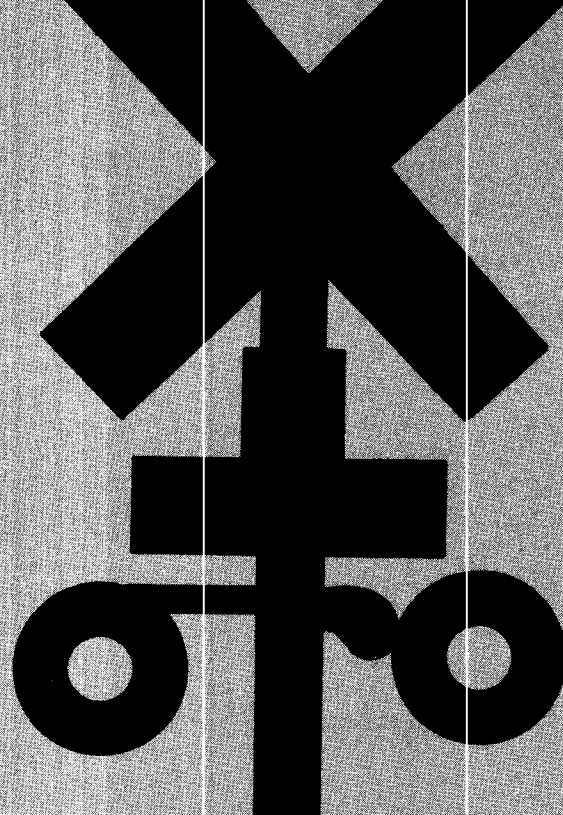




FOR THE YEAR ENDED DECEMBER 31, 1968

RAIL-HIGHWAY GRADE-CROSSING ACCIDENTS

**DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
BUREAU OF RAILROAD SAFETY**

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DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

PREFACE

This is the thirty-fourth annual statistical report on rail-highway grade crossing accidents based upon reports of rail carriers filed pursuant to the Accident Reports Act of 1910 (as amended).

The primary purpose of this report is to direct attention to the hazards inherent at public grade crossings, and to provide a basis for formulation of regulations which would promote the safety of both rail and highway traffic at crossings.

Statistics recently compiled by the Bureau of Public Roads, Federal Highway Administration, show an increase of more than four million highway motor vehicle registrations compared with 1967. There was a decrease in the number of grade crossing accidents and in casualties, both killed and injured.

In 1968, 781 more crossings were "specially protected" as defined under "Classification of Crossings." There is no statistical evidence to indicate that the decrease in crossing accidents in 1968 was the result of any specific factor or combination of factors.

In reference to the tables shown in this report, it should be noted that only Tables A, B, C and Table 1 pertain to rail-highway grade crossing accidents of all kinds. All the other tables pertain to collisions involving motor vehicles, such as automobiles, buses, motortrucks and motorcycles.

R. N. Whitman
Administrator

SUMMARY

Rail-Highway Grade Crossing Accidents of All Kinds

In 1968, there were 3,816 crossing accidents involving pedestrians, automobiles, motortrucks, buses, motorcycles, and other vehicles or machines. The above accidents resulted in 1,546 deaths and 3,774 injuries, and show what is hopefully a decreasing trend in all three categories.

The following three tables show data for the ten-year period, 1959 - 1968.

Table A. Total number of accidents and casualties at rail-highway grade crossings

Year	No. of accidents	Killed	Injured
Average 1959-68	3,542	1,444	3,611
1959	3,075	1,203	3,247
1960	3,195	1,364	3,424
1961	3,204	1,291	3,514
1962	3,149	1,241	3,192
1963	3,373	1,302	3,524
1964	3,755	1,543	3,783
1965	3,820	1,534	3,801
1966	4,097	1,780	4,043
1967	3,932	1,632	3,812
1968	3,816	1,546	3,774

Table B. Ratios of the number of crossing accidents and casualties to the average of the 1959-1968 period.

Year	No. of accidents	Killed	Injured
Average number, 1959-1968	3,542	1,444	3,611
	Percent	Percent	Percent
1959-1968	100.00	100.00	100.00
1959	86.82	83.31	89.92
1960	90.20	94.46	94.82
1961	90.46	89.40	97.31
1962	89.90	85.94	88.40
1963	95.21	90.17	97.59
1964	106.01	106.86	104.76
1965	107.85	106.23	105.26
1966	115.67	123.27	111.96
1967	111.01	113.02	105.57
1968	107.74	107.06	104.51

Table C. Ratio of number of casualties to number of crossing accidents

Year	Killed	Injured
1959	0.391	1.056
1960	0.427	1.072
1961	0.403	1.097
1962	0.394	1.014
1963	0.386	1.045
1964	0.411	1.007
1965	0.402	0.995
1966	0.434	0.987
1967	0.415	0.969
1968	0.405	0.989

Table C shows that with respect to deaths, the severity of crossing accidents in 1968 was slightly lower than in the preceding year. In the matter of injuries, the severity was slightly higher.

Grade Crossing Accidents Involving Motor Vehicles

Of the 3,816 crossing accidents of all kinds in 1968, 3,603 involved collisions between railroad movements and motor vehicles, and resulted in 1,448 deaths and 3,665 injuries. In 2,395 collisions, or 66.47 percent, trains struck motor vehicles, resulting in 1,089, or 75.20 percent, of the deaths and in 2,333, or 63.66 percent of the injuries. In the other 1,208 collisions, or 33.53 percent, motor vehicles struck the sides of train movements, resulting in 359, or 24.79 percent, of the deaths and in 1,332, or 36.34 percent, of the injuries.

The number of crossing accidents in 1968 involving collisions with motor vehicles show a decrease from 1967. In comparison with last year, there was also a decrease of 72 in the number of deaths and 61 in the number of injuries.

Table D. Number of crossing accidents involving motor vehicles, per million vehicles registered

Year	Number of accidents	Number of motor vehicles registered	Number of accidents per million vehicles registered
		(Thousands)	
1959	2,842	71,778	39.6
1960	2,980	74,660	39.9
1961	2,931	76,442	38.3
1962	2,944	79,682	36.9
1963	3,195	83,478	38.3
1964	3,539	87,281	40.5
1965	3,602	91,738	39.3
1966	3,862	95,929	40.3
1967	3,733	98,942	37.7
1968	3,603	103,150	34.9

Types of Crossing Protection Provided

Of the 3,603 collisions, 1,580, or 43.85 percent, occurred at crossings which were specially protected by one of the following: Lowered gates, trainman, watchman, audible and visual signals, audible signals, or visible signals. The other 2,023, or 56.15 percent, occurred at crossings protected by signals or signs that did not indicate the approach of trains.

