



OTR

FOR THE YEAR ENDED DECEMBER 31, 1974

**RAIL-HIGHWAY
GRADE-CROSSING
ACCIDENTS**

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

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

PREFACE

This is the fortieth 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 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.

While motor vehicle registrations increased by over six million in 1974, and train mileage was up slightly, the number of highway-grade crossing accidents decreased 3.3 percent, and the number of casualties remained virtually unchanged. 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, 1, and 20A 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.

ASAHP H. HALL
Administrator

INDEX

	Page
Preface -----	i
Summary -----	1
Definition of Terms	
Classification of Accidents -----	3
Classification of Casualties -----	3
Classification of Crossings -----	3
Classification of Persons -----	3

TABLES

Table Number		Page
1 Rail-highway Accidents and Casualties, 1974-1973 -----		3
Rail-highway grade-crossing accidents involving motor vehicles classified according to:		
2 Nature of collision, 1974-1972 -----		4
3 Part of train struck, 1974-1972 -----		5
4 Nature of collision and part of 24-hour period, 1974-1972-----		5
5 Hours in which accidents occurred, 1974-1972 -----		5
6 Day of Week, 1974-1972 -----		6
7 Month, 1974-1972 -----		6
8 Type of Motor Vehicle, 1974-1972 -----		6
9 Kind of Train, 1974-1972 -----		7
10 Type of Crossing Protection at Time of Accident, 1974 -----		7
11 Operation of Crossing Protection, 1974-1972 -----		7
12 Illumination of Crossing, 1974-1972 -----		7
13 Speed and Kind of Train, 1974 -----		8
14 Weather Conditions, 1974 -----		8
15 Number of Cars in Train, and Kind of Train, 1974 -----		8
16 Speed of Motor Vehicles, 1974 -----		8
17A Accidents by States, 1974-1973 -----		9
17B Accidents by States and part of 24-hour period, 1974 -----		10
18 States and Types of Motor Vehicle, 1974 -----		11
19 States and Months, 1974 -----		12
20A Casualties by States, in all types of Rail-Highway Accidents, 1974 -----		13
20B Casualties and Motor Vehicles Registered, by States, 1974-----		14
21A Accidents at Public Crossings, by Cause of Accident, 1974-----		15
21B Accidents at Private Crossings, by Cause of Accident, 1974-----		15
22 Kind of Protection, by Individual Railways, 1974 -----		16

SUMMARY

RAIL-HIGHWAY GRADE CROSSING ACCIDENTS OF ALL KINDS

In 1974, there were 3,268 crossing accidents involving pedestrians, automobiles, motortrucks, buses, motorcycles, and other vehicles or machines. The above accidents resulted in 1,220 deaths and 3,249 injuries.

The following three tables show data for the ten-year period, 1965 - 1974.

TABLE A SUMMARY OF ALL TYPES OF RAIL-HIGHWAY CROSSING ACCIDENTS
FOR 10-YEAR PERIOD 1965 THRU 1974

Year	Number of Accidents	Per cent	Killed	Injured	Total Casualties	Casualties per Accident
1965	3,820	10.4	1,534	3,801	5,335	1.39
1966	4,097	11.2	1,780	4,043	5,823	1.42
1967	3,932	10.7	1,632	3,812	5,444	1.38
1968	3,816	10.4	1,546	3,774	5,320	1.39
1969	3,774	10.3	1,490	3,669	5,159	1.36
1970	3,559	9.7	1,440	3,336	4,776	1.34
1971	3,392	9.3	1,356	3,332	4,688	1.38
1972	3,379	9.2	1,260	3,285	4,545	1.34
1973	3,379	9.2	1,185	3,283	4,468	1.32
1974	3,268	8.9	1,220	3,249	4,469	1.36
TOTAL	36,416	100.0	14,443	35,584	50,027	1.37
Yearly Mean	3651.90		1453.27	3578.81	5032.09	

Table B shows that in 1974, while accidents and resulting injuries were at a minimum for the ten-year period, total casualties remained virtually unchanged.

TABLE B SUMMARY OF ALL TYPES OF RAIL-HIGHWAY CROSSING ACCIDENTS
FOR 10-YEAR PERIOD 1965 THRU 1974

Year	Accidents		Fatalities		Injuries	
	No.	Pct.	No.	Pct.	No.	Pct.
1965	3,820	10.4	1,534	10.6	3,801	10.6
1966	4,097	11.2	1,780	12.3	4,043	11.3
1967	3,932	10.7	1,632	11.2	3,812	10.7
1968	3,816	10.4	1,546	10.7	3,774	10.6
1969	3,774	10.3	1,490	10.3	3,669	10.3
1970	3,559	9.7	1,440	9.9	3,336	9.3
1971	3,392	9.3	1,356	9.3	3,332	9.3
1972	3,379	9.2	1,260	8.7	3,285	9.2
1973	3,379	9.2	1,185	8.2	3,283	9.2
1974	3,268	8.9	1,220	8.4	3,249	9.1
TOTAL	36,416	100.0	14,443	100.0	35,584	100.0
Mean	3651.90		1453.27		3578.81	
S.D.	270.14		183.45		284.53	
Min.	3,268		1,185		3,249	
Max.	4,097		1,780		4,043	

GRADE CROSSING ACCIDENTS INVOLVING MOTOR VEHICLES

Of the 3,268 crossing accidents of all kinds in 1974, 3,079 involved collisions between railroad movements and motor vehicles, and resulted in 1,128 deaths and 3,155 injuries. In 2,220 collisions, or 72.1 percent, trains struck motor vehicles, resulting in 908, or 80.5 percent, of the deaths and in 2,224, or 70.5 percent of the injuries. In the other 859 collisions, or 27.9 percent, motor vehicles struck the sides of train movements, resulting in 220, or 19.5 percent, of the deaths and in 931 or 29.5 percent of the injuries.

The number of crossing accidents in 1974 involving collisions with motor vehicles shows a decrease from 1973. In comparison with last year, there was a decrease of 95 in the number of accidents and a decrease of 37 in the number of injuries. However, the number of deaths increased by 51.

TABLE C NUMBER OF RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
FOR 10-YEAR PERIOD 1965 THRU 1974

Year	Number of Accidents	Motor Vehicles Registered (000)*	Accidents per Million Vehicles
1965	3,602	76,633	46.77
1966	3,862	80,084	48.27
1967	3,733	82,411	45.52
1968	3,603	85,799	41.89
1969	3,572	88,815	40.13
1970	3,377	92,124	36.70
1971	3,224	96,097	33.58
1972	3,222	100,595	31.90
1973	3,174	129,511	24.60
1974	3,079	135,720	22.15

*NOTE: Estimated figures supplied by Federal Highway Administration

TYPES OF CROSSING PROTECTION PROVIDED

Of the 3,079 collisions, 1,256, or 40.79 percent, occurred at crossings which were specially protected by one of the following: Lowered gates, trainmen, watchmen, audible and visual signals, audible signals, or visual signals. The other 1,823, or 59.21 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 208,467 public rail-highway crossings at grade. Of these crossings, 48,821 or 23.42 percent, were specially protected; 159,646, or 76.58 percent, were not specially protected.

TIMES AND WEATHER CONDITIONS INVOLVED IN MOTOR VEHICLE COLLISIONS

Of the 3,079 crossing collisions, 2,028 or 65.87 percent, occurred in daylight, and 1,051 or 34.13 percent, took place at night. There were 2,073 collisions, or 67.33 percent, in clear weather, and 1,006 or 32.67 percent under cloudy or inclement weather conditions.

