



FOR THE YEAR ENDED DECEMBER 31, 1971

RAIL-HIGHWAY GRADE-CROSSING ACCIDENTS

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

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DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

PREFACE

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

The purpose of this report is to direct attention to the hazards inherent at public grade crossings, and to provide basic statistical information in support of the overall Department of Transportation program to promote the safety of both rail and highway traffic at crossings.

The 1971 figures show a 4.7 percent decrease, as compared with 1970, in the number of grade crossing accidents and a 1.8 percent decline in the number of casualties. Data in this report is not such as to identify the vast combination of factors leading to such decrease; however, the tabular information provides valuable material for use in identifying specific trends and conditions surrounding crossing accidents.

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

J. W. Ingram
Administrator

SUMMARY

Rail-Highway Grade Crossing Accidents of All Kinds

In 1971, there were 3,392 crossing accidents involving pedestrians, automobiles, motortrucks, buses, motorcycles, and other vehicles or machines. The above accidents resulted in 1,356 deaths and 3,332 injuries, and show what is hopefully a continuing decreasing trend in all three categories.

The following three tables show data for the ten-year period, 1962 - 1971.

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

Year	No. of accidents	Killed	Injured
Average 1962-71	3,667	1,486	3,627
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
1969	3,774	1,490	3,669
1970	3,559	1,440	3,336
1971	3,392	1,356	3,332

Table B. Ratios of the number of crossing accidents and casualties to the average of the 1962-1971 period.

Year	No. of accidents	Killed	Injured
Average number, 1962-1971	3,667	1,486	3,627
	Percent	Percent	Percent
1962-1971	100.00	100.00	100.00
1962	85.87	83.51	88.01
1963	91.98	87.62	97.16
1964	102.40	103.84	104.30
1965	104.17	103.23	104.80
1966	111.73	119.78	111.47
1967	107.23	109.83	105.10
1968	104.06	104.04	104.05
1969	102.92	100.27	101.16
1970	97.05	96.90	91.98
1971	92.50	91.25	91.87

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

Year	Killed	Injured
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
1969	0.395	0.972
1970	0.405	0.937
1971	0.400	0.982

Table C shows that with respect to total casualties the severity of crossing accidents in 1971 was slightly lower than in the preceding year.

Grade Crossing Accidents Involving Motor Vehicles

Of the 3,392 crossing accidents of all kinds in 1971, 3,224 involved collisions between railroad movements and motor vehicles, and resulted in 1,267 deaths and 3,253 injuries. In 2,269 collisions, or 70.38 percent, trains struck motor vehicles, resulting in 980, or 77.35 percent, of the deaths and in 2,245, or 69.01 percent of the injuries. In the other 955 collisions, or 29.62 percent, motor vehicles struck the sides of train movements, resulting in 287 or 22.65 percent, of the deaths and in 1,008 or 30.99 percent, of the injuries.

The number of crossing accidents in 1971 involving collisions with motor vehicles show a decrease from 1970. In comparison with last year, there was a decrease of 95 in the number of deaths. However, the number of injuries increased by 16.

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)	
1962	2,944	79,782	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
1969	3,572	106,957	33.4
1970	3,377	111,291	30.3
1971	3,224	116,254	27.73

Types of Crossing Protection Provided

Of the 3,224 collisions, 1,351, or 41.90 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 1,873, or 58.10 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 210,954 rail-highway crossings at grade. Of these crossings, 46,674 or 22.13 percent, were specially protected; 164,280, or 77.87 percent, were not specially protected.

Times and Weather Conditions Involved in Motor Vehicle Collisions

Of the 3,224, crossing collisions, 2,020 or 62.66 percent, occurred in daylight, and 1,204 or 37.34 percent, took place at night. There were 2,215 collisions, or 68.70 percent, in clear weather, and 1,009 or 31.30 percent, under cloudy or inclement weather conditions.

Types of Motor Vehicles Involved in Crossing Accidents

Of the 3,224 collisions between trains and motor vehicles, automobiles were involved in 2,439, or 75.65 percent; buses in 9, or 0.28 percent; motortrucks in 733, or 22.74 percent, and motorcycles in 43, or 1.33 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, nontrespassers, or trespassers.

Table 1. Rail-Highway Accidents of All Kinds and Casualties, 1971-1970*

Cause of accident	Accidents				Killed				Injured			
	1971		1970		1971		1970		1971		1970	
	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 -----	91	2.68	103	2.89	69	5.09	66	4.58	23	0.69	38	1.14
Passenger autos -----	2,439	71.90	2,587	72.69	975	71.90	1,067	74.10	2,567	77.04	2,644	79.26
Motor buses -----	9	.27	8	.21	6	.44	2	.13	54	1.62	9	.26
Motortrucks -----	733	21.61	734	20.62	259	19.10	268	18.61	608	18.25	552	16.55
Motorcycles -----	43	1.27	48	1.34	27	1.99	25	1.74	24	.72	32	.96
Other vehicles or machines -----	40	1.18	34	1.05	13	.96	10	.70	24	.72	22	.66
Pedestrians passing over or under -----	9	.27	7	.19	3	.22	1	.07	6	.18	6	.18
Miscellaneous -----	28	.82	38	1.01	4	.30	1	.07	26	.78	33	.99
Total -----	3,392	100.00	3,559	100.00	1,356	100.00	1,440	100.00	3,332	100.00	3,336	100.00

* Nontrain accidents excluded.

