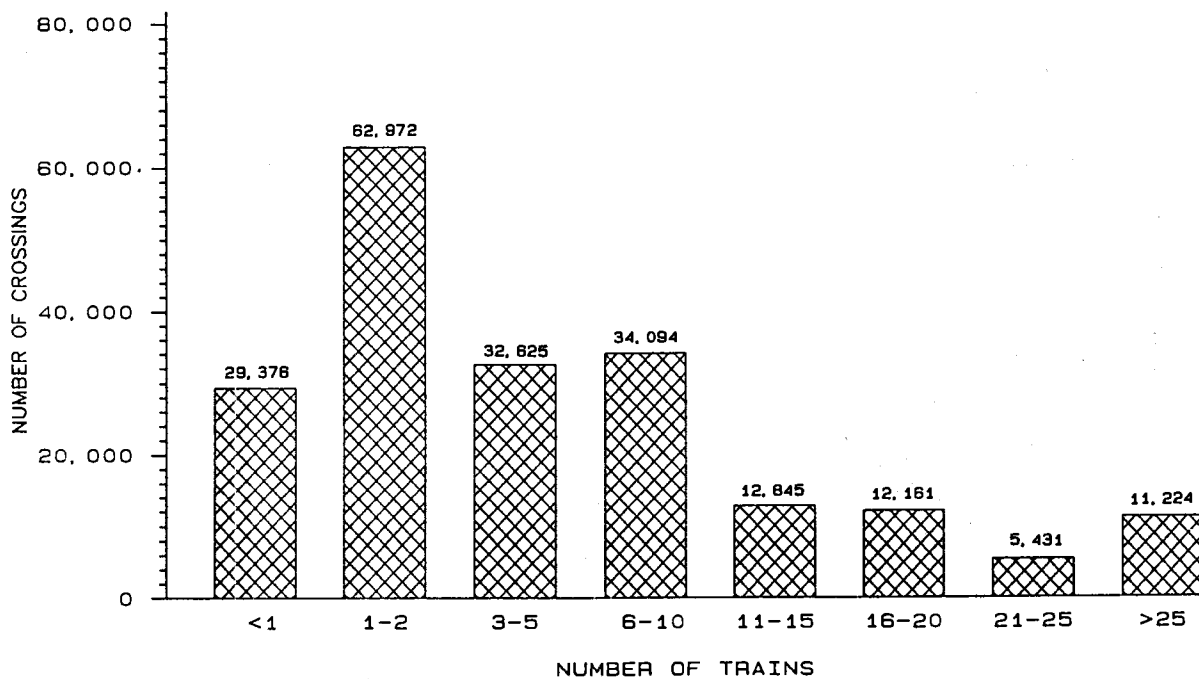


FIGURE 32. CROSSINGS BY TOTAL NUMBER OF TRAINS PER DAY

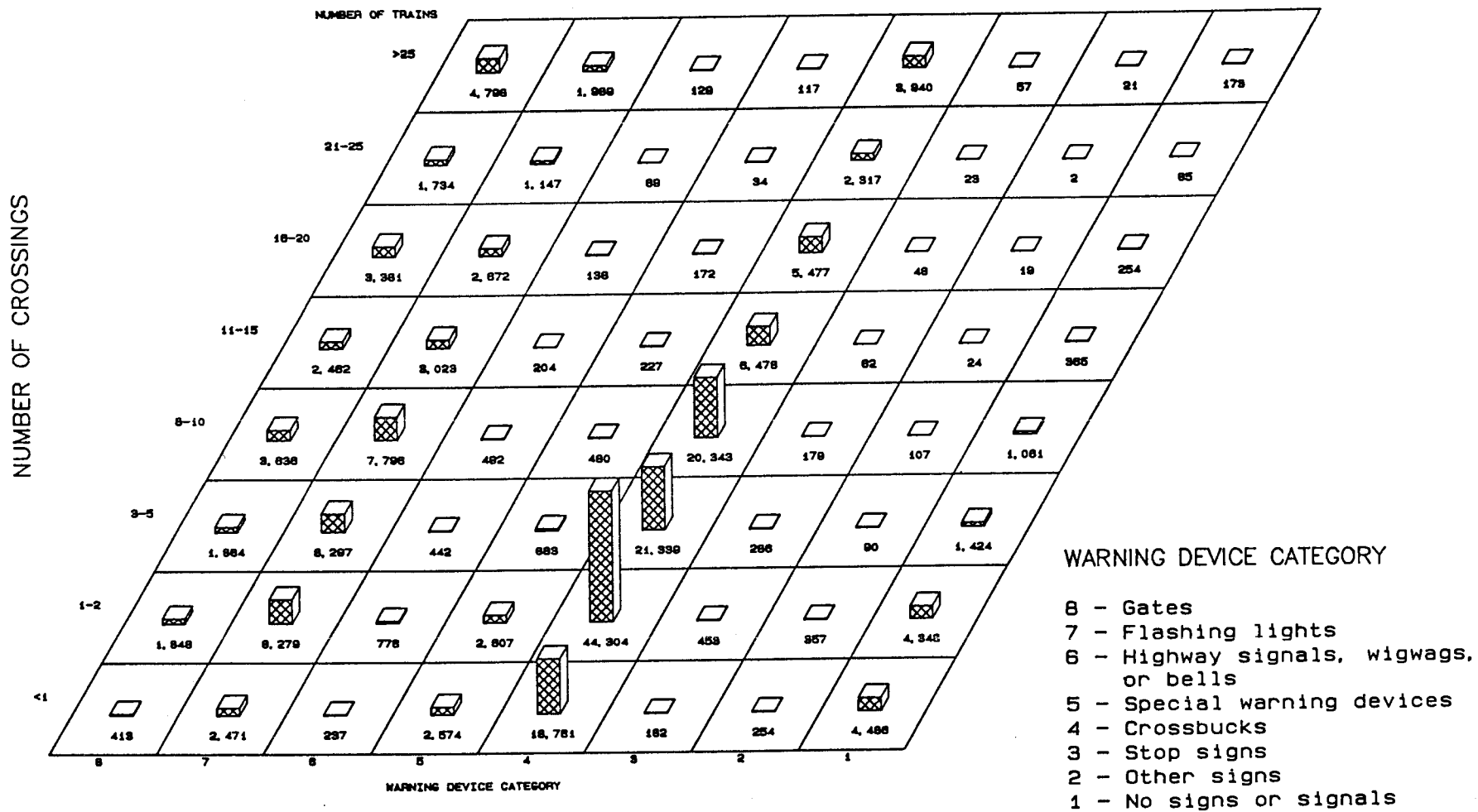


FIGURE 33. CROSSINGS BY NUMBER OF TRAINS PER DAY AND WARNING DEVICE CATEGORY

TABLE 51. TOTAL CROSSINGS BY NUMBER OF THRU TRAINS AND SWITCHING TRAINS PER DAY

Switching Trains	Through trains								Total
	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	
<1	29,378	35,512	15,438	15,891	5,306	5,847	2,219	4,681	114,272
1-2	26,015	9,319	6,474	6,516	2,939	2,135	970	1,565	55,933
2-3	6,466	1,765	2,107	2,520	1,289	628	500	810	16,085
6-10	3,687	967	858	1,438	886	956	301	627	9,720
11-15	747	190	191	306	85	107	80	129	1,835
16-20	614	132	116	206	93	93	115	119	1,488
21-25	146	34	20	66	17	15	36	47	381
>25	346	85	76	135	108	104	27	135	1,016
Total	67,399	48,004	25,280	27,078	10,723	9,885	4,248	8,113	200,730

TABLE 52. TOTAL CROSSINGS BY NUMBER OF DAY AND NIGHT TRAINS PER DAY

Day Trains	Night trains								Total
	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	
<1	29,378	8,484	1,311	240	13	6	3	1	39,436
1-2	38,946	32,410	3,403	516	24	44	1	1	75,345
2-3	6,157	11,914	17,668	1,593	252	174	2	3	37,763
6-10	2,750	2,797	6,848	15,072	1,542	183	226	17	29,435
11-15	361	261	725	3,327	4,617	663	12	36	10,002
16-20	339	39	87	643	1,231	1,876	166	243	4,624
21-25	52	11	35	127	340	145	528	97	1,335
>25	495	42	44	98	289	313	347	1,162	2,790
Total	78,478	55,958	30,121	21,616	8,308	3,404	1,285	1,560	200,730

TABLE 53. TOTAL CROSSINGS BY NUMBER OF TRAINS PER DAY AND WARNING DEVICE CATEGORY

Warning device	NUMBER OF TRAINS								Total
	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	
Gates.....	413	1,848	1,864	3,636	2,462	3,381	1,734	4,798	20,136
Flashing lights.....	2,471	8,279	6,297	7,796	3,023	2,672	1,147	1,989	33,674
Hwy. signals, wigwags, balls	237	776	442	492	204	138	89	129	2,507
Special warning devices.....	2,574	2,607	883	480	227	172	34	117	7,094
Crossbucks.....	18,761	44,304	21,339	20,343	6,478	5,477	2,317	3,940	122,959
Stop signs.....	182	453	286	179	62	48	23	57	1,290
Other signs.....	254	357	90	107	24	19	2	21	874
No signs or signals.....	4,486	4,348	1,424	1,061	365	254	85	173	12,196
Total.....	29,378	62,972	32,625	34,094	12,845	12,161	5,431	11,224	200,730