TYPES OF MOTOR VEHICLES INVOLVED IN CROSSING ACCIDENTS

Of the 3,079 collisions between trains and motor vehicles, automobiles were involved in 2,185, or 70.96 percent; buses in 13, or 0.42 percent; motortrucks in 809, or 26.27 percent; and motorcycles in 72, or 2.34 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 person 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. (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 I RAIL-HIGHWAY ACCIDENTS OF ALL KINDS AND CASUALTIES
1974 - 1973

Trains striking or being struck by:	Total accidents		Total Killed		Total Injured	
	1974	1973	1974	1973	1974	1973
Pedestrians	96	2.9	106	3.1	69	5.6
Automobiles	2,185	66.8	2,281	67.5	830	68.0
Buses	13	0.3	14	0.4	14	1.1
Trucks	809	24.7	814	24.0	247	20.2
Motorcycles	72	2.2	65	1.9	37	3.0
Other vehicles	56	1.7	58	1.7	20	1.6
Over/Under*	6	0.1	6	0.1	2	0.1
Miscellaneous	31	0.9	35	1.0	1	0.0
Total	3,268	100.0	3,379	100.0	1,220	100.0
					1,185	100.0
					3,249	100.0
					3,283	100.0

* NOTE: Pedestrians passing over, under or otherwise thru train

TABLE 2-A NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS
SHOWING NUMBER OF ACCIDENTS, 1974 - 1972

	1974		1973		1972	
	#	Pct.	#	Pct.	#	Pct.
Motor vehicle struck by train	2,220	72.1	2,209	69.5	2,263	70.2
Motor vehicle ran into train	859	27.8	965	30.4	959	29.7
TOTAL....	3,079	100.0	3,174	100.0	3,222	100.0

TABLE 2-B NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS
SHOWING NUMBER OF FATALITIES, 1974 - 1972

	1974		1973		1972	
	#	Pct.	#	Pct.	#	Pct.
Motor vehicle struck by train	908	80.4	839	77.9	937	78.7
Motor vehicle ran into train	220	19.5	238	22.0	253	21.2
TOTAL....	1,128	100.0	1,077	100.0	1,190	100.0

TABLE 2-C NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS
SHOWING NUMBER OF INJURIES, 1974 - 1972

	1974		1973		1972	
	#	Pct.	#	Pct.	#	Pct.
Motor vehicle struck by train	2,224	70.4	2,136	66.9	2,160	67.4
Motor vehicle ran into train	931	29.5	1,056	33.0	1,041	32.5
TOTAL....	3,155	100.0	3,192	100.0	3,201	100.0

TABLE 2-D NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS
WHERE MOTOR VEHICLE WAS STRUCK BY TRAIN, 1974

Type of Vehicle	Daylight.....			Dark.....		
	Accidents	Killed	Injured	Accidents	Killed	Injured
Passenger automobiles	1,071	504	1,080	492	188	519
Motor buses	9	10	81	2	3	22
Motor trucks	507	159	403	121	31	112
Motorcycles	14	11	4	4	2	3
Total....	1,601	684	1,568	619	224	656

TABLE 2-E NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS
WHERE TRAIN WAS RUN INTO BY MOTOR VEHICLE, 1974

Type of Vehicle	Daylight.....			Dark.....		
	Accidents	Killed	Injured	Accidents	Killed	Injured
Passenger automobiles	255	51	296	367	87	435
Motor buses	1	1	0	1	0	11
Motor trucks	133	37	104	48	20	47
Motorcycles	38	19	23	16	5	15
Total....	427	108	423	432	112	508

TABLE 3 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES THAT RAN INTO TRAINS, 1974 - 1972

Part of Train Struck	1974 #	1974 Pct.	1973 #	1973 Pct.	1972 #	1972 Pct.	Number in 1974 Daylight	Number in 1974 Dark
MPU Pulling or running light	555	64.6	615	63.7	606	63.1	341	214
Lead car shoved	29	3.3	33	3.4	36	3.7	12	17
Other part near head end of train	5	0.5	5	0.5	4	0.4	3	2
First quarter of train	113	13.1	132	13.6	136	14.1	39	74
Second quarter of train	48	5.5	58	6.0	57	5.9	11	37
Third quarter of train	30	3.4	37	3.8	38	3.9	7	23
Fourth quarter of train	51	5.9	53	5.4	51	5.3	7	44
Last unit of train	21	2.4	21	2.1	24	2.5	6	15
Part of train not reported	7	0.8	11	1.1	7	0.7	1	6
Total	859	100.0	965	100.0	959	100.0	427	432

TABLE 4 NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES AND PART OF 24-HOUR PERIOD, 1974 - 1972

	1974							
	1974 #	1974 Pct.	1973 #	1973 Pct.	1972 #	1972 Pct.	Struck by train Killed	Ran into train Killed
Daylight	2,028	65.8	2,044	64.3	2,027	62.9	684	1,568
Dark	1,051	34.1	1,130	35.6	1,195	37.0	224	656
Total	3,079	100.0	3,174	100.0	3,222	100.0	908	2,224
						Ran into train Injured	Killed	Injure

TABLE 5 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES ACCORDING TO HOUR, 1974 - 1972

Hour	Total Accidents			Struck by Train			Ran into Train		
	1974	1973	1972	1974	1973	1972	1974	1973	1972
Midnight to 12:59 AM	109	99	113	51	46	51	58	53	62
1 to 1:59 AM	93	100	103	33	37	37	55	63	66
2 to 2:59 AM	73	87	75	23	35	31	45	52	44
3 to 3:59 AM	33	50	50	14	20	21	19	30	29
4 to 4:59 AM	42	40	53	21	22	24	21	18	29
5 to 5:59 AM	32	50	56	20	30	38	12	20	18
6 to 6:59 AM	113	108	103	88	87	71	25	21	32
7 to 7:59 AM	158	160	148	132	130	116	26	30	32
8 to 8:59 AM	147	159	147	120	123	125	27	36	22
9 to 9:59 AM	129	164	171	95	128	134	34	36	37
10 to 10:59 AM	161	158	159	131	128	111	30	30	48
11 to 11:59 AM	158	162	169	132	126	138	26	36	31
12 Noon to 12:59 PM	158	169	140	125	128	111	33	41	29
1 to 1:59 PM	163	167	184	119	123	138	44	44	46
2 to 2:59 PM	177	180	178	141	132	142	36	48	36
3 to 3:59 PM	200	186	193	158	154	150	42	32	43
4 to 4:59 PM	199	203	207	156	166	157	43	37	50
5 to 5:59 PM	204	175	178	165	121	142	39	54	36
6 to 6:59 PM	135	152	175	94	110	127	41	42	48
7 to 7:59 PM	130	145	150	96	100	104	34	45	46
8 to 8:59 PM	103	117	129	63	73	84	40	44	45
9 to 9:59 PM	113	110	105	73	65	71	40	45	34
10 to 10:59 PM	118	129	132	77	71	80	41	58	52
11 to 11:59 PM	131	104	104	83	54	60	48	50	44
TOTAL.....	3,079	3,174	3,222	2,220	2,209	2,263	859	965	959

TABLE 6 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY DAY OF WEEK, 1974 - 1972

	Total Accidents			Struck by Train			Ran into Train		
	1974	1973	1972	1974	1973	1972	1974	1973	1972
Sunday	290	293	318	223	201	220	67	92	98
Monday	440	463	408	319	326	286	121	137	122
Tuesday	461	447	489	338	321	344	123	126	145
Wednesday	458	476	431	320	323	302	138	153	129
Thursday	450	440	433	331	315	315	119	125	118
Friday	520	508	583	352	354	410	168	154	173
Saturday	460	547	560	337	369	386	123	178	174
Total	3,079	3,174	3,222	2,220	2,209	2,263	859	965	959

TABLE 7 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY MONTH, 1974 - 1972

Month	Total Accidents			Struck by Train			Ran into Train		
	1974	1973	1972	1974	1973	1972	1974	1973	1972
January	293	328	305	213	231	222	80	97	83
February	271	283	313	201	191	203	70	92	110
March	241	235	246	161	163	183	80	72	63
April	198	250	242	156	174	167	42	76	75
May	243	250	219	178	172	157	65	78	62
June	221	208	258	157	143	190	64	65	68
July	221	217	204	153	139	140	68	78	64
August	232	246	219	148	172	155	84	74	64
September	247	244	264	179	167	171	68	77	93
October	305	299	305	213	210	226	92	89	79
November	311	293	313	242	209	213	69	84	100
December	296	321	334	219	238	236	77	83	98
Total	3,079	3,174	3,222	2,220	2,209	2,263	859	965	959

