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Transportation**

Federal Railroad  
Administration  
Office of Safety

# Accident/Incident Bulletin

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## NOTICE

This document is prepared from reports submitted by the railroads to the Federal Railroad Administration in accordance with Regulation 49 C.F.R 225. These data have been edited and summarized by FRA personnel. The United States Government assumes no liability for its contents or its use.

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## INTRODUCTION

To comply with the provisions of 49 CFR 225, all railroads are required to file monthly accident/incident reports with the Federal Railroad Administration's (FRA) Office of Safety.

Bulletin 151 summarizes all reportable railroad accidents/incidents that occurred in the United States during 1982, including those involving Canadian railroads operating in the United States.

Railroads must use the reporting forms contained in Appendix B and the FRA Guide for Preparing Accident/Incident Reports, in accordance with 49 CFR 225.11. The forms and the reporting guide are reviewed every two years and if necessary are amended.

The reporting threshold used to determine which accidents must be reported is adjusted to account for the effects of inflation on train accident damage costs. Any train accident exceeding \$750 in damages to railroad on-track equipment, signals, track or track structures, and roadbed had to be reported between 1957 and 1974. Since the reporting threshold remained the same during this period, the rise in damage costs due to inflation contributed to an increased number of reported accidents. In 1975, the FRA implemented new reporting rules for railroad accidents. The reporting threshold was raised to \$1,750; and a policy of adjusting the threshold every two years was adopted to reflect inflationary changes. The reporting threshold in 1981 was \$3,700.

While this change improved the comparability of the data, comparisons were valid only for those years when the threshold was adjusted. Generally, the number of accidents reported in the year following an adjustment is higher. Biennial adjustments not only make year-to-year statistical comparisons difficult, but also impose an unnecessary reporting burden on the railroads. To get a clear picture of annual trends, it is necessary to adjust the second year of a threshold. This had been done for several figures by limiting the count of accidents in 1979 to those resulting in reportable damage of more than \$2,600, and in 1980 to those over \$3,200 and in 1982 to those over \$4,100. For other years, the actual number of accidents is reported.

To assess the impact of increases or decreases in accidents/incidents, it is useful to know the number of hours worked (man-hours) and the revenue ton-miles. The 1982 Accident/Incident Bulletin reports data for train accidents and train incidents by billion revenue ton-miles, and data for non-train incidents by 200,000 man-hours.

In 1977, more specific accident/incident cause and occurrence codes were added to the Guide for Preparing Accident/Incident Reports. Some existing codes have been redefined. While totals for major code groupings were not significantly affected by these changes, care should be used in comparing individual codes used before 1977 with those used in 1977 and after.

The heading "Nonfatal Casualties" indicates that both injuries and occupational illnesses are included. In all other cases, nonfatal illnesses are shown separately.

While casualties and accidents at rail-highway crossings are represented in this bulletin, more detailed information is available in the "Rail-Highway Crossing Accident/Incident and Inventory Bulletin" published annually by the FRA Office of Safety.



1. HISTORICAL TRENDS, 1977 THROUGH 1982

OPERATIONS

TABLE H1. RAILROAD OPERATIONAL PROFILE

Year	Man- Hours (000,000)	Motor Train- Miles (000)	Yard Switching Miles (000)	Locomotive- Miles (000)	Total Train- Miles (000)
1977	1,053	32,419	218,544	499,079	750,042
1978	1,056	32,279	214,498	505,187	751,964
1979	1,077	32,274	207,849	523,306	763,429
1980	1,011	32,784	182,340	502,538	717,662
1981	949	30,301	164,754	481,161	676,216
1982	801	27,359	133,424	412,586	573,369

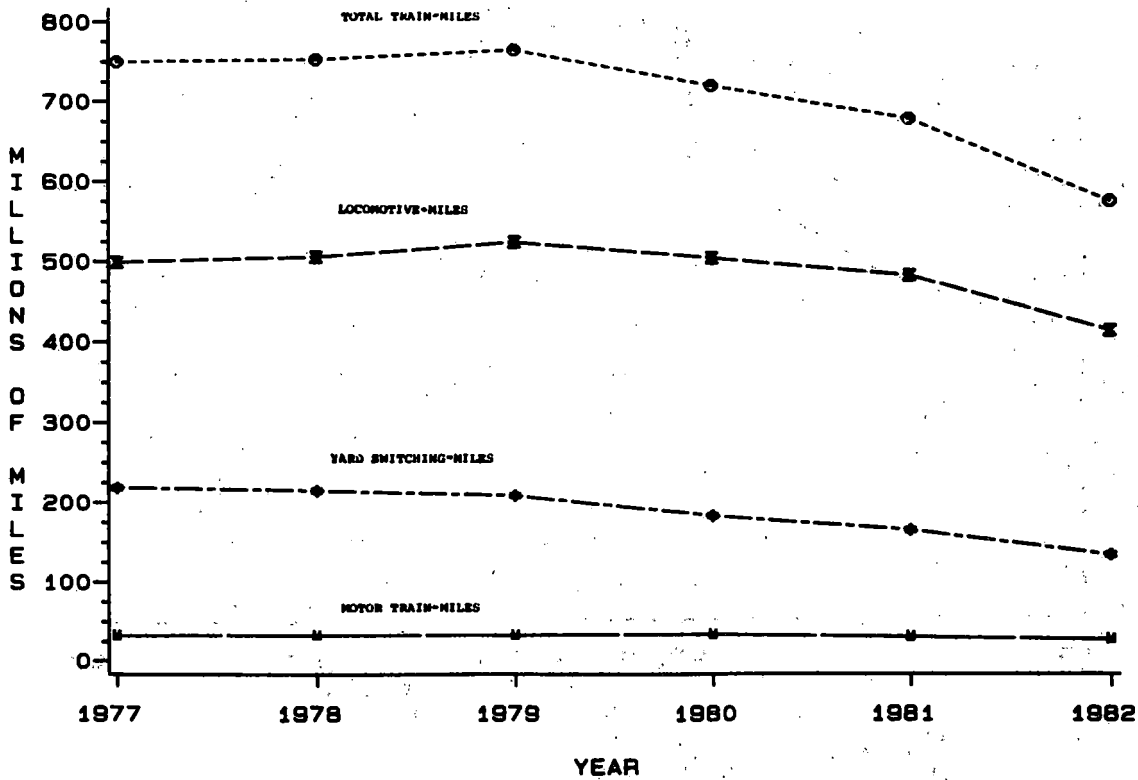
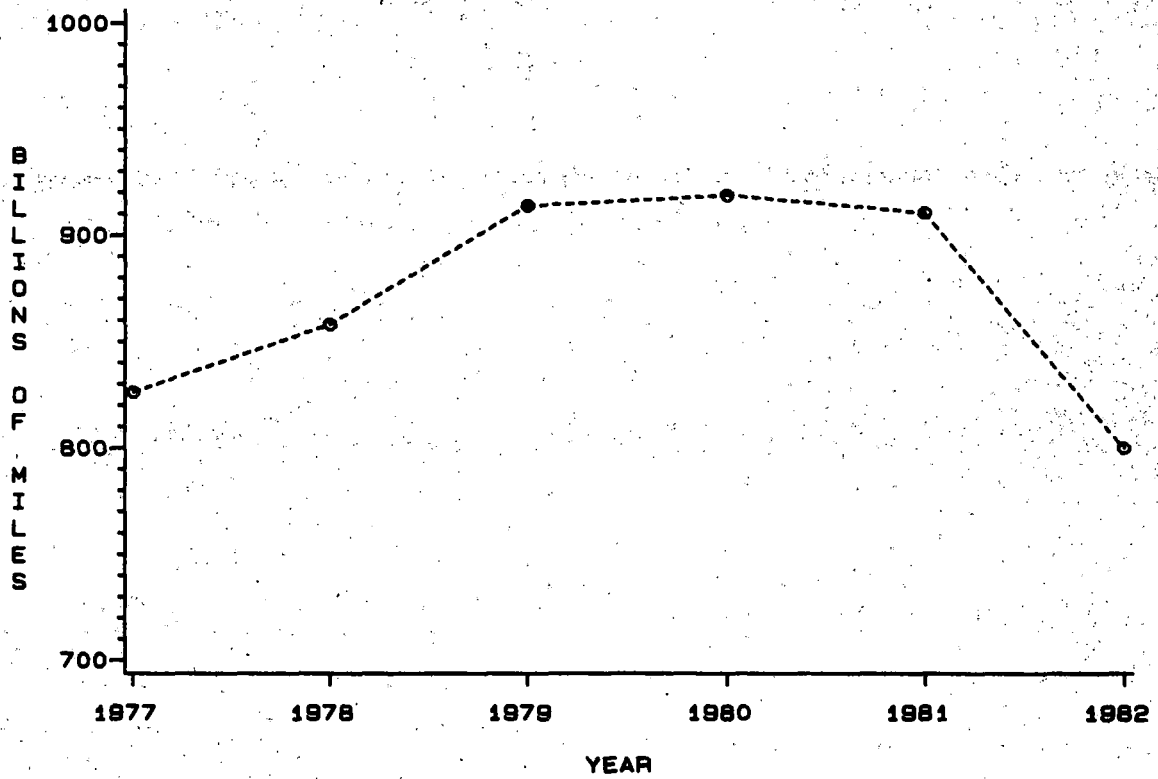


FIGURE 1. RAILROAD TRAIN-MILES, 1977-1982

Revenue Ton-Miles, 1977-1982  
(Billions)

1977	826.3
1978	858.1
1979	913.7
1980	918.6
1981	910.2
1982	799.6



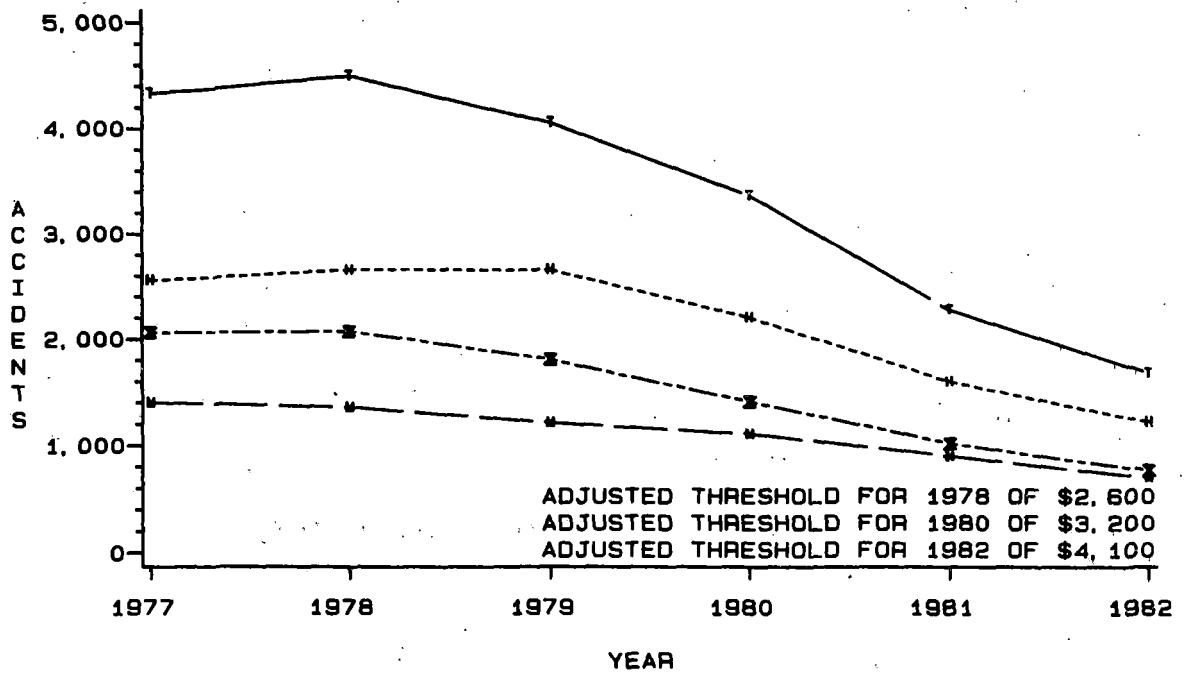
SOURCE: ASSOCIATION OF AMERICAN RAILROADS

FIGURE 2. REVENUE TON-MILES, 1977-1982

TRAIN ACCIDENTS

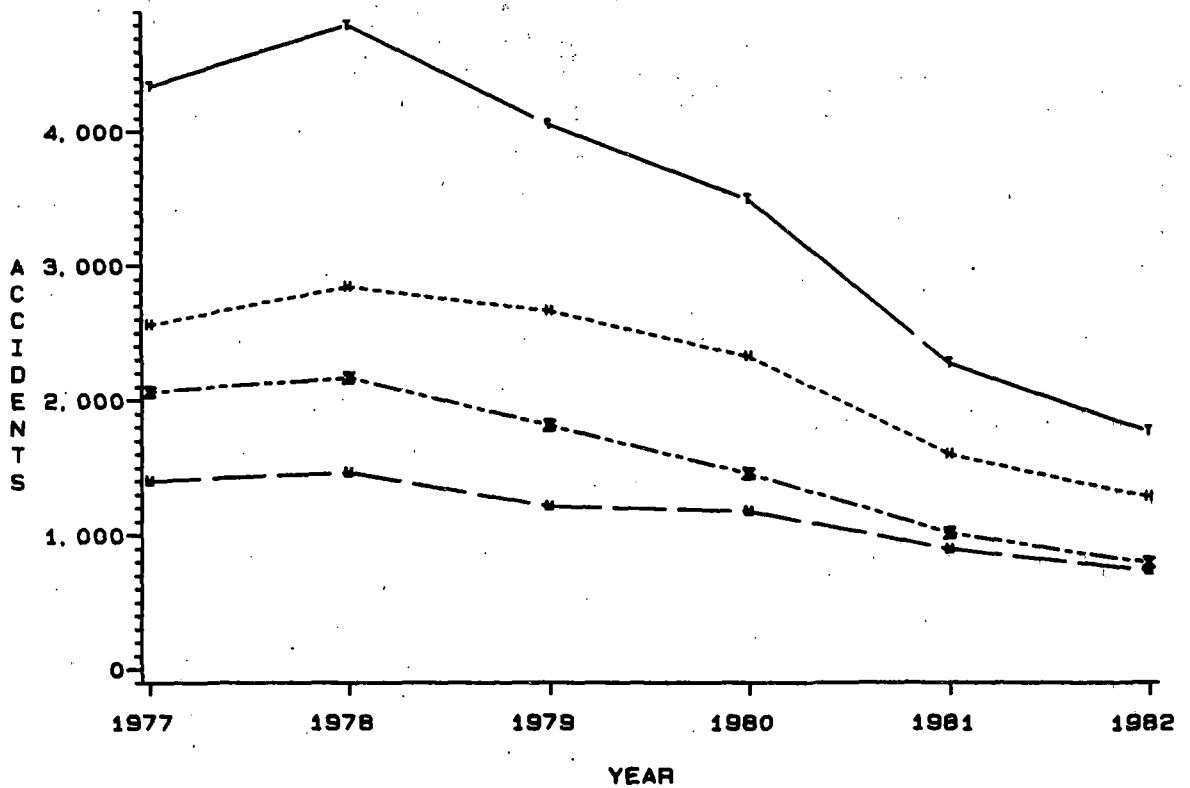
TABLE H3. TRAIN ACCIDENT CAUSES

<u>Year</u>	<u>Human Factors</u>	<u>Mechanical &amp; Electrical Failures</u>	<u>Track Defects</u>	<u>Other</u>	<u>Total Accidents</u>
1977	2,559	2,064	4,337	1,402	10,362
1978	2,845	2,170	4,797	1,465	11,277
1979	2,660	1,815	4,050	1,215	9,740
1980	2,323	1,458	3,492	1,178	8,451
1981	1,597	1,016	2,273	895	5,781
1982	1,284	796	1,769	740	4,589