Table 2. Nature of Rail-Highway Accidents Involving Motor Vehicles, 1971-1968

Motor vehicle:	Number of accidents				Killed				Injured			
	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968
Struck by train -----	2,269	2,269	2,389	2,395	980	1,052	1,035	1,089	2,245	2,091	2,267	2,333
Ran into side of train ---	955	1,108	1,183	1,208	287	310	346	359	1,008	1,146	1,311	1,332
Total -----	3,224	3,377	3,572	3,603	1,267	1,362	1,381	1,448	3,253	3,237	3,578	3,665

Percent of total

Motor vehicle:	70.38	67.19	66.88	66.47	77.35	77.24	74.95	75.21	69.01	64.60	63.36	63.66
Struck by train -----	29.62	32.81	33.12	33.53	22.65	22.76	25.05	24.79	30.99	35.40	36.64	36.34
Ran into side of train ---												
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 1971		Killed in 1971		Injured in 1971	
	Daylight	Dark	Daylight	Dark	Daylight	Dark
Struck by train:						
Passenger automobiles ----	1,116	591	518	250	1,107	647
Motor buses -----	7	-	5	-	51	-
Motortrucks -----	438	102	162	32	352	82
Motorcycles -----	10	5	8	5	4	2
Total -----	1,571	698	693	287	1,514	731
Ran into side of train:						
Passenger automobiles ---	301	431	78	129	340	473
Motor buses -----	1	1	-	1	2	1
Motortrucks -----	130	63	39	26	116	58
Motorcycles -----	17	11	7	7	12	6
Total -----	449	506	124	163	470	538

Table 3. Accidents Involving Motor Vehicles, Classified as "Ran into Side of Train," 1971-1969

Part of train struck	Number of accidents			Percent of total			Number in 1971	
	1971	1970	1969	1971	1970	1969	Daylight	Dark
Head end of train								
Motive power pulling or running light -----	610	719	738	63.88	64.89	62.38	366	244
Lead car shoved -----	45	52	64	4.71	4.69	5.41	15	30
Other part at or near head end of train <u>1/</u> -----	1	-	2	.10	-	.17	1	-
Sub-total -----	656	771	804	68.69	69.58	67.96	382	274
Last Unit of train -----	21	39	32	2.20	3.52	2.70	9	12
Other parts of train consisting of more than 3 units:								
First quarter of train -----	107	123	150	11.21	11.10	12.68	40	67
Second quarter of train -----	51	69	65	5.34	6.23	5.50	6	45
Third quarter of train -----	49	39	45	5.13	3.52	3.80	3	46
Fourth quarter of train <u>2/</u> -----	66	63	79	6.91	5.69	6.68	8	58
Sub-total -----	273	294	339	30.79	26.54	28.66	57	216
Part of train not reported -----	5	4	8	.52	.36	.68	1	4
Grand Total -----	955	1,108	1,183	100.00	100.00	100.00	449	506

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, 1971-1968

Part of 24-hour period	Total number of accidents				Percent of total				Struck by train in 1971		Ran into side of train in 1971	
	1971	1970	1969	1968	1971	1970	1969	1968	Persons		Persons	
									Killed	Injured	Killed	Injured
Daylight -----	2,020	2,096	2,208	2,167	62.66	62.07	61.81	60.14	693	1,514	124	470
Dark -----	1,204	1,281	1,364	1,436	37.34	37.93	38.19	39.86	287	731	163	538
Total -----	3,224	3,377	3,572	3,603	100.00	100.00	100.00	100.00	980	2,245	287	1,008

Table 5. Rail-Highway Accidents Involving Motor Vehicles, According to Hour, 1971-1968

Hour	Total				Struck by train				Ran into side of train			
	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968
Midnight to 12:59 A.M. --	113	110	116	126	53	57	50	60	60	53	66	66
1 to 1:59 A.M. ----	105	97	113	118	48	32	45	46	57	65	68	72
2 to 2:59 " " ----	90	101	106	102	35	30	34	37	55	71	72	65
3 to 3:59 " " ----	60	65	63	68	30	32	23	25	30	33	40	43
4 to 4:59 " " ----	39	35	46	55	13	13	17	24	26	22	29	31
5 to 5:59 " " ----	44	46	75	43	24	30	34	25	20	16	41	18
6 to 6:59 " " ----	106	110	118	127	70	84	86	89	36	26	32	38
7 to 7:59 " " ----	161	174	179	187	120	127	144	134	41	47	35	53
8 to 8:59 " " ----	148	172	182	170	117	119	143	135	31	53	39	35
9 to 9:59 " " ----	131	161	162	162	108	120	117	129	23	41	45	33
10 to 10:59 " " ----	168	160	162	188	133	131	124	149	35	29	38	39
11 to 11:59 " " ----	173	175	193	165	144	141	151	122	29	34	42	43
Noon to 12:59 P.M. ----	183	155	169	167	145	116	127	125	38	39	42	42
1 to 1:59 " " ----	173	180	186	183	135	131	133	144	38	49	53	39
2 to 2:59 " " ----	152	179	204	176	118	136	159	128	34	43	45	48
3 to 3:59 " " ----	185	210	213	199	139	168	160	154	46	42	53	45
4 to 4:59 " " ----	200	179	216	225	160	143	176	171	40	36	40	54
5 to 5:59 " " ----	188	197	203	184	148	153	153	125	40	44	50	59
6 to 6:59 " " ----	165	185	157	201	122	123	107	148	43	62	50	53
7 to 7:59 " " ----	177	154	160	158	116	99	105	95	61	55	55	63
8 to 8:59 " " ----	109	118	137	140	77	67	79	89	32	51	58	51
9 to 9:59 " " ----	115	138	153	162	78	74	90	96	37	64	63	66
10 to 10:59 " " ----	119	151	131	143	64	83	76	62	55	68	55	81
11 to 11:59 " " ----	120	125	128	154	72	60	56	83	48	65	72	71
Total -----	3,224	3,377	3,572	3,603	2,269	2,269	2,389	2,395	955	1,108	1,183	1,208