TABLE 8 TYPES OF MOTOR VEHICLES INVOLVED IN ACCIDENTS
AT RAIL-HIGHWAY CROSSINGS, 1974 - 1972

Type of Vehicle	Number of Accidents			Vehicles Registered (000)*	Accidents per million Vehicles	Number occurring in Daylight	
	1974	1973	1972			Day	Night
Passenger automobiles	2,185	2,281	2,367	105,000	20.7	1,326	859
Motor buses	13	14	10	475	32.5	10	3
Motor trucks	809	814	804	25,276	32.1	640	169
Motorcycles	72	65	41	4,969	14.6	52	20
Total.....	3,079	3,174	3,222	135,720	22.6	2,028	1,051

*NOTE: Estimated figures supplied by Federal Highway Administration

TABLE 9 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY KIND OF TRAIN INVOLVED, 1974 - 1972

Kind of Train	1974			1973			1972		
	# Accidents	Train miles (000)	# per mill. miles	# Accidents	Train miles (000)	# per mill. miles	# Accidents	Train miles (000)	# per mill. miles
Freight	2,566	469,728	5.47	2,653	476,379	5.57	2,682	451,456	5.94
Passenger	152	64,368	2.37	145	61,516	2.37	153	60,993	2.55
Work	60	4,881	15.00	53	4,967	13.25	61	5,119	12.20
Yard switching	301	194,496	1.55	323	201,606	1.60	326	234,228	1.39
Total	3,079	733,473	4.21	3,174	744,468	4.27	3,222	751,796	4.29

TABLE 10 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY TYPE OF CROSSING PROTECTION, 1974

Crossing Protection	Number of Accidents			Crossings	Accidents per 100 Crossings	Number Occurring			Struck by train			Ran into train	
	Killed	Injured	Accidents			Daylight	Dark	Daylight	Dark	Daylight	Dark	Daylight	Dark
Lowered gates	43	110	122	11,917	1.02	48	74	41	60	7	14		
Trainman	4	27	27	-	27.00	10	17	7	9	3	8		
Watchman	-	2	2	376	0.66	1	1	1	1	-	-		
Audible + Visual	247	589	609	30,975	1.97	391	218	293	129	98	89		
Audible signal	3	24	24	1,205	2.00	18	6	16	3	2	3		
Visual signal	136	479	472	4,348	10.97	314	158	248	100	66	58		
Total active	433	1,231	1,256	48,821	2.58	782	474	606	302	176	172		
Passive signals	695	1,924	1,823	159,646	1.14	1,246	577	995	317	251	260		
Grand total	1,128	3,155	3,079	208,467	1.47	2,028	1,051	1,601	619	427	432		

TABLE 11 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
ACCORDING TO OPERATION OF CROSSING PROTECTION, 1974 - 1972

Crossing protection	Number of Accidents			Occurring Daylight	Dark	Struck by train			Ran into train		
	1974	1973	1972			Daylight	Dark	Daylight	Dark	Daylight	Dark
Automatic, both sides	1,181	1,266	1,188	739	442	580	284	159	158		
Automatic, side of approach	21	14	16	12	9	7	6	5	3		
Automatic, opposite side	7	4	5	5	2	5	1	-	1		
Manual, both sides	14	12	16	6	8	4	6	2	2		
Manual, side of approach	13	24	32	7	6	3	2	4	4		
Manual, opposite side	1	2	3	1	-	1	-	-	-		
Other, both sides	1,588	1,588	1,664	1,074	514	852	275	222	239		
Other, side of approach	128	146	151	96	32	76	25	20	7		
Other, opposite side	100	106	132	71	29	57	18	14	11		
Not reported	26	12	15	17	9	16	2	1	7		
Total	3,079	3,174	3,222	2,028	1,051	1,601	619	427	432		

TABLE 12 CROSSING ACCIDENTS AFTER DARK INVOLVING MOTOR VEHICLES
ACCORDING TO ILLUMINATION OF CROSSING, 1974 - 1972

Crossing Illumination	Number of Accidents			Struck by Train			Ran into Train			1974 Persons	
	1974	1973	1972	1974	1973	1972	1974	1973	1972	Killed	Injured
Lighted	514	530	534	317	325	317	197	205	217	134	609
Not-lighted	537	600	661	302	301	373	235	299	288	202	555
Total	1,051	1,130	1,195	619	626	690	432	504	505	336	1,164

TABLE 13 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
ACCORDING TO SPEED AND TYPE OF TRAIN INVOLVED, 1974

Train Speed (MPH)	Struck by train			Ran into train			Freight #	Passenger #	Yard (Switching) and other		
	Total	Daylight	Dark	Daylight	Dark	Pct.			#	Pct.	
0 - 9	471	103	93	68	207	10.2	264	4	2.6	203	56.2
10 - 19	459	186	112	68	93	13.9	358	11	7.2	90	24.9
20 - 29	673	372	146	103	52	24.2	622	16	10.5	35	9.6
30 - 39	603	353	127	81	42	22.0	565	23	15.1	15	4.1
40 - 49	513	352	68	66	27	18.9	485	13	8.5	15	4.1
50 - 59	252	167	50	28	7	8.8	226	23	15.1	3	0.8
60 - 69	70	48	13	5	4	1.6	43	27	17.7	-	0.0
70 - 79	36	18	10	8	-	0.0	2	34	22.3	-	0.0
80 - 89	1	1	-	-	-	0.0	-	1	0.6	-	0.0
90 and over	1	1	-	-	-	0.0	1	-	0.0	-	0.0
Total	3,079	1,601	619	427	432	100.0	2,566	152	100.0	361	100.0

**TABLE 14 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
ACCORDING TO WEATHER CONDITIONS, 1974**

Weather	Total Accidents		Struck by Train		Ran into Train	
	#	Pct	Daylight	Dark	Daylight	Dark
Clear	2,073	67.3	1,119	400	286	268
Cloudy	640	20.7	335	128	85	92
Rain	221	7.1	85	61	31	44
Snow, sleet or hail	84	2.7	40	20	15	9
Fog	61	1.9	22	10	10	19
Dust	-	0.0	-	-	-	-
Smoke	-	0.0	-	-	-	-
Not reported	-	0.0	-	-	-	-
Total	3,079	100.0	1,601	619	427	432

TABLE 15 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
ACCORDING TO NUMBER OF CARS IN TRAIN AND KIND OF TRAIN, 1974

Number of cars in train	Freight				Passenger				Yard(Switching) and others				Total		Number occurring in...	
	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.	Daylight	Dark
None	78	3.0	1	0.6	83	22.9	162	5.2	89	73						
1 - 9	412	16.0	88	57.8	153	42.3	653	21.2	460	193						
10 - 19	283	11.0	49	32.2	63	17.4	395	12.8	278	117						
20 - 29	207	8.0	4	2.6	20	5.5	231	7.5	160	71						
30 - 39	179	6.9	8	5.2	9	2.4	196	6.3	138	58						
40 - 49	210	8.1	2	1.3	12	3.3	224	7.2	146	78						
50 - 59	195	7.5	-	0.0	4	1.1	199	6.4	125	74						
60 - 69	178	6.9	-	0.0	2	0.5	180	5.8	122	58						
70 - 79	163	6.3	-	0.0	6	1.6	169	5.4	106	63						
80 - 89	155	6.0	-	0.0	2	0.5	157	5.0	101	56						
90 - 99	153	5.9	-	0.0	1	0.2	154	5.0	96	58						
100 - 109	119	4.6	-	0.0	1	0.2	120	3.8	69	51						
110 - 119	79	3.0	-	0.0	-	0.0	79	2.5	43	36						
120 - 129	59	2.2	-	0.0	-	0.0	59	1.9	35	24						
130 - 139	42	1.6	-	0.0	-	0.0	42	1.3	23	19						
140 - 149	18	0.7	-	0.0	-	0.0	18	0.5	9	9						
150 and over	29	1.1	-	0.0	1	0.2	30	0.9	19	11						
Not reported or unknown	7	0.2	-	0.0	4	1.1	11	0.3	9	2						
Total	2,566	83.3	152	4.9	361	11.7	3,079	100.0	2,028	1,051						