TABLE 54. TOTAL CROSSINGS BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC

Trains	Average annual daily traffic						Total
	1-250	251-500	501-1,000	1,001-5,000	5,001-10,000	> 10,000	
<1	13,399	3,485	3,243	6,164	1,888	1,199	29,378
1-2	33,643	7,012	6,491	10,680	3,118	2,028	62,972
2-3	16,452	3,760	3,429	6,109	1,715	1,160	32,625
6-10	17,158	3,915	3,626	6,246	1,920	1,228	34,094
11-15	6,079	1,315	1,405	2,619	821	606	12,845
16-20	5,353	1,382	1,416	2,640	847	523	12,161
21-25	2,395	635	657	1,200	348	196	5,431
>25	4,417	1,200	1,245	2,718	961	683	11,224
Total	98,897	22,704	21,512	38,376	11,618	7,623	200,730

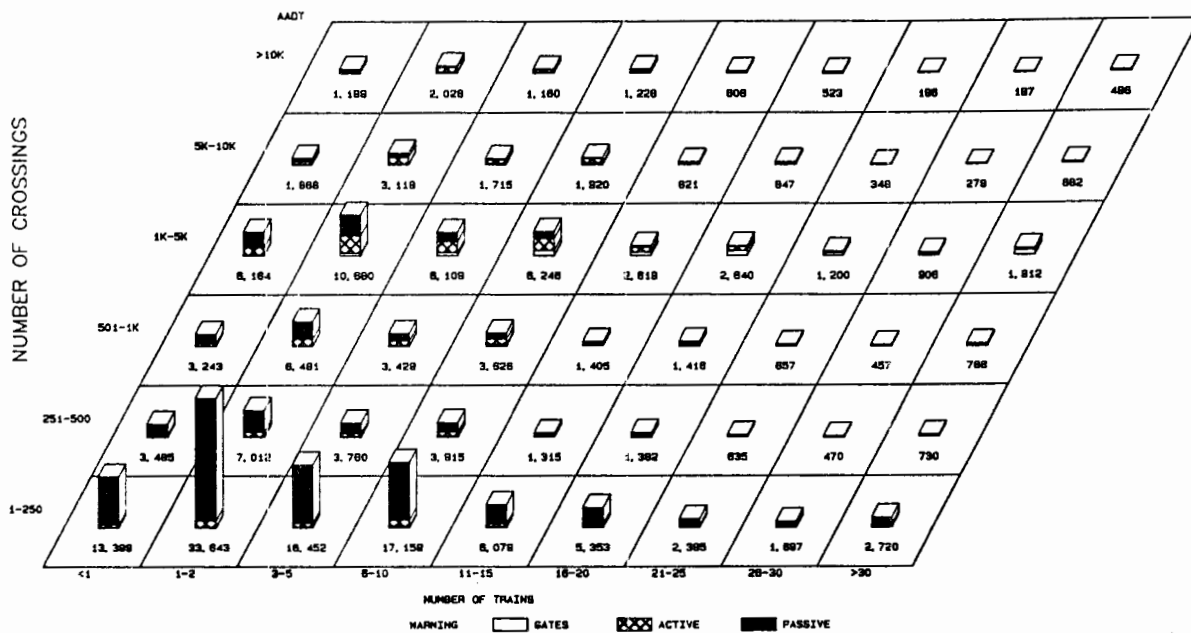


FIGURE 34. CROSSINGS BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC (AADT)

TRAIN SPEED DATA

TABLE 55. TOTAL CROSSINGS BY MAXIMUM TIMETABLE SPEED

<u>Timetable Speed</u>	<u>Crossings</u>
1-5	9,324
6-10	31,106
11-15	15,127
16-20	15,319
21-25	22,654
26-30	24,395
31-35	14,471
36-40	20,697
41-45	4,716
46-50	18,044
51-55	2,482
56-60	10,399
61-65	1,068
66-70	3,680
71-75	818
76-80	5,238
81-85	11
86-90	836
91-95	---
96-100	3
>100	342
Total	200,730

TABLE 56. TOTAL CROSSINGS BY TYPICAL TRAIN SPEED VARIATION

<u>Speed Variation</u>	<u>Crossings</u>
<1	3,295
1-5	56,484
6-10	51,516
11-15	21,716
16-20	18,590
21-25	11,217
26-30	11,534
31-35	5,683
36-40	6,295
41-45	2,707
46-50	5,400
51-55	1,076
56-60	2,028
61-65	694
66-70	703
71-75	636
76-80	741
81-85	56
86-90	60
91-95	---
96-100	---
>100	299
Total	200,730

NOTE: Typical speed variation is the difference between normal maximum speed and normal minimum speed.

TABLE 57. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC

<u>AADT</u>	<u>Crossings</u>
1-100	68,644
101-200	18,617
201-300	17,731
301-400	7,985
401-500	8,624
501-600	5,062
601-700	3,617
701-800	5,592
801-900	2,846
901-1,000	4,395
1,001-2,000	17,299
2,001-3,000	10,008
3,001-4,000	5,833
4,001-5,000	5,236
5,001-6,000	3,129
6,001-7,000	2,371
7,001-8,000	2,525
8,001-9,000	1,713
9,001-10,000	1,880
10,001-20,000	6,048
>20,000	1,575
Total	200,730

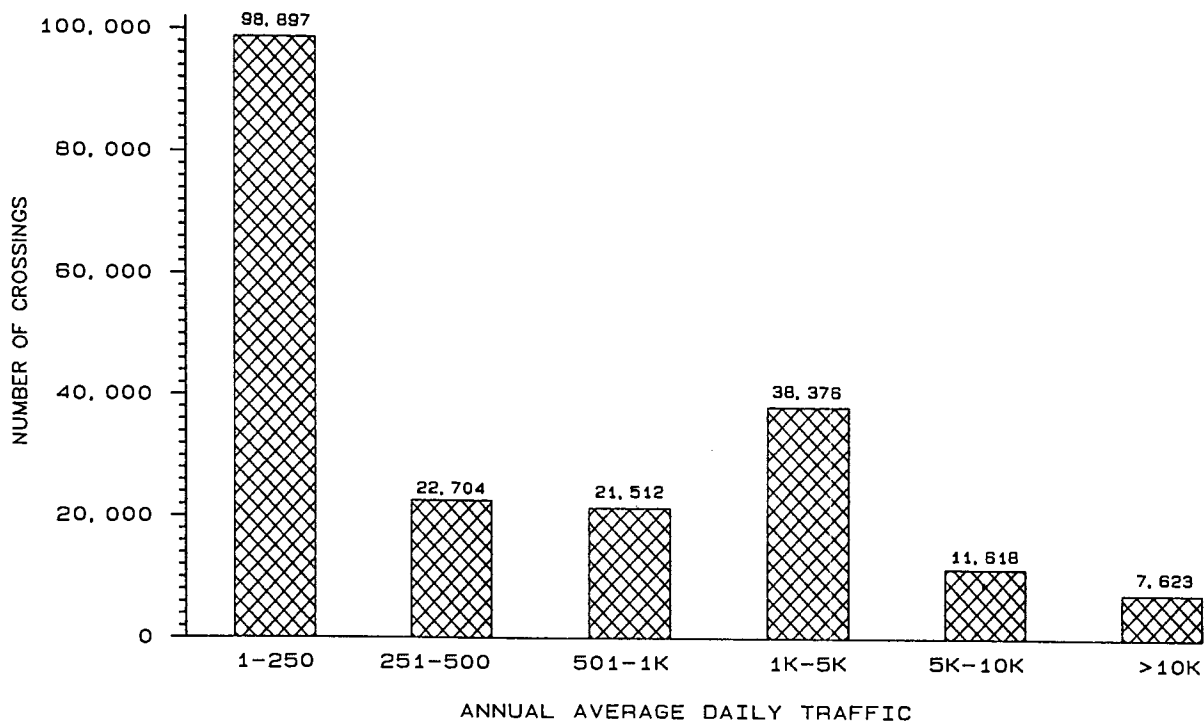


FIGURE 35. CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC

TABLE 58. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC AND WARNING DEVICE CATEGORY

Warning device	ANNUAL AVERAGE DAILY TRAFFIC						Total
	1-250	251-500	501-1,000	1,001-5,000	5,001-10,000	> 10,000	
Gates.....	2,710	1,937	2,672	7,336	3,077	2,404	20,136
Flashing lights.....	4,891	3,615	5,148	12,649	4,387	2,984	33,674
Hwy. signals, wigwags, bells	776	299	350	643	237	202	2,507
Special warning devices.....	1,584	867	948	2,276	851	568	7,094
Crossbucks.....	81,247	14,312	10,810	13,084	2,396	1,110	122,959
Stop signs.....	636	176	172	236	46	24	1,290
Other signs.....	401	178	130	114	38	13	874
No signs or signals.....	6,652	1,320	1,282	2,038	586	318	12,196
Total.....	98,897	22,704	21,512	38,376	11,618	7,623	200,730