Table 6. Rail-Highway Accidents Involving Motor Vehicles, According to Day, 1971-1968

Day	Total				Struck by train				Ran into side of train			
	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968
Sunday -----	329	330	365	377	230	204	230	244	99	126	135	133
Monday -----	461	472	504	501	334	341	346	348	127	131	158	153
Tuesday -----	459	487	483	553	334	338	333	373	125	149	150	180
Wednesday -----	447	481	524	508	306	328	350	342	141	153	174	166
Thursday -----	486	477	518	830	335	329	336	365	151	148	182	165
Friday -----	535	582	573	562	390	389	374	346	145	193	199	216
Saturday -----	507	548	605	572	340	340	420	377	167	208	185	195
Total -----	3,224	3,377	3,572	3,603	2,269	2,269	2,389	2,395	955	1,108	1,183	1,208

Table 7. Rail-Highway Accidents Involving Motor Vehicles, by Month, 1971-1968

Month	Total				Struck by train				Ran into side of train			
	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968
January -----	341	382	367	389	251	262	255	248	90	120	112	141
February -----	290	263	318	346	223	181	224	239	67	82	94	107
March -----	295	273	328	324	226	183	207	215	69	90	121	109
April -----	263	241	242	218	199	169	156	150	64	72	86	68
May -----	223	222	248	252	134	145	170	168	89	77	78	84
June -----	222	232	236	214	149	162	157	139	73	71	79	75
July -----	214	223	211	223	142	146	140	146	72	77	71	77
August -----	201	221	264	260	138	133	164	171	63	88	100	89
September -----	242	275	253	230	155	181	159	141	87	94	94	89
October -----	292	319	341	345	198	218	235	211	94	101	106	134
November -----	310	332	364	410	223	222	245	283	87	110	115	127
December -----	331	393	400	392	231	267	273	284	100	126	127	108
Total -----	3,224	3,377	3,572	3,603	2,269	2,269	2,389	2,395	955	1,108	1,183	1,208

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Table 8. Types of Motor Vehicles Involved in Crossing Accidents, 1971 - 1968

Motor vehicle	Number of accidents				Year 1971			
					Number of motor vehicles registered (thousands)	Number of accidents per million vehicles registered	Number of accidents occurring	
	1971	1970	1969	1968			Daylight	Dark
Automobile -----	2,439	2,587	2,762	2,818	92,753	26.30	1,417	1,022
Bus -----	9	8	12	4	398	22.61	8	1
Motortruck -----	733	734	764	740	19,759	37.10	568	165
Motorcycle -----	43	48	34	41	3,344	12.86	27	16
Total -----	3,224	3,377	3,572	3,603	116,254	27.73	2,020	1,204

Table 9. Rail-Highway Accidents Involving Motor Vehicles, by Kind of Train, 1971 - 1968

Kind of train	Train Miles Class I railroads (thousands)		Number of accidents	Number per million Train Miles				Number of accidents occurring in 1971	
	1971	1970		1971	1970	1969	1968	Daylight	Dark
	Freight -----	429,521	427,116	2,592	6.03	6.05	6.08	6.06	1,698
Passenger ^{2/} -----	52,590	92,727	228	4.34	3.73	4.01	3.92	166	62
Work ^{2/} -----	5,425	5,636	46	8.47	9.40	9.99	8.08	36	10
Yard (switching) & other ^{1/} ---	229,519	261,102	358	1.56	1.51	1.72	1.81	120	238
Total -----	717,055	786,581	3,224	4.50	4.29	4.42	4.40	2,020	1,204

^{1/} Excluding switching and terminal companies.

^{E/} Estimate.

^{2/} Excludes AMTRACK train miles.

Table 10. Rail-Highway Accidents Involving Motor Vehicles, by Type of Crossing Protection, 1971

Type of crossing protection at time of accident	Killed	Injured	Number of accidents	Number of crossings 1/ on Dec. 31, 1970	Accidents per 100 crossings	Number occurring		Struck by train		Ran into side of train	
						Daylight	Dark	Daylight	Dark	Daylight	Dark
Lowered gates -----	60	117	138	10,412	1.33	45	93	39	64	6	29
Trainman -----	5	35	32	-	-	5	27	-	8	5	19
Watchman -----	-	5	3	428	.70	3	-	2	-	1	-
Audible & Visible signal -----	265	648	673	29,960	2.25	391	282	281	179	110	103
Audible signal -----	10	22	24	1,273	1.89	19	5	16	5	3	-
Visible signal -----	178	468	481	4,601	10.45	289	192	214	117	75	75
Total special -----	518	1,295	1,351	46,674	2.89	752	599	552	373	200	226
Signal or sign not of a type indicating approach of train -----	749	1,958	1,873	164,280	1.14	1,268	605	1,019	325	249	280
Grand total -----	1,267	3,253	3,224	210,954	1.53	2,020	1,204	1,571	698	449	506

1/ On class I line-haul railroads and switching and terminal companies. Data for 1971 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, 1971-1968