TABLE 16 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
ACCORDING TO SPEED OF MOTOR VEHICLE, 1974

Speed of Vehicle	Struck by Train												Ran into Train															
	Total Accidents			Daylight				Dark					Daylight			Dark				Daylight			Dark					
	#	Pct	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.	#	Kid.	Inj.			
Standing	384	12 4	111	428	274	69	308	108	40	119	1	2	-	1	-	1	-	1	-	1	-	1	-	1	-			
1 - 9	421	13 6	151	395	275	113	245	91	30	92	34	5	35	21	3	2	5	35	21	3	2	5	35	21	3	2		
10 - 19	516	16 7	195	565	321	148	366	110	35	112	43	6	46	42	6	4	6	46	42	6	4	6	46	42	6	4		
20 - 29	498	16 1	170	513	254	115	236	106	30	112	70	10	77	68	15	8	15	77	68	15	8	15	77	68	15	8		
30 - 39	385	12 5	120	429	148	67	141	72	26	85	82	19	84	83	8	11	84	83	8	11	84	83	8	11	84	83	8	11
40 - 49	180	5 8	69	179	62	25	52	20	14	28	49	18	40	49	12	5	40	49	12	5	40	49	12	5	40	49	12	5
50 - 59	123	3 9	81	95	36	23	25	13	15	8	42	22	28	32	21	3	32	32	21	3	32	32	21	3	32	32	21	3
60 And over	54	1 7	36	39	14	12	15	5	3	3	17	9	11	18	12	1	18	12	1	18	12	1	18	12	1	18	12	1
High, not stated	27	0 8	12	35	5	4	8	2	1	2	7	1	11	13	6	1	11	13	6	1	11	13	6	1	11	13	6	1
Not reported	491	15 9	183	477	212	108	172	92	30	95	82	16	91	105	29	19	91	105	29	19	91	105	29	19	91	105	29	19
Total	3,079	100 0	1,128	3,155	1,601	684	1,568	619	224	656	427	108	423	432	112	50	432	432	112	50	432	432	112	50	432	432	112	50

TABLE 17-A RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY STATE, 1974 - 1973

State	1974						1973					
	Accidents #	Pct.	Killed #	Pct.	Injured #	Pct.	Accidents #	Pct.	Killed #	Pct.	Injured #	Pct.
Alabama	98	3.1	20	1.7	108	3.4	101	3.1	34	3.1	110	3.4
Alaska	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Arizona	9	0.2	3	0.2	9	0.2	21	0.6	3	0.2	33	1.0
Arkansas	80	2.5	34	3.0	71	2.2	66	2.0	20	1.8	69	2.1
California	102	3.3	50	4.4	130	4.1	157	4.9	57	5.2	144	4.5
Colorado	27	0.8	13	1.1	18	0.5	40	1.2	22	2.0	30	0.9
Connecticut	8	0.2	1	0.0	8	0.2	3	0.0	-	0.0	5	0.1
Delaware	2	0.0	1	0.0	1	0.0	-	0.0	-	0.0	-	0.0
District of Columbia	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Florida	151	4.9	70	6.2	145	4.5	184	5.7	75	6.9	183	5.7
Georgia	165	5.3	61	5.4	217	6.8	165	5.1	49	4.5	193	6.0
Hawaii	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Idaho	22	0.7	20	1.7	13	0.4	37	1.1	11	1.0	33	1.0
Illinois	223	7.2	58	5.1	225	7.1	216	6.8	87	8.0	203	6.3
Indiana	159	5.1	62	5.4	179	5.6	171	5.3	61	5.6	166	5.2
Iowa	65	2.1	20	1.7	64	2.0	76	2.3	23	2.1	72	2.2
Kansas	96	3.1	32	2.8	90	2.8	83	2.6	24	2.2	83	2.6
Kentucky	62	2.0	24	2.1	63	1.9	52	1.6	20	1.8	42	1.3
Louisiana	80	2.5	22	1.9	89	2.8	66	2.0	17	1.5	81	2.5
Maine	5	0.1	1	0.0	3	0.0	7	0.2	1	0.0	11	0.3
Maryland	16	0.5	2	0.1	14	0.4	21	0.6	1	0.0	19	0.5
Massachusetts	10	0.3	2	0.1	8	0.2	11	0.3	5	0.4	9	0.2
Michigan	103	3.3	40	3.5	96	3.0	131	4.1	48	4.4	128	4.0
Minnesota	68	2.2	25	2.2	65	2.0	75	2.3	26	2.4	74	2.3
Mississippi	78	2.5	22	1.9	74	2.3	83	2.6	21	1.9	93	2.9
Missouri	83	2.6	26	2.3	81	2.5	73	2.2	27	2.5	72	2.2
Montana	7	0.2	3	0.2	5	0.1	17	0.5	4	0.3	15	0.4
Nebraska	69	2.2	33	2.9	62	1.9	58	1.8	31	2.8	47	1.4
Nevada	2	0.0	3	0.2	3	0.0	3	0.0	2	0.1	13	0.4
New Hampshire	5	0.1	-	0.0	7	0.2	2	0.0	-	0.0	2	0.0
New Jersey	24	0.7	9	0.7	19	0.6	28	0.8	3	0.2	24	0.7
New Mexico	10	0.3	5	0.4	7	0.2	10	0.3	4	0.3	8	0.2
New York	55	1.7	24	2.1	55	1.7	37	1.1	13	1.2	36	1.1
North Carolina	106	3.4	33	2.9	140	4.4	95	2.9	49	4.5	113	3.5
North Dakota	21	0.6	6	0.5	21	0.6	20	0.6	5	0.4	17	0.5
Ohio	207	6.7	73	6.4	211	6.6	200	6.3	58	5.3	184	5.7
Oklahoma	95	3.0	21	1.8	106	3.3	75	2.3	20	1.8	75	2.3
Oregon	49	1.5	9	0.7	62	1.9	44	1.3	9	0.8	45	1.4
Pennsylvania	78	2.5	15	1.3	60	1.9	72	2.2	17	1.5	69	2.1
Puerto Rico	1	0.0	1	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Rhode Island	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
South Carolina	81	2.6	32	2.8	93	2.9	64	2.0	19	1.7	79	2.4
South Dakota	15	0.4	8	0.7	13	0.4	10	0.3	4	0.3	15	0.4
Tennessee	84	2.7	39	3.4	80	2.5	84	2.6	38	3.5	72	2.2
Texas	255	8.2	118	10.4	254	8.0	292	9.1	93	8.6	302	9.4
Utah	13	0.4	4	0.3	11	0.3	21	0.6	10	0.9	14	0.4
Vermont	1	0.0	-	0.0	1	0.0	4	0.1	-	0.0	5	0.1
Virginia	42	1.3	15	1.3	35	1.1	49	1.5	12	1.1	62	1.9
Washington	54	1.7	22	1.9	46	1.4	51	1.6	14	1.2	49	1.5
West Virginia	14	0.4	2	0.1	17	0.5	19	0.5	6	0.5	15	0.4
Wisconsin	75	2.4	40	3.5	72	2.2	74	2.3	28	2.5	74	2.3
Wyoming	4	0.1	4	0.3	4	0.1	6	0.1	6	0.5	4	0.1
Unknown	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
Total.....	3,079	100.0	1,128	100.0	3,155	100.0	3,174	100.0	1,077	100.0	3,192	100.0