LEGEND: CAUSE      ■-■-■ EQUIPMENT      \*-\*-\* HUMAN FACTORS  
 +--+ MISCELLANEOUS      +--+ TRACK

FIGURE 3A. ACCIDENT CAUSES, 1977-1982 - ADJUSTED



LEGEND: CAUSE      ■-■-■ EQUIPMENT      \*-\*-\* HUMAN FACTORS  
 +--+ MISCELLANEOUS      +--+ TRACK

FIGURE 3B. ACCIDENT CAUSES, 1977-1982 - UNADJUSTED

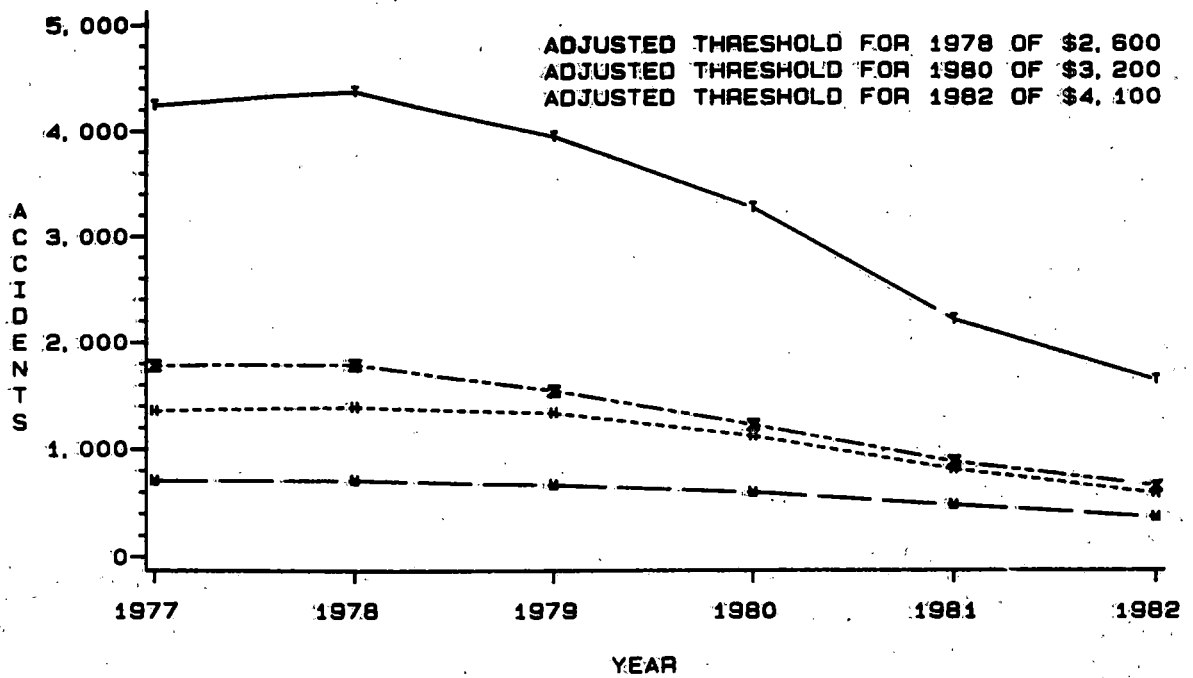


FIGURE 4A. DERAILMENT CAUSES, 1977-1982 - ADJUSTED

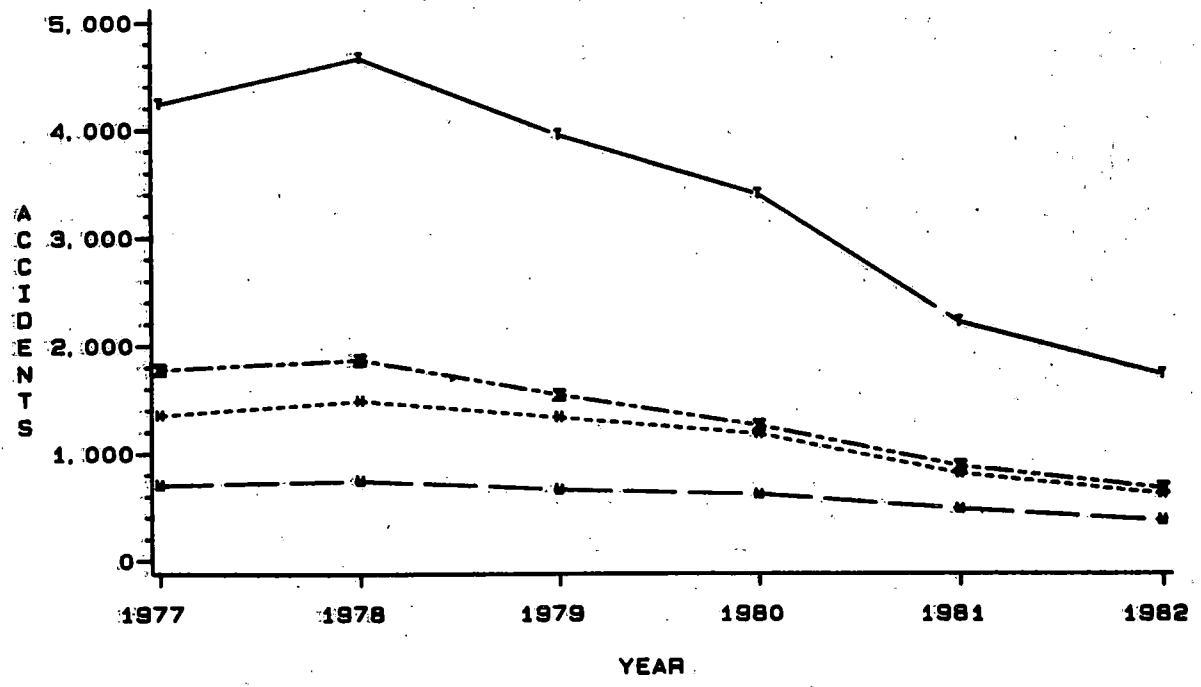


FIGURE 4B. DERAILMENT CAUSES, 1977-1982 - UNADJUSTED

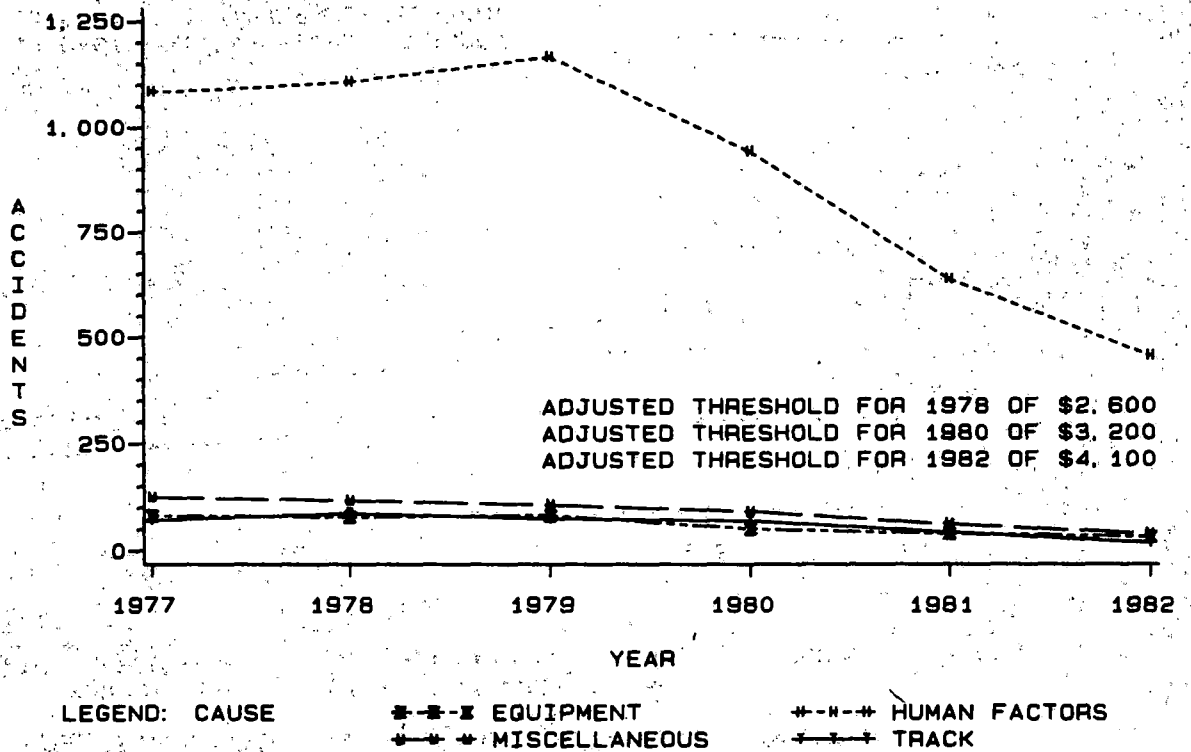


FIGURE 5A. COLLISION CAUSES, 1977-1982 - ADJUSTED

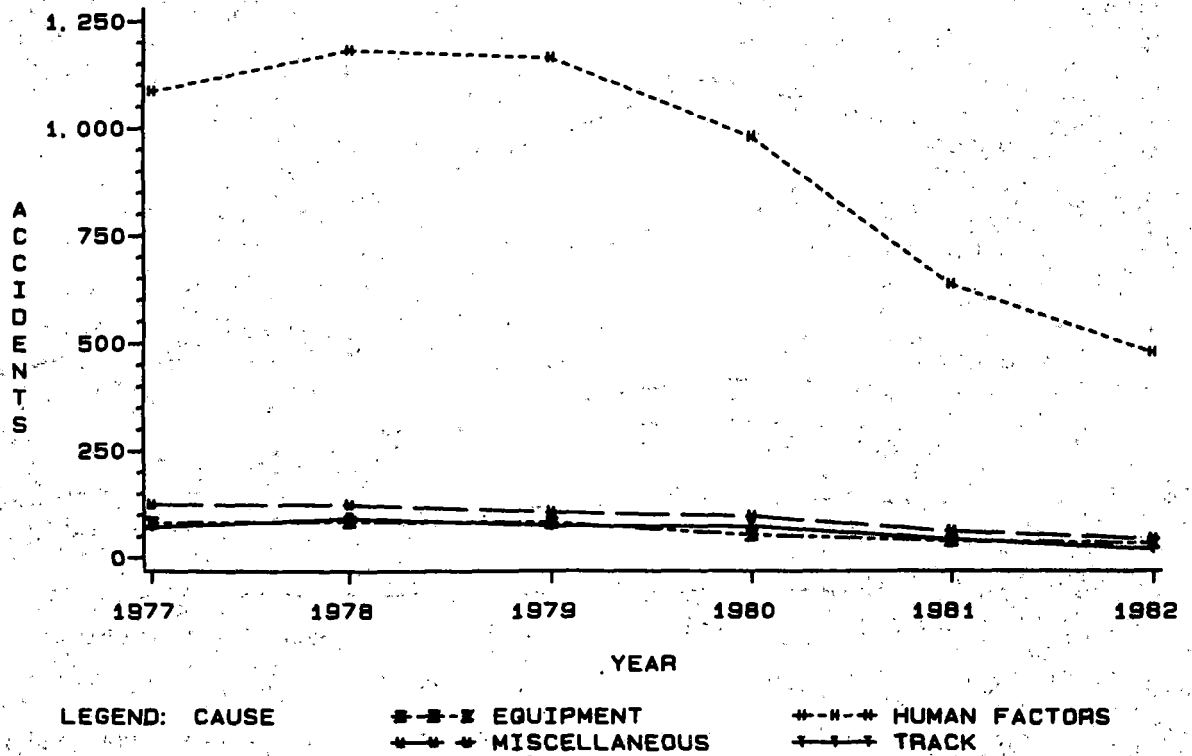
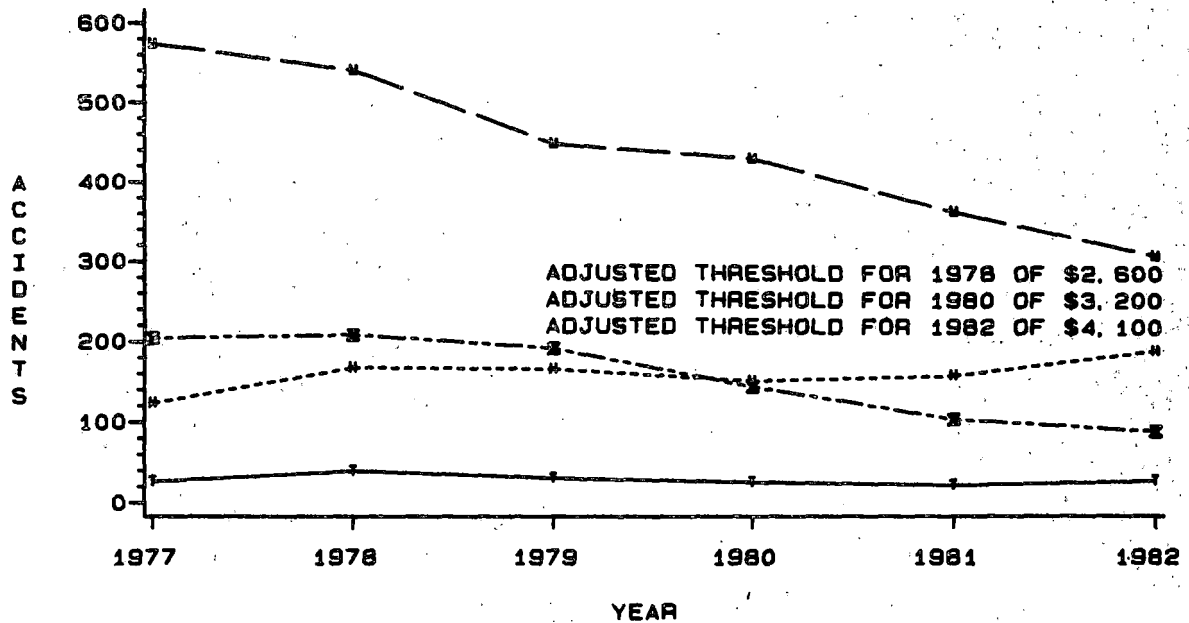
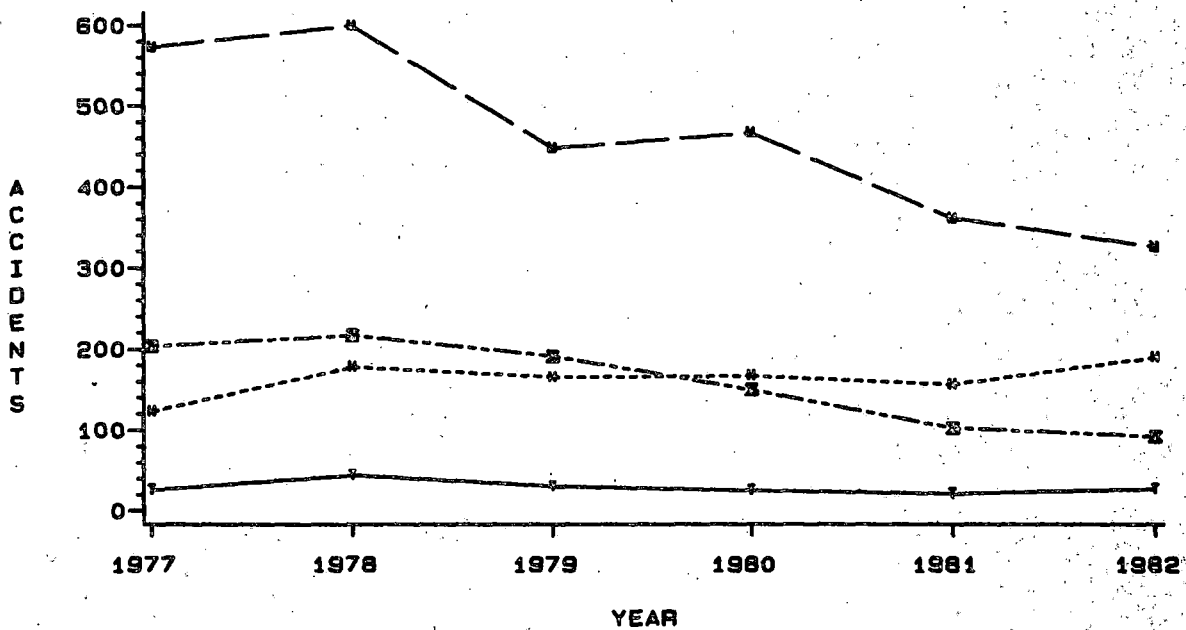


FIGURE 5B. COLLISION CAUSES, 1977-1982 - UNADJUSTED



LEGEND: CAUSE      ■-■-■ EQUIPMENT      +-+--+ HUMAN FACTORS  
 +--+ MISCELLANEOUS      -|-|- TRACK

FIGURE 6A. CAUSES OF ACCIDENTS OTHER THAN COLLISIONS AND DERAILMENTS, 1977-1982 - ADJUSTED



LEGEND: CAUSE      ■-■-■ EQUIPMENT      +-+--+ HUMAN FACTORS  
 +--+ MISCELLANEOUS      -|-|- TRACK

FIGURE 6B. CAUSES OF ACCIDENTS OTHER THAN COLLISIONS AND DERAILMENT, 1977-1982 - UNADJUSTED



**TABLE H6. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TRAIN-MILES**

Year	Total Accidents	Total Damage (\$)	Average Damage (\$)	Damage/Million Train-Miles (\$)	Accidents/Million Train-Miles