The latest available statistics show a total of 213,723 rail-highway crossings at grade. Of these crossings, 45,213, or 21.15 percent, were specially protected; 168,510, or 78.85 percent, were not specially protected.

Times and Weather Conditions Involved in Motor Vehicle Collisions

Of the 3,603 crossing collisions, 2,167, or 60.14 percent, occurred in daylight, and 1,436, or 39.86 percent, took place at night. There were 2,486 collisions, or 69.00 percent, in clear weather, and 1,117, or 31.00 percent, under cloudy or inclement weather conditions.

Types of Motor Vehicles Involved in Crossing Accidents

Of the 3,603 collisions between trains and motor vehicles, automobiles were involved in 2,818, or 78.21 percent; buses in 4, or 0.11 percent; motortrucks in 740, or 20.54 percent, and motorcycles in 41, or 1.14 percent.

DEFINITION OF TERMS

Classification of Accidents. A public rail-highway grade crossing accident is one which results in (a) a reportable casualty to a person or (b) in a collision or derailment of a train, locomotive, or car, or other train accident and in which there is more than \$750 damage to equipment, track, or roadbed.

Classification of Casualties. Reportable casualties are:

(a) Death of a person: A death resulting from an accident within 24 hours immediately following the accident is reportable as a fatality; if death occurs after the expiration of the 24-hour period, the casualty is reported as an injury and also as a subsequent fatality.

(b) Injury to a railroad employee if the injury is sufficient to incapacitate the injured persons from performing his or her duties for a period of more than 24 hours in the aggregate during the 10 days immediately following the accident. (Prior to January 1, 1961, the injury was not reportable unless the employee was incapacitated for a period of more than three days in the aggregate during the 10 days immediately following the accident).

(c) Injury to a person other than a railroad employee if the injury is sufficient to incapacitate the injured person from following his or her customary vocation or mode of life for a period of more than 24 hours in the aggregate during the 10 days immediately following the accident.

Classification of Crossings. A highway crossing comprises all the tracks within, or immediately adjacent to, the railroad right-of-way, owned or leased, at an intersection with the highway. Crossings with streets, avenues, and rural highways, are included. Only public crossings are covered. Highway crossings with industrial tracks only, not owned or leased by a railroad, are excluded.

The type of signaling device for restricting use of a crossing by trains, highway vehicles, or pedestrians determines whether the crossing is "specially protected" or "not specially protected." "Specially protected" crossings are those protected by: Gates operated 24 hours per day or less; trainmen; watchmen on duty 24 hours per day or less; or devices that indicate the approach of trains. Crossings "not specially protected" are those that merely indicate the proximity of a crossing by fixed signs, and those without stationary signs or other cautionary fixtures.

Classification of Persons. Persons using crossings as a continuation of a street or road are divided into two classes, "trespassers" and "non-trespassers." A person is not reported as a trespasser on a highway grade crossing unless the crossing is protected by gates, or other similar barriers, which were closed when the person went on the crossing, or unless the person attempted to pass over or under trains or cars at the crossing.

There are instances in which persons on trains may be killed or injured. Such persons may be classified as passengers, employees on duty, non-trespassers, or trespassers.

Table 1. Rail-Highway Accidents of All Kinds and Casualties, 1968-1967 *

Cause of accident	Accidents				Killed				Injured			
	1968		1967		1968		1967		1968		1967	
	No.	Percent of total	No.	Percent of total	No.	Percent of total	No.	Percent of total	No.	Percent of total	No.	Percent of total
Trains striking or being struck by:												
Pedestrians -----	117	3.07	115	2.92	75	4.85	85	5.21	43	1.14	35	0.92
Passenger autos -----	2,818	73.85	2,906	73.91	1,171	75.74	1,219	74.69	2,969	78.67	3,043	79.83
Motor buses -----	4	.10	11	.28	10	.65	9	.55	33	.87	23	.60
Motortrucks -----	740	19.39	780	19.84	243	15.72	275	16.85	643	17.04	637	16.71
Motorcycles -----	41	1.07	36	.92	24	1.55	17	1.04	20	.53	23	.60
Other vehicles or machines -----	53	1.39	45	1.14	20	1.29	25	1.53	33	.87	19	.50
Pedestrians passing over or under -----	6	.15	6	.15	1	.06	2	.12	5	.13	4	.10
Miscellaneous -----	37	.97	33	.84	2	.13	-	-	28	.74	28	.73
Total -----	3,816	100.00	3,932	100.00	1,546	100.00	1,632	100.00	3,774	100.00	3,812	100.00

* Nontrain accidents excluded.

Table 2. Nature of Rail-Highway Accidents Involving Motor Vehicles, 1968-1965

	Number of accidents				Killed				Injured			
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965
Motor vehicle:												
Struck by train -----	2,395	2,456	2,595	2,387	1,089	1,158	1,301	1,075	2,333	2,218	2,445	2,244
Ran into side of train ---	1,208	1,277	1,267	1,215	359	362	356	359	1,332	1,508	1,482	1,419
Total -----	3,603	3,733	3,862	3,602	1,448	1,520	1,657	1,434	3,665	3,726	3,927	3,663

Percent of total

Motor vehicle:												
Struck by train -----	66.47	65.79	67.19	66.27	75.21	76.18	78.52	74.97	63.66	59.53	62.26	61.26
Ran into side of train ---	33.53	34.21	32.81	33.73	24.79	23.82	21.48	25.03	36.34	40.47	37.74	38.74
Total -----	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Nature of collision	Accidents in 1968		Killed in 1968		Injured in 1968	
	Daylight	Dark	Daylight	Dark	Daylight	Dark
Struck by train:						
Passenger automobiles ----	1,175	659	587	299	1,141	692
Motor buses -----	4	-	10	-	33	-
Motor trucks -----	455	92	157	28	385	78
Motorcycles -----	5	5	4	4	2	2
Total -----	1,639	756	758	331	1,561	772
Ran into side of train:						
Passenger automobiles ----	383	601	120	165	431	705
Motor buses -----	-	-	-	-	-	-
Motor trucks -----	123	70	39	19	114	66
Motorcycles -----	22	9	12	4	10	6
Total -----	528	680	171	188	555	777

Table 3. Accidents Involving Motor Vehicles, Classified as "Ran into Side of Train," 1968-1966

Part of train struck	Number of accidents			Percent of total			Number in 1968	
	1968	1967	1966	1968	1967	1966	Daylight	Dark
Head end of train								
Motive power pulling or running light -----	754	785	794	62.42	61.47	62.67	416	338
Lead car shoved -----	84	74	61	6.95	5.79	4.81	33	51
Other part at or near head end of train <u>1/</u> -----	1	5	2	.08	.39	.16	1	-
Sub-total -----	839	864	857	69.45	67.66	67.64	450	389
Last Unit of train -----	28	36	41	2.32	2.82	3.24	8	20
Other parts of train consisting of more than 3 units:								
First quarter of train -----	137	140	163	11.34	10.96	12.87	49	88
Second quarter of train -----	57	104	89	4.72	8.14	7.02	7	50
Third quarter of train -----	61	54	36	5.05	4.23	2.84	5	56
Fourth quarter of train <u>2/</u> -----	75	72	78	6.21	5.64	6.16	7	68
Sub-total -----	330	370	366	27.32	28.97	28.89	68	262
Part of train not reported -----	11	7	3	.91	.55	.24	2	9
Grand Total -----	1,208	1,277	1,267	100.00	100.00	100.00	528	680

1/ Includes accidents involving trains of less than four cars where the motive power unit was not involved.