Operation of crossing protection	Number of accidents				Year 1971						
					Number occurring		Struck by train		Ran into side of train		
	1971	1970	1969	1968	Daylight	Dark	No. occurring		No. occurring		
							Daylight	Dark	Daylight	Dark	
Automatic:											
Both sides of crossing ---	1,278	1,327	1,380	1,441	722	556	531	351	191	205	
Side of approach -----	27	18	27	31	14	13	12	11	2	2	
Opposite side -----	11	17	7	13	8	3	7	2	1	1	
Manual:											
Both sides of crossing ---	6	22	8	6	3	3	2	2	1	1	
Side of approach -----	31	48	67	84	6	25	1	8	5	17	
Opposite side -----	-	1	4	2	-	-	-	-	-	-	
Other: ^{1/}											
Both sides of crossing ---	1,597	1,701	1,776	1,744	1,078	519	858	279	220	240	
Side of approach -----	149	139	163	157	97	52	80	27	17	25	
Opposite side -----	116	89	111	100	86	30	74	16	12	14	
Not reported -----	9	15	29	25	6	3	6	2	-	1	
Total -----	3,224	3,377	3,572	3,603	2,020	1,204	1,571	698	449	506	

^{1/} Not of a type indicating approach of train.

Table 12. Crossing Accidents After Dark Involving Motor Vehicles, According to Illumination of Crossing, 1971-1968

Crossing illumination	Accidents after dark												Year 1971	
	Number of Accidents				Struck by train				Ran into side of train				Persons	
	1971	1970	1969	1968	1971	1970	1969	1968	1971	1970	1969	1968	Killed	Injured
Lighted -----	572	574	648	647	355	316	347	357	217	258	301	290	196	639
Not lighted -----	632	707	716	789	343	351	361	399	389	356	355	390	254	630
Total -----	1,204	1,281	1,364	1,436	698	667	708	756	506	614	656	680	450	1,269

Table 13. Rail-Highway Accidents Involving Motor Vehicles, According to Speed and Kind of Train Involved, 1971

Speed of train (miles per hour)	Number of accidents	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
0 - 9 1/2 -----	534	87	115	67	265	297	11.46	5	2.19	232	57.43
10 - 19 -----	507	214	140	82	71	384	14.81	11	4.83	112	27.72
20 - 29 -----	635	314	149	109	63	573	22.11	26	11.40	36	8.91
30 - 39 -----	599	345	118	84	52	557	21.49	26	11.40	16	3.96
40 - 49 -----	502	315	86	70	31	462	17.82	34	14.91	6	1.49
50 - 59 -----	277	181	56	23	17	234	9.03	41	17.98	2	.49
60 - 69 -----	121	84	25	7	5	78	3.01	43	18.86	-	-
70 - 79 -----	38	25	7	5	1	2	.08	36	15.79	-	-
80 - 89 -----	5	4	1	-	-	1	.04	4	1.76	-	-
90 and over ----	6	2	1	2	1	4	.15	2	.88	-	-
Total -----	3,224	1,571	698	449	506	2,592	100.00	228	100.00	404	100.00

1/ Includes standing trains.

Table 14. Rail-Highway Accidents Involving Motor Vehicles, According to Weather Conditions, 1971

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-----	2,215	68.70	1,131	454	300	330
Cloudy -----	638	19.79	310	153	78	97
Rain -----	210	6.52	72	64	39	35
Snow, sleet or hail --	79	2.45	38	19	17	5
Fog -----	79	2.45	18	8	14	39
Dust -----	-	-	-	-	-	-
Not Reported -----	3	.09	2	-	1	-
Total -----	3,224	100.00	1,571	698	449	506

Table 15. Rail-Highway Accidents Involving Motor Vehicles, According to Number of Cars in Train and Kind of Train, 1971

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/ -----	185	83	1	101	5.74	3.20	.44	25.00	101	84
1 - 9 -----	765	420	178	167	23.73	16.20	78.07	41.33	503	262
10 - 19 -----	394	278	43	73	12.22	10.73	18.86	18.07	241	153
20 - 29 -----	265	236	3	26	8.22	9.11	1.31	6.44	176	89
30 - 39 -----	209	194	2	13	6.48	7.48	.88	3.22	132	77
40 - 49 -----	181	175	-	6	5.61	6.75	-	1.49	106	75
50 - 59 -----	175	168	-	7	5.43	6.48	-	1.73	97	78
60 - 69 -----	198	195	1	2	6.14	7.52	.44	.49	125	73
70 - 79 -----	159	154	-	5	4.93	5.94	-	1.24	108	51
80 - 89 -----	179	179	-	-	5.56	6.91	-	-	118	61
90 - 99 -----	175	174	-	1	5.43	6.71	-	.25	115	60
100 - 109 -----	112	112	-	-	3.47	4.32	-	-	67	45
110 - 119 -----	92	92	-	-	2.85	3.55	-	-	55	37
120 - 129 -----	64	63	-	1	1.99	2.43	-	.25	41	23
130 - 139 -----	34	34	-	-	1.05	1.31	-	-	18	16
140 - 149 -----	23	23	-	-	.71	.89	-	-	11	12
150 and over -----	9	9	-	-	.28	.35	-	-	4	5
Not reported or unknown -----	5	3	-	2	.16	.12	-	.49	2	3
Total -----	3,224	2,592	228	404	100.00	100.00	100.00	100.00	2,020	1,204

1/ Locomotives only.