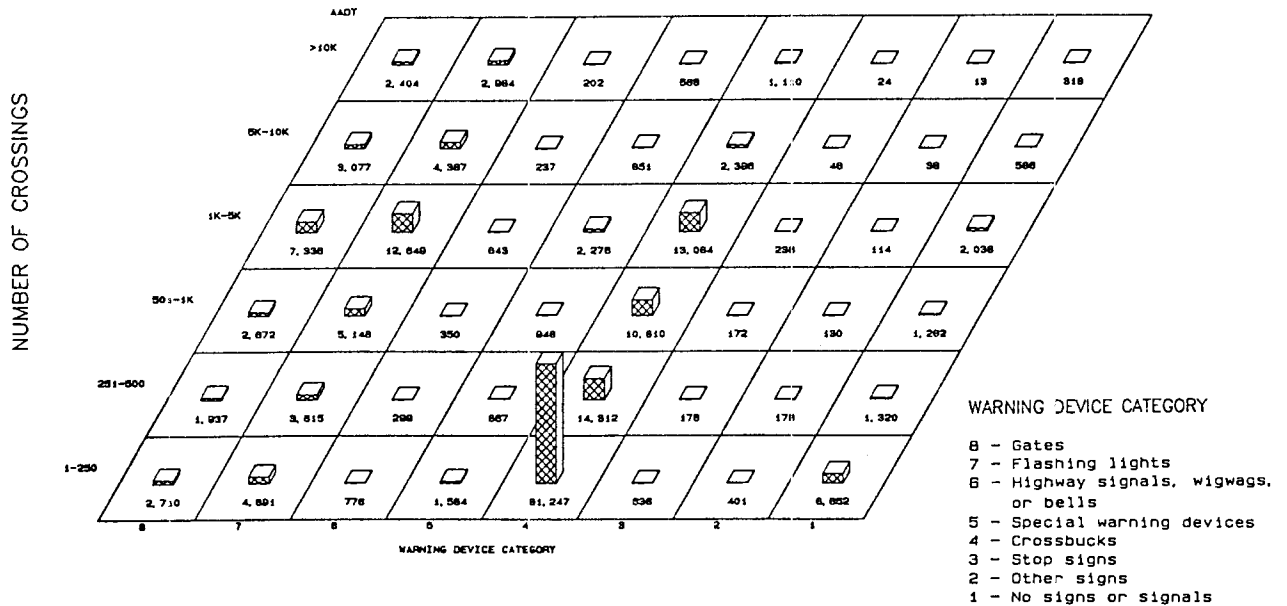


FIGURE 36. CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC AND WARNING DEVICE CATEGORY

TABLE 59. TOTAL CROSSINGS BY TRUCK TRAFFIC AS A PERCENTAGE OF ANNUAL AVERAGE DAILY TRAFFIC

%	Crossings
<1	7,205
1-5	79,976
6-10	70,408
11-15	21,591
16-20	9,704
21-25	2,335
26-30	6,230
31-35	395
36-40	1,112
41-45	155
46-50	1,098
51-55	19
56-60	165
61-65	6
66-70	61
71-75	117
76-80	75
81-85	7
86-90	60
91-95	1
96-99	10
Total	200,730

APPENDIX A: REPORTING REQUIREMENTS AND DEFINITIONS

ACCIDENT /INCIDENT REPORTABILITY REQUIREMENTS

The rules governing monthly reporting of railroad accidents/incidents in effect in 1984 define a reportable accident/incident as an event arising from the operation of a railroad that results in one or more state circumstances.

- (a) An impact occurs between railroad on-track equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle, pedestrian or other highway user at a rail-highway crossing.
- (b) Any collision, derailment, fire, explosion, act of GOD or other event involving the operation of railroad on-track equipment (standing or moving) which results in more than \$4,500 in damages to railroad on-track equipment, signals, track and/or track structures, and roadbed.
- (c) Any event arising from the operation of a railroad which results in:
 - (i) death of one or more persons;
 - (ii) injury to one or more persons, other than railroad employees, requiring medical treatment;
 - (iii) injury to one or more employees requiring medical treatment or resulting in restriction of work or motion for one or more days, one or more lost work days, transfer to another job, termination of employment or loss of consciousness;
 - (iv) any occupational illness of railroad employee diagnosed by a physician.

DEFINITIONS

Annual average daily traffic. An estimate of the annual average daily highway traffic in both traffic directions.

Active warning devices. A warning system activated by an approaching train: gates, flashing lights, highway signal, wigwags, or bells.

Car. A railway car designed to carry freight, railroad personnel, or passengers. This includes boxcars, covered hopper cars, flatcars, refrigerator cars, gondola cars, hopper cars, tank cars, cabooses, stock cars, ventilation cars, and special cars. Also includes on-track maintenance equipment.

Class I railroad. A railroad with an annual gross operating revenue in excess of \$50 million based on 1978 dollars.

Class II railroad. A railroad with an annual gross operating revenue of between \$10 and \$50 million based on 1978 dollars.

Class III railroads. All switching and terminal companies, and all railroads with annual operating revenues of less than \$10 million based on 1978 dollars.

Commercial power. A source of commercial power within 500 feet of a crossing.

Consist. On-track railroad equipment such as a train, locomotive, group of railroad cars, or a single railcar not coupled to another car or to a locomotive.

Contractor employee. A person employed by a contractor hired by a railroad to perform normal maintenance work to railroad rolling stock, track structure, bridges,, buildings, etc.

Crossing surfaces.

1. Sectional treated timber. Prefabricated units approximately eight feet long, made of treated timber, individually installed, and removable for maintenance and replacement purpose.

2. Full wood plank. A wood surface, other than sectional treated timber, covering the entire crossing area above crossties.

3. Asphalt. A surface over the entire crossing area or the area between planks or other material which forms flangeway openings with or without single planks on the outside of running rails.

4. Concrete slab. Precast concrete slabs which are installed and individually removable for maintenance and replacement.

5. Concrete pavement. A continuous concrete surface over the track area which cannot be removed except by destruction of the surface.

6. Rubber slabs. Preformed rubber sections which can be installed and removed individually for maintenance and replacement.

7. Metal sections. Preformed sections of steel or other metal which can be individually installed and removed for maintenance and replacement.

8. Other metal. A crossing area completed with covered rails or other permanent metal materials in limited sectional units.

9. Unconsolidated. Ballast or other unconsolidated material placed above the tops of crossties with or without planks on one or both sides of running rail.

Daylight train movements. Train movements between 6 a.m. and 6 p.m.

Employee. A person engaged in railroad operations who works for a railroad company in return for financial or other compensation.

Employee not on duty. A railroad employee who is on railroad property for a purpose connected with his employment or with other railroad permission, but who is not engaged in rail operations for financial or other compensation.

Fatality. The death of a person resulting from an injury incurred during railroad operations or resulting from an occupational illness if death occurs within 365 days of initial diagnosis.

Flashing lights. Cantilevered flashing lights, mast mounted flashing lights, and other flashing lights not conforming with the latest "Manual on Uniform Traffic Control Devices" (MUTCD).

Highway signals. Train-activated highway lights (red-amber-green) that control highway traffic over the crossing.

Locomotive. A self-propelled unit of on-track equipment designed for moving other rail freight and passenger equipment on rail tracks, including self-propelled units.

Main track. Any track other than auxiliary track that extends through railroad yards or between stations and over which trains operate by time-table and/or train orders or the use of the track is governed by a signal system.

Maximum timetable speed. Maximum train speed permitted over a crossing.

Nearby intersecting highway. A highway intersection within 75 feet of the crossing.

Night train movements. Train movements between 6 p.m. and 6 a.m.

Non-trespasser. A person who is lawfully on any part of railroad property which is used in railroad operations or a person who is adjacent to railroad premises when injured as the result of railroad operations.

Number of crossbucks. Masts with crossbucks; a mast with two or more crossbucks is counted as one. A crossbuck on an active device is not counted.

On-track equipment. Railroad rolling stock used to transport freight or passenger. It includes locomotives, railroad cars, maintenance equipment, and one or more locomotives coupled to one or more cars.

Other signs. Signs other than crossbucks or stop signs.

Other stop signs. Stop signs other than standard highway stop signs.

Passenger. A person who is on, boarding, or alighting from a railroad car for the purpose of travel, without participating in its operation.

Passive warning device. A warning system not automatically activated by an approaching train: signs (crossbucks or standard highway signs) or special warning devices (manually operated gates, flood lights, etc.).

Pavement markings. Markings prescribed or generally similar to those in highway traffic manuals, in particular, stoplines and railroad crossing symbols.

Percentage trucks. The percentage of total daily highway traffic represented by trucks.

Public crossing. A location open to public travel where railroad tracks cross a road that is under the jurisdiction and maintenance of a public authority.

Rail-highway crossing. A location where one or more railroad tracks intersect a public or private thoroughfare, a side walk, or a pathway.

Railroad. Any surface transportation system which carries passengers, goods, materials, or property over rails.

Railroad advance warning. Advance warning signs on any highway approach.

Rural crossing. A crossing classification derived from the Functional Classification Code.

Signals for train operation. Automatic signals or interlocks which control train operations in the vicinity of a crossing.

Smallest crossing angle. The smallest angle between the highway and the track.

Special warning devices. Non-train-activated devices other than signs including manually operated gates, train crews flagging a crossing, watchmen, and flood lights.

Speed selection for trains. A uniform warning time for the speed range of trains normally encountered at the crossing.

Standard highway stop sign. Octagonal red sign with white lettering STOP.

Stop signs. The standard highway stop sign or other stop signs.

Switch trains. All trains other than thru trains, including locals, industrial runs, and switch engines.

Thru trains. Trains whose primary responsibility is to move cars over the road; they may have a limited number of pickups and setouts along the route.

Total train movements. All train movements for the reporting company and all other railroads operating over the crossing.