1977	10,362	279,450,336	26,969	372,579	13.82
1978	11,277	304,951,427	27,033	405,540	15.00
1979	9,740	313,907,209	32,229	411,181	12.76
1980	8,451	273,905,340	32,411	381,664	11.78
1981	5,781	237,514,603	41,085	351,240	8.55
1982	4,589	222,215,592	48,424	387,561	8.00

**TABLE H7. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TYPE**

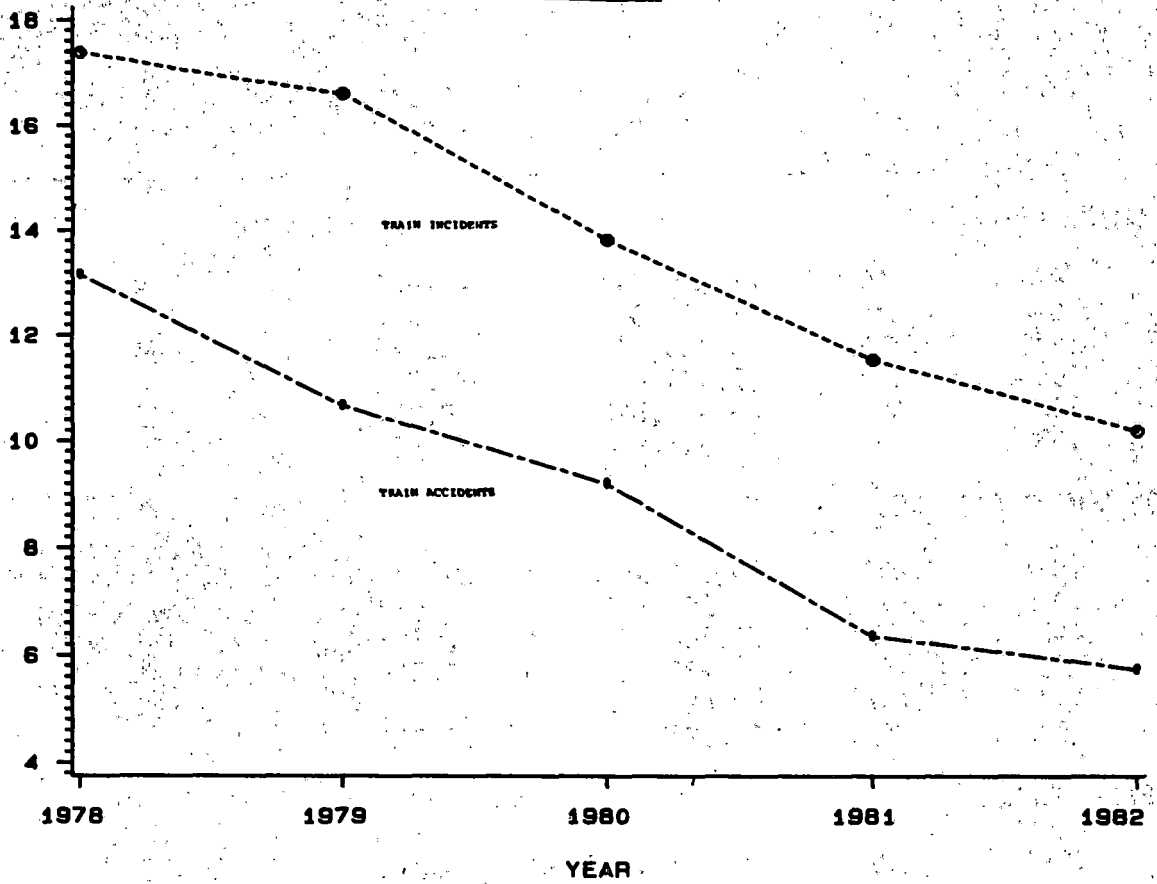
Year	Total Accidents	Total Damage (\$)	Average Damage (\$)	Damage/Million Train-Miles (\$)	Accidents/Million Train-Miles
<b>COLLISIONS</b>					
1977	1,363	34,101,836	25,020	45,467	1.82
1978	1,476	33,630,565	22,772	44,724	1.96
1979	1,425	41,919,343	29,417	54,909	1.87
1980	1,201	39,240,680	32,673	54,679	1.67
1981	776	24,814,627	31,978	36,696	1.15
1982	572	25,730,567	44,984	44,876	1.00
<b>DERAILMENTS</b>					
1977	8,073	223,123,541	27,638	297,481	10.76
1978	8,763	250,266,525	28,551	332,819	11.66
1979	7,482	253,630,703	33,899	332,225	9.80
1980	6,442	218,642,543	33,940	304,660	9.98
1981	4,366	184,299,946	42,213	272,546	6.46
1982	3,383	174,930,472	51,709	305,093	5.90
<b>OTHER</b>					
1977	926	22,224,959	24,001	29,632	1.23
1978	1,038	21,054,337	20,278	27,990	1.38
1979	833	18,357,163	22,037	24,059	1.09
1980	808	16,022,117	19,829	22,325	1.13
1981	639	28,400,030	44,444	41,998	.94
1982	634	21,554,553	33,998	37,593	1.11

TABLE H8.

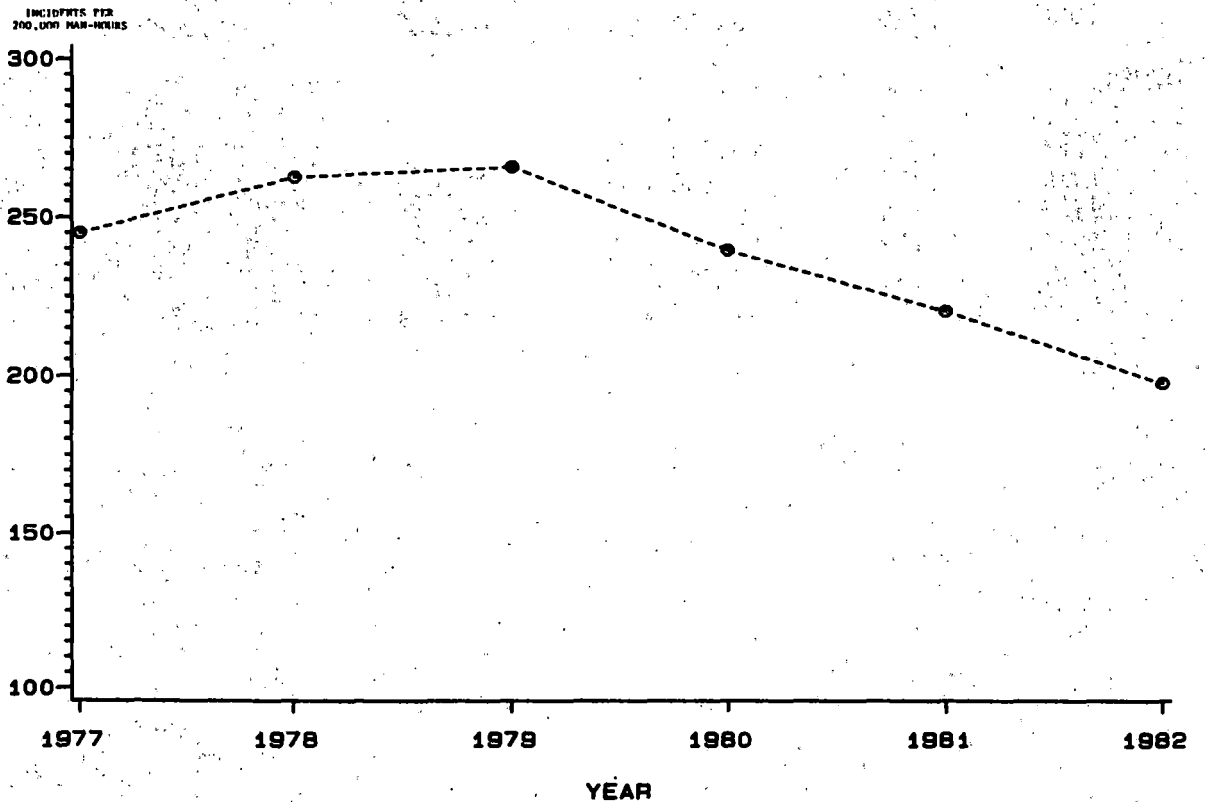
## TRAIN ACCIDENTS AND REPORTABLE DAMAGE BY CAUSE