Table 16. Rail-Highway Accidents Involving Motor Vehicles, According to Speed of Motor Vehicles, 1971

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 -----	362	11.23	116	383	259	81	295	100	33	82	1	1	3	2	1	3
1 - 9 -----	353	10.95	118	338	214	83	191	97	29	98	22	4	23	20	2	26
10 - 19 -----	562	17.43	207	603	325	129	336	144	55	170	53	19	51	40	4	46
20 - 29 -----	527	16.35	214	521	272	132	242	127	55	146	58	13	62	60	14	71
30 - 39 -----	414	12.84	175	420	178	107	161	77	36	80	74	15	74	85	17	105
40 - 49 -----	224	6.95	95	225	69	40	58	28	17	30	60	13	70	67	25	67
50 - 59 -----	162	5.03	92	159	42	31	28	22	12	20	46	17	58	52	32	53
60 and over -----	92	2.85	57	83	20	14	15	4	6	2	33	14	35	35	23	31
High speed ^{1/} -----	14	.43	7	16	5	4	8	-	-	-	3	1	2	6	2	6
Not reported -----	514	15.94	186	505	187	72	180	99	44	103	89	27	92	139	43	130
Total -----	3,224	100.00	1,267	3,253	1,571	693	1,514	698	287	731	449	124	470	506	163	538

^{1/} Miles per hour not known.

Table 17, Rail-highway Accidents Involving Motor Vehicles, by States, 1971-1970

State	Total number of accidents		Total persons				Struck by train						Ran into side of train					
			Killed		Injured		Daylight			Dark			Daylight			Dark		
	1971	1970	1971	1970	1971	1970	Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons		Number of accidents	Persons	
								Killed	Injured		Killed	Injured		Killed	Injured		Killed	Injured
1 Alabama	84	92	22	44	104	85	44	9	54	19	6	17	11	2	20	10	5	13
2 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Arizona	14	19	1	12	14	14	8	-	-	-	-	-	2	-	-	-	-	-
4 Arkansas	68	52	22	21	65	53	30	17	27	15	2	13	12	8	9	11	2	16
5 California	204	203	87	83	190	205	90	42	70	47	24	45	18	7	16	49	14	59
6 Colorado	29	29	7	15	25	20	8	2	6	9	3	9	6	1	5	6	1	5
7 Connecticut	5	3	1	1	3	2	5	1	-	-	-	-	-	-	-	-	-	-
8 Delaware	2	7	-	3	2	9	-	-	-	-	-	-	-	-	-	-	-	-
9 Florida	138	146	69	51	118	151	77	46	58	24	13	24	22	6	24	15	4	12
10 Georgia	121	146	50	48	133	147	62	33	63	28	10	37	15	3	17	16	4	16
11 Hawaii	-	1	-	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-
12 Idaho	22	28	18	15	19	24	15	11	15	6	7	3	1	-	1	-	-	-
13 Illinois	242	234	89	113	275	201	113	44	128	56	18	62	35	11	30	38	16	55
14 Indiana	211	217	96	94	207	218	109	60	95	46	15	64	25	9	27	31	12	21
15 Iowa	73	80	26	42	74	62	47	19	49	6	1	6	6	2	5	14	4	14
16 Kansas	87	85	40	49	93	61	35	20	31	16	9	21	14	2	19	22	9	22
17 Kentucky	50	58	22	27	48	56	30	10	30	11	7	10	2	1	1	7	2	7
18 Louisiana	75	84	32	32	78	89	36	24	37	12	2	11	13	3	14	14	3	16
19 Maine	11	6	4	-	7	4	9	-	4	-	-	-	-	-	-	-	-	-
20 Maryland	20	15	6	9	15	7	12	3	7	2	1	2	3	1	2	3	1	4
21 Massachusetts	13	15	5	5	11	18	6	4	3	1	-	1	1	-	1	5	1	6
22 Michigan	152	165	41	58	169	158	59	24	59	41	9	49	28	3	37	24	5	24
23 Minnesota	76	79	35	52	74	63	40	16	40	14	10	16	10	4	7	12	5	11
24 Mississippi	76	91	26	31	97	95	30	9	49	24	13	26	10	1	8	12	3	14
25 Missouri	100	102	44	42	112	96	61	32	73	21	9	20	9	1	11	9	2	8
26 Montana	20	21	11	14	18	19	11	10	7	-	-	-	3	-	3	6	1	8
27 Nebraska	60	35	33	10	57	31	28	17	19	14	8	19	14	7	14	4	1	5
28 Nevada	4	2	-	-	5	2	3	-	4	-	-	-	1	-	-	-	-	-
29 New Hampshire	2	4	-	3	2	3	-	-	-	-	-	-	2	-	2	-	-	-
30 New Jersey	31	26	14	7	27	29	7	1	6	13	7	10	7	4	8	4	2	3
31 New Mexico	8	8	8	3	7	6	3	2	1	1	-	1	3	5	5	1	1	-
32 New York	62	64	21	13	62	67	24	9	24	17	8	17	16	4	15	5	1	6
33 North Carolina	83	100	37	33	84	101	50	23	42	14	7	18	7	1	11	12	6	13
34 North Dakota	26	26	11	6	22	29	12	4	12	5	3	3	3	3	2	6	2	5
35 Ohio	197	242	80	96	192	247	91	37	94	49	25	40	18	3	19	39	15	39
36 Oklahoma	79	69	29	20	82	65	42	19	41	7	2	5	17	5	23	13	3	13
37 Oregon	52	50	17	15	51	47	25	10	24	14	5	14	6	-	6	7	2	7
38 Pennsylvania	67	79	14	23	68	73	32	6	34	15	6	11	10	-	12	10	2	7
39 Rhode Island	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
40 South Carolina	73	65	31	28	81	74	39	19	38	21	11	23	6	-	8	7	1	12
41 South Dakota	12	12	7	4	10	13	3	-	4	2	-	2	3	4	-	-	-	-
42 Tennessee	81	60	40	22	74	55	53	29	44	14	5	12	5	2	3	4	3	4
43 Texas	273	322	90	116	266	320	123	38	120	64	21	69	49	12	46	37	19	15
44 Utah	17	20	7	11	14	11	9	5	5	2	2	7	2	-	1	1	-	1
45 Vermont	3	1	1	-	2	1	2	1	1	1	-	1	-	-	-	-	-	-
46 Virginia	37	44	9	13	45	41	19	4	18	7	4	14	4	-	5	7	1	8
47 Washington	65	53	28	36	56	53	25	17	18	17	6	13	12	4	14	3	-	11
48 West Virginia	21	20	4	8	24	15	8	1	12	8	3	6	2	-	2	11	1	11
49 Wisconsin	74	84	25	32	65	83	36	11	31	9	4	7	14	5	12	17	5	15
50 Wyoming	4	5	-	1	6	5	2	-	4	-	-	-	2	-	2	-	-	-
51 District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52 State Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53 Total	3,224	3,377	1,267	1,362	3,253	3,237	1,571	693	1,514	698	287	731	449	124	470	506	163	538