Traffic lanes. Number of highway traffic lanes not including shoulders or parking lanes.

Trespasser. Any person whose presence on railroad property used in railroad operations, is prohibited or unlawful.

Truck pullout lane. A special lane designed to accommodate vehicles which are required to stop at a crossing.

Type of development.

1. Open space. An area that is undeveloped, sparsely developed, very lightly populated, or agricultural.
2. Residential. An area comprised of private residences.
3. Commercial. An area with retail stores, businesses, offices, and personal service offices.
4. Industrial. An area with manufacturing, construction, heavy products, factories, and warehouses.
5. Institutional. An area with schools, churches, hospitals, parks, and other community facilities.

Urban crossing. A crossing classification derived from the Functional Classification Code.

Warning device category. At crossings which have more than one warning device, the warning category is determined by the following method:

Highest	8)	Gates ¹
	7)	Flashing lights ¹
	6)	Highway signals, wigwags or bells
	5)	Special warning devices
	4)	Crossbucks
	3)	Stop signs
	2)	Other signs
Lowest	1)	No signs or signals

¹When cantilevered flashing lights are categorized separately, they are ranked eighth and gates are ranked ninth.

APPENDIX B: REPORTING FORMS

FORMS

Three separate forms may be required to properly report a rail-highway crossing accident/incident:

- FRA F 6180-57 Grade Crossing Accident/Incident Report
- FRA F 6180-55 Railroad Injury and Illness Summary
- FRA F 6180-54 Rail Equipment Accident/Incident Report

For all reportable rail-highway crossing accidents/incidents, Form FRA F 6180-57 must be submitted by the carrier which has on-track equipment involved. If reportable casualties result, they must be individually reported on Form F 6180-55. If the accident resulted in more than \$4,500 in damages to railroad on-track equipment, signals, track, track structures, or roadbed, Form FRA 6180-54 must also be submitted.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAILROAD INJURY AND ILLNESS SUMMARY

Form Approved
OMB No. 04-R4009

1. NAME OF REPORTING RAILROAD	2. ALPHABETIC CODE	3. REPORT MONTH & YEAR	4. STATE ALPHABETIC CODE	5. COUNTY
NAME OF REPORTING OFFICER			OFFICIAL TITLE	
ADDRESS			TELEPHONE (Area Code) (Number)	

6. I, _____, being first duly sworn, do say upon my oath that I am _____, of the railroad aforesaid and as such officer of the said railroad it is my duty to have supervision over the record of reportable incidents arising from the operation of the said railroad, and that I have caused to be compiled from the said record and to be carefully examined the annexed report of such incidents occurring during the month named at the head of this sheet; and that the said report is true and complete to the best of my knowledge and belief.

Subscribed and sworn to before me, a notary public in and for the State and County aforesaid, this _____ day of _____, 19 _____.

(Use an im-
[L.S]
pression seal) _____ (Notary Public) _____ (Signature of affiant)

7. **MILES RUN DURING MONTH**

A. LOCOMOTIVE TRAIN MILES	B. MOTOR TRAIN MILES	C. YARD SWITCHING MILES	D. TOTAL
---------------------------	----------------------	-------------------------	----------

8.

A. EMPLOYEE MANHOURS WORKED	B. PASSENGER MILES OPERATED	C. NUMBER OF PASSENGERS TRANSPORTED
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TOTAL TRAIN ACCIDENTS	TOTAL FRA FORMS 6180-53A	TOTAL FRA FORMS 6180-54	TOTAL FRA FORMS 6180-57
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SECTION A—RECAPITULATION OF ALL CASUALTIES INCLUDING HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES						CLASS OF PERSON FOR SECTIONS A AND B	SECTION B—RECAPITULATION OF ALL HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES									
TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS			TOTAL		TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS		TOTAL	
Kld	Inj	Kld	Inj	Kld	Inj		Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj

SECTION C—MEMORANDUM—SUBSEQUENT FATALITIES DEVELOPED FROM REPORTED CASUALTIES

LINE NO.	ACCIDENT/INCIDENT NUMBER	TYPE PERSON OR JOB CODE	DATE OF INJURY	DATE OF DEATH	STATE
1.					
2.					
3.					
4.					

FORM FRA F 6180-55 (8-76) REPLACES FORM FRA F 6180-55 (12-74) WHICH IS OBSOLETE.

This report is required by law (45 USC 40). Failure to report can result in the imposition of civil penalties.

RAILROAD INJURY
AND
ILLNESS SUMMARY
(CONTINUATION SHEET)

1. NAME OF REPORTING RAILROAD	2. ALPHABETIC CODE	3. REPORT MONTH
-------------------------------	--------------------	-----------------

9. CASUALTIES (Cont.)

a. ACCIDENT/ INCIDENT NUMBER	b. TYPE PERSON OR JOB CODE	c. INJURY OR ILLNESS CODE	d. OCCURRENCE CODE	e. AGE	f. NUMBER OF DAYS AWAY FROM WORK	g. NUMBER OF DAYS OF RESTRICTED ACTIVITY	h. CASES WITH- OUT LOST WORK DAYS	i. STATE ALPHABETIC CODE

RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT

1. NAME OF REPORTING RAILROAD		Amtrak Autotrain	1a. Alphabetic Code	1b. Railroad Accident/Incident No.
2. NAME OF OTHER RAILROAD INVOLVED IN TRAIN ACCIDENT/INCIDENT			2a. Alphabetic Code	2b. Railroad Accident/Incident No.
3. NAME OF RAILROAD RESPONSIBLE FOR TRACK MAINTENANCE (single entry)			3a. Alphabetic Code	3b. Railroad Accident/Incident No.
4. U. S. DOT-AAR GRADE CROSSING IDENTIFICATION NUMBER		5. DATE OF ACCIDENT/INCIDENT month day year		6. TIME OF ACCIDENT/INCIDENT am <input type="checkbox"/> pm <input type="checkbox"/>
7. TYPE OF ACCIDENT/INCIDENT (enter number in code box, single entry) CODE				
1. Derailment 3. Rear end collision 5. Raking collision 7. Rail-Hwy crossing 9. Obstruction 11. Fire or violent rupture 12. Other (specify) 2. Head on collision 4. Side collision 6. Broken train collision 8. RR grade crossing 10. Explosion-Detonation				

HAZARDOUS MATERIALS (number of)

8. CARS CARRYING	9. CARS DAMAGED OR DERAILED	10. CARS WHICH RELEASED HAZ. MAT.	11. PEOPLE EVACUATED (est.)
------------------	-----------------------------	-----------------------------------	-----------------------------

LOCATION

12. DIVISION	13. NEAREST STATION	14. MILEPOST (to nearest tenth)	15. STATE (two letter code) CODE
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ENVIRONMENTAL CONDITIONS

16. TEMPERATURE (specify if minus) °F	17. VISIBILITY (single entry) CODE 1. Dawn 3. Dusk 2. Day 4. Dark	18. WEATHER (single entry) CODE 1. Clear 2. Cloudy 3. Rain 4. Fog 5. Sleet 6. Snow
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OPERATIONAL DATA

19. METHOD (place X in appropriate box(es))		17. VISIBILITY (single entry) CODE		18. WEATHER (single entry) CODE	
1 <input type="checkbox"/> Manual block	4 <input type="checkbox"/> Automatic block	7 <input type="checkbox"/> Yard rules	10 <input type="checkbox"/> Auto. train control	13 <input type="checkbox"/> Other (specify)	
2 <input type="checkbox"/> Interlocking	5 <input type="checkbox"/> Traffic control	8 <input type="checkbox"/> Time table	11 <input type="checkbox"/> Verbal permission		
3 <input type="checkbox"/> Cab signal	6 <input type="checkbox"/> Auto. train stop	9 <input type="checkbox"/> Radio	12 <input type="checkbox"/> Train orders		
20. SPEED (recorded speed, if available) Est. MPH Recorded MPH		21. TRAIN NUMBER		22. TIME TABLE DIRECTION CODE 1. North 2. South 3. East 4. West	

EQUIPMENT

23. TRAILING TONS (gross tonnage, excluding power units)	24. TYPE OF EQUIPMENT CONSIST (single entry) CODE 1. Freight train 3. Mixed train 5. Single car 7. Yard/switching 2. Passenger train 4. Work train 6. Cut of cars 8. Light loco(s)		25. WAS THE EQUIPMENT IDENTIFIED IN ITEM 24 UNATTENDED? CODE 1. Yes 2. No
26. TRACK NUMBER OR NAME	27. FRA TRACK CLASSIFICATION		28. ANNUAL TRACK DENSITY (gross tons in millions)
29. TYPE OF TRACK CODE 1. Main 3. Siding 2. Yard 4. Industry	30. PRINCIPLE CAR/UNIT		
(1) First Involved (derailed, struck, striking, etc.)		30a. Initial and Number	
(2) Causing (mechanical failures)		30b. Position in Train	
30c. Loaded (yes or no)		31. LOCOMOTIVE UNITS (no. of)	
a. Head End		Mid Train	
b. Manual		c. Remote	
d. Manual		e. Remote	
32. CARS (no. of)		Loaded	
(1) Total in Train		a. Freight	
(1) Total in Equipment Consist		b. Pass.	
(2) Total Derailed		c. Freight	
		d. Pass.	
		e. Caboose	

PROPERTY DAMAGE (estimated cost, including labor, to repair or replace)