Year	Total Accidents	Total Damage (\$)	Average Damage (\$)	Damage/Million Train-Miles (\$)	Accidents/ Million Train-Miles
<b>HUMAN FACTORS</b>					
1977	2,559	65,679,391	25,666	87,568	3.41
1978	2,845	56,007,609	19,675	74,514	3.79
1979	2,660	80,125,870	30,122	105,014	3.49
1980	2,323	63,121,042	27,172	87,954	3.24
1981	1,597	48,474,562	30,354	71,685	2.36
1982	1,284	41,815,988	32,567	72,930	2.24
<b>EQUIPMENT FAILURES</b>					
1977	2,064	70,652,940	34,236	94,212	2.75
1978	2,170	79,266,281	36,528	105,458	2.89
1979	1,815	76,768,530	42,297	100,614	2.38
1980	1,458	56,738,724	38,915	79,061	2.03
1981	1,016	60,480,146	59,528	89,439	1.50
1982	796	58,323,219	73,270	101,720	1.39
<b>TRACK DEFECTS</b>					
1977	4,337	96,377,004	22,222	128,495	5.78
1978	4,797	117,145,701	24,412	155,853	6.38
1979	4,050	110,582,493	27,304	144,931	5.31
1980	3,492	108,839,389	31,168	151,658	4.87
1981	2,273	79,997,917	35,195	118,302	3.36
1982	1,769	83,108,370	46,980	144,948	3.09
<b>OTHER</b>					
1977	1,402	46,731,001	33,332	62,304	1.87
1978	1,465	52,531,836	35,851	69,890	1.95
1979	1,215	46,430,316	38,214	60,852	1.59
1980	1,178	45,206,185	38,375	62,991	1.64
1981	895	48,561,978	54,259	71,814	1.32
1982	740	38,968,015	52,659	67,963	1.29

**TRAIN ACCIDENTS, TRAIN INCIDENTS AND NON-TRAIN INCIDENTS**



**FIGURE 7. TOTAL TRAIN ACCIDENTS AND TRAIN INCIDENTS PER BILLION REVENUE TON-MILES**



**FIGURE 8. NONTRAIN INCIDENTS PER 200,000 MAN-HOURS**

TABLE H2. TOTAL ACCIDENTS/INCIDENTS

Year	Train Accidents	Train Incidents	Nontrain Incidents	Total
1977	10,362	14,611	51,601	76,574
1978	11,277	14,918	55,391	81,586
1979	9,740	15,159	57,213	82,112
1980	8,451	12,686	48,398	69,535
1981	5,781	10,485	41,757	58,023
1982	4,589	8,147	31,606	44,342

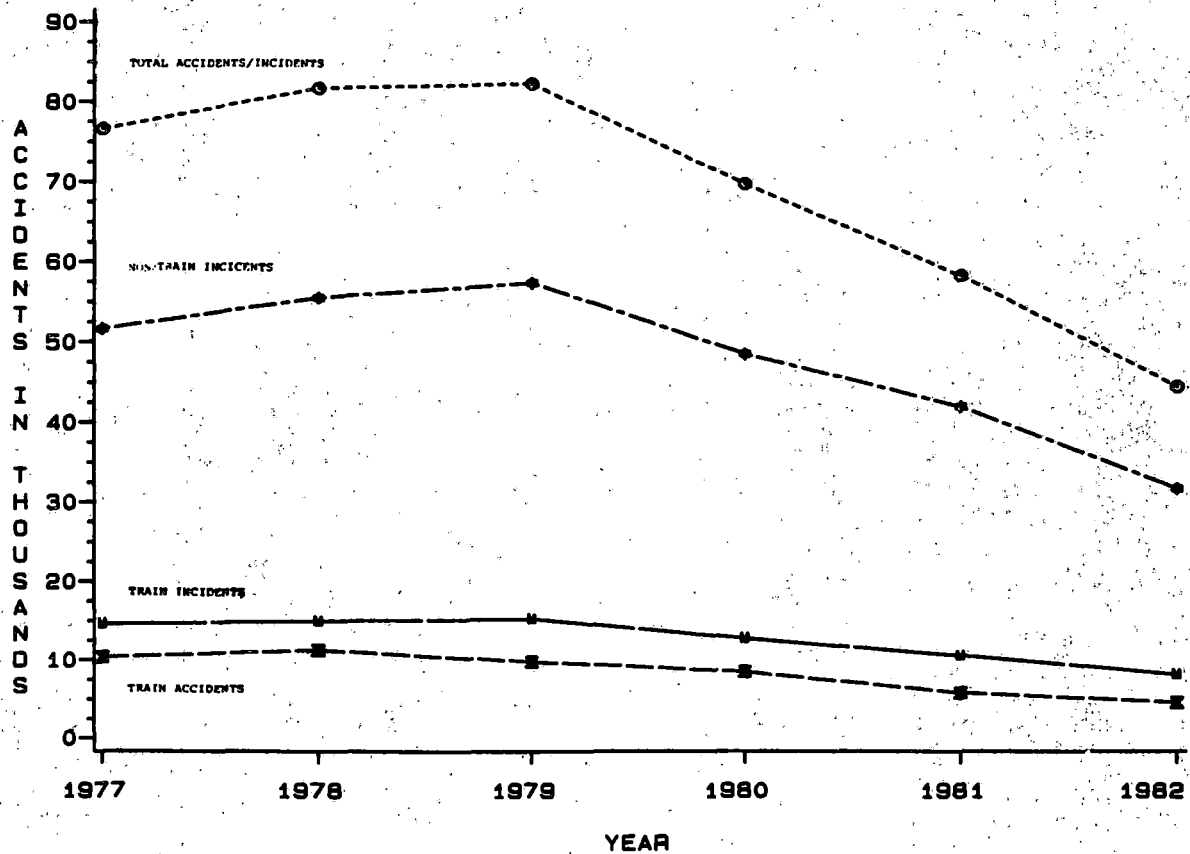


FIGURE 9. TOTAL ACCIDENTS/INCIDENTS , 1977-1982

**CASUALTIES****TABLE H4. CASUALTIES IN ACCIDENTS/INCIDENTS**

Class of Acc/Inc by Year	Fatal	Nonfatal	Total	Accidents	Casualties per Million Train Miles
<b>TRAIN ACCIDENTS</b>					
1977	108	985	1,093	10,362	1.46
1978	139	1,911*	2,050	11,277	2.73
1979	100	1,275	1,375	9,740	1.80
1980	97	860	957	8,451	1.33
1981	63	562	625	5,781	.92
1982	49	472	521	4,589	.91
<b>TRAIN INCIDENTS</b>					
1977	1,340	14,876	16,216	14,611	21.62
1978	1,427	15,014	16,441	14,918	21.86
1979	1,245	15,414	16,659	15,159	21.83
1980	1,242	12,802	14,044	12,686	19.57
1981	1,157	10,505	11,662	10,485	17.25
1982	1,004	8,026	9,030	8,147	15.75
<b>NONTRAIN INCIDENTS</b>					
1977	82	52,006	52,088	51,601	69.45
1978	80	55,620	55,700	55,391	74.07
1979	84	57,437	57,521	57,213	75.39
1980	78	48,584	48,662	48,398	67.81
1981	64	41,936	42,000	41,757	62.11
1982	66	31,777	31,843	31,606	55.54
<b>ALL ACCIDENTS</b>					
1977	1,530	67,867	69,397	76,574	92.52
1978	1,646	72,545	74,191	81,856	98.66
1979	1,429	74,126	75,555	82,112	99.02
1980	1,417	62,246	63,663	69,535	88.71
1981	1,284	53,003	54,287	58,023	80.28
1982	1,119	40,275	41,934	44,342	72.19

\*Included is an ICG commuter train accident, which on January 26, 1979, resulted in 558 nonfatal casualties.

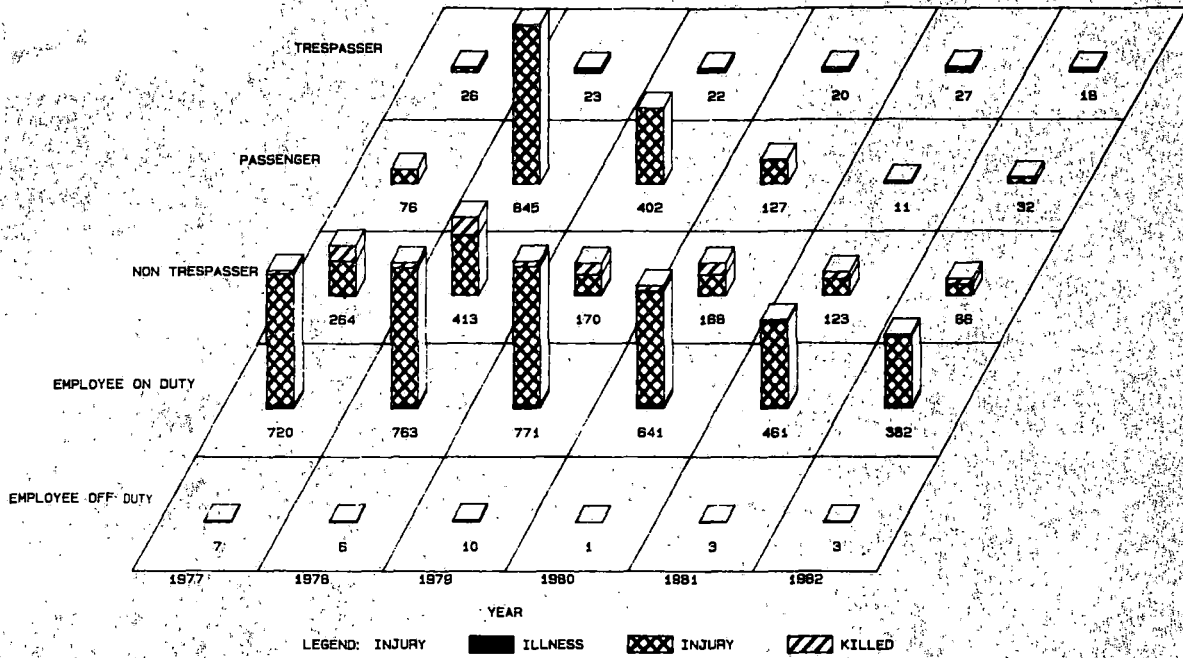


FIGURE 10. CASUALTIES IN TRAIN ACCIDENTS, 1977-1982

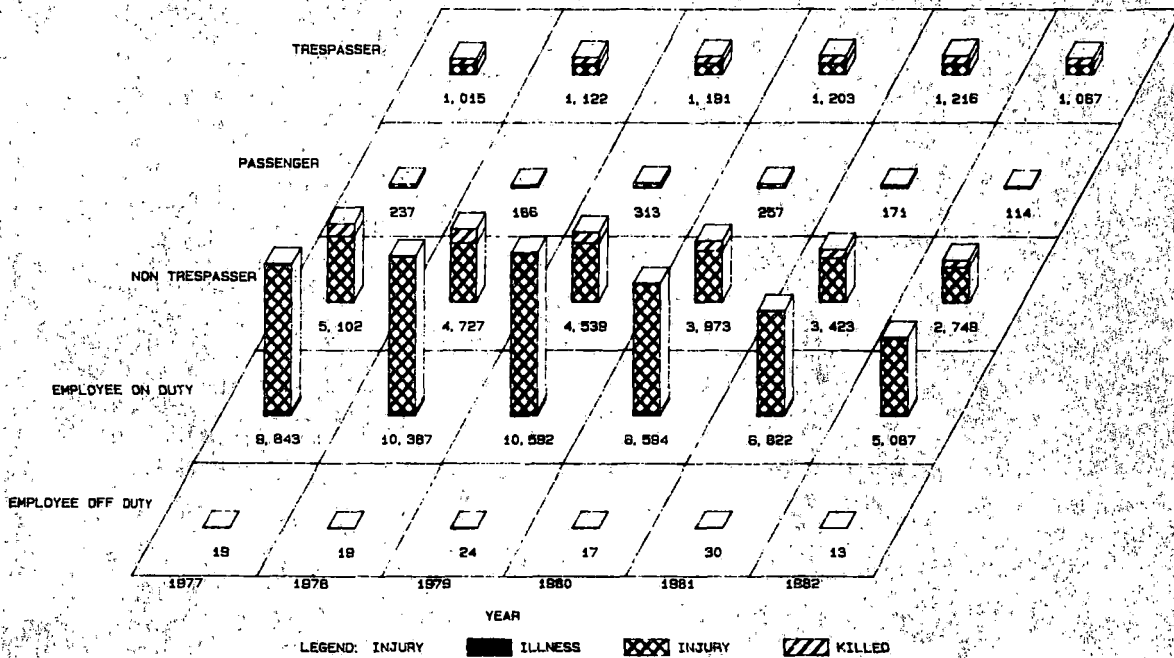
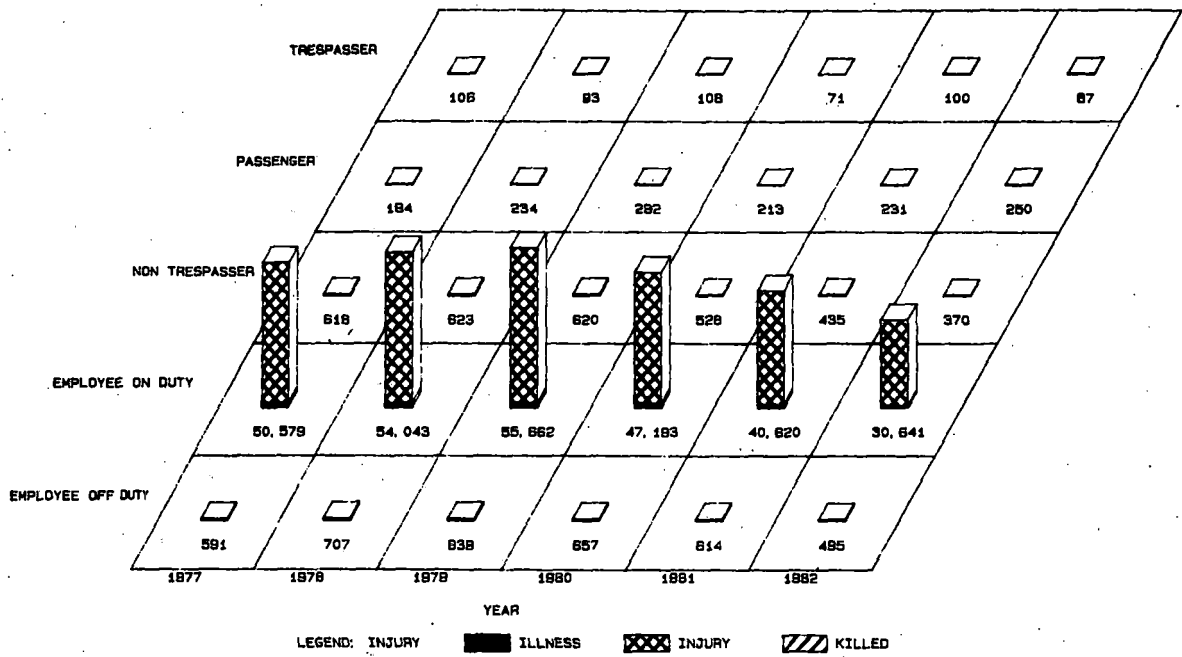
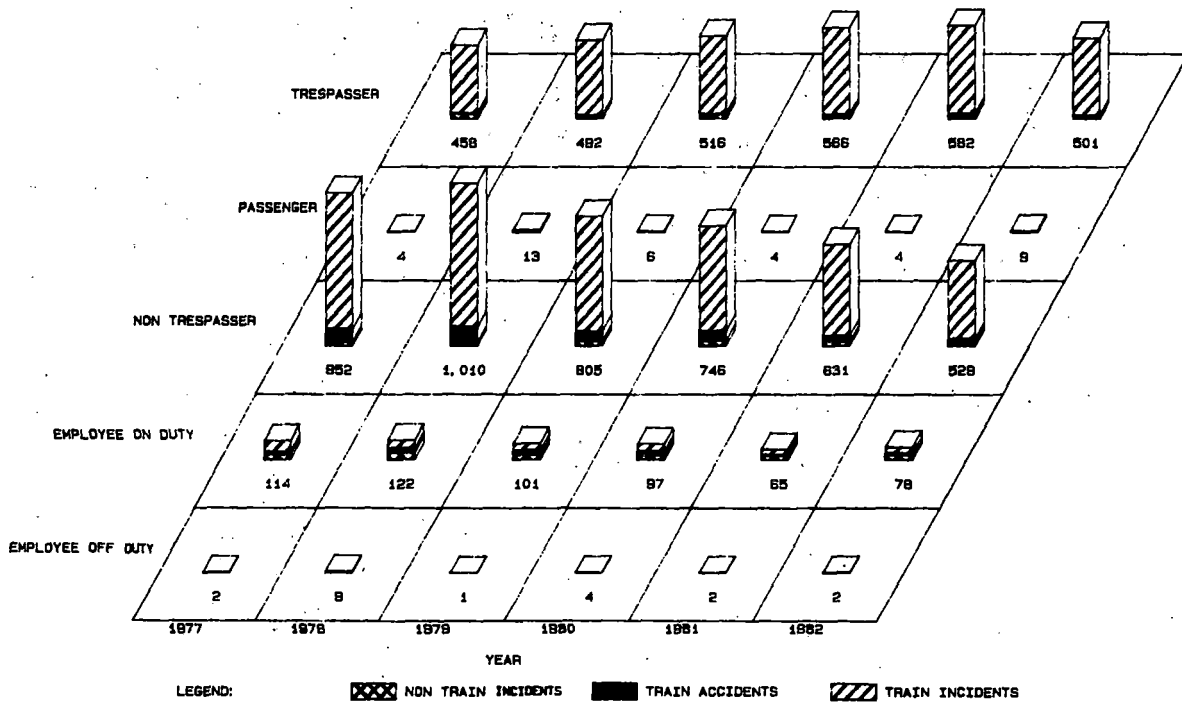