2/ Excludes accidents involving last unit of train.

Table 4. Nature of Rail-Highway Collision Involving Motor Vehicles and Part of 24-hour Period, 1968-1965

Part of 24-hour period	Total number of accidents				Percent of total				Struck by train in 1968		Ran into side of train in 1968	
	1968	1967	1966	1965	1968	1967	1966	1965	Persons		Persons	
									Killed	Injured	Killed	Injured
Daylight -----	2,167	2,273	2,354	2,138	60.14	60.89	67.19	59.35	758	1,561	171	555
Dark -----	1,436	1,460	1,508	1,464	39.86	39.11	32.81	40.65	331	772	188	777
Total -----	3,603	3,733	3,862	3,602	100.00	100.00	100.00	100.00	1,089	2,333	359	1,332

Table 5. Rail-Highway Accidents Involving Motor Vehicles, According to Hour, 1968-1965

Hour	Total				Struck by train				Ran into side of train			
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965
Midnight to 12:59 A.M. --	126	124	132	124	60	48	56	58	66	76	76	66
1 to 1:59 A.M. -----	118	123	130	106	46	41	51	37	72	82	79	69
2 to 2:59 " " -----	102	109	91	90	37	38	35	31	65	71	56	59
3 to 3:59 " " -----	68	72	69	69	25	27	28	28	43	45	41	41
4 to 4:59 " " -----	55	55	61	46	24	21	29	21	31	34	32	25
5 to 5:59 " " -----	43	53	94	70	25	28	62	38	18	25	32	32
6 to 6:59 " " -----	127	129	142	130	89	88	98	99	38	41	44	31
7 to 7:59 " " -----	187	210	195	188	134	169	150	141	53	41	45	47
8 to 8:59 " " -----	170	176	190	161	135	134	147	127	35	42	43	34
9 to 9:59 " " -----	162	164	201	170	129	129	162	129	33	35	39	41
10 to 10:59 " " -----	188	196	206	151	149	156	157	118	39	40	49	33
11 to 11:59 " " -----	165	196	192	192	122	150	142	150	43	46	50	42
Noon to 12:59 P.M. -----	167	201	196	156	125	154	156	120	42	47	40	36
1 to 1:59 " " -----	183	162	189	190	144	129	148	139	39	33	41	51
2 to 2:59 " " -----	176	176	204	199	128	130	164	156	48	46	40	43
3 to 3:59 " " -----	199	211	198	203	154	167	150	157	45	44	48	46
4 to 4:59 " " -----	225	212	193	198	171	157	151	153	54	55	42	45
5 to 5:59 " " -----	184	194	187	178	125	141	134	133	59	53	53	45
6 to 6:59 " " -----	201	183	181	196	148	121	111	129	53	62	70	67
7 to 7:59 " " -----	158	174	182	179	95	99	108	113	63	75	74	66
8 to 8:59 " " -----	140	167	160	146	89	101	92	76	51	66	68	70
9 to 9:59 " " -----	162	138	165	176	96	80	105	105	66	58	60	71
10 to 10:59 " " -----	143	151	152	141	62	75	77	69	81	76	75	72
11 to 11:59 " " -----	154	157	152	143	83	73	82	60	71	84	70	83
Total -----	3,603	3,733	3,862	3,602	2,395	2,456	2,595	2,387	1,208	1,277	1,267	1,215

Table 6. Rail-Highway Accidents Involving Motor Vehicles, According to Day, 1968-1965

Day	Total				Struck by train				Ran into side of train			
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965
Sunday -----	377	411	379	356	244	256	257	236	133	155	122	120
Monday -----	501	497	517	503	348	346	354	338	153	151	163	165
Tuesday -----	553	523	549	506	373	362	392	342	180	161	157	164
Wednesday -----	508	502	583	512	342	337	375	339	166	165	208	173
Thursday -----	530	512	557	520	365	340	373	356	165	172	184	164
Friday -----	562	666	579	609	346	444	377	391	216	222	202	218
Saturday -----	572	622	698	596	377	371	467	385	195	251	231	211
Total -----	3,603	3,733	3,862	3,602	2,395	2,456	2,595	2,387	1,208	1,277	1,267	1,215

Table 7. Rail-Highway Accidents Involving Motor Vehicles, by Month, 1968-1965

Month	Total				Struck by train				Ran into side of train			
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965
January -----	389	394	431	364	248	264	316	262	141	130	115	102
February -----	346	373	351	363	239	263	239	251	107	110	112	112
March -----	324	277	310	328	215	188	211	237	109	89	99	91
April -----	218	262	270	253	150	173	182	163	68	89	88	90
May -----	252	258	264	232	168	172	186	152	84	86	78	80
June -----	214	209	240	234	139	140	155	156	75	69	85	78
July -----	223	253	236	225	146	155	150	141	77	98	86	84
August -----	260	284	261	255	171	186	173	143	89	98	88	112
September -----	230	275	277	261	141	173	173	163	89	102	104	98
October -----	345	333	328	322	211	222	206	202	134	111	122	120
November -----	410	389	403	368	283	250	265	254	127	139	138	114
December -----	392	426	491	397	284	270	339	263	108	156	152	134
Total -----	3,603	3,733	3,862	3,602	2,395	2,456	2,595	2,387	1,208	1,277	1,267	1,215

Table 8. Types of Motor Vehicles Involved in Crossing Accidents, 1968-1965

Motor vehicle	Number of accidents				Year 1968			
					Number of motor vehicles registered (thousands)	Number of accidents per million vehicles registered	Number of accidents occurring	
	1968	1967	1966	1965			Daylight	Dark
Automobile -----	2,818	2,906	2,964	2,824	83,698	33.67	1,558	1,260
Bus -----	4	11	23	10	352	11.36	4	-
Motortruck -----	740	780	837	736	16,999	43.53	578	162
Motorcycle -----	41	36	38	32	2,101	19.51	27	14
Total -----	3,603	3,733	3,862	3,602	103,150	34.93	2,167	1,436