33. EQUIPMENT DAMAGE (to be reported for this equipment consist only) \$	34. TRACK, SIGNAL, WAY AND STRUCTURES DAMAGE (to be reported by railroad in item 3 only) \$
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ACCIDENT/INCIDENT CAUSE CODE

35. PRIMARY CAUSE CODE	36. CONTRIBUTING CAUSE CODE	37. If no code available, explain cause.
---	--	--

CASUALTIES

38. NUMBER OF PERSONS INJURED	39. ESTIMATED TOTAL DAYS DISABILITY	40. NUMBER OF FATALITIES
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CREW (no of)

HOURS ON DUTY

41. ENGINEERS	42. FIREMEN	43. CONDUCTORS	44. BRAKEMEN	45. ENGINEER Hrs: Mins:	46. CONDUCTOR Hrs: Mins:
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47. TYPED NAME AND TITLE	48. SIGNATURE	49. DATE
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50. NARRATIVE DESCRIPTION - Describe the cause, nature and circumstances of accident/incident

RAIL-HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT REPORT

1. NAME OF REPORTING RAILROAD		Amtrak Autotrain	1a. Alphabetic Code	1b. Railroad Accident/Incident No.	
2. NAME OF OTHER RAILROAD INVOLVED IN TRAIN ACCIDENT/INCIDENT			2a. Alphabetic Code	2b. Railroad Accident/Incident No.	
3. NAME OF RAILROAD RESPONSIBLE FOR TRACK MAINTENANCE (single entry)			3a. Alphabetic Code	3b. Railroad Accident/Incident No.	
4. U.S. DOT-AAR GRADE CROSSING IDENTIFICATION NUMBER			5. DATE OF ACCIDENT/INCIDENT month day year	6. TIME OF ACCIDENT/INCIDENT am <input type="checkbox"/> pm <input type="checkbox"/>	
LOCATION					
7. NEAREST RAILROAD STATION			8. COUNTY	9. STATE (two letter code) CODE	
10. CITY (if in a city)			11. HIGHWAY NAME OR NUMBER (if private crossing, so state)		
ACCIDENT/INCIDENT SITUATION					
HIGHWAY USER INVOLVED			RAILROAD EQUIPMENT INVOLVED		
12. TYPE 1. Auto 3. Truck-Trailer 6. Motorcycle 2. Truck 4. Bus 7. Pedestrian 5. School Bus 8. Other (specify)	CODE		16. EQUIPMENT 1. Train (units pulling) 3. Train (standing) 6. Light loco(s) (moving) 2. Train (units pushing) 4. Car(s) (moving) 7. Light loco(s) (standing) 5. Car(s) (standing) 8. Other (specify)	CODE	
13. SPEED (estimated mph at impact)	14. DIRECTION (geographical) 1. North 3. East 2. South 4. West	CODE	17. POSITION OF CAR/UNIT IN TRAIN CODE		
15. POSITION 1. Stalled on crossing 2. Stopped on crossing 3. Moving over crossing			18. CIRCUMSTANCE 1. Train struck highway user 2. Train struck by highway user CODE		
19. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials?			1. Highway user 2. Rail equipment 3. Both 4. Neither CODE		
ENVIRONMENT					
20. TEMPERATURE (specify, if minus) °F		21. VISIBILITY (single entry) 1. Dawn 3. Dusk 2. Day 4. Dark		22. WEATHER (single entry) CODE 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow	
TRAIN AND TRACK					
23. TYPE OF TRAIN 1. Freight 3. Mixed 5. Yard/Switching 2. Passenger 4. Work 6. Light Locomotive(s)			24. TRACK TYPE USED BY TRAIN INVOLVED 1. Main 3. Siding 2. Yard 4. Industry	CODE	
25. TRACK NUMBER OR NAME		26. FRA TRACK CLASSIFICATION		27. NUMBER OF LOCOMOTIVE UNITS	
28. NUMBER OF CARS		29. TRAIN SPEED (recorded speed, if available) MPH Recorded		30. TIME TABLE DIRECTION CODE 1. North 3. East 2. South 4. West	
CROSSING WARNING					
31. TYPE (place X in appropriate box(es)) 1. <input type="checkbox"/> Gates 5. <input type="checkbox"/> Hwy. Traffic Signals 9. <input type="checkbox"/> Watchman 2. <input type="checkbox"/> Cantilever FLS 6. <input type="checkbox"/> Audible 10. <input type="checkbox"/> Flagged by crew 3. <input type="checkbox"/> Standard FLS 7. <input type="checkbox"/> Crossbucks 11. <input type="checkbox"/> Other (specify) 4. <input type="checkbox"/> Wig Wags 8. <input type="checkbox"/> Stop Signs 12. <input type="checkbox"/> None			32. SIGNALLED CROSSING WARNING Was the signaled crossing warning identified in item 31 operating? 1. Yes 2. No CODE		
33. LOCATION OF WARNING 1. Both sides 2. Side of vehicle approach 3. Opposite side of vehicle approach		34. CROSSING WARNING INTERCONNECTED WITH HIGHWAY SIGNALS 1. Yes 2. No 3. Unknown	35. CROSSING ILLUMINATED BY STREET LIGHTS OR SPECIAL LIGHTS 1. Yes 2. No 3. Unknown		
MOTORIST ACTION					
36. MOTORIST PASSED STANDING HIGHWAY VEHICLE 1. Yes 2. No 3. Unknown			37. MOTORIST DROVE BEHIND OR IN FRONT OF TRAIN AND STRUCK OR WAS STRUCK BY SECOND TRAIN 1. Yes 2. No 3. Unknown		
38. MOTORIST 1. Drove around or thru the gate 2. Stopped and then proceeded 3. Did not stop 4. Other (specify) 5. Unknown					
39. VIEW OF TRACK OBSCURED BY (primary obstruction) 1. Permanent structure 2. Standing railroad equipment 3. Passing train 5. Vegetation 7. Other (specify) 4. Topography 6. Highway vehicles 8. Not obstructed					
HIGHWAY VEHICLE PROPERTY DAMAGE/CASUALTIES					
40. HIGHWAY VEHICLE PROPERTY DAMAGE (est. dollar damage)		41. DRIVER WAS 1. Killed 2. Injured 3. Uninjured		42. WAS DRIVER IN THE VEHICLE? 1. Yes 2. No	
43. TOTAL NUMBER OF OCCUPANTS KILLED		44. TOTAL NUMBER OF OCCUPANTS INJURED		45. TOTAL NUMBER OF OCCUPANTS (include driver)	
46. IS A RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT BEING FILED? 1. Yes 2. No					
47. TYPED NAME AND TITLE		48. SIGNATURE		49. DATE	

U.S. DOT - AAR CROSSING INVENTORY FORM

A. INITIATING AGENCY

RAILROAD STATE

C. REASON FOR UPDATE:

CHANGES IN EXISTING CROSSING DATA
 NEW CROSSING
 CLOSED CROSSING

D. EFFECTIVE DATE

____/____/____
M D Y

B. CROSSING NUMBER

Part I Location and Classification of All Crossings (Must Be Completed)

1. Railroad Operating Company _____	2. Railroad Division or Region _____	3. Railroad Subdivision or District _____
4. State _____	5. County _____	6. County Map. Ref. No. _____
7. City _____	8. Nearest City _____	9. Highway Type and No. _____
10. Street or Road Name _____	11. RR I. D. No. _____	DO NOT WRITE IN THIS SPACE State _____ County _____ City _____ Nearest City _____ RR Code _____ Timetable Station _____
12. Nearest RR Timetable Station _____	13. Branch or Line Name _____	14. Railroad Mile Post _____

15. Pedestrian Crossing 1. at grade 2. RR under 3. RR over

16. Private Vehicle Crossing
 A. 1. Farm 2. Residential 3. Recreational 4. Industrial
 B. 5. at grade 6. RR under 7. RR over
 C. 8. signs-specify _____
 9. signals-specify _____
 0. none

17. Public Vehicle Crossing
 1. at grade
 2. RR under
 3. RR over

COMPLETE REMAINDER OF FORM ONLY FOR PUBLIC VEHICLE CROSSINGS AT GRADE

Part II Detailed Information for Public Vehicular at Grade Crossing

1A. Typical Number of Daily Train Movements

Daylight (6 AM to 6 PM)		Night (6 PM to 6 AM)	
thru trains	switching	thru trains	switching
____	____	____	____

1B. Check if Less Than One Movement Per Day 5

2. Speed of Train at Crossing
 A. Maximum time table speed _____ mph
 B. Typical Speed Range Over Crossing from _____ to _____ mph

3. Type and Number of Tracks
 main _____ other _____ If other specify _____

4. Does Another RR Operate a Separate Track at Crossing?
 Yes No Specify: RR _____

5. Does Another RR Operate Over Your Track at Crossing?
 Yes No Specify: RR _____

6. Type of Warning Device at Crossing

A. Signs

Crossbucks		Standard Highway Stop Sign	Other Stop Signs	Other Signs: Specify	
reflectORIZED	non-reflectORIZED			05 _____	06 _____
____	____	____	____	07 _____	08 _____
Number	Number	Number	Number	Number	Number

B. Train Activated Devices

Gates		Cantilevered Flashing Lights		Mast Mounted Flashing Lights	Other Flashing Lights Specify	Highway Traffic Signals	Wigwags	Bells
red & white reflectORIZED	other colored	over traffic lane	not over traffic lane					
____	____	____	____	____	____	____	____	____
Number	Number	Number	Number	Number	Number	Number	Number	Number