FIGURE 11. CASUALTIES IN TRAIN INCIDENTS, 1977-1982



**FIGURE 12. CASUALTIES IN NON-TRAIN INCIDENTS, 1977-1982**

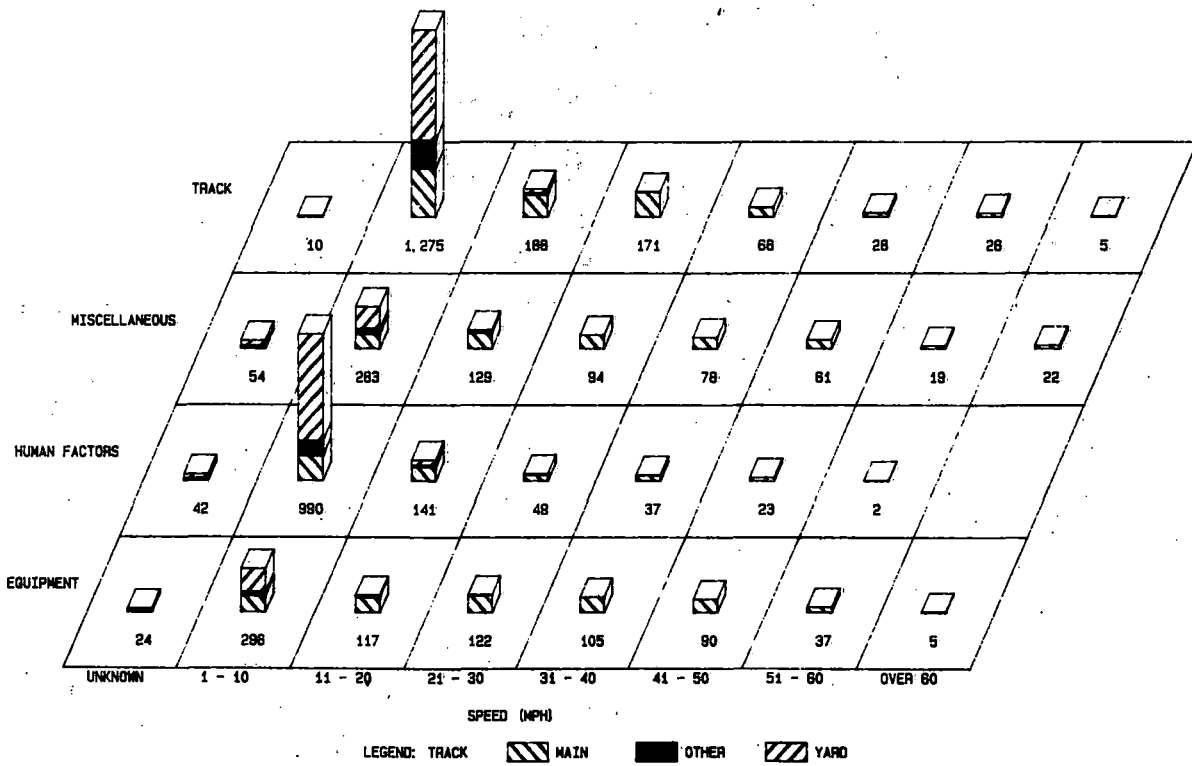


**FIGURE 13. FATALITIES IN ACCIDENTS/INCIDENTS, 1977-1982**



## 2. OVERVIEW OF 1982 DATA

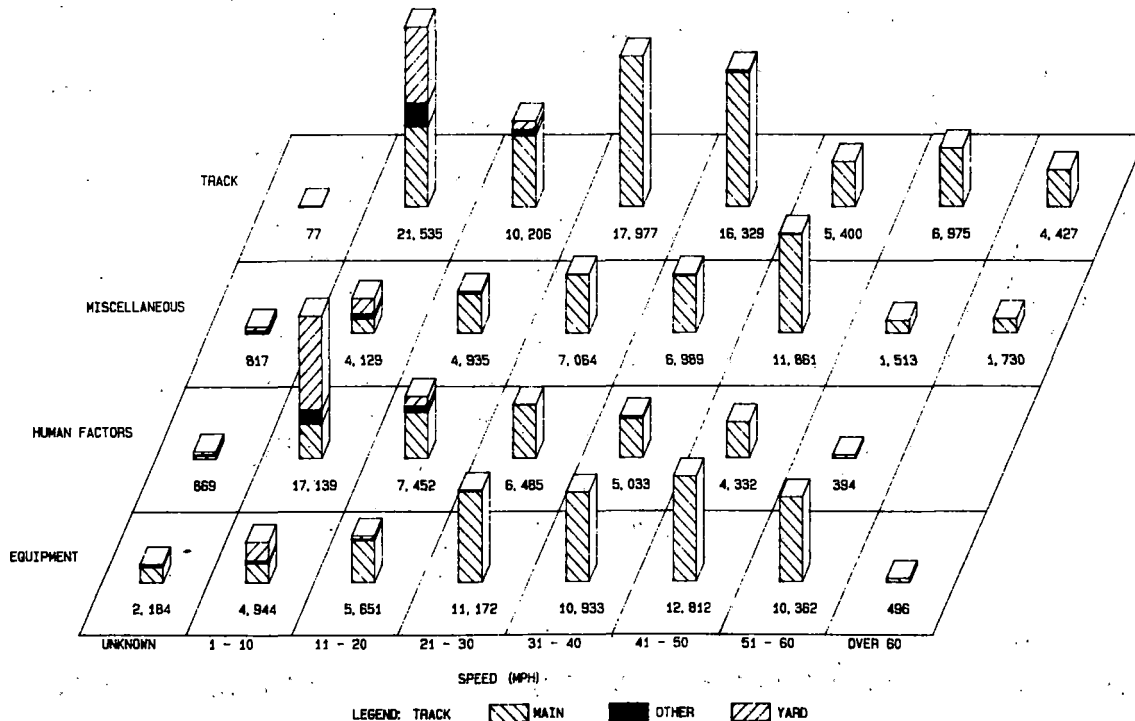
### SPEED FACTOR IN ACCIDENTS



**FIGURE 14. CAUSES OF ACCIDENTS BY TYPE OF TRACK AND CONSIST SPEED**

**TABLE S44. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY SPEED**

CONSIST SPEED	TOTAL ACCIDENTS	TOTAL DAMAGE	EQUIPMENT DAMAGE	TRACK DAMAGE	COLLISIONS	DERAILMENTS	OTHER ACCIDENTS	TRACK CAUSED	EQUIPMENT FAILURE	OPERATING PRACTICES	OTHER CAUSES
<b>ACCIDENTS ON MAIN LINE TRACK</b>											
UNKNOWN	43	2,472,092	2,275,231	196,861	3	18	22	3	14	15	11
1-10	705	17,898,696	12,057,890	5,840,806	59	587	59	330	110	167	98
11-20	449	23,872,939	18,687,166	5,185,773	34	359	56	150	102	91	106
21-30	424	42,464,472	34,453,081	8,011,391	25	340	59	170	119	43	92
31-40	277	38,499,919	33,567,628	4,932,291	19	195	63	63	104	34	76
41-50	199	34,244,658	29,827,527	4,417,131	9	129	61	27	89	23	60
51-60	84	19,242,933	16,267,079	2,975,854	---	61	23	26	37	2	19
61-70	19	2,178,106	1,774,845	403,261	---	6	13	2	4	---	13
71-80	8	4,165,150	4,073,500	91,650	---	1	7	1	---	---	7
81-90	3	264,000	234,000	30,000	---	1	2	1	---	---	2
>=91	2	45,400	36,000	9,400	---	---	2	1	1	---	---
TOTAL....	2,213	185,348,365	153,253,947	32,094,418	149	1,697	367	774	580	375	484
<b>ACCIDENTS ON YARD TRACK</b>											
UNKNOWN	76	1,098,463	1,002,152	96,311	5	28	43	6	9	25	36
1-10	1,784	24,680,379	18,891,098	5,789,281	362	1,259	163	752	160	722	150
11-20	84	2,791,105	2,398,461	392,644	23	47	14	21	10	36	17
21-30	8	127,835	101,550	26,285	3	2	3	1	1	5	1
31-40	4	240,750	238,450	2,300	2	2	---	1	1	1	1
41-50	2	10,250	8,450	1,800	---	2	---	1	1	---	---
TOTAL....	1,958	28,948,782	22,640,161	6,308,621	395	1,340	223	782	182	789	205
<b>ACCIDENTS ON INDUSTRY, SIDING OR UNKNOWN TRACK TYPE</b>											
UNKNOWN	11	373,494	350,416	23,078	---	2	9	1	1	2	7
1-10	355	5,169,289	4,001,274	1,168,015	21	305	29	193	26	101	35
11-20	42	1,580,304	1,166,250	414,054	3	34	5	17	5	14	6
21-30	4	104,545	55,600	48,945	2	2	---	---	2	1	1
31-40	5	542,009	508,850	33,159	1	3	1	2	---	2	1
41-50	1	148,804	130,204	18,600	1	---	---	---	---	---	1
TOTAL....	418	7,918,445	6,212,594	1,705,851	28	346	44	213	34	120	51
FINAL	4,589	222,215,592	182,106,702	40,108,890	572	3,383	634	1,769	796	1,284	740