Table 18. Rail-highway Accidents by States and Type of Motor Vehicles Involved, 1971

	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	84	22	104	55	17	81	1	1	1	24	4	20	4	3	2
2 Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Arizona	14	1	14	12	1	12	-	-	-	2	-	2	-	-	-
4 Arkansas	68	29	65	51	17	53	-	-	-	16	12	11	1	-	1
5 California	204	87	190	154	63	145	-	-	-	45	21	43	5	3	2
6 Colorado	29	7	25	24	6	22	-	-	-	5	1	3	-	-	-
7 Connecticut	5	1	3	-	-	-	-	-	-	5	1	3	-	-	-
8 Delaware	2	-	2	2	-	2	-	-	-	-	-	-	-	-	-
9 Florida	138	69	118	109	62	95	-	-	-	28	6	23	1	1	-
10 Georgia	121	50	133	97	44	111	-	-	-	24	6	22	-	-	-
11 Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Idaho	22	18	19	11	12	9	-	-	-	11	6	10	-	-	-
13 Illinois	242	89	275	195	73	225	1	-	2	42	15	46	3	1	2
14 Indiana	211	96	207	158	70	167	1	4	6	50	20	33	2	2	1
15 Iowa	73	26	74	58	23	63	-	-	-	15	3	11	-	-	-
16 Kansas	87	40	93	67	29	78	-	-	-	19	11	14	1	-	1
17 Kentucky	50	22	48	39	17	37	1	-	1	10	5	10	-	-	-
18 Louisiana	75	32	78	51	24	52	1	1	7	22	6	18	1	1	1
19 Maine	11	4	7	6	2	4	-	-	-	5	2	3	-	-	-
20 Maryland	20	6	15	12	6	10	-	-	-	8	-	5	-	-	-
21 Massachusetts	13	5	11	13	5	11	-	-	-	-	-	-	-	-	-
22 Michigan	152	41	169	127	30	150	-	-	-	24	10	19	1	1	-
23 Minnesota	76	35	74	58	30	57	-	-	-	17	4	17	1	1	-
24 Mississippi	76	26	97	63	22	72	1	-	16	12	4	9	-	-	-
25 Missouri	100	44	112	64	28	68	1	-	16	33	16	26	2	-	2
26 Montana	20	11	18	13	5	16	-	-	-	6	5	2	1	1	-
27 Nebraska	60	33	57	44	25	45	-	-	-	16	8	12	-	-	-
28 Nevada	4	-	5	2	-	3	-	-	-	2	-	2	-	-	-
29 New Hampshire	2	-	2	2	-	2	-	-	-	-	-	-	-	-	-
30 New Jersey	31	14	27	20	9	20	-	-	-	10	4	7	1	1	-
31 New Mexico	8	8	7	5	5	7	-	-	-	2	2	-	1	1	-
32 New York	62	21	62	51	15	52	-	-	-	9	3	10	2	3	-
33 North Carolina	83	37	84	71	34	74	-	-	-	12	3	10	-	-	-
34 North Dakota	26	11	22	16	8	10	-	-	-	10	3	12	-	-	-
35 Ohio	197	80	192	163	67	168	1	-	4	31	12	19	2	1	1
36 Oklahoma	79	29	82	56	21	57	-	-	-	18	6	19	5	2	6
37 Oregon	52	17	51	32	11	35	-	-	-	20	6	16	-	-	-
38 Pennsylvania	67	14	68	53	12	55	-	-	-	14	2	13	-	-	-
39 Rhode Island	73	31	81	61	26	71	-	-	-	-	-	-	-	-	-
40 South Carolina	-	-	-	-	-	-	-	-	-	12	5	10	-	-	-
41 South Dakota	12	7	10	8	7	5	-	-	-	4	-	5	-	-	-
42 Tennessee	81	40	74	58	23	62	-	-	-	22	17	11	1	-	1
43 Texas	273	90	266	198	72	202	1	-	1	71	15	62	3	3	1
44 Utah	17	7	14	12	4	13	-	-	-	5	3	1	-	-	-
45 Vermont	3	1	2	3	1	2	-	-	-	-	-	-	-	-	-
46 Virginia	37	9	45	24	7	31	-	-	-	13	2	14	-	-	-
47 Washington	65	28	56	45	21	39	-	-	-	19	7	16	1	-	1
48 West Virginia	21	4	24	17	4	19	-	-	-	3	-	4	1	-	1
49 Wisconsin	74	25	65	57	20	54	-	-	-	14	3	10	3	2	1
50 Wyoming	4	-	6	1	-	1	-	-	-	3	-	5	-	-	-
51 District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52 State Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53 Total	3,224	1,267	3,253	2,439	975	2,567	9	6	54	733	259	608	43	27	24