C. Specify Special Warning Device not Train Activated _____

D. No Signs or Signals 20

7. Is Commercial Power Available? Yes No

8. Does Crossing Signal Provide Speed Selection for Trains? Yes No N/A

9. Method of Signalling for Train Operation: Is Track Equipped with Signals? Yes No

Part III Physical Data

1. Type of Development <input type="checkbox"/> 1. Open Sp. <input type="checkbox"/> 2. Res <input type="checkbox"/> 3. Comm. <input type="checkbox"/> 4. Ind. <input type="checkbox"/> 5. Inst.	5. Is Highway Paved <input type="checkbox"/> Yes <input type="checkbox"/> No	9. Does Track Run Down A Street? <input type="checkbox"/> Yes <input type="checkbox"/> No
2. Smallest Crossing Angle <input type="checkbox"/> 0°-29° <input type="checkbox"/> 30°-59° <input type="checkbox"/> 60°-90°	6. Pavement Markings <input type="checkbox"/> Stoplines <input type="checkbox"/> RR Xing Sym. <input type="checkbox"/> None	10. Nearby Intersecting Highway? <input type="checkbox"/> Yes <input type="checkbox"/> No
3. Number of Traffic Lanes Crossing Railroad _____	7. Are RR Advance Warning Signs Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Are Truck Pullout Lanes Present? <input type="checkbox"/> Yes <input type="checkbox"/> No	8. Crossing Surface <input type="checkbox"/> 1. Sec. Timber <input type="checkbox"/> 2. Full Wd. Plank <input type="checkbox"/> 3. Asphalt <input type="checkbox"/> 4. Concrete Slab <input type="checkbox"/> 5. Concrete Pave. <input type="checkbox"/> 6. Rubber <input type="checkbox"/> 7. Metal Sections <input type="checkbox"/> 8. Other Metal <input type="checkbox"/> 9. Unconsolidated <input type="checkbox"/> 0. Other Specify _____	

Part IV Highway Department Information

1. Highway System _____	4. Estimate AADT _____	I. D. Number _____
2. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input type="checkbox"/> No.	5. Estimate Percent Trucks _____	
3. Functional Classification of Road over Crossing _____		

APPENDIX C: MISCELLANEOUS DATA

TABLE C-1. MISCELLANEOUS DATA RECEIVED FROM THE RAIL-HIGHWAY CROSSING ACCIDENT/INCIDENT REPORTS

1. IS RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT BEING FILED?
 YES 161 NO 6,209 NOT REPORTED 0
2. WAS DRIVER IN VEHICLE?
 YES 5,470 NO 894 NOT REPORTED 6
3. DRIVER WAS:
 KILLED 392 INJURED 1,640 UNINJURED 4,329 NOT REPORTED 9
4. IS CROSSING WARNING INTERCONNECTED WITH HIGHWAY SIGNALS?
 YES 488 NO 4,263 NOT REPORTED 980 N/A 639
5. DIRECTION (GEOGRAPHICAL) OF HIGHWAY USER INVOLVED:
 NORTH 1,648 SOUTH 1,567 EAST 1,602 WEST 1,518 NOT REPORTED 35
6. TRAIN TIMETABLE DIRECTION:
 NORTH 1,301 SOUTH 1,291 EAST 1,871 WEST 1,876 NOT REPORTED 31

TABLE C-2. MISCELLANEOUS DATA RECEIVED FROM DOT-AAR INVENTORY FORMS

LESS THAN ONE TRAIN PER DAY?					
YES	30,735	NO	169,994	N/R	1
DOES ANOTHER RAILROAD OPERATE A SEPARATE TRACK AT CROSSINGS?					
YES	5,066	NO	195,568	N/R	96
DOES ANOTHER RAILROAD OPERATE OVER YOUR TRACK AT CROSSING?					
YES	28,714	NO	171,891	N/R	125
IS TRACK EQUIPPED WITH ANY SIGNS OR SIGNALS?					
YES	187,513	NO	13,212	N/R	5
IS TRACK EQUIPPED WITH SIGNALS FOR TRAIN OPERATION?					
YES	58,390	NO	141,962	N/R	378
IS HIGHWAY PAVED?					
YES	138,348	NO	62,368	N/R	14
IS COMMERCIAL POWER AVAILABLE?					
YES	181,727	NO	18,892	N/R	111
DOES TRACK RUN DOWN A STREET? ¹					
YES	6,334	NO	186,399	N/R	7,997
NEARBY INTERSECTING HIGHWAY? ¹					
YES	73,379	NO	119,303	N/R	8,048
RR ADVANCE WARNING SIGNS PRESENT?					
YES	100,976	NO	99,728	N/R	26
ARE TRUCK PULLOUT LANES PRESENT?					
YES	2,543	NO	198,115	N/R	72
IS CROSSING ON STATE HIGHWAY SYSTEM?					
YES	31,700	NO	168,986	N/R	44
DOES CROSSING PROVIDE SPEED SELECTION?					
YES	6,462	NO	70,774	N/R	123,494

¹NOT ON ORIGINAL INVENTORY FORM USED IN THE FIVE PILOT STATES.

N/R: NOT RECORDED
 N/A: NOT APPLICABLE

APPENDIX D. ACCIDENTS/INCIDENTS AT PRIVATE CROSSINGS

TABLE D-1. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE CROSSINGS INVOLVING MOTOR VEHICLES BY STATE AND TYPE OF TRAIN

State	TYPE OF TRAIN											
	---Freight---			---Passenger---			-Yard Switching			-----Other-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
Alabama.....	8	---	4	---	---	---	2	---	---	---	---	---
Alaska.....	---	---	---	---	---	---	---	---	---	---	---	---
Arizona.....	---	---	---	---	---	---	---	---	---	1	---	1
Arkansas.....	10	1	10	---	---	---	1	---	---	1	---	---
California.....	30	3	12	3	---	---	1	---	---	1	---	---
Colorado.....	8	1	1	1	---	2	3	---	1	---	---	---
Connecticut.....	---	---	---	1	---	---	---	---	---	1	---	---
Delaware.....	---	---	---	---	---	---	1	---	---	---	---	---
Dist. of Columbia	---	---	---	---	---	---	---	---	---	1	---	---
Florida.....	6	1	2	---	---	---	3	---	1	---	---	---
Georgia.....	6	---	1	---	---	---	3	---	1	2	---	---
Idaho.....	6	---	1	---	---	---	---	---	---	---	---	---
Illinois.....	18	---	3	1	---	---	16	---	3	3	---	1
Indiana.....	11	---	1	1	---	---	7	---	1	1	---	---
Iowa.....	8	2	---	---	---	---	2	---	---	1	---	---
Kansas.....	4	1	1	1	---	---	---	---	---	---	---	---
Kentucky.....	28	---	7	1	---	---	1	---	1	6	---	3
Louisiana.....	21	4	3	---	---	---	2	---	---	4	---	1
Maine.....	6	---	5	---	---	---	---	---	---	1	---	---
Maryland.....	4	---	3	---	---	---	1	---	---	2	---	2
Massachusetts....	2	---	---	1	---	---	2	---	---	2	---	---
Michigan.....	1	---	---	---	---	---	5	---	---	4	---	2
Minnesota.....	5	---	---	---	---	---	1	---	---	2	---	---
Mississippi.....	5	---	3	---	---	---	---	---	---	1	---	---
Missouri.....	17	3	11	---	---	---	---	---	---	3	---	---
Montana.....	7	---	5	---	---	---	2	---	---	---	---	---
Nebraska.....	8	4	2	---	---	---	---	---	---	---	---	---
Nevada.....	1	---	1	---	---	---	1	---	---	---	---	---
New Hampshire.....	1	---	---	---	---	---	1	---	---	---	---	---
New Jersey.....	1	---	---	2	---	2	5	---	---	1	---	---
New Mexico.....	1	---	---	---	---	---	---	---	---	---	---	---
New York.....	9	3	3	3	1	---	1	---	---	1	---	---
North Carolina...	16	1	4	---	---	---	2	---	1	1	---	---
North Dakota.....	3	---	---	---	---	---	---	---	---	1	---	---
Ohio.....	22	1	8	1	---	1	8	---	---	2	---	---
Oklahoma.....	5	1	1	---	---	---	1	---	1	1	---	---
Oregon.....	9	---	---	---	---	---	7	---	---	2	---	---
Pennsylvania.....	9	---	6	1	1	---	5	---	1	2	---	---
Rhode Island.....	---	---	---	---	---	---	---	---	---	---	---	---
South Carolina...	7	---	3	2	---	---	2	---	1	---	---	---
South Dakota.....	---	---	---	---	---	---	---	---	---	---	---	---
Tennessee.....	7	---	1	---	---	---	2	---	---	1	---	1
Texas.....	30	3	15	---	---	---	10	---	3	13	---	3
Utah.....	1	---	---	---	---	---	---	---	---	---	---	---
Vermont.....	---	---	---	---	---	---	---	---	---	---	---	---
Virginia.....	17	---	4	1	---	---	7	---	---	7	1	7
Washington.....	15	---	---	---	---	---	5	---	---	5	---	1
West Virginia....	13	---	4	---	---	---	1	---	---	2	---	---
Wisconsin.....	4	---	6	---	---	---	---	---	---	3	---	---
Wyoming.....	3	---	---	---	---	---	---	---	---	2	---	1
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	393	29	131	20	2	5	111	---	15	81	1	23