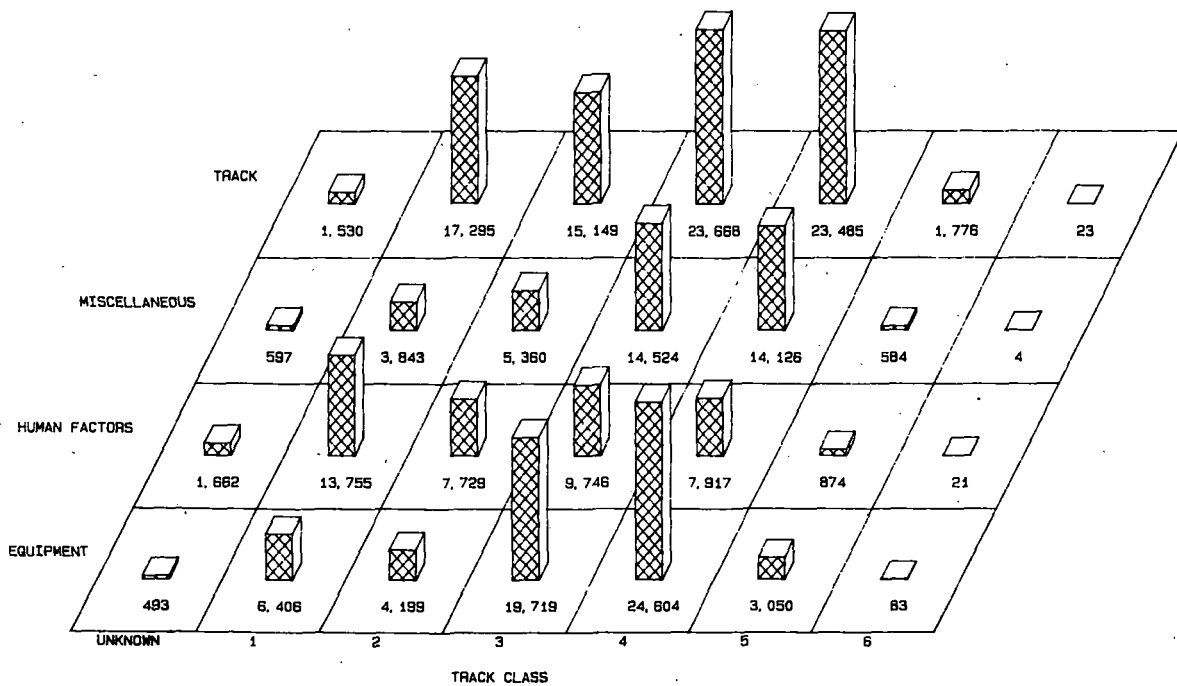


**FIGURE 15. ACCIDENT DAMAGES BY SPEED AND CAUSE (\$ 000's)**

**ACCIDENTS AND TRACK TYPE**

**TABLE S45. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TRACK CLASS**

TRACK CLASS	TOTAL ACCIDENTS	TOTAL DAMAGE	EQUIPMENT DAMAGE	TRACK DAMAGE	COLLISIONS	DERAILMENTS	OTHER ACCIDENTS CAUSED	TRACK EQUIPMENT FAILURE	EQUIPMENT OPERATING PRACTICES	OTHER CAUSES
?	305	4,281,883	3,314,342	967,541	73	212	20	128	23	112
1	2,172	41,297,348	31,401,583	9,895,765	307	1,623	242	963	217	758
2	740	32,437,710	25,256,157	7,181,553	88	570	82	327	108	177
3	763	67,654,329	58,498,986	9,155,343	64	556	143	235	204	131
4	537	70,129,338	58,431,322	11,698,016	38	374	125	106	211	92
5	66	6,283,684	5,146,212	1,137,472	2	46	18	9	30	13
6	6	131,300	58,100	73,200	---	2	4	1	3	1
<b>TOTAL</b>	<b>4,589</b>	<b>222,215,592</b>	<b>182,106,702</b>	<b>40,108,890</b>	<b>572</b>	<b>3,383</b>	<b>634</b>	<b>1,769</b>	<b>796</b>	<b>1,284</b>

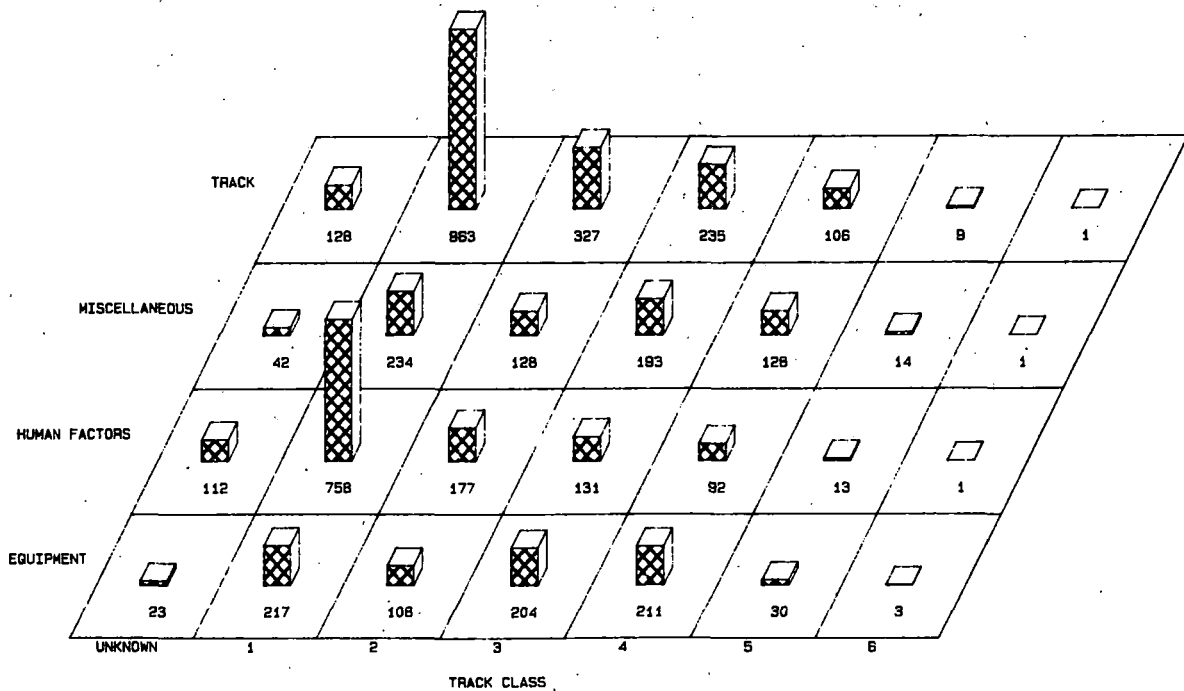


**FIGURE 16. ACCIDENT DAMAGES BY TRACK CLASS AND CAUSE (\$ 000's)**

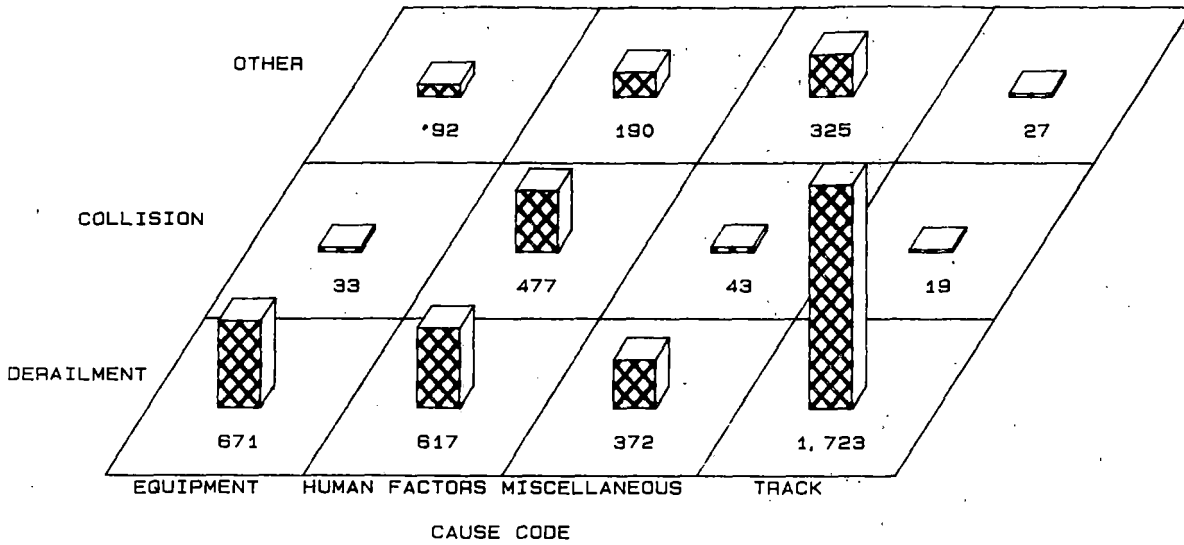
**CAUSE BY TYPE OF ACCIDENT**

**TABLE S40B. REPORTABLE DAMAGES IN TRAIN ACCIDENTS BY TYPE AND CAUSE**

Type of Accident	...Track Caused...		.Equipment Caused.		...Human Factors..		...Other Causes...		.....Total Damage.....	
	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg
Derailment	15,663,548	64,875,097	11,492,347	42,080,379	4,663,194	12,753,850	4,130,238	19,271,819	35,949,327	138,981,145
Head on collision	---	---	---	---	125,486	5,910,659	18,600	145,204	144,086	6,055,863
Rear end collision	---	---	1,825	112,100	185,809	4,485,659	4,000	282,425	191,634	4,880,184
Side collision	45,622	285,857	12,018	460,383	773,706	8,433,095	241,956	740,695	1,073,302	9,920,030
Raking collision	13,134	33,100	24,800	926,419	118,611	825,948	20,000	163,848	176,545	1,949,315
Broken trn collisin	---	---	26,352	1,037,152	8,965	93,800	50	10,300	35,367	1,141,252
Rail-hwy crossing	---	---	2,000	10,000	---	---	1,277,065	6,680,941	1,279,065	6,690,941
RR grade crossing	---	---	---	---	10,789	152,200	---	---	10,789	152,200
Obstruction	---	---	16,050	36,775	331	237,570	87,046	1,986,637	103,427	2,260,982
Explosion-detonatin	---	---	---	---	---	---	---	---	---	---
Fire/violent ruptre	---	---	1,500	1,509,359	---	---	16,638	2,659,003	18,138	4,168,362
Other	156,350	2,035,662	256,647	317,113	262,070	2,774,246	452,143	779,407	1,127,210	5,906,428
<b>TOTAL.....</b>	<b>15,878,654</b>	<b>67,229,716</b>	<b>11,833,539</b>	<b>46,489,680</b>	<b>6,148,961</b>	<b>35,667,027</b>	<b>6,247,736</b>	<b>32,720,279</b>	<b>40,108,890</b>	<b>182,106,702</b>

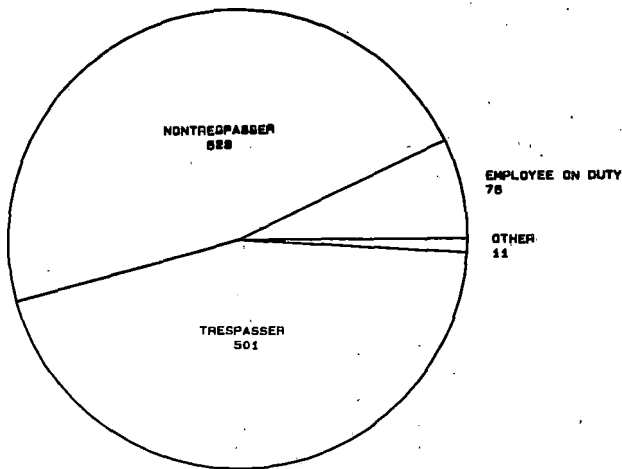


**FIGURE 17. ACCIDENT CAUSES BY TRACK CLASS**

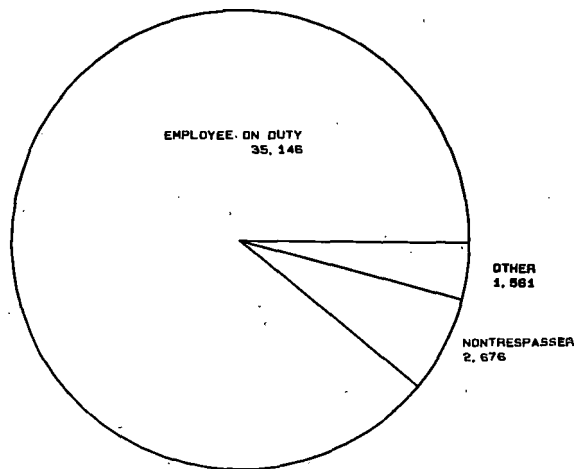


**FIGURE 18. ACCIDENT CAUSES BY ACCIDENT TYPE**

**INJURIES AND FATALITIES BY TYPE OF PERSON**



**FIGURE 19A. FATALITIES BY TYPE OF PERSON, 1982**



**FIGURE 19B. INJURIES BY TYPE OF PERSON, 1982**

TABLE S50. CASUALTIES BY TYPE OF PERSON

Type of Person	Train Accidents <sup>1</sup>			Train Incidents <sup>1</sup>			Nontrain Incidents <sup>1</sup>			Rail-highway Crossing			Total		
	K	I	NFI	K	I	NFI	K	I	NFI	K	I	NFI	K	I	NFI
Employee on Duty	9	298	14	35	4,902	83	30	29,823	785	4	123	4	78	35,146	886
Employee not on Duty	---	1	2	---	7	3	2	491	1	---	4	---	2	503	6
Passenger on Train	3	26	---	3	111	---	3	247	---	---	3	---	9	387	---
Trespasser	---	5	---	7	39	---	2	199	---	516	2,352	---	525	2,595	---
Nontrespasser	2	12	---	397	443	---	15	65	---	87	151	---	501	671	---
Contractor Employee <sup>2</sup>	---	---	---	2	5	---	2	76	---	---	---	---	4	81	---
Total	14	342	16	444	5,507	86	54	30,901	786	607	2,633	4	1,119	39,383	892