Table 9. Rail-Highway Accidents Involving Motor Vehicles, by Kind of Train, 1968-1965

Kind of train	Train Miles Class I railroads (thousands)		Number of accidents	Number per million Train Miles				Number of accidents occurring in 1968	
	1968	1967		1968	1967	1966	1965	Daylight	Dark
Freight -----	429,278	420,355	2,603	6.06	6.31	6.02	5.82	1,609	994
Passenger -----	122,591	149,820	480	3.92	3.74	3.88	3.64	370	110
Work -----	5,938	5,587	48	8.08	8.33	8.98	8.54	33	15
Yard (switching) & other <u>1/</u> -----	261,244	257,388	472	1.81	1.85	2.40	2.13	155	317
Total -----	819,051	833,150	3,603	4.40	4.48	4.64	4.39	2,167	1,436

1/ Excluding switching and terminal companies.

Table 10. Rail-Highway Accidents Involving Motor Vehicles, by Type of Crossing Protection, 1968

Type of crossing protection at time of accident	Killed	Injured	Number of accidents	Number of crossings 1/ on Dec. 31, 1967	Accidents per 100 crossings	Number occurring		Struck by train		Ran into side of train	
						Daylight	Dark	Daylight	Dark	Daylight	Dark
Lowered gates -----	37	83	99	7,871	1.26	36	63	26	39	10	24
Trainman -----	6	96	79	-	-	11	68	5	15	6	53
Watchman -----	2	7	8	954	.84	-	8	-	5	-	3
Audible & Visible signal ---	351	924	917	21,755	4.26	564	353	406	198	158	155
Audible signal -----	13	33	35	1,390	2.51	22	13	16	10	6	3
Visible signal -----	194	428	442	13,243	3.34	268	174	202	100	66	74
Total special -----	603	1,571	1,580	45,213	3.49	901	679	655	367	246	312
Signal or sign not of a type indicating approach of train -----	845	2,094	2,023	168,510	1.20	1,266	757	984	389	282	368
Grand total -----	1,448	3,665	3,603	213,723	1.69	2,167	1,436	1,639	756	528	680

1/ On class I line-haul railroads and switching and terminal companies. Data for 1968 not available.

Note: Where more than one type of protection was afforded at the time of accident, the accident was classified according to the type first shown above.

Table 11. Rail-Highway Accidents Involving Motor Vehicles, According to Operation of Crossing Protection, 1968-1965

Operation of crossing protection	Number of accidents				Year 1968					
					Number occurring		Struck by train		Ran into side of train	
					Daylight	Dark	No. occurring		No. occurring	
	1968	1967	1966	1965			Daylight	Dark	Daylight	Dark
Automatic:										
Both sides of crossing ---	1,441	1,465	1,395	1,345	858	583	629	337	229	246
Side of approach -----	31	28	53	63	20	11	12	4	8	7
Opposite side -----	13	24	14	29	8	5	7	3	1	2
Manual:										
Both sides of crossing ---	6	15	15	10	4	2	2	2	2	-
Side of approach -----	84	82	67	96	10	74	4	20	6	54
Opposite side -----	2	3	12	7	-	2	-	-	-	2
Other: 1/										
Both sides of crossing ---	1,744	1,736	1,877	1,682	1,096	648	838	326	258	322
Side of approach -----	157	218	252	216	94	63	79	30	15	33
Opposite side -----	100	125	130	125	62	38	56	27	6	11
Not reported -----	25	37	47	29	15	10	12	7	3	3
Total -----	3,603	3,733	3,862	3,602	2,167	1,436	1,639	756	528	680

1/ Not of a type indicating approach of train.

Table 12. Crossing Accidents After Dark Involving Motor Vehicles, According to Illumination of Crossing, 1968-1965

Crossing illumination	Accidents after dark												Year 1968	
	Number of accidents				Struck by train				Ran into side of train				Persons	
	1968	1967	1966	1965	1968	1967	1966	1965	1968	1967	1966	1965	Killed	Injured
Lighted -----	647	645	656	614	357	322	364	342	290	323	292	272	193	724
Not lighted ---	789	815	852	850	399	391	422	413	390	424	430	437	326	825
Total -----	1,436	1,460	1,508	1,464	756	713	786	755	680	747	722	709	519	1,549

Table 13. Rail-Highway Accidents Involving Motor Vehicles, According to Speed and Kind of Train Involved, 1968

Speed of train (miles per hour)	Number of acci- dents	Struck by train		Ran into side of train		Kind of train					
		Number occurring		Number occurring		Freight		Passenger		Yard (switching) and other	
		Daylight	Dark	Daylight	Dark	Number	Percent of total	Number	Percent of total	Number	Percent of total
1 - 9 ----	691	93	163	76	359	359	13.79	13	2.71	319	61.35
10 - 19 ----	565	206	142	87	130	409	15.71	32	6.67	124	23.85
20 - 29 ----	657	332	138	110	77	552	21.21	56	11.67	49	9.42
30 - 39 ----	582	320	103	106	53	509	19.55	61	12.71	12	2.31
40 - 49 ----	527	309	90	87	41	455	17.48	60	12.50	12	2.31
50 - 59 ----	293	182	68	30	13	228	8.76	62	12.92	3	.58
60 - 69 ----	177	120	37	16	4	85	3.27	91	18.96	1	.19
70 - 79 ----	94	66	11	15	2	5	.19	89	18.54	-	-
80 - 89 ----	13	7	4	1	1	-	-	13	2.71	-	-
90 and over	4	4	-	-	-	1	.04	3	.63	-	-
Total ----	3,603	1,639	756	528	680	2,603	100.00	480	100.00	520	100.00

Table 14. Rail-Highway Accidents Involving Motor Vehicles, According to Weather Conditions, 1968

Weather	Number of accidents		Struck by train		Ran into side of train	
	Number	Percent of total	Number occurring		Number occurring	
			Daylight	Dark	Daylight	Dark
Clear -----	2,486	69.00	1,181	493	364	448
Cloudy -----	664	18.43	308	149	87	120
Rain -----	293	8.13	96	80	52	65
Snow, sleet or hail ---	96	2.66	35	27	16	18
Fog -----	64	1.78	19	7	9	29
Dust -----	-	-	-	-	-	-
Total -----	3,603	100.00	1,639	756	528	680

Table 15. Rail-Highway Accidents Involving Motor Vehicles, According to Number of Cars in Train and Kind of Train, 1968