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE D-2. ACCIDENTS/INCIDENTS AT PRIVATE CROSSINGS INVOLVING MOTOR VEHICLES BY STATE AND WARNING DEVICE CATEGORY

WARNING DEVICE CATEGORY

State	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross-Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alabama.....	---	1	---	1	4	---	---	4	10
Alaska.....	---	---	---	---	---	---	---	---	---
Arizona.....	---	---	---	---	1	---	---	---	1
Arkansas.....	---	---	---	---	7	---	1	4	12
California.....	2	2	1	---	3	20	1	6	35
Colorado.....	---	---	1	---	4	---	3	4	12
Connecticut.....	---	---	---	---	1	1	---	---	2
Delaware.....	---	---	---	1	---	---	---	---	1
Dist. of Columbia	---	---	---	---	---	---	---	1	1
Florida.....	2	---	---	1	5	---	---	1	9
Georgia.....	---	1	---	2	4	1	---	3	11
Idaho.....	---	---	---	---	5	---	---	1	6
Illinois.....	---	1	---	5	9	5	5	13	38
Indiana.....	1	---	---	3	8	---	1	7	20
Iowa.....	---	---	---	1	5	2	---	3	11
Kansas.....	---	---	---	---	2	---	---	3	5
Kentucky.....	---	2	---	---	6	---	---	28	36
Louisiana.....	---	2	---	---	9	1	---	15	27
Maine.....	---	---	---	1	1	---	3	2	7
Maryland.....	---	2	---	1	4	---	---	---	7
Massachusetts....	---	---	---	---	1	---	1	5	7
Michigan.....	---	3	---	---	2	1	3	1	10
Minnesota.....	---	---	1	1	2	---	---	4	8
Mississippi.....	---	---	---	1	4	---	---	1	6
Missouri.....	1	---	---	---	11	---	---	8	20
Montana.....	---	---	1	---	3	---	---	5	9
Nebraska.....	---	---	1	---	2	---	---	5	8
Nevada.....	---	---	---	---	2	---	---	---	2
New Hampshire.....	---	---	---	---	2	---	---	---	2
New Jersey.....	---	---	1	1	2	1	---	4	9
New Mexico.....	---	---	---	---	---	---	---	1	1
New York.....	---	---	1	1	4	3	1	4	14
North Carolina...	1	---	---	---	12	---	1	5	19
North Dakota.....	---	---	---	---	1	---	---	3	4
Ohio.....	---	4	3	1	6	3	3	13	33
Oklahoma.....	---	---	---	---	3	1	---	3	7
Oregon.....	---	2	2	1	3	8	---	2	18
Pennsylvania.....	---	---	---	3	8	---	2	4	17
Rhode Island.....	---	---	---	---	---	---	---	---	---
South Carolina...	---	---	---	---	7	1	1	2	11
South Dakota.....	---	---	---	---	---	---	---	---	---
Tennessee.....	---	1	---	3	2	1	---	3	10
Texas.....	1	2	---	2	21	3	---	24	53
Utah.....	---	---	---	---	---	---	1	---	1
Vermont.....	---	---	---	---	---	---	---	---	---
Virginia.....	---	---	---	1	12	---	---	19	32
Washington.....	1	---	2	2	12	2	---	6	25
West Virginia....	---	1	---	1	9	1	---	4	16
Wisconsin.....	1	---	---	---	2	1	1	2	7
Wyoming.....	---	---	2	---	1	1	---	1	5
Unknown.....	---	---	---	---	---	---	---	---	---
Total.....	10	24	16	34	212	57	28	224	605

Note: "Special" are crossings protected by watchmen or members of train crew

TABLE D-3. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE CROSSINGS BY TYPE OF ROADWAY USER

Type Of Vehicle	---Acc/Inc---		---Killed---		---Injured---		Fatal Acc/Inc	Injury Acc/Inc
	No.	%	No.	%	No.	%		
Automobile.....	269	41.51	20	51.28	79	42.25	15	54
Truck.....	202	31.17	6	15.38	61	32.62	5	48
Truck-trailer....	127	19.60	4	10.26	34	18.18	4	26
Bus.....	2	.31	---	---	---	---	---	---
School bus.....	1	.15	---	---	---	---	---	---
Motorcycle.....	4	.62	2	5.13	---	---	2	---
Pedestrian.....	1	.15	1	2.56	---	---	1	---
Other.....	42	6.48	6	15.38	13	6.95	6	10
Total.....	648	100.00	39	100.00	187	100.00	33	138

TABLE D-4. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE CROSSINGS INVOLVING MOTOR VEHICLES BY WARNING DEVICE CATEGORY AND MOTORIST ACTION

Warning Device	--Drove Around-- -Or Thru Gate--			--Stopped And-- -Then Proceeded			-Did Not Stop--			-----Other-----			-----Unknown-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	I
Gates.....	3	1	---	---	---	---	4	---	1	3	---	---	---	---	---	10	1	---
Cantilever flashrs	---	---	---	---	---	---	2	---	2	---	---	---	---	---	---	2	---	---
Standard flashers	---	---	---	5	---	2	12	---	4	5	---	---	---	---	---	22	---	---
Hwy Sig,W W,Bells	---	---	---	2	---	---	7	---	2	7	---	---	---	---	---	16	---	---
Special Devices..	---	---	---	5	---	---	22	---	6	7	---	---	---	---	---	34	---	---
Crossbucks.....	---	---	---	7	1	4	122	11	65	75	---	9	8	---	1	212	12	---
Stopsigns.....	---	---	---	4	1	1	31	1	7	17	1	5	5	1	1	57	4	---
Other Signs.....	---	---	---	2	---	3	12	---	4	13	1	4	1	---	---	28	1	---
No Signs Or Signl	---	---	---	10	---	1	101	10	34	104	4	17	9	---	1	224	14	---
Total.....	3	1	---	35	2	11	313	22	125	231	6	35	23	1	3	605	32	1

Note: "Special" are crossings protected by watchmen or members of train crew.
 "Hwy Sig" = Highway signals, W W = Wigwags.

TABLE D-5. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE CROSSINGS INVOLVING MOTOR VEHICLES BY SPEED OF TRAIN, CIRCUMSTANCE, AND VISIBILITY

VISIBILITY

Speed Of Consist	-----Dawn-----			-----Day-----			-----Dusk-----			-----Dark-----			-----Total-----		
	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj
RAIL CONSIST STRUCK HIGHWAY USER															
Standing.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1-9.....	8	---	1	101	---	18	5	---	1	55	---	6	169	---	26
10-19.....	1	---	---	31	---	3	2	---	1	13	---	4	47	---	8
20-29.....	3	---	1	67	---	28	6	---	1	18	---	3	94	---	33
30-39.....	4	---	1	50	9	27	3	---	2	38	---	4	95	9	34
40-49.....	4	---	2	39	11	22	2	---	---	23	---	2	68	11	26
50-59.....	---	---	---	20	4	7	1	---	---	15	2	3	36	6	10
60-69.....	---	---	---	11	4	8	---	---	---	5	---	---	16	4	8
70-79.....	---	---	---	2	1	1	---	---	---	2	---	---	4	1	1
80-89.....	---	---	---	1	---	2	---	---	---	---	---	---	1	---	2
90 and over.....	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	20	---	5	322	29	116	19	---	5	170	2	22	531	31	148
HIGHWAY USER STRUCK RAIL CONSIST															
Standing.....	---	---	---	1	---	---	---	---	---	3	---	---	4	---	---
1-9.....	---	---	---	29	---	3	---	---	---	15	---	6	44	---	9
10-19.....	1	---	1	6	---	7	---	---	---	3	---	---	10	---	8
20-29.....	---	---	---	4	---	2	---	---	---	2	---	4	6	---	6
30-39.....	---	---	---	---	---	---	1	---	1	1	---	1	2	---	2
40-49.....	---	---	---	3	1	1	---	---	---	---	---	---	3	1	1
50-59.....	1	---	---	2	---	---	---	---	---	---	---	---	3	---	---
60-69.....	---	---	---	2	---	---	---	---	---	---	---	---	2	---	---
70-79.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
80-89.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
90 and over.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	2	---	1	47	1	13	1	---	1	24	---	11	74	1	26
GRAND TOTAL															
Standing.....	---	---	---	1	---	---	---	---	---	3	---	---	4	---	---
1-9.....	8	---	1	130	---	21	5	---	1	70	---	12	213	---	35
10-19.....	2	---	1	37	---	10	2	---	1	16	---	4	57	---	16
20-29.....	3	---	1	71	---	30	6	---	1	20	---	7	100	---	39
30-39.....	4	---	1	50	9	27	4	---	3	39	---	5	97	9	36
40-49.....	4	---	2	42	12	23	2	---	---	23	---	2	71	12	27
50-59.....	1	---	---	22	4	7	1	---	---	15	2	3	39	6	10
60-69.....	---	---	---	13	4	8	---	---	---	5	---	---	18	4	8
70-79.....	---	---	---	2	1	1	---	---	---	2	---	---	4	1	1
80-89.....	---	---	---	1	---	2	---	---	---	---	---	---	1	---	2
90 and over.....	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	22	---	6	369	30	129	20	---	6	194	2	33	605	32	174