1 Excludes casualties resulting from rail-highway crossing collisions

2 Contractors are included with nontrespassers in other tables

KEY: K - Killed  
 I - Injured  
 NFI - Nonfatal Illness

**TABLE S11. TOTAL FATALITIES BY TYPE OF PERSON**

Type Of Accident/Incident	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passengers	Nontrespassers	Trespassers
<b>TRAIN ACCIDENTS</b>						
Collisions.....	4	4	---	4	---	---
Derailments.....	8	4	1	5	1	2
Rail-highway x-ing.....	35	2	1	3	---	29
Miscellaneous.....	2	---	---	---	2	---
Total.....	49	10	2	12	3	29
<b>TRAIN INCIDENTS</b>						
Coupling and uncoupling locomotives or cars.....	4	3	1	4	---	---
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---
Operating hand brakes.....	2	2	---	2	---	---
Operating switches or derails.....	2	1	1	2	---	---
Contacting fixed objects while on locos or cars....	1	1	---	1	---	---
Getting on or off cars or locomotives.....	17	3	---	3	1	13
Collisions, derailments, etc. (<= \$3,701).....	9	1	1	2	---	2
Rail-highway crossing accidents/incidents.....	560	1	---	1	---	476
Struck by/ran into loco/car(not at rr-hwy x-ing)...	389	5	7	12	---	5
Servicing or maintenance of equipment.....	---	---	---	---	---	---
Maintenance of way and structures.....	1	---	1	1	---	---
Freight, baggage, express or mail.....	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	7	1	---	1	1	5
Flying or falling objects, burns, etc., N.O.C.....	1	---	---	---	---	1
Operation of on-track work equipment.....	2	---	2	2	---	---
Assault.....	---	---	---	---	---	---
Other occurrences.....	9	4	1	5	1	1
Total.....	1,004	22	14	36	3	485
<b>NONTRAIN INCIDENTS</b>						
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---
Operating switches or derails.....	---	---	---	---	---	---
Contacting fixed objects while on locos or cars....	---	---	---	---	---	---
Getting on or off cars or locomotives.....	1	---	---	---	---	1
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	12	---	---	---	---	11
Struck by/ran into loco/car(not at rr-hwy x-ing)...	3	---	---	---	---	3
Servicing or maintenance of equipment.....	5	---	5	5	---	---
Maintenance of way and structures.....	5	---	3	3	1	1
Freight, baggage, express or mail.....	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	8	---	4	4	---	4
Flying or falling objects, burns, etc., N.O.C.....	8	---	2	2	---	2
Operation of on-track work equipment.....	---	---	---	---	---	---
Assault.....	5	---	3	3	2	---
Other occurrences.....	19	2	11	13	1	1
Total.....	66	2	28	30	2	3
Grand total.....	1,119	34	44	78	2	529



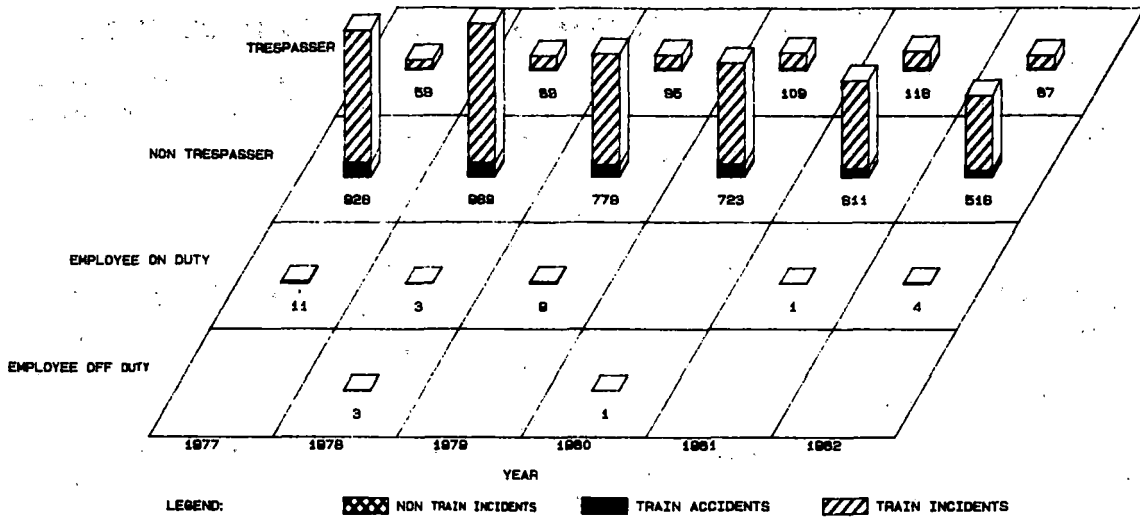
**TABLE S12. TOTAL NONFATAL CASUALTIES BY TYPE OF PERSON**

Type Of Accident/Incident	Total Injured	...Employees On Duty... Trainmen	Other	Emp Not On Duty Total	Passengers	Nontrespassers	Trespassers
<b>TRAIN ACCIDENTS</b>							
Collisions.....	108	93	11	104	---	4	---
Derailments.....	200	137	29	166	1	17	4
Rail-highway x-ing.....	114	43	15	58	---	3	52
Miscellaneous.....	50	30	12	42	2	5	1
Total.....	472	303	67	370	3	29	57
<b>TRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	288	274	13	287	---	---	1
Coupling/uncoupling air/steam hose, safety chains...	45	44	1	45	---	---	---
Operating or on locomotives.....	658	636	19	655	1	---	2
Operating rail motorcars.....	41	5	36	41	---	---	---
Operating hand brakes.....	123	116	7	123	---	---	---
Operating switches or derails.....	28	28	---	28	---	---	---
Contacting fixed objects while on locos or cars....	104	95	6	101	---	1	1
Getting on or off cars or locomotives.....	1,232	1,099	46	1,145	---	23	4
Collisions, derailments, etc. (<= \$3,701).....	183	145	23	168	---	---	5
Rail-highway crossing accidents/incidents.....	2,433	50	16	66	3	---	2,220
Struck by/ran into loco/car(not at rr-hwy x-ing)...	429	41	17	58	2	---	17
Servicing or maintenance of equipment.....	140	1	138	139	---	---	1
Maintenance of way and structures.....	155	2	153	155	---	---	---
Freight, baggage, express or mail.....	22	9	9	18	---	3	---
Windows, doors, etc., on on-track equipment.....	158	121	20	141	1	15	---
Passenger car doors.....	10	3	4	7	1	2	---
Stumbling, slipping, falling, caught, N.O.C.....	340	259	33	292	---	33	3
Flying or falling objects, burns, etc., N.O.C.....	672	608	48	656	2	12	2
Operation of on-track work equipment.....	148	9	139	148	---	---	---
Assault.....	136	127	1	128	1	6	---
Other occurrences.....	681	601	49	650	2	16	8
Total.....	8,026	4,273	778	5,051	13	111	2,264
<b>NONTRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	726	672	53	725	1	---	---
Coupling/uncoupling air/steam hose, safety chains...	208	252	56	308	---	---	---
Operating or on locomotives.....	456	387	68	455	1	---	---
Operating rail motorcars.....	98	1	97	98	---	---	---
Operating hand brakes.....	525	483	42	525	---	---	---
Operating switches or derails.....	1,392	1,271	121	1,392	---	---	---
Contacting fixed objects while on locos or cars....	12	7	5	12	---	---	---
Getting on or off cars or locomotives.....	1,440	987	331	1,318	7	103	9
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	90	---	3	3	1	---	80
Struck by/ran into loco/car(not at rr-hwy x-ing)...	24	12	3	15	---	---	---
Servicing or maintenance of equipment.....	8,000	58	7,860	7,918	61	---	21
Maintenance of way and structures.....	11,278	24	11,150	11,174	45	---	59
Freight, baggage, express or mail.....	184	15	162	177	1	1	4
Windows, doors, etc., on on-track equipment.....	580	231	321	552	8	11	8
Passenger car doors.....	18	6	5	11	---	7	---
Stumbling, slipping, falling, caught, N.O.C.....	3,008	1,192	1,310	2,502	258	109	131
Flying or falling objects, burns, etc., N.O.C.....	728	380	301	681	14	4	13
Operation of on-track work equipment.....	160	2	158	160	---	---	---
Assault.....	231	49	158	207	13	6	2
Other occurrences.....	2,519	487	1,891	2,378	83	6	28
Total.....	31,777	6,516	24,095	30,611	493	247	355
Grand total.....	40,275	11,092	24,940	36,032	509	387	2,676

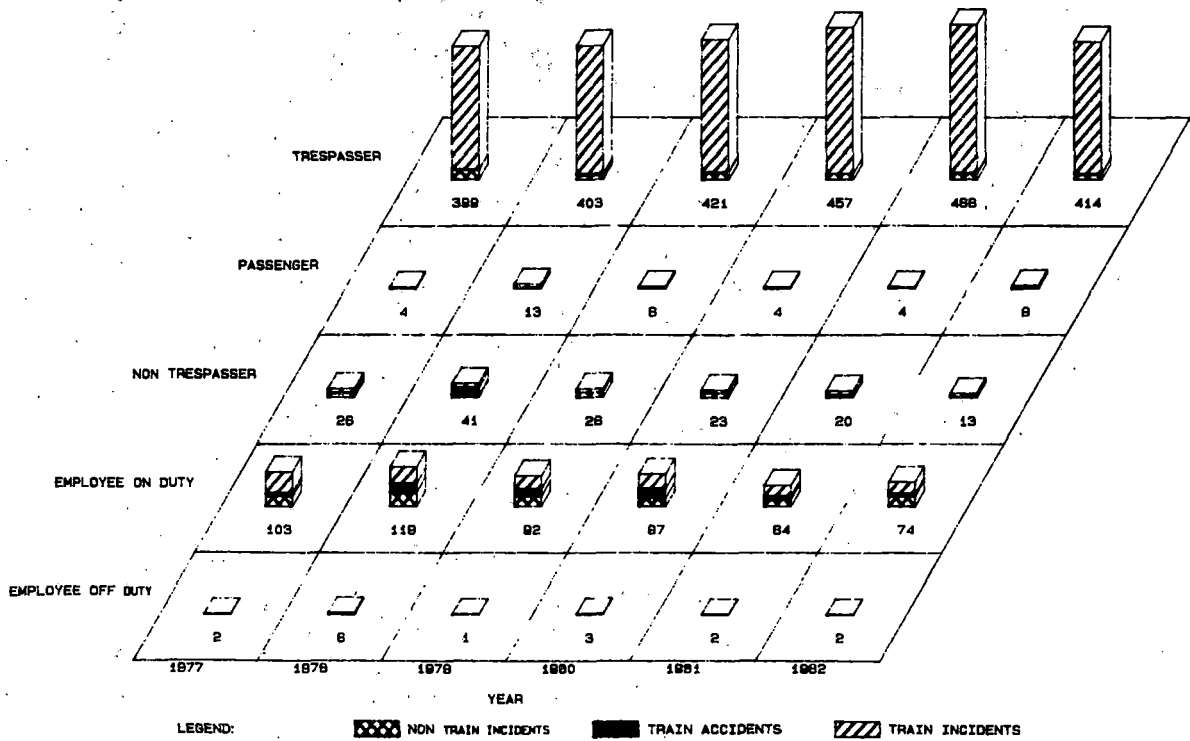
**TABLE S12A. TOTAL ACCIDENTS/INCIDENTS BY OCCURRENCE**

Type Of Accident/Incident	.....Accidents/Incidents.....		
	Total	Fatal	Nonfatal
<b>TRAIN ACCIDENTS *</b>			
Collisions.....	572	3	53
Derailments.....	3,383	7	110
Rail-highway x-ing.....	178	27	64
Miscellaneous.....	456	1	23
Total.....	4,589	38	250
<b>TRAIN INCIDENTS</b>			
Coupling and uncoupling locomotives or cars.....	290	4	286
Coupling/uncoupling air/steam hose, safety chains...	45	---	45
Operating or on locomotives.....	643	---	643
Operating rail motorcars.....	40	---	40
Operating hand brakes.....	125	2	123
Operating switches or derails.....	30	2	28
Contacting fixed objects while on locos or cars....	105	1	104
Getting on or off cars or locomotives.....	1,245	17	1,228
Collisions, derailments, etc. (<= \$3,701).....	164	8	156
Rail-highway crossing accidents/incidents.....	2,223	450	1,773
Struck by/ran into loco/car(not at rr-hwy x-ing)...	801	383	418
Servicing or maintenance of equipment.....	139	---	139
Maintenance of way and structures.....	155	1	154
Freight, baggage, express or mail.....	22	---	22
Windows, doors, etc., on on-track equipment.....	158	---	158
Passenger car doors.....	10	---	10
Stumbling, slipping, falling, caught, N.O.C.....	345	7	338
Flying or falling objects, burns, etc., N.O.C.....	659	1	658
Operation of on-track work equipment.....	141	2	139
Assault.....	136	---	136
Other occurrences.....	671	9	662
Total.....	8,147	887	7,260
<b>NONTRAIN INCIDENTS</b>			
Coupling and uncoupling locomotives or cars.....	726	---	726
Coupling/uncoupling air/steam hose, safety chains...	308	---	308
Operating or on locomotives.....	440	---	440
Operating rail motorcars.....	98	---	98
Operating hand brakes.....	524	---	524
Operating switches or derails.....	1,391	---	1,391
Contacting fixed objects while on locos or cars....	12	---	12
Getting on or off cars or locomotives.....	1,439	1	1,438
Collisions, derailments, etc. (<= \$3,701).....	---	---	---
Rail-highway crossing accidents/incidents.....	69	11	58
Struck by/ran into loco/car(not at rr-hwy x-ing)...	26	3	23
Servicing or maintenance of equipment.....	7,989	5	7,984
Maintenance of way and structures.....	11,262	5	11,257
Freight, baggage, express or mail.....	184	---	184
Windows, doors, etc., on on-track equipment.....	580	---	580
Passenger car doors.....	18	---	18
Stumbling, slipping, falling, caught, N.O.C.....	3,012	8	3,004
Flying or falling objects, burns, etc., N.O.C.....	698	8	690
Operation of on-track work equipment.....	160	---	160
Assault.....	234	5	229
Other occurrences.....	2,436	17	2,419
Total.....	31,606	63	31,543
Grand total.....	44,342	988	39,053

\*NOTE: Train accidents do not require a casualty to be reportable. See definition in Appendix A