Number of cars in train	Number of accidents				Percent of total				Number of accidents occurring	
	Total	Freight	Passenger	Yard (switching) and other	Total	Freight	Passenger	Yard (switching) and other	Daylight	Dark
None 1/ -----	206	91	2	113	5.72	3.50	0.42	21.73	86	120
1 - 9 -----	1,057	474	340	243	29.34	18.21	70.83	46.73	668	389
10 - 19 -----	530	322	123	85	14.71	12.37	25.63	16.35	336	194
20 - 29 -----	242	206	8	28	6.72	7.91	1.67	5.38	135	107
30 - 39 -----	191	171	1	19	5.30	6.57	.21	3.65	103	88
40 - 49 -----	183	167	2	14	5.08	6.42	.42	2.69	105	78
50 - 59 -----	177	173	-	4	4.91	6.65	-	.77	113	64
60 - 69 -----	171	165	1	5	4.75	6.34	.21	.96	103	68
70 - 79 -----	169	166	2	1	4.69	6.38	.42	.19	109	60
80 - 89 -----	162	161	-	1	4.50	6.19	-	.19	105	57
90 - 99 -----	146	145	-	1	4.05	5.57	-	.19	83	63
100 - 109 -----	123	121	1	1	3.41	4.65	.21	.19	73	50
110 - 119 -----	82	80	-	2	2.28	3.07	-	.38	52	30
120 - 129 -----	54	54	-	-	1.50	2.07	-	-	31	23
130 - 139 -----	52	52	-	-	1.44	2.00	-	-	33	19
140 - 149 -----	32	32	-	-	.89	1.23	-	-	19	13
150 and over -----	21	21	-	-	.58	.81	-	-	9	12
Not reported or unknown -----	5	2	-	3	.14	.08	-	.58	4	1
Total -----	3,603	2,603	480	520	100.00	100.00	100.00	100.00	2,167	1,436

1/ Locomotives only.

Table 16. Rail-highway Accidents Involving Motor Vehicles, According to Speed of Motor Vehicles, 1968

Speed of motor vehicle (miles per hour)	Total				Struck by train						Ran into side of train					
	Number of accidents	Percent of total	Killed	Injured	Daylight			Dark			Daylight			Dark		
					Accidents	Killed	Injured	Accidents	Killed	Injured	Accidents	Killed	Injured	Accidents	Killed	Injured
Standing -----	388	10.77	123	371	282	91	285	103	32	82	1	-	1	2	-	3
1 - 9 -----	342	9.49	144	346	224	95	225	82	42	83	17	1	16	19	6	22
10 - 19 -----	640	17.76	239	595	348	156	298	143	56	142	67	18	66	82	9	89
20 - 29 -----	716	19.87	224	776	307	134	294	185	50	216	92	25	96	132	15	170
30 - 39 -----	507	14.07	208	561	201	113	203	95	41	116	81	15	100	130	39	142
40 - 49 -----	284	7.88	154	293	83	62	75	56	40	65	71	30	64	74	22	89
50 - 59 -----	200	5.55	92	204	47	29	39	18	17	12	68	19	81	67	27	72
60 and over -----	113	3.14	92	110	21	19	23	11	19	4	47	32	47	34	22	36
High speed 1/ -----	12	.33	5	10	4	3	3	1	-	1	2	1	1	5	1	5
Not reported -----	401	11.13	167	399	122	56	116	62	34	51	82	30	83	135	47	149
Total -----	3,603	100.00	1,448	3,665	1,639	758	1,561	756	331	772	528	171	555	680	188	777

1/ Miles per hour not known.

Table 17. Rail-highway Accidents Involving Motor Vehicles, by States, 1968-1967

State	Total number of accidents		Total persons				Struck by train 1968						Ran into side of train 1968					
			Killed		Injured		Daylight			Dark			Daylight			Dark		
							Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons	
	1968	1967	1968	1967	1968	1967		Killed	Injured		Killed	Injured		Killed	Injured		Killed	Injured
1 Alabama	111	88	34	31	118	85	56	24	57	25	6	29	11	3	11	19	1	21
2 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Arizona	23	29	12	7	18	28	8	4	4	5	5	5	3	-	4	7	3	5
4 Arkansas	63	67	31	35	63	59	38	19	35	17	9	18	4	3	1	13	-	9
5 California	221	267	91	122	193	267	87	44	62	48	24	45	37	12	32	49	11	54
6 Colorado	20	31	10	7	18	33	14	8	13	1	-	1	2	-	3	3	2	1
7 Connecticut	3	2	2	-	1	2	2	1	1	1	1	-	-	-	-	-	-	-
8 Delaware	8	11	4	3	7	9	-	-	-	3	1	3	1	-	1	4	3	3
9 Florida	140	154	64	51	139	149	71	41	66	14	5	13	32	12	35	23	6	25
10 Georgia	139	119	50	60	158	115	79	23	93	23	13	24	14	7	14	23	7	27
11 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Idaho	18	14	15	6	11	14	9	7	5	3	4	1	2	1	1	4	3	4
13 Illinois	247	283	89	112	238	279	102	45	93	66	24	69	38	13	34	41	7	42
14 Indiana	200	203	73	88	205	188	96	37	97	51	14	53	20	9	18	33	13	37
15 Iowa	91	104	40	40	91	102	38	17	39	19	9	18	13	3	17	21	11	17
16 Kansas	111	91	43	39	125	94	52	16	50	20	12	25	26	7	31	13	8	19
17 Kentucky	48	64	21	23	43	60	23	8	17	13	11	9	5	1	7	7	1	10
18 Louisiana	88	88	46	30	87	101	33	26	30	22	10	21	14	4	14	19	6	22
19 Maine	13	18	3	4	14	21	6	2	5	3	1	5	2	-	2	2	2	2
20 Maryland	16	16	3	8	16	9	4	2	4	4	-	3	3	-	5	5	1	4
21 Massachusetts	14	8	1	4	17	9	8	1	6	3	-	6	1	-	1	2	-	4
22 Michigan	172	200	71	71	177	231	53	30	50	38	15	31	39	9	44	42	17	52
23 Minnesota	98	103	51	42	88	100	39	23	32	15	14	12	19	5	18	25	9	26
24 Mississippi	72	74	24	25	84	84	40	12	38	11	6	17	11	-	17	10	6	12
25 Missouri	113	102	49	55	100	93	62	33	51	19	8	11	18	1	24	14	7	14
26 Montana	19	15	8	13	15	8	8	4	3	4	3	4	2	-	3	5	1	5
27 Nebraska	56	68	40	42	38	49	23	17	10	13	11	10	14	11	13	6	1	5
28 Nevada	6	3	5	2	6	1	3	4	4	1	1	-	-	-	-	2	-	2
29 New Hampshire	10	6	-	3	10	4	6	-	6	2	-	2	1	-	1	1	-	1
30 New Jersey	45	36	23	16	58	34	21	15	37	12	0	7	6	1	7	6	1	7
31 New Mexico	10	8	6	7	9	6	4	5	2	4	-	6	1	1	-	1	-	1
32 New York	64	72	20	32	58	84	19	7	11	15	10	12	9	1	9	21	2	26
33 North Carolina	110	111	47	43	124	106	62	26	60	24	13	27	11	5	13	13	3	24
34 North Dakota	27	21	8	12	33	17	9	4	8	4	3	4	7	1	12	7	-	9
35 Ohio	252	240	108	79	258	256	118	67	117	61	22	62	27	10	28	46	9	51
36 Oklahoma	74	85	28	41	92	87	38	14	58	10	3	9	17	9	15	9	2	10
37 Oregon	70	57	26	15	69	55	31	16	25	17	6	20	5	2	7	17	2	17
38 Pennsylvania	81	90	26	30	78	80	31	12	30	16	3	17	10	3	8	24	8	23
39 Rhode Island	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
40 South Carolina	75	63	29	32	86	57	30	10	36	16	8	20	12	3	10	17	8	20
41 South Dakota	7	19	1	13	10	15	3	1	3	1	-	2	1	-	1	2	-	4
42 Tennessee	80	75	26	29	76	78	45	19	38	21	5	23	7	1	6	7	1	9
43 Texas	305	336	112	121	328	363	138	62	122	56	20	75	51	18	56	60	12	75
44 Utah	24	25	14	8	22	26	11	3	9	2	3	1	4	4	6	7	4	6
45 Vermont	4	3	2	1	3	2	-	-	-	1	1	-	1	1	-	2	-	3
46 Virginia	47	42	17	21	46	31	22	9	22	10	3	10	5	2	4	10	3	10
47 Washington	81	64	35	29	93	71	39	22	45	20	9	19	3	1	4	19	3	25
48 West Virginia	17	23	4	8	20	25	11	2	14	4	2	4	1	-	1	-	-	1
49 Wisconsin	103	124	34	54	116	128	42	15	48	17	6	19	18	7	17	26	6	32
50 Wyoming	7	10	2	6	6	10	5	1	5	1	1	-	-	-	-	1	-	1
51 District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52 State Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53 Total	3,603	3,733	1,448	1,520	3,665	3,726	1,639	758	1,561	756	331	772	528	171	555	680	188	777