TABLE 17-B NATURE OF ACCIDENTS AT RAIL-HIGHWAY CROSSINGS INVOLVING MOTOR VEHICLES
BY STATE, 1974

State	Daylight			Dark		
	Accidents	Killed	Injured	Accidents	Killed	Injured
Alabama	69	18	70	29	2	38
Alaska	-	-	-	-	-	-
Arizona	6	1	8	3	2	1
Arkansas	62	25	60	18	9	11
California	53	28	58	49	22	72
Colorado	15	9	10	12	4	8
Connecticut	5	1	5	3	-	3
Delaware	1	-	1	1	1	-
District of Columbia	-	-	-	-	-	-
Florida	117	61	111	34	9	34
Georgia	115	52	163	50	9	54
Hawaii	-	-	-	-	-	-
Idaho	15	14	5	7	6	8
Illinois	132	36	122	91	22	103
Indiana	103	40	121	56	22	58
Iowa	40	16	32	25	4	32
Kansas	61	25	58	35	7	32
Kentucky	46	21	44	16	3	19
Louisiana	53	14	65	27	8	24
Maine	5	1	3	-	-	-
Maryland	9	1	3	7	1	11
Massachusetts	5	1	4	5	1	4
Michigan	63	31	46	40	9	50
Minnesota	45	18	37	23	7	28
Mississippi	61	17	55	17	5	19
Missouri	52	22	46	31	4	35
Montana	3	-	2	4	3	3
Nebraska	50	23	43	19	10	19
Nevada	2	3	3	-	-	-
New Hampshire	3	-	4	2	-	3
New Jersey	12	7	6	12	2	13
New Mexico	7	5	4	3	-	3
New York	32	19	29	23	5	26
North Carolina	82	24	98	24	9	42
North Dakota	17	6	15	4	-	6
Ohio	117	38	109	90	35	102
Oklahoma	58	14	60	37	7	46
Oregon	32	6	44	17	3	18
Pennsylvania	46	7	32	32	8	28
Puerto Rico	-	-	-	1	1	-
Rhode Island	-	-	-	-	-	-
South Carolina	56	15	66	25	17	27
South Dakota	9	3	9	6	5	4
Tennessee	65	30	67	19	9	13
Texas	172	81	154	83	37	100
Utah	8	2	7	5	2	4
Vermont	1	-	1	-	-	-
Virginia	29	11	24	13	4	11
Washington	37	19	31	17	3	15
West Virginia	6	1	5	8	1	12
Wisconsin	50	25	50	25	15	22
Wyoming	1	1	1	3	3	3
Unknown	-	-	-	-	-	-
Total.....	2,028	792	1,991	1,051	336	1,164

TABLE 18 RAIL-HIGHWAY ACCIDENTS BY STATE AND TYPE
OF MOTOR VEHICLE INVOLVED, 1974

State	Total			Automobiles			Buses			Motortrucks			Motorcycles		
	# Killed	Killed	Injured	# Killed	Killed	Injured	# Killed	Killed	Injured	# Killed	Killed	Injured	# Killed	Killed	Injured
Alabama	98	20	108	71	14	35	-	-	-	25	4	23	2	2	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	9	3	9	9	3	9	-	-	-	-	-	-	-	-	3
Arkansas	80	34	71	47	23	45	-	-	-	30	10	23	3	1	3
California	102	50	130	76	42	87	2	3	21	23	4	22	1	1	-
Colorado	27	13	18	19	9	14	-	-	-	8	4	4	-	-	-
Connecticut	8	1	8	7	1	7	-	-	-	1	-	1	-	-	-
Delaware	2	1	1	2	1	1	-	-	-	-	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	9	5	4
Florida	151	70	145	111	51	119	-	-	-	31	14	22	3	1	2
Georgia	165	61	217	120	45	127	1	7	49	41	8	39	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	22	20	13	16	17	10	-	-	-	6	3	3	-	-	-
Illinois	223	58	225	163	42	175	-	-	-	60	16	50	-	-	-
Indiana	159	62	179	113	44	128	2	2	21	42	15	29	2	1	1
Iowa	65	20	64	47	14	52	-	-	-	15	3	12	3	3	4
Kansas	96	32	90	62	23	60	-	-	-	29	6	26	5	3	4
Kentucky	62	24	63	37	15	38	2	-	5	21	7	19	2	2	1
Louisiana	80	22	89	57	14	62	1	-	2	19	8	21	3	-	4
Maine	5	1	3	1	-	1	-	-	-	4	1	2	-	-	-
Maryland	16	2	14	12	2	14	-	-	-	4	-	-	-	-	-
Massachusetts	10	2	8	9	2	8	-	-	-	1	-	-	-	-	-
Michigan	103	40	96	75	26	75	-	-	-	21	11	17	7	3	4
Minnesota	68	25	65	49	18	52	-	-	-	17	7	10	2	-	3
Mississippi	78	22	74	56	17	59	-	-	-	22	5	15	-	-	-
Missouri	83	26	81	60	19	60	-	-	-	23	7	21	-	-	-
Montana	7	3	5	4	3	2	-	-	-	3	-	3	-	-	-
Nebraska	69	33	62	37	18	41	-	-	-	30	14	19	2	1	2
Nevada	2	3	3	2	3	3	-	-	-	-	-	-	-	-	-
New Hampshire	5	-	7	3	-	4	-	-	-	2	-	3	-	-	-
New Jersey	24	9	19	21	9	17	-	-	-	3	-	2	-	-	-
New Mexico	10	5	7	7	4	5	1	1	-	2	-	2	-	-	-
New York	55	24	55	45	21	50	-	-	-	9	2	5	1	1	-
North Carolina	106	33	140	77	25	107	1	-	11	25	6	21	3	2	1
North Dakota	21	6	21	10	3	9	-	-	-	10	3	10	1	-	2
Ohio	207	73	211	156	58	170	-	-	-	49	14	40	2	1	1
Oklahoma	95	21	106	64	17	78	-	-	-	29	4	26	2	-	2
Oregon	49	9	62	32	7	47	-	-	-	17	2	15	-	-	-
Pennsylvania	78	15	60	55	12	46	-	-	-	18	-	11	5	3	3
Puerto Rico	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	81	32	93	60	23	72	-	-	-	19	9	19	2	-	2
South Dakota	15	8	13	10	6	11	-	-	-	5	2	2	-	-	-
Tennessee	84	39	80	60	29	60	1	-	1	21	8	19	2	2	2
Texas	255	118	254	173	76	178	2	1	4	77	39	70	3	2	2
Utah	13	4	11	9	3	8	-	-	-	3	-	3	1	1	-
Vermont	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-
Virginia	42	15	35	32	12	31	-	-	-	10	3	4	-	-	-
Washington	54	22	46	36	16	31	-	-	-	18	6	15	-	-	-
West Virginia	14	2	17	9	2	11	-	-	-	5	-	6	-	-	4
Wisconsin	75	40	72	59	36	57	-	-	-	10	2	11	6	2	-
Wyoming	4	4	4	3	4	3	-	-	-	1	-	1	-	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total.....	3,079	1,128	3,155	2,185	830	2,330	13	14	114	809	247	666	72	37	45

TABLE 19 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY STATE AND MONTH, 1974