Table 19. Rail-highway Accidents Involving Motor Vehicles, by States and Months, 1971

	State	January	February	March	April	May	June	July	August	September	October	November	December	Year
1	Alabama	7	9	7	6	5	3	4	5	6	9	12	11	84
2	Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Arizona	1	1	-	-	4	-	1	-	-	3	-	4	14
4	Arkansas	3	7	8	3	5	7	6	5	3	9	6	6	68
5	California	19	17	17	29	12	19	8	6	22	23	11	21	204
6	Colorado	5	2	1	4	-	2	3	2	4	1	2	3	29
7	Connecticut	-	-	-	-	1	-	-	1	-	-	2	1	5
8	Delaware	1	-	-	-	-	-	-	-	-	-	-	1	2
9	Florida	14	6	8	10	9	8	8	12	14	13	17	19	138
10	Georgia	20	16	13	8	5	9	3	6	7	15	7	12	121
11	Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Idaho	2	4	2	1	-	2	1	2	3	3	-	2	22
13	Illinois	25	20	15	17	17	15	21	21	18	23	28	22	242
14	Indiana	32	17	26	13	13	13	15	16	9	20	14	23	211
15	Iowa	5	7	8	2	5	6	3	6	5	11	5	10	73
16	Kansas	11	7	4	10	3	13	5	4	9	4	11	6	87
17	Kentucky	10	7	4	3	4	1	3	-	3	6	3	6	50
18	Louisiana	4	9	7	6	7	6	9	3	6	5	7	6	75
19	Maine	1	6	1	1	1	-	-	-	-	-	-	1	11
20	Maryland	2	3	3	2	1	1	1	-	3	1	1	2	20
21	Massachusetts	2	1	2	1	2	-	2	1	-	1	1	-	13
22	Michigan	22	9	21	8	10	7	14	10	13	17	11	10	152
23	Minnesota	4	12	4	9	5	3	4	5	6	3	10	11	76
24	Mississippi	8	6	6	10	4	7	3	4	5	6	7	10	76
25	Missouri	4	11	9	14	8	8	10	3	7	9	14	3	100
26	Montana	2	3	-	1	1	2	2	-	2	2	3	2	20
27	Nebraska	3	4	8	2	4	8	3	2	7	6	8	5	60
28	Nevada	-	-	-	2	-	-	-	2	-	-	-	-	4
29	New Hampshire	-	-	-	-	-	1	-	-	-	-	-	1	2
30	New Jersey	1	1	4	1	-	3	3	3	4	4	3	4	31
31	New Mexico	2	-	-	-	2	-	1	1	1	-	-	1	8
32	New York	6	3	3	4	3	5	7	4	3	5	11	8	62
33	North Carolina	13	6	10	5	8	3	1	3	7	8	9	10	83
34	North Dakota	5	5	-	3	-	1	1	2	4	2	3	-	26
35	Ohio	21	19	21	18	20	15	12	15	10	11	15	20	197
36	Oklahoma	7	11	2	5	8	4	3	5	8	8	4	14	79
37	Oregon	6	-	1	9	5	4	3	5	6	5	4	4	52
38	Pennsylvania	5	7	7	10	3	1	2	3	8	5	9	7	67
39	Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-
40	South Carolina	9	7	4	7	4	7	7	6	6	8	6	2	73
41	South Dakota	2	-	-	-	-	1	1	3	1	1	1	2	12
42	Tennessee	5	7	16	6	8	3	4	2	6	5	8	11	81
43	Texas	36	16	24	20	26	17	27	18	15	17	32	25	273
44	Utah	1	3	3	-	-	-	-	3	1	2	1	4	17
45	Vermont	-	-	-	1	-	-	-	-	-	1	-	-	3
46	Virginia	3	2	6	2	3	1	1	2	2	5	4	6	37
47	Washington	-	4	10	4	1	8	6	4	3	11	8	6	65
48	West Virginia	2	1	4	2	1	1	3	2	1	2	1	2	21
49	Wisconsin	10	13	7	3	4	5	3	4	4	4	9	8	74
50	Wyoming	-	1	-	1	1	1	-	-	-	-	-	-	4
51	District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-
52	State Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-
53	Total	341	290	295	263	223	222	214	201	242	292	310	331	3,224

Table 20. Rail-Highway Accidents Involving Trains and Motor Vehicles,
Classified as to Kind of Crossing Protection, Class I Railroads, 1971