Table 18. Rail-highway Accidents by States and Type of Motor Vehicles Involved, 1968

	State	Total			Automobile			Buses			Motortrucks			Motorcycles		
		Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons	
			Killed	Injured		Killed	Injured		Killed	Injured		Killed	Injured		Killed	Injured
1	Alabama -----	111	34	118	89	29	98	-	-	-	22	5	20	-	-	-
2	Alaska -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Arizona -----	23	12	18	17	9	13	-	-	-	6	3	5	-	-	-
4	Arkansas -----	63	31	63	43	17	50	-	-	-	20	14	13	-	-	-
5	California -----	221	91	193	164	69	159	-	-	-	48	16	30	9	6	4
6	Colorado -----	20	10	18	15	9	13	-	-	-	5	1	5	-	-	-
7	Connecticut -----	3	2	1	2	2	-	-	-	-	1	-	1	-	-	-
8	Delaware -----	8	4	7	6	4	5	-	-	-	2	-	2	-	-	-
9	Florida -----	140	64	139	109	54	115	1	1	1	26	7	21	4	2	2
10	Georgia -----	139	50	158	117	43	143	-	-	-	19	6	13	3	1	2
11	Hawaii -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Idaho -----	18	15	11	11	11	5	-	-	-	7	4	6	-	-	-
13	Illinois -----	247	89	238	208	80	197	-	-	-	36	6	40	3	3	1
14	Indiana -----	200	73	205	155	62	157	-	-	-	43	11	46	2	-	2
15	Iowa -----	91	40	91	70	33	72	1	-	2	20	7	17	-	-	-
16	Kansas -----	111	43	125	84	32	98	-	-	-	27	11	27	-	-	-
17	Kentucky -----	48	21	43	39	19	37	-	-	-	8	2	5	1	-	1
18	Louisiana -----	88	46	87	67	40	71	-	-	-	21	6	16	-	-	-
19	Maine -----	13	3	14	9	2	8	-	-	-	4	1	6	-	-	-
20	Maryland -----	16	3	16	11	3	13	-	-	-	5	-	3	-	-	-
21	Massachusetts -----	14	1	17	10	1	14	-	-	-	4	-	3	-	-	-
22	Michigan -----	172	71	177	146	57	163	-	-	-	21	9	14	5	5	-
23	Minnesota -----	98	51	88	77	45	72	-	-	-	19	5	15	2	1	1
24	Mississippi -----	72	24	84	54	20	67	-	-	-	17	4	16	1	-	1
25	Missouri -----	113	49	100	87	37	81	-	-	-	26	12	19	-	-	-
26	Montana -----	19	8	15	9	4	7	-	-	-	10	4	8	-	-	-
27	Nebraska -----	56	40	38	39	27	33	-	-	-	17	13	5	-	-	-
28	Nevada -----	6	5	6	4	1	4	-	-	-	2	4	2	-	-	-
29	New Hampshire -----	10	-	10	9	-	9	-	-	-	1	-	1	-	-	-
30	New Jersey -----	45	23	58	34	12	40	1	9	11	9	2	6	1	-	1
31	New Mexico -----	10	6	9	8	5	9	-	-	-	2	1	-	-	-	-
32	New York -----	64	20	58	59	20	55	-	-	-	4	-	2	1	-	1
33	North Carolina -----	110	47	124	88	37	106	-	-	-	21	9	17	1	1	1
34	North Dakota -----	27	8	33	21	7	25	-	-	-	6	1	8	-	-	-
35	Ohio -----	252	108	258	206	94	196	-	-	-	45	14	61	1	-	1
36	Oklahoma -----	74	28	92	58	22	64	1	-	19	15	6	9	-	-	-
37	Oregon -----	70	26	69	48	22	55	-	-	-	22	4	14	-	-	-
38	Pennsylvania -----	81	26	78	69	24	68	-	-	-	12	2	10	-	-	-
39	Rhode Island -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	South Carolina -----	75	29	86	65	27	76	-	-	-	10	2	10	-	-	-
41	South Dakota -----	7	1	10	5	1	8	-	-	-	2	-	2	-	-	-
42	Tennessee -----	80	26	76	66	21	66	-	-	-	12	4	9	2	1	1
43	Texas -----	305	112	328	232	87	264	-	-	-	72	25	63	1	-	1
44	Utah -----	24	14	22	15	7	12	-	-	-	7	5	10	2	2	-
45	Vermont -----	4	2	3	3	1	3	-	-	-	1	1	-	-	-	-
46	Virginia -----	47	17	46	28	12	23	-	-	-	19	5	23	-	-	-
47	Washington -----	81	35	93	62	28	74	-	-	-	19	7	19	-	-	-
48	West Virginia -----	17	4	20	13	3	16	-	-	-	4	1	4	-	-	-
49	Wisconsin -----	103	34	116	84	29	102	-	-	-	17	3	14	2	2	-
50	Wyoming -----	7	2	6	3	2	3	-	-	-	4	-	3	-	-	-
51	District of Columbia -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	State Unknown -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	Total -----	3,603	1,448	3,665	2,818	1,171	2,969	4	10	33	740	243	643	41	24	20