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alabama	6	9	6	6	6	4	8	7	13	9	15	9	98
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	-	1	1	-	1	-	-	1	1	1	2	1	9
Arkansas	10	2	5	6	10	9	5	5	5	4	10	9	80
California	10	16	8	6	7	11	7	8	10	7	9	3	102
Colorado	4	1	1	3	-	4	-	-	2	4	2	6	27
Connecticut	2	-	1	-	-	-	-	-	1	4	-	-	8
Delaware	-	-	-	-	1	-	-	-	-	-	-	1	2
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	13	9	16	11	14	16	14	16	12	9	12	9	151
Georgia	12	18	8	7	19	9	16	13	9	13	20	21	165
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	3	1	2	2	1	3	2	1	3	2	-	2	22
Illinois	27	18	16	14	12	12	18	11	16	26	32	21	223
Indiana	30	19	9	6	12	9	6	11	14	15	10	18	159
Iowa	8	7	4	4	4	3	6	1	5	7	6	10	65
Kansas	7	4	7	4	6	10	14	5	8	10	13	8	96
Kentucky	2	9	4	6	2	4	1	8	5	11	5	5	62
Louisiana	4	10	4	8	8	7	5	10	1	6	6	11	80
Maine	2	-	-	-	-	-	-	-	2	-	1	-	5
Maryland	1	1	3	-	-	2	1	2	1	1	3	1	16
Massachusetts	2	1	-	1	-	1	-	-	-	1	3	1	10
Michigan	10	12	10	8	4	10	10	3	5	12	9	10	103
Minnesota	6	4	6	3	5	6	1	6	9	4	7	11	68
Mississippi	4	10	4	4	11	5	7	13	2	5	4	9	78
Missouri	9	3	14	2	7	7	5	11	4	8	5	8	83
Montana	1	-	3	-	1	-	1	-	-	1	-	-	7
Nebraska	6	4	5	5	10	6	6	4	3	11	4	5	69
Nevada	-	-	-	-	-	-	-	-	-	1	1	-	2
New Hampshire	1	-	1	1	-	1	-	-	1	-	-	-	5
New Jersey	3	1	2	-	2	2	1	2	2	4	2	3	24
New Mexico	1	-	1	1	-	-	-	-	2	5	-	-	10
New York	2	5	8	6	1	5	1	6	6	5	8	2	55
North Carolina	8	10	11	6	14	3	8	9	6	14	10	7	106
North Dakota	2	3	1	-	-	2	-	2	2	-	5	4	21
Ohio	19	20	23	17	14	13	16	12	17	19	19	18	207
Oklahoma	9	6	8	5	9	11	10	6	7	1	9	14	95
Oregon	4	5	7	4	8	1	2	5	4	5	3	1	49
Pennsylvania	6	11	6	3	7	4	6	2	6	12	8	7	78
Puerto Rico	-	-	-	-	-	-	-	-	1	-	-	-	1
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	10	2	6	5	4	5	4	5	11	12	10	7	81
South Dakota	1	1	-	2	-	1	2	3	1	1	1	2	15
Tennessee	6	11	6	3	7	7	7	6	8	12	4	7	84
Texas	26	19	12	22	18	17	23	15	24	22	29	28	255
Utah	-	1	3	-	1	-	-	2	-	2	4	-	13
Vermont	-	-	-	-	-	1	-	-	-	-	-	-	1
Virginia	3	1	2	5	3	4	5	1	8	5	1	4	42
Washington	4	3	3	4	7	2	1	9	3	5	7	6	54
West Virginia	1	1	-	2	2	1	1	1	1	-	4	-	14
Wisconsin	8	11	4	4	5	3	1	10	6	9	8	6	75
Wyoming	-	1	-	2	-	-	-	-	-	-	-	1	4
Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	293	271	241	198	243	221	221	232	247	305	311	296	3079

TABLE 20-A CASUALTIES IN ALL TYPES OF RAIL-HIGHWAY ACCIDENTS
BY STATE, 1974

State	Accidents	Killed		Injured		Total Casualties	
		#	Pct.	#	Pct.	#	Pct.
Alabama	100	22	1.8	108	3.3	130	2.9
Alaska	-	-	0.0	-	0.0	-	0.0
Arizona	10	4	0.3	9	0.2	13	0.2
Arkansas	80	34	2.7	71	2.1	105	2.3
California	112	57	4.6	133	4.0	190	4.2
Colorado	28	13	1.0	19	0.5	32	0.7
Connecticut	8	1	0.0	8	0.2	9	0.2
Delaware	2	1	0.0	1	0.0	2	0.0
District of Columbia	-	-	0.0	-	0.0	-	0.0
Florida	159	71	5.8	154	4.7	225	5.0
Georgia	170	63	5.1	220	6.7	283	6.3
Hawaii	-	-	0.0	-	0.0	-	0.0
Idaho	24	20	1.6	14	0.4	34	0.7
Illinois	257	77	6.3	241	7.4	318	7.1
Indiana	167	68	5.5	181	5.5	249	5.5
Iowa	71	24	1.9	66	2.0	90	2.0
Kansas	101	33	2.7	94	2.8	127	2.8
Kentucky	66	26	2.1	65	2.0	91	2.0
Louisiana	83	23	1.8	89	2.7	112	2.5
Maine	5	1	0.0	3	0.0	4	0.0
Maryland	17	2	0.1	15	0.4	17	0.3
Massachusetts	12	2	0.1	10	0.3	12	0.2
Michigan	113	43	3.5	102	3.1	145	3.2
Minnesota	71	26	2.1	66	2.0	92	2.0
Mississippi	86	24	1.9	79	2.4	103	2.3
Missouri	88	30	2.4	82	2.5	112	2.5
Montana	7	3	0.2	5	0.1	8	0.1
Nebraska	73	35	2.8	64	1.9	99	2.2
Nevada	2	3	0.2	3	0.0	6	0.1
New Hampshire	5	-	0.0	7	0.2	7	0.1
New Jersey	31	15	1.2	20	0.6	35	0.7
New Mexico	10	5	0.4	7	0.2	12	0.2
New York	62	29	2.3	57	1.7	86	1.9
North Carolina	110	33	2.7	144	4.4	177	3.9
North Dakota	24	6	0.4	24	0.7	30	0.6
Ohio	218	82	6.7	214	6.5	296	6.6
Oklahoma	99	22	1.8	109	3.3	131	2.9
Oregon	49	9	0.7	62	1.9	71	1.5
Pennsylvania	82	15	1.2	64	1.9	79	1.7
Puerto Rico	1	1	0.0	-	0.0	1	0.0
Rhode Island	-	-	0.0	-	0.0	-	0.0
South Carolina	82	33	2.7	93	2.8	126	2.8
South Dakota	15	8	0.6	13	0.4	21	0.4
Tennessee	85	39	3.1	81	2.4	120	2.6
Texas	263	121	9.9	257	7.9	378	8.4
Utah	15	6	0.4	11	0.3	17	0.3
Vermont	1	-	0.0	1	0.0	1	0.0
Virginia	48	19	1.5	37	1.1	56	1.2
Washington	57	24	1.9	48	1.4	72	1.6
West Virginia	15	2	0.1	18	0.5	20	0.4
Wisconsin	79	41	3.3	75	2.3	116	2.5
Wyoming	5	4	0.3	5	0.1	9	0.2
Unknown	-	-	0.0	-	0.0	-	0.0
Total.....	3,268	1,220	100.0	3,249	100.0	4,469	100.0

TABLE 20-B CASUALTIES IN RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES
BY STATE AND NUMBER OF AUTOMOBILES REGISTERED, 1974