TABLE D-6. ACCIDENTS/INCIDENTS AT PRIVATE CROSSINGS INVOLVING MOTOR VEHICLES BY RAILROAD AND WARNING DEVICE CATEGORY

WARNING DEVICE CATEGORY

Railroad	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross-Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alabama Great Southern Railroad.....	---	---	---	---	2	---	---	1	3
Amtrak (National Railroad Passenger Corp.)	---	1	---	---	6	1	---	3	11
Atchison, Topeka and Santa Fe Railway Co..	1	1	---	---	9	3	1	6	21
Baltimore and Ohio Railroad Company.....	---	1	---	---	5	5	1	7	19
Bangor And Aroostook Railroad Company.....	---	---	---	---	---	---	1	---	1
Bessemer & Lake Erie Railroad Company.....	---	---	---	---	---	---	---	---	---
Boston and Maine Corporation.....	---	---	---	---	4	---	---	3	7
Burlington Northern.....	1	1	10	4	18	4	---	29	67
Canadian Pacific Lines In Maine.....	---	---	---	---	---	---	---	---	---
Carolina And Northwestern Rwy Company.....	---	---	---	---	---	---	---	---	---
Central of Georgia Railroad Company.....	---	---	---	1	---	---	---	---	1
Central Vermont Railway Incorporated.....	---	---	---	---	---	---	---	---	---
Chesapeake and Ohio Railway Company.....	---	5	---	---	5	---	---	16	26
Chicago and Northwestern Transportation Co	1	---	---	3	---	2	---	3	9
Chicago And Illinois Midland Railway Co...	---	---	---	---	---	1	---	---	1
Chicago South Shore And South Bend RR.....	1	---	---	---	---	---	---	---	1
Chicago, Milwaukee, St. Paul & Pacific RR.	---	---	---	1	7	---	---	5	13
Cincinnati, New Orleans & Texas Pacific RR	---	1	---	---	---	---	---	---	1
Consolidated Rail Corporation.....	---	3	4	9	19	5	9	24	73
Delaware and Hudson Railroad Company.....	---	---	---	1	---	---	---	---	1
Denver and Rio Grande Western Railroad Co.	---	---	---	---	3	---	3	---	6
Duluth Winnipeg And Pacific Railway Co....	---	---	---	---	---	---	---	---	---
Duluth, Missabe and Iron Range Railway Co.	---	---	---	---	---	---	---	---	---
Elgin, Joliet and Eastern Railway Company.	---	---	---	---	---	---	---	---	---
Florida East Coast Railway Company.....	---	---	---	---	---	---	---	---	---
Georgia Southern And Florida Railway.....	---	---	---	---	---	---	---	---	---
Grand Trunk Western Railroad Company.....	---	---	---	---	1	---	1	---	2
Green Bay And Western Railroad.....	---	---	---	---	---	---	---	---	---
Illinois Central Gulf Railroad.....	---	2	---	2	7	---	---	7	18
Kansas City Southern Railway Company.....	---	---	---	---	3	---	---	1	4
Louisiana & Arkansas Railway Company.....	---	---	---	---	1	---	---	2	3
Maine Central Railroad Company.....	---	---	---	1	1	---	1	2	5
Michigan Interstate Railroad.....	---	---	---	---	---	---	---	---	---
Missouri Pacific Railroad Company.....	1	1	---	1	19	1	1	28	52
Missouri-Kansas-Texas Railroad Company....	---	---	---	---	6	1	---	3	10
Monogahela Railway.....	---	---	---	---	1	---	---	---	1
Norfolk and Western Railway Company.....	1	1	---	---	24	1	---	19	46
Northwestern Pacific Railroad.....	---	---	---	---	---	1	---	1	2
Oklahoma, Kansas And Texas Railroad Co....	---	---	---	1	---	---	---	---	1
Pittsburgh & Lake Erie Railroad.....	---	---	---	---	---	---	---	---	---
Richmond, Frederickburg And Potomac.....	---	---	---	---	---	---	---	1	1
Seaboard System Railroad.....	1	4	---	5	28	3	1	26	68
Soo Line Railroad.....	---	---	---	---	1	---	3	3	7
Southern Pacific Transportation Company...	2	2	---	---	8	18	1	12	43
Southern Railway Company.....	---	---	---	1	10	---	1	14	26
Spokane International Railroad.....	---	---	---	---	---	---	---	---	---
St. Louis Southwestern Railway Company....	---	---	---	---	2	---	---	2	4
Texas Northern Railroad Company.....	---	---	---	---	---	---	---	---	---
Texas, Mexican Railway Company.....	---	---	---	---	2	---	---	---	2
Union Pacific Railroad.....	1	1	1	---	11	6	---	6	26
All Other Railroads.....	---	1	1	4	13	6	4	3	32
Total.....	10	25	16	34	216	58	28	227	614

Note: "Special" are crossings protected by watchmen or members of train crew.

The totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

TABLE D-7. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE CROSSINGS BY RAILROAD

Railroad	Motor Vehicle			Other Highway Users			Total		
	Acc/Inc	Killed	Injured	Acc/Inc	Killed	Injured	Acc/Inc	Killed	Injured
Alabama Great Southern Railroad.....	3	---	---	---	---	---	3	---	---
Amtrak (National Railroad Passenger Corp.)	11	1	---	1	---	---	12	1	---
Atchison, Topeka and Santa Fe Railway Co..	21	3	16	1	---	---	22	3	17
Baltimore and Ohio Railroad Company.....	19	---	5	2	---	1	21	---	7
Bangor And Aroostook Railroad Company.....	1	---	---	1	---	1	2	---	1
Bessemer & Lake Erie Railroad Company.....	---	---	---	---	---	---	---	---	---
Boston and Maine Corporation.....	7	---	---	1	---	1	8	---	1
Burlington Northern.....	67	10	10	5	1	---	72	11	10
Canadian Pacific Lines In Maine.....	---	---	---	---	---	---	---	---	---
Carolina And Northwestern Rwy Company.....	---	---	---	---	---	---	---	---	---
Central of Georgia Railroad Company.....	1	---	---	1	---	---	2	---	---
Central Vermont Railway Incorporated.....	---	---	---	---	---	---	---	---	---
Chesapeake and Ohio Railway Company.....	26	---	6	1	---	---	27	---	6
Chicago and Northwestern Transportation Co	9	---	2	1	---	---	10	---	2
Chicago And Illinois Midland Railway Co...	1	---	1	---	---	---	1	---	1
Chicago South Shore And South Bend RR.....	1	---	---	---	---	---	1	---	---
Chicago, Milwaukee, St. Paul & Pacific RR.	13	---	---	1	---	---	14	---	---
Cincinnati, New Orleans & Texas Pacific RR	1	---	1	---	---	---	1	---	1
Consolidated Rail Corporation.....	73	3	15	---	---	---	73	3	15
Delaware and Hudson Railroad Company.....	1	---	---	---	---	---	1	---	---
Denver and Rio Grande Western Railroad Co.	6	1	2	---	---	---	6	1	2
Duluth Winnipeg And Pacific Railway Co....	---	---	---	---	---	---	---	---	---
Duluth, Missabe and Iron Range Railway Co.	---	---	---	---	---	---	---	---	---
Elgin, Joliet and Eastern Railway Company.	---	---	---	---	---	---	---	---	---
Florida East Coast Railway Company.....	---	---	---	---	---	---	---	---	---
Georgia Southern And Florida Railway.....	---	---	---	---	---	---	---	---	---
Grand Trunk Western Railroad Company.....	2	---	2	1	1	---	3	1	2
Green Bay And Western Railroad.....	---	---	---	---	---	---	---	---	---
Illinois Central Gulf Railroad.....	18	1	9	1	---	---	19	1	9
Kansas City Southern Railway Company.....	4	---	2	1	---	---	5	---	2
Louisiana & Arkansas Railway Company.....	3	---	1	1	---	1	4	---	2
Maine Central Railroad Company.....	5	---	4	---	---	---	5	---	4
Michigan Interstate Railroad.....	---	---	---	---	---	---	---	---	---
Missouri Pacific Railroad Company.....	52	5	22	5	---	5	57	5	27
Missouri-Kansas-Texas Railroad Company....	10	---	3	1	---	---	11	---	3
Monongahela Railway.....	1	---	---	---	---	---	1	---	---
Norfolk and Western Railway Company.....	46	1	16	---	---	---	46	1	16
Northwestern Pacific Railroad.....	2	---	---	1	---	---	3	---	---
Oklahoma, Kansas And Texas Railroad Co....	1	---	---	---	---	---	1	---	---
Pittsburgh & Lake Erie Railroad.....	1	---	---	---	---	---	1	---	---
Richmond, Frederickburg And Potomac.....	---	---	---	---	---	---	---	---	---
Seaboard System Railroad.....	68	3	18	5	---	1	73	3	19
Soo Line Railroad.....	7	---	2	---	---	---	7	---	2
Southern Pacific Transportation Company...	43	3	10	3	2	1	46	5	11
Southern Railway Company.....	26	---	9	4	3	---	30	3	9
Spokane International Railroad.....	---	---	---	---	---	---	---	---	---
St. Louis Southwestern Railway Company....	4	---	1	---	---	---	4	---	1
Texas Northern Railroad Company.....	---	---	---	---	---	---	---	---	---
Texas, Mexican Railway Company.....	2	---	3	---	---	---	2	---	3
Union Pacific Railroad.....	26	---	4	3	---	---	29	---	4
All Other Railroads.....	32	1	10	3	---	---	35	1	10
Total.....	614	32	174	44	7	13	658	39	187

Note: A/I totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

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