Table 19. Rail-highway Accidents Involving Motor Vehicles, by States and Months, 1968

	State	January	February	March	April	May	June	July	August	September	October	November	December	Year
1	Alabama -----	11	9	9	6	7	5	6	5	8	12	20	13	111
2	Alaska -----	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Arizona -----	1	1	3	1	4	1	-	2	2	4	1	3	23
4	Arkansas -----	9	5	4	5	4	6	3	3	3	9	6	6	63
5	California -----	17	12	16	20	13	19	22	17	12	21	30	22	221
6	Colorado -----	1	1	5	1	-	1	1	1	-	3	4	2	20
7	Connecticut -----	1	-	-	-	-	-	1	-	-	-	-	1	3
8	Delaware -----	-	1	-	-	-	1	1	1	-	1	2	1	8
9	Florida -----	12	25	14	6	12	1	14	5	7	15	14	15	140
10	Georgia -----	12	12	13	6	10	10	13	10	5	10	14	24	139
11	Hawaii -----	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Idaho -----	3	2	-	1	-	-	-	1	1	5	1	4	18
13	Illinois -----	28	22	22	15	25	14	15	21	21	17	29	18	247
14	Indiana -----	27	20	22	11	17	7	7	13	14	20	21	21	200
15	Iowa -----	9	8	9	3	7	6	3	9	7	9	7	14	91
16	Kansas -----	9	13	8	8	5	6	6	10	7	9	16	14	111
17	Kentucky -----	5	7	5	2	4	2	1	4	6	2	3	7	48
18	Louisiana -----	11	7	8	7	2	9	4	7	2	5	14	12	88
19	Maine -----	2	1	1	1	-	1	1	2	1	1	1	1	13
20	Maryland -----	2	3	2	-	-	2	-	-	1	2	1	3	16
21	Massachusetts -----	3	1	1	-	2	-	1	2	-	1	1	2	14
22	Michigan -----	16	20	13	13	13	5	12	20	11	14	18	17	172
23	Minnesota -----	14	10	15	5	4	9	7	9	2	7	9	7	98
24	Mississippi -----	7	11	8	3	9	3	3	4	2	3	10	9	72
25	Missouri -----	5	10	14	6	14	6	10	4	9	13	15	7	113
26	Montana -----	-	3	1	1	-	1	2	2	1	4	1	3	19
27	Nebraska -----	3	4	3	5	2	1	4	8	6	7	4	9	56
28	Nevada -----	-	1	1	-	-	-	-	-	-	3	1	-	6
29	New Hampshire -----	1	-	-	-	-	-	2	2	2	1	1	1	10
30	New Jersey -----	7	5	4	3	1	7	4	2	3	3	5	1	45
31	New Mexico -----	2	-	1	1	-	-	2	2	-	1	-	1	10
32	New York -----	11	9	3	4	8	2	2	3	2	6	7	7	64
33	North Carolina -----	10	15	11	4	10	7	6	1	10	18	9	9	110
34	North Dakota -----	3	2	-	1	1	1	2	3	2	3	4	5	27
35	Ohio -----	33	25	20	12	18	17	13	10	16	25	26	37	252
36	Oklahoma -----	8	3	7	5	6	6	4	6	6	6	9	8	74
37	Oregon -----	11	7	9	5	6	2	4	3	5	5	9	4	70
38	Pennsylvania -----	10	7	8	7	8	5	5	4	4	6	9	8	81
39	Rhode Island -----	-	-	-	-	-	-	-	-	-	-	-	-	-
40	South Carolina -----	5	9	5	2	8	9	5	6	4	5	11	6	75
41	South Dakota -----	3	-	1	-	-	-	1	-	-	1	1	-	7
42	Tennessee -----	8	7	9	4	3	4	5	6	5	11	12	6	80
43	Texas -----	31	28	30	22	15	23	11	26	21	29	36	33	305
44	Utah -----	5	1	-	3	-	1	2	2	4	3	2	1	24
45	Vermont -----	-	-	-	-	1	-	-	-	-	2	-	1	4
46	Virginia -----	6	4	4	3	3	2	4	3	2	3	4	9	47
47	Washington -----	10	6	8	5	3	4	5	6	6	9	10	9	81
48	West Virginia -----	2	1	1	-	1	1	-	-	3	3	3	2	17
49	Wisconsin -----	14	8	5	11	5	6	8	14	6	8	9	9	103
50	Wyoming -----	1	-	1	-	1	1	1	1	1	-	-	-	7
51	District of Columbia -----	-	-	-	-	-	-	-	-	-	-	-	-	-
52	State Unknown -----	-	-	-	-	-	-	-	-	-	-	-	-	-
53	Total -----	389	346	324	218	252	214	223	260	230	345	410	392	3,603

Table 20. Rail-Highway Accidents Involving Trains and Motor Vehicles,
Classified as to Kind of Crossing Protection, Class I Railroads, 1968