State	Total Accidents	Killed		Injured		Total #	Pct.	Vehicles Registered (000)*	Casualties per 10,000 Registrations		
		#	Pct.	#	Pct.				Killed	Injured	Total
Alabama	98	20	1.7	108	3.4	128	2.9	2,454	0.08	0.44	0.52
Alaska	-	-	0.0	-	0.0	-	0.0	188	0.00	0.00	0.00
Arizona	9	3	0.2	9	0.2	12	0.2	1,524	0.01	0.05	0.07
Arkansas	80	34	3.0	71	2.2	105	2.4	1,239	0.27	0.57	0.84
California	102	50	4.4	130	4.1	180	4.2	13,787	0.03	0.09	0.13
Colorado	27	13	1.1	18	0.5	31	0.7	1,899	0.06	0.09	0.16
Connecticut	8	1	0.0	8	0.2	9	0.2	1,933	0.00	0.04	0.04
Delaware	2	1	0.0	1	0.0	2	0.0	346	0.02	0.02	0.05
District of Columbia	-	-	0.0	-	0.0	-	0.0	262	0.00	0.00	0.00
Florida	151	70	6.2	145	4.5	215	5.0	5,687	0.12	0.25	0.37
Georgia	165	61	5.4	217	6.8	278	6.4	3,364	0.18	0.64	0.82
Hawaii	-	-	0.0	-	0.0	-	0.0	501	0.00	0.00	0.00
Idaho	22	20	1.7	13	0.4	33	0.7	617	0.32	0.20	0.53
Illinois	223	58	5.1	225	7.1	283	6.6	6,212	0.09	0.36	0.45
Indiana	159	62	5.4	179	5.6	241	5.6	3,368	0.18	0.53	0.71
Iowa	65	20	1.7	64	2.0	84	1.9	2,080	0.09	0.30	0.40
Kansas	96	32	2.8	90	2.8	122	2.8	1,837	0.17	0.48	0.66
Kentucky	62	24	2.1	63	1.9	87	2.0	2,186	0.10	0.28	0.39
Louisiana	80	22	1.9	89	2.8	111	2.5	2,155	0.10	0.41	0.51
Maine	5	1	0.0	3	0.0	4	0.0	627	0.01	0.04	0.06
Maryland	16	2	0.1	14	0.4	16	0.3	2,356	0.00	0.05	0.06
Massachusetts	10	2	0.1	8	0.2	10	0.2	3,059	0.00	0.02	0.03
Michigan	103	40	3.5	96	3.0	136	3.1	5,449	0.07	0.17	0.24
Minnesota	68	25	2.2	65	2.0	90	2.1	2,527	0.09	0.25	0.35
Mississippi	78	22	1.9	74	2.3	96	2.2	1,359	0.16	0.54	0.70
Missouri	83	26	2.3	81	2.5	107	2.4	2,837	0.09	0.28	0.37
Montana	7	3	0.2	5	0.1	8	0.1	590	0.05	0.08	0.13
Nebraska	69	33	2.9	62	1.9	95	2.2	1,126	0.29	0.54	0.84
Nevada	2	3	0.2	3	0.0	6	0.1	466	0.06	0.06	0.12
New Hampshire	5	-	0.0	7	0.2	7	0.1	478	0.00	0.14	0.14
New Jersey	24	9	0.7	19	0.6	28	0.6	4,244	0.02	0.04	0.06
New Mexico	10	5	0.4	7	0.2	12	0.2	751	0.06	0.09	0.16
New York	55	24	2.1	55	1.7	79	1.8	7,560	0.03	0.07	0.10
North Carolina	106	33	2.9	140	4.4	173	4.0	3,609	0.09	0.38	0.47
North Dakota	21	6	0.5	21	0.6	27	0.6	524	0.11	0.40	0.51
Ohio	207	73	6.4	211	6.6	284	6.6	6,927	0.10	0.30	0.40
Oklahoma	95	21	1.8	106	3.3	127	2.9	2,057	0.10	0.51	0.61
Oregon	49	9	0.7	62	1.9	71	1.6	1,683	0.05	0.36	0.42
Pennsylvania	78	15	1.3	60	1.9	75	1.7	6,978	0.02	0.08	0.10
Puerto Rico	1	1	0.0	-	0.0	1	0.0	-	1.00	0.00	1.00
Rhode Island	-	-	0.0	-	0.0	-	0.0	585	0.00	0.00	0.00
South Carolina	81	32	2.8	93	2.9	125	2.9	1,692	0.18	0.55	0.73
South Dakota	15	8	0.7	13	0.4	21	0.4	512	0.15	0.25	0.41
Tennessee	84	39	3.4	80	2.5	119	2.7	2,613	0.14	0.30	0.45
Texas	255	118	10.4	254	8.0	372	8.6	8,203	0.14	0.30	0.45
Utah	13	4	0.3	11	0.3	15	0.3	778	0.05	0.14	0.19
Vermont	1	-	0.0	1	0.0	1	0.0	288	0.00	0.03	0.03
Virginia	42	15	1.3	35	1.1	50	1.1	2,932	0.05	0.11	0.17
Washington	54	22	1.9	46	1.4	68	1.5	2,479	0.08	0.18	0.27
West Virginia	14	2	0.1	17	0.5	19	0.4	945	0.02	0.17	0.20
Wisconsin	75	40	3.5	72	2.2	112	2.6	2,566	0.15	0.28	0.43
Wyoming	4	4	0.3	4	0.1	8	0.1	312	0.12	0.12	0.25
Unknown	-	-	0.0	-	0.0	-	0.0	--	0.00	0.00	0.00
Total	3,079	1,128	100.0	3,155	100.0	4,283	100.0	130,751	0.08	0.24	0.32

*NOTE: Figures include passenger automobiles, trucks and buses and are estimates supplied by the Federal Highway Administration

TABLE 21-A CASUALTIES IN ACCIDENTS AT PUBLIC RAIL-HIGHWAY CROSSINGS
BY CAUSE OF ACCIDENT, 1974

Cause Code	Cause	Number of Accidents	Total Persons		Employees on duty				Employees				Non-trespassers		Trespassers			
			Killed	Injured	Total	Killed	Injured	Trainmen	Killed	Injured	Others	Killed	Injured	not on duty	Killed	Injured	Passengers	Killed
Train accidents																		
4401	Passenger automobile struck by locomotive or car.....	49	30	34	-	3	-	1	-	2	-	-	-	8	29	21	1	2
4402	Bus struck by locomotive or car.....	2	7	51	-	-	-	-	-	-	-	-	-	1	7	50	-	-
4403	Truck struck by locomotive or car.....	187	40	92	2	34	2	29	-	5	-	-	-	1	35	56	3	1
4404	Other vehicle struck by locomotive or car.....	6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4411	Passenger automobile ran into side of locomotive or car.....	25	7	22	-	1	-	1	-	-	-	-	-	-	1	1	-	-
4413	Truck ran into side of locomotive or car.....	58	16	28	-	7	-	7	-	-	-	-	-	-	7	20	-	1
4421	Sudden brake application to avoid highway crossing accident.....	6	-	3	-	-	-	-	-	-	-	-	-	-	16	20	-	1
4488	Other highway grade crossing accidents.....	1	-	1	-	-	-	-	-	-	-	-	-	-	3	-	-	-
SUBTOTAL.....		334	101	232	2	45	2	38	-	7	-	-	-	13	95	169	4	5
Train service accidents																		
5601	At public crossing, pedestrian struck by locomotive or car.....	93	69	26	-	-	-	-	-	-	-	-	-	-	25	11	44	15
5602	At public crossing, passenger auto struck by locomotive or car.....	1,514	662	1,565	-	8	-	5	-	3	-	-	-	5	632	1,471	30	81
5603	At public crossing, bus struck by locomotive or car.....	9	6	52	-	-	-	-	-	-	-	-	-	-	6	52	-	-
5604	At public crossing, truck struck by locomotive or car.....	441	150	423	-	23	-	19	-	4	-	-	-	-	146	395	4	5
5605	At public crossing, motorcycle struck by locomotive or car.....	18	13	7	-	-	-	-	-	-	-	-	-	-	12	6	1	1
5606	At public crossing, other vehicle, machine or animal hit by train.....	44	17	28	-	1	-	-	-	1	-	-	-	-	13	25	4	2
5607	At public crossing, pedestrian ran into or drew into train.....	3	-	3	-	-	-	-	-	-	-	-	-	-	-	2	-	1
5608	At public crossing, passenger auto ran into side of train.....	597	131	709	-	1	-	1	-	-	-	-	-	-	126	688	5	19
5609	At public crossing, bus ran into side of locomotive or car.....	2	1	11	-	-	-	-	-	-	-	-	-	-	1	11	-	-
5610	At public crossing, truck ran into side of locomotive or car.....	123	41	123	-	-	-	-	-	-	-	-	-	-	41	121	-	2
5611	At public crossing, motorcycle ran into side of locomotive or car.....	54	24	38	-	-	-	-	-	-	-	-	-	-	24	38	-	-
5612	At public crossing, other vehicle, machine or animal ran into train.....	6	2	4	-	-	-	-	-	-	-	-	-	-	1	3	1	1
5614	Sudden train brake application to avoid highway crossing accident.....	5	-	5	-	5	-	5	-	-	-	-	-	-	-	-	-	-
5615	Pedestrian crossing between cars on public crossing.....	6	2	4	-	-	-	-	-	-	-	-	-	-	-	-	2	4
5688	Highway crossing accidents due to other causes.....	19	1	19	1	12	1	12	-	-	-	-	-	-	-	7	-	-
SUBTOTAL.....		2,934	1,119	3,017	1	50	1	42	-	8	-	1	-	5	1,027	2,830	91	131
GRAND TOTAL.....		3,268	1,220	3,249	3	95	3	80	-	15	-	1	-	18	1,122	2,999	95	136