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								
Akron, Canton & Youngstown -----	2	-	-	-	1	-	-	1
Ann Arbor -----	5	-	-	-	-	-	1	4
Baltimore & Ohio -----	85	-	-	-	20	2	16	47
Bangor & Aroostook -----	2	-	-	-	-	-	-	2
Bessemer & Lake Erie -----	5	-	-	-	-	-	-	5
Boston & Maine -----	9	2	3	-	4	-	-	-
Canadian Pacific Lines in Maine -----	-	-	-	-	-	-	-	-
Central R.R. Co. of New Jersey -----	11	-	-	-	3	1	5	2
Central Vermont -----	6	-	-	-	1	-	-	5
Chesapeake & Ohio -----	94	4	-	-	28	1	19	42
Chicago & Eastern Illinois -----	8	1	1	-	1	-	-	5
Delaware & Hudson -----	4	-	-	-	1	-	-	3
Detroit & Toledo Shore Line -----	1	-	-	-	-	-	-	1
Detroit, Toledo & Ironton -----	12	1	-	-	1	-	-	10
Elgin, Joliet & Eastern -----	8	1	-	-	1	-	2	4
Erie Lackawanna -----	39	7	-	-	8	1	10	13
Grand Trunk Western -----	50	7	1	-	18	1	3	20
Illinois Terminal -----	2	-	-	-	2	-	-	-
Lehigh Valley -----	10	-	-	-	5	-	-	5
Long Island -----	7	2	-	-	1	-	3	1
Maine Central -----	7	-	-	-	4	-	1	2
Missouri-Illinois -----	-	-	-	-	-	-	-	-
Monon ^{1/} -----	5	-	-	-	1	-	2	2

^{1/} Seven months figures, merged with Louisville & Nashville, 8-1-71.

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1971 - 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 -----	1	-	-	-	-	-	1	-
Norfolk & Western -----	218	10	2	-	26	-	52	128
Penn Central -----	262	24	2	-	20	3	75	138
Pennsylvania-Reading Seashore Lines ---	6	1	-	-	2	-	1	2
Pittsburgh & Lake Erie -----	1	-	-	-	-	-	-	1
Reading -----	18	-	-	-	-	1	13	4
Richmond, Fredericksburg & Potomac ----	2	-	-	-	-	-	-	2
Western Maryland -----	5	1	-	-	-	-	2	2
Total -----	885	61	9	-	148	10	206	451
Southern district								
Alabama Great Southern -----	20	2	-	-	4	-	3	11
Central of Georgia -----	19	-	-	-	-	-	4	15
Cincinnati, New Orleans & Tex. Pac. ---	13	1	-	-	3	-	-	9
Clinchfield -----	3	-	-	-	-	-	1	2
Florida East Coast -----	10	1	-	-	7	-	-	2
Georgia -----	4	-	-	-	1	-	-	3
Georgia Southern & Florida -----	17	-	-	-	3	1	-	13
Gulf, Mobile & Ohio -----	33	2	-	-	34	-	11	27
Illinois Central -----	135	5	1	-	15	-	11	84
Louisville & Nashville -----	98	1	-	-	-	1	11	70

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1971 - 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								
Norfolk Southern -----	5	-	-	-	-	-	1	4
Seaboard Coast Line -----	259	4	-	-	45	-	34	176
Southern -----	177	3	1	-	24	-	25	124
Total -----	793	19	2	-	137	2	93	540
Western district								
Atchison, Topeka & Santa Fe -----	145	7	-	-	61	-	11	66
Chicago & North Western -----	85	8	-	-	20	1	7	49
Burlington Northern -----	224	6	4	1	28	4	41	140
Chicago, Milwaukee, St. Paul & Pacific-----	84	2	4	-	18	1	12	47
Chicago, Rock Island & Pacific -----	80	6	-	-	30	1	2	41
Colorado & Southern -----	19	-	1	-	4	-	2	2
Denver & Rio Grande Western -----	12	-	-	-	6	-	-	6
Duluth, Missabe & Iron Range -----	-	-	-	-	-	-	-	-
Duluth, Winnipeg & Pacific -----	5	-	-	-	2	-	-	3

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1971 - 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
Western district - continued								
Fort Worth & Denver -----	9	-	-	-	3	-	-	6
Green Bay & Western -----	2	-	-	-	-	-	-	2
Kansas City Southern -----	17	-	-	-	8	-	-	9
Lake Superior & Ishpeming -----	2	-	-	-	1	-	-	1
Missouri-Kansas-Texas -----	52	-	2	-	14	-	-	36
Missouri Pacific -----	148	6	2	-	34	-	20	86
Northwestern Pacific -----	6	-	-	-	3	-	-	3
St. Louis-San Francisco -----	88	-	-	-	20	1	5	62
St. Louis Southwestern -----	38	-	2	-	4	-	7	25
Soo Line -----	35	-	-	-	4	-	14	17
Southern Pacific -----	229	13	-	1	71	1	23	120
Texas & Pacific -----	42	1	1	-	4	-	11	25
Toledo, Peoria & Western -----	1	-	-	-	1	-	-	-
Union Pacific -----	97	3	-	-	18	-	17	59
Western Pacific -----	17	1	-	-	5	-	-	11
Total -----	1,427	53	16	2	359	9	172	816

Table 20. Rail-Highway Accidents Involving Motor Vehicles, Classified as to Kind of Crossing Protection, Class I Railroads, 1971 - 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 -----	885	61	9	-	148	10	206	451
Southern district -----	793	19	2	-	137	2	93	540
Western district -----	1,427	53	16	2	359	9	172	816
Class I railroads (excluding Switching and Terminal Co.'s) -----	3,105	133	27	2	644	21	471	1,807
Class I Switching and Terminal Companies -----	27	2	-	1	6	2	6	10
Railroads other than Class I -----	92	3	5	-	23	1	4	56
Total, all classes -----	3,224	138	32	3	673	24	481	1,873