Railroad	Number	Lowered gates	Trainman	Watchman	Audible & visible signal	Audible Signal	Visible Signal	Signal or sign not of a type indicating ap- proach of train
Eastern district								
Akron, Canton & Youngstown -----	1	-	-	-	1	-	-	-
Ann Arbor -----	6	-	-	-	1	1	-	4
Baltimore & Ohio -----	104	1	2	1	8	-	35	57
Bangor & Aroostook -----	5	-	1	-	-	-	-	4
Bessemer & Lake Erie -----	3	-	-	-	-	-	-	3
Boston & Maine -----	16	1	-	1	9	1	-	4
Canadian Pacific Lines in Maine -----	1	-	-	-	1	-	-	-
Central R. R. Co. of New Jersey -----	9	-	-	-	1	1	-	7
Central Vermont -----	1	-	-	-	-	-	-	1
Chesapeake & Ohio -----	82	3	2	-	23	1	15	38
Chicago & Eastern Illinois -----	11	2	-	-	2	-	-	7
Chicago & Illinois Midland -----	2	-	-	-	1	-	-	1
Delaware & Hudson -----	3	1	-	-	-	1	1	-
Detroit & Toledo Shore Line -----	-	-	-	-	-	-	-	-
Detroit, Toledo & Ironton -----	23	1	-	-	3	-	4	15
Elgin, Joliet & Eastern -----	7	1	-	-	1	1	-	4
Erie Lackawanna -----	47	5	3	1	6	-	25	7
Grand Trunk Western -----	46	3	-	-	22	-	2	19
Illinois Terminal -----	11	-	-	-	4	-	-	7
Lehigh Valley -----	10	-	-	-	3	-	-	7
Long Island -----	12	2	-	-	2	1	4	3
Maine Central -----	6	-	-	-	3	-	-	3
Missouri-Illinois -----	-	-	-	-	-	-	-	-
Monon -----	7	-	-	-	-	-	1	6

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1968 - Continued

Railroad	Number	Lowered gates	Trainman	Watchman	Audible & visible signal	Audible Signal	Visible Signal	Signal or sign not of a type indicating approach of train
Eastern district - Continued								
Monongahela -----	-	-	-	-	-	-	-	-
New York, New Haven & Hartford -----	8	-	-	-	7	-	1	-
Norfolk & Western -----	173	7	-	-	21	-	34	111
Penn Central -----	330	13	10	2	35	8	74	188
Pennsylvania-Reading Seashore Lines --	20	-	1	-	3	1	-	15
Pittsburgh & Lake Erie -----	2	-	-	-	-	-	-	2
Reading -----	15	1	1	-	-	-	6	7
Richmond, Fredericksburg & Potomac ---	1	-	-	-	-	-	1	-
Western Maryland -----	7	-	-	-	-	-	3	4
Total -----	969	41	20	5	157	16	206	524
Southern district								
Alabama Great Southern -----	13	-	-	-	5	-	1	7
Central of Georgia -----	26	-	-	-	4	-	-	22
Cincinnati, New Orleans & Tex. Pac. --	9	-	-	-	2	-	-	7
Clinchfield -----	3	-	-	-	-	-	1	2
Florida East Coast -----	13	3	-	-	4	-	-	6
Georgia -----	4	-	-	-	-	-	-	4
Georgia Southern & Florida -----	7	-	-	-	-	-	-	7
Gulf, Mobile & Ohio -----	37	2	-	-	6	1	1	27
Illinois Central -----	160	2	4	-	37	3	14	100
Louisville & Nashville -----	98	2	1	-	19	4	4	68

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1968 - Continued

Railroad	Number	Lowered gates	Trainman	Watchman	Audible & visible signal	Audible Signal	Visible Signal	Signal or sign not of a type indicating approach of train
Southern district - continued								
New Orleans & Northeastern -----	7	-	-	-	3	-	-	4
Norfolk Southern -----	10	-	-	-	-	-	-	10
Piedmont & Northern -----	5	-	1	-	1	-	-	3
Savannah & Atlanta -----	2	-	-	-	-	-	-	2
Seaboard Coast Line -----	275	4	7	-	51	2	31	180
Southern -----	172	-	3	-	26	-	-	143
Total -----	841	13	16	-	158	10	52	592
Western district								
Atchison, Topeka & Santa Fe -----	211	6	4	-	138	-	10	53
Chicago & North Western -----	105	4	1	1	66	-	11	22
Chicago, Burlington & Quincy -----	86	-	1	-	27	-	6	52
Chicago Great Western 1/ -----	3	-	-	-	-	-	1	2
Chicago, Milwaukee, St. Paul & Pacific	98	2	4	-	22	1	8	61
Chicago, Rock Island & Pacific -----	89	6	2	-	19	1	4	57
Colorado & Southern -----	9	-	-	-	2	-	-	7
Denver & Rio Grande Western -----	8	-	-	-	2	-	1	5
Duluth, Missabe & Iron Range -----	2	-	-	-	-	-	1	1
Duluth, Winnipeg & Pacific -----	1	-	-	-	-	-	-	1

1/ Six months figures, merged with Chicago & North Western, 7/1/68.

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to
Kind of Crossing Protection, Class I Railroads, 1968 - Continued

Railroad	Number	Lowered gates	Trainman	Watchman	Audible & visible signal	Audible Signal	Visible Signal	Signal or sign not of a type indicating ap- proach of train
Western district - continued								
Fort Worth & Denver -----	21	-	-	-	6	-	2	13
Great Northern -----	75	2	2	-	11	2	12	46
Kansas City Southern -----	19	-	-	-	6	-	-	13
Lake Superior & Ishpeming -----	-	-	-	-	-	-	-	-
Louisiana & Arkansas -----	17	-	-	-	7	-	-	10
Missouri-Kansas-Texas -----	48	-	2	-	12	2	4	28
Missouri Pacific -----	128	-	1	-	25	-	21	81
Northern Pacific -----	69	-	2	-	24	-	-	43
Northwestern Pacific -----	5	-	-	-	3	-	-	2
St. Louis-San Francisco -----	118	1	5	-	41	1	4	66
St. Louis Southwestern -----	30	-	1	-	10	-	18	1
Soo Line -----	50	-	-	-	8	-	10	32
Southern Pacific -----	269	9	4	-	105	-	35	116
Spokane, Portland & Seattle -----	16	-	-	-	1	-	-	15
Texas & Pacific -----	45	-	-	-	6	-	3	36
Toledo, Peoria & Western -----	3	-	-	-	1	-	1	1
Union Pacific -----	107	-	3	-	14	2	12	76
Western Pacific -----	19	2	-	-	11	-	-	6
Total -----	1,651	32	32	1	567	9	164	846

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1968 - Concluded

RECAPITULATION

Railroad	Number	Lowered gates	Trainman	Watchman	Audible & visible signal	Audible Signal	Visible Signal	Signal or sign not of a type indicating approach of train
All districts								
Eastern district -----	969	41	20	5	157	16	206	524
Southern district -----	841	13	16	-	158	10	52	592
Western district -----	1,651	32	32	1	567	9	164	846
Class I railroads (excluding Switching and Terminal Co.'s) -----	3,461	86	68	6	882	35	422	1,962
Class I Switching and Terminal Companies -----	38	7	5	1	6	-	10	9
Railroads other than Class I -----	104	6	6	1	29	-	10	52
Total, all classes -----	3,603	99	79	8	917	35	442	2,023