TABLE 21-B CASUALTIES IN ACCIDENTS AT PRIVATE RAIL-HIGHWAY CROSSINGS BY CAUSE OF ACCIDENT, 1974

Cause Code	Cause	Number of Accidents	Total Persons		Employees on duty				Employees				Non-trespassers		Trespassers				
			Killed	Injured	Total	Killed	Injured	Trainmen	Killed	Injured	Others	Killed	Injured	not on duty	Killed	Injured	Passengers	Killed	Injured
4422 Highway vehicle struck by locomotive or car at private crossing.....																			
4487	Other private crossing accidents.....	2	-	1	-	-	-	-	-	-	1	-	-	-	1	3	4	-	-
5702	Struck by train, crossing track at private crossing.....	98	37	97	-	3	-	1	-	2	-	-	-	-	12	93	5	1	
Grand Total.....		120	41	103	1	3	-	1	1	2	-	-	-	1	35	98	5	1	

TABLE 22 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES BY KIND OF CROSSING PROTECTION IN 1974

Railroad	Total	Lowered Gates	Train-men	Watch-men	Audible and Visible Signals	Audible Signals	Visible Signals	Passive Signals
CLASS I RR (LINE-HAUL)								
EASTERN DISTRICT								
Akron Canton & Youngstown	7	-	-	-	4	1	-	2
Ann Arbor	6	-	-	-	-	-	-	6
Baltimore & Ohio	75	3	2	-	15	-	19	36
Bessemer & Lake Erie	2	-	-	-	-	-	1	1
Boston & Maine	8	1	-	-	4	1	1	1
Central RR Co. of New Jersey	3	-	1	-	-	-	-	2
Chesapeake & Ohio	82	2	1	-	23	-	19	37
Chicago & Eastern Illinois	17	2	-	-	6	-	-	9
Delaware & Hudson	4	-	-	-	-	1	3	-
Detroit & Toledo Shore Line	1	1	-	-	-	-	-	-
Detroit, Toledo & Ironton	7	-	1	-	-	-	1	5
Elgin, Joliet & Eastern	13	2	-	-	3	-	1	7
Erie-Lackawanna	60	4	-	-	11	2	26	17
Grand Trunk Western	37	7	-	-	12	-	2	16
Illinois Terminal	3	-	-	-	1	-	-	2
Lehigh Valley	6	-	-	-	4	-	-	2
Long Island	3	2	-	-	-	-	-	1
Maine Central	6	-	-	-	2	-	1	3
Missouri-Illinois	1	-	-	-	-	-	-	1
Norfolk & Western	193	8	1	1	25	2	45	111
Penn Central	214	22	1	1	15	3	66	106
Pennsylvania-Reading Seashore Lines	5	-	-	-	3	-	1	1
Reading	17	-	-	-	3	-	8	6
Richmond, Fredericksburg & Potomac	1	1	-	-	-	-	-	-
Western Maryland	11	-	1	-	-	-	3	8
SUBTOTAL, EASTERN DISTRICT	782	55	7	2	131	10	197	380
SOUTHERN DISTRICT								
Alabama Great Southern	27	1	-	-	2	-	9	15
Atlanta & West Point	8	-	-	-	3	-	-	5
Central of Georgia	39	-	-	-	2	-	5	32
Cincinnati, New Orleans & Texas Pacific	11	-	-	-	1	-	3	7
Clinchfield	1	-	-	-	-	-	-	1
Florida East Coast	5	1	-	-	3	-	-	1
Georgia	13	-	-	-	1	-	-	12
Georgia Southern & Florida	22	-	-	-	-	-	2	20
Illinois Central Gulf	182	3	3	-	21	1	15	139
Louisville & Nashville	118	1	2	-	26	-	14	75
Norfolk Southern	17	-	-	-	2	-	3	12
Seaboard Coast Line	280	3	-	-	34	-	45	198
Southern	185	4	-	-	10	-	34	137
SUBTOTAL, SOUTHERN DISTRICT	908	13	5	-	105	1	130	654
WESTERN DISTRICT								
Atchison, Topeka & Santa Fe	134	5	1	-	41	1	22	64
Burlington Northern	181	5	1	-	24	2	22	127
Chicago & North Western	97	11	1	-	36	1	5	43
Chicago, Milwaukee, St. Paul & Pacific	63	3	-	-	9	-	9	42
Chicago, Rock Island & Pacific	138	6	-	-	34	4	1	93
Colorado & Southern	11	-	-	-	5	-	-	6
Denver & Rio Grande Western	10	-	-	-	4	-	1	5
Duluth, Missabe & Iron Range	1	-	-	-	-	-	-	1
Duluth, Winnipeg & Pacific	1	-	-	-	-	-	-	1
Fort Worth & Denver	2	-	-	-	-	-	-	2
Kansas City Southern	8	-	-	-	1	-	-	7
Lake Superior & Ishpeming	1	-	-	-	-	-	-	1
Minneapolis, Northfield & Southern	2	-	-	-	-	-	-	2
Missouri-Kansas-Texas	23	-	1	-	6	-	4	12
Missouri Pacific	180	4	4	-	65	-	3	104
Northwestern Pacific	2	-	-	-	2	-	-	-
St. Louis-San Francisco	108	3	2	-	29	1	2	71
St. Louis Southwestern	26	-	1	-	3	-	8	14
Soo Line	32	-	1	-	15	1	3	12
Southern Pacific	126	7	1	-	45	1	26	46
Texas & Pacific	41	1	-	-	13	-	-	27
Texas Mexican	1	-	-	-	1	-	-	-
Toledo, Peoria & Western	2	-	-	-	-	-	-	2
Union Pacific	95	3	1	-	10	2	24	55
Western Pacific	18	3	-	-	10	-	-	5
SUBTOTAL, WESTERN DISTRICT	1,303	51	14	-	353	13	130	742
CLASS I RR (SWITCHING AND TERMINAL)								
EASTERN DISTRICT								
Baltimore & Ohio Chicago Terminal	3	1	-	-	-	-	1	1
Pataosco & Back Rivers	1	-	-	-	-	-	-	1
SUBTOTAL, EASTERN DISTRICT	4	1	-	-	-	-	1	2
SOUTHERN DISTRICT								
Kentucky & Indiana Terminal	1	-	-	-	-	-	1	-
SUBTOTAL, SOUTHERN DISTRICT	1	-	-	-	-	-	1	-
WESTERN DISTRICT								
Houston Belt & Terminal	4	-	-	-	2	-	-	2
Portland Terminal	1	-	-	-	1	-	-	-
Port Terminal RR Association	2	-	-	-	1	-	1	-

(CONT.) TABLE 22 RAIL-HIGHWAY ACCIDENTS INVOLVING MOTOR VEHICLES BY KIND OF CROSSING PROTECTION IN 1974

Railroad	Total	Lowered Gates	Train-men	Watch-men	Audible and Visible Signals	Audible Signals	Visible Signals	Passive Signals
WESTERN DISTRICT (CONT.)								
SUBTOTAL, WESTERN DISTRICT	7	-	-	-	4	-	1	2
CLASS II RR								
ALL DISTRICTS, CLASS II								
Class II	74	2	1	-	16	-	12	43
SUBTOTAL, ALL DISTRICTS, CLASS II	74	2	1	-	16	-	12	43
RECAPITULATION								
ALL DISTRICTS								
Eastern District	786	56	7	2	131	10	198	382
Southern District	909	13	5	-	105	1	131	654
Western District	1,310	51	14	-	357	13	131	744
Class I RR (Line-haul)	2,993	119	26	2	589	24	457	1,776
Class I RR (Switching and Terminal)	12	1	-	-	4	-	3	4
Railroads All Other Classes	74	2	1	-	16	-	12	43
TOTAL FOR ALL RAILROADS	3,079	122	27	2	609	24	472	1,823