**FIGURE 20. FATALITIES AT RAIL-HIGHWAY CROSSINGS BY TYPE OF PERSON, 1977-1982**



**FIGURE 21. FATALITIES NOT AT RAIL-HIGHWAY CROSSINGS, 1977-1982**

**TABLE S2. TRAIN ACCIDENTS BY MONTH**

Month	Accs		Total Damage	Damage Per MTM	Train Miles.....			
	Accs	Per MTM			Locomotive	Motor	Yard Switching	Total
January....	472	9.67	22,507,430	\$461,104.44	34,650,718	2,313,411	11,847,896	48,812,025
February...	451	9.29	26,167,223	\$539,152.41	34,673,405	2,161,163	11,699,582	48,534,150
March.....	424	7.84	19,686,267	\$363,799.22	38,779,189	2,406,293	12,927,931	54,113,413
April.....	395	7.86	18,178,513	\$361,703.87	36,167,679	2,337,236	11,753,365	50,258,280
May.....	401	8.11	18,897,904	\$382,231.43	35,552,513	2,266,971	11,621,776	49,441,260
June.....	362	7.51	22,076,991	\$458,076.38	34,449,715	2,303,053	11,441,958	48,194,726
July.....	381	8.14	22,265,894	\$475,512.95	33,687,500	2,288,984	10,848,936	46,825,420
August.....	363	7.52	15,090,741	\$312,495.93	34,990,251	2,328,716	10,972,241	48,291,208
September..	273	6.35	16,440,779	\$382,583.93	31,164,590	2,146,015	9,662,802	42,973,407
October....	372	7.76	13,763,226	\$287,038.85	34,919,156	2,262,764	10,767,258	47,949,178
November...	350	7.84	13,895,598	\$311,107.09	32,269,947	2,212,628	10,182,302	44,664,877
December...	345	7.97	13,245,026	\$305,812.06	31,280,971	2,332,109	9,697,585	43,310,665
Total....	4,589	8.00	222,215,592	\$387,561.23	412,585,634	27,359,343	133,423,632	573,368,609

NOTE: "MTM" = Million train miles

**TABLE S40A. TRAIN ACCIDENTS BY TYPE AND MONTH**

Type of Accident	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Derailment	352	325	332	304	296	267	291	257	189	265	254	251	3,383
Head on collision	8	2	5	3	3	4	4	2	5	4	6	1	47
Rear end collision	11	16	9	4	10	12	10	10	5	7	3	1	98
Side collision	32	41	29	38	27	21	21	27	30	29	35	26	356
Raking collision	7	8	3	5	4	2	6	3	3	5	2	4	52
Broken train collision	1	2	---	2	3	1	---	2	---	2	2	2	17
Rail-hwy crossing	15	21	20	13	15	15	18	12	12	19	8	10	178
RR grade crossing	---	---	---	---	---	---	---	1	---	1	---	---	2
Obstruction	3	4	5	2	3	4	5	5	3	5	6	2	47
Explosion-detonation	---	---	---	---	---	---	---	---	---	---	---	---	---
Fire or violent rupture	9	9	5	7	10	13	2	10	7	10	4	7	93
Other	34	23	16	17	30	23	24	34	19	25	30	41	316
TOTAL.....	472	451	424	395	401	362	381	363	273	372	350	345	4,589

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data. The document also notes that regular audits are essential to identify any discrepancies or errors early on.

2. The second part of the document focuses on the role of technology in streamlining financial processes. It highlights how accounting software can automate repetitive tasks, such as invoicing and payroll, which saves time and reduces the risk of human error. Additionally, cloud-based systems provide real-time access to financial data, enabling better decision-making and collaboration between departments.

3. The third part of the document addresses the importance of budgeting and financial forecasting. It explains that a well-defined budget helps in allocating resources effectively and monitoring spending against the plan. Financial forecasting, on the other hand, provides a clear picture of the organization's future financial health, allowing management to anticipate potential challenges and take proactive measures to address them.



4. The fourth part of the document discusses the importance of maintaining strong relationships with creditors and suppliers. It suggests that timely payments and clear communication are key to building trust and ensuring a smooth flow of goods and services. The document also mentions that negotiating favorable terms can significantly improve the organization's cash flow and overall financial stability.

5. The fifth part of the document covers the importance of tax compliance. It stresses that staying up-to-date with the latest tax regulations is crucial to avoid penalties and interest. The document provides a checklist of key tax obligations, including filing returns on time and keeping accurate records of all tax-related transactions. It also advises consulting with a tax professional for complex situations.

6. The sixth part of the document discusses the importance of financial reporting. It explains that regular reports, such as the balance sheet, income statement, and cash flow statement, provide a comprehensive overview of the organization's financial performance. The document emphasizes that these reports should be presented in a clear and concise manner, using visual aids like charts and graphs to highlight key trends and insights.

### 3. ACCIDENTS: DETAILS OF 1982 OCCURRENCES

#### TABLE S41. TRAIN ACCIDENTS AND DAMAGES BY PRINCIPAL CAUSES AND SUBCAUSES

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
<b>TRACK, ROADBED AND STRUCTURES</b>						
Roadbed defects.....	109	11,051,110	---	108	1	---
Track geometry defects.....	751	28,043,250	3	746	2	---
Rail and joint bar defects.....	459	35,237,093	5	451	3	---
Frogs, switches and track appliances.....	428	7,133,820	11	408	9	---
Other way and structure.....	17	1,519,909	---	7	10	---
Signal and communication failures.....	5	123,188	---	3	2	---
Subtotal.....	1,769	83,108,370	19	1,723	27	---
<b>MECHANICAL AND ELECTRICAL FAILURES</b>						
*LOCOMOTIVE FAILURE*						
Brakes.....	1	8,969	---	1	---	---
Body.....	---	---	---	---	---	---
Coupler and draft system.....	---	---	---	---	---	---
Truck components.....	6	222,178	---	6	---	---
Axles and journal bearings.....	6	2,571,416	---	6	---	---
Wheels.....	8	238,750	---	8	---	---
Locomotives.....	55	2,143,009	1	11	42	1
Doors.....	---	---	---	---	---	---
General mechanical and electrical failures.....	4	129,329	1	1	2	---
Subtotal (Locomotives).....	80	5,313,651	2	33	44	1
*CAR FAILURE*						
Brakes.....	113	6,200,706	12	85	16	---
Trailer or container on flat car.....	9	580,791	1	5	3	---
Body.....	73	7,015,441	2	65	6	---
Coupler and draft system.....	79	2,578,005	13	58	8	---
Truck components.....	160	10,600,231	---	158	2	---
Axles and journal bearings.....	125	10,337,598	---	122	3	---
Wheels.....	136	13,634,297	1	132	3	---
Doors.....	7	211,325	1	4	2	---
General mechanical and electrical failures.....	14	1,851,174	1	9	4	---
Subtotal (cars).....	716	53,009,568	31	638	47	---
<b>TOTAL EQUIPMENT FAILURES.....</b>	<b>796</b>	<b>58,323,219</b>	<b>33</b>	<b>671</b>	<b>91</b>	<b>1</b>
<b>TRAIN OPERATION - HUMAN FACTORS</b>						
Brakes, use of.....	223	6,130,462	110	68	45	---
Employee physical condition.....	4	835,338	4	---	---	---
Flagging, fixed, hand and radio signals.....	47	6,059,406	23	17	7	---
Other rules and instructions.....	349	8,925,318	220	63	66	---
Speed.....	121	6,799,438	34	59	28	---
Switches, use of.....	184	3,199,518	46	123	15	---
Miscellaneous.....	356	9,866,508	40	287	29	---
Subtotal.....	1,284	41,815,988	477	617	190	---
<b>MISCELLANEOUS FACTORS</b>						
Collision with highway user at crossing site.....	174	7,667,338	---	---	---	174
Emergency brake application to avoid accident....	9	430,528	---	7	1	1
Vandalism.....	78	4,471,820	7	38	32	1
Interference with rr operation, not vandals.....	16	1,126,999	3	6	7	---
Load shifted.....	30	2,718,796	1	26	3	---
Load fell from car.....	6	219,204	---	2	4	---
Overloaded car.....	5	470,170	---	5	---	---
Improperly loaded car.....	17	874,500	1	16	---	---
Oversized load, misrouted.....	4	46,400	1	---	3	---
Object on or fouling track.....	38	1,362,294	---	14	23	1
Equipment on or fouling track.....	11	495,004	4	---	7	---
Trail/container tiedown eqp impr applied.....	4	84,185	---	1	3	---
Overload/improper loaded container etc.....	2	61,600	---	2	---	---
Interaction of lateral/vertical forces.....	129	4,782,188	1	128	---	---
Failure to control car spd with hand brk.....	1	4,500	---	1	---	---
Snow, ice, or mud on track.....	61	1,561,242	7	50	4	---
Other acts of God.....	6	289,125	1	3	2	---
Fire, not due to vandalism.....	24	2,216,860	---	---	24	---
Hump retarder failed to slow car.....	21	232,152	8	3	10	---
Switch fouled by lading chains, etc.....	7	229,550	---	5	2	---
Other causes.....	97	9,623,560	9	65	23	---
Subtotal.....	740	38,968,015	43	372	148	177
<b>GRAND TOTAL.....</b>	<b>4,589</b>	<b>222,215,592</b>	<b>572</b>	<b>3,383</b>	<b>456</b>	<b>178</b>

**TABLE S5. TRAIN ACCIDENTS RESULTING FROM HUMAN FACTORS  
BY SPECIFIC CAUSES**

Cause Of Accident	-----Total-----		Collisions	Derailments	Other
	Accidents	Damage			
<b>BRAKES, USE OF</b>					
500 Automatic brake, improper use.....	14	569,152	3	10	1
501 Dynamic brake, improper use.....	6	452,400	---	6	---
502 Failure to secure engine (R.R. emp.).....	16	831,175	10	3	3
503 Failure to secure hnd brk (R.R. emp.).....	53	1,204,526	38	5	10
504 Failure to apply sufficient hand brake.....	46	1,021,546	24	15	7
505 Failure to apply hnd brk on car (emp.).....	35	435,701	21	3	11
506 Fail. to secure eng/car (Non R.R. emp.).....	6	67,800	1	2	3
507 Independent (eng.) brake, improper use.....	15	388,785	2	12	1
508 Fail. to control spd,hnd brk (R.R.emp.).....	5	75,300	2	1	2
509 Other causes involving use of brakes.....	27	1,084,077	9	11	7
<b>SUBTOTAL.....</b>	<b>223</b>	<b>6,130,462</b>	<b>110</b>	<b>68</b>	<b>45</b>
<b>EMPLOYEE PHYSICAL CONDITION</b>					
510 Impairment due to alcohol or drugs.....	1	15,500	1	---	---
513 Employee falling asleep.....	3	819,838	3	---	---
<b>SUBTOTAL.....</b>	<b>4</b>	<b>835,338</b>	<b>4</b>	<b>---</b>	<b>---</b>
<b>FLAGGING, FIXED, HAND AND RADIO SIGNALS</b>					
517 Absence of fixed signal (Blue signal).....	1	10,291	---	1	---
519 Fixed signal improperly displayed.....	2	58,071	1	1	---
52A Block signal, failure to comply.....	3	978,830	1	2	---
52B Interlocking signal, failure to comply.....	1	70,000	1	---	---
520 Fixed signal, failure to comply.....	20	4,245,664	10	8	2
521 Flagging, improper or failure to flag.....	3	65,260	2	---	1
522 Flagging signal, failure to comply.....	1	10,000	---	1	---
523 Hand signal, failure to comply.....	2	160,000	1	---	1
525 Hand signal, failure to give/receive.....	4	30,476	---	3	1
526 Radio communicatio, failure to comply.....	1	76,500	1	---	---
527 Radio communication, improper.....	5	77,406	3	---	2
528 Radio comm., failure to give/receive.....	3	102,710	2	1	---
529 Flagging, fixed, hand & radio (other).....	1	174,198	1	---	---
<b>SUBTOTAL.....</b>	<b>47</b>	<b>6,059,406</b>	<b>23</b>	<b>17</b>	<b>7</b>
<b>OTHER RULES AND INSTRUCTIONS</b>					
530 Car(s) shoved out & left out of clear.....	14	133,510	12	---	2
531 Cars left foul.....	44	466,486	26	---	18
532 Derail, failure to apply or remove.....	16	152,537	1	14	1
533 Failure to stop train in clear.....	54	1,321,585	43	6	5
535 Instruction to trn/yard crew improper.....	20	1,101,742	15	2	3
536 Mtr car/on-trk eqp rules,fail to cmPLY.....	33	734,235	21	2	10
537 Equip move without authority (RR emp.).....	7	73,025	5	1	1
538 Shoving move, missing man at lead.....	96	1,766,017	65	19	12
539 Shoving movement, fail to control.....	28	452,204	12	10	6
540 Skate, failure to remove or place.....	4	28,850	2	2	---
541 Special op. instr., failure to comply.....	18	356,505	8	5	5
542 Trn ord/timetable auth, fail to comply.....	8	1,955,066	4	2	2
544 Trn ord(written)err in preparation,etc.....	1	41,000	1	---	---
549 Rules and instructions, other.....	6	342,556	5	---	1
<b>SUBTOTAL.....</b>	<b>349</b>	<b>8,925,318</b>	<b>220</b>	<b>63</b>	<b>66</b>



TABLE S5. (CONTINUED)

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	
	Accidents	Damage				
SPEED						
550	Coupling speed excessive.....	52	1,496,117	17	17	18
553	Switch movement, excessive speed.....	20	472,397	7	7	6
554	Trn inside yrd limit, excess speed.....	16	1,195,547	7	7	2
555	Trn out yrd limit, clear blk, excess spd.....	18	3,169,074	2	16	---
559	Other Causes involving excessive speed.....	15	466,303	1	12	2
SUBTOTAL.....		121	6,799,438	34	59	28
SWITCHES, USE OF						
560	Spring switch not clear before reverse.....	13	127,755	---	12	1
561	Switch improperly lined.....	101	2,162,231	43	45	13
562	Switch not latched or locked.....	18	337,100	2	15	1
563	Switch previously run through.....	50	555,082	1	49	---
569	Use of switches, other.....	2	17,350	---	2	---
SUBTOTAL.....		184	3,199,518	46	123	15
MISCELLANEOUS						
570	Buffing or slack action excessive.....	181	6,007,071	3	177	1
571	Failure to couple.....	16	132,827	8	7	1
572	Lateral drawbar force on curve excess.....	51	1,534,570	---	51	---
574	Passed couplers.....	55	712,131	8	37	10
575	Retarder, improper manual operation.....	13	139,112	4	3	6
576	Retarder yard skate improperly applied.....	2	51,980	1	---	1
599	Other train operation/human factors.....	38	1,288,817	16	12	10
SUBTOTAL.....		356	9,866,508	40	287	29
GRAND TOTAL.....		1,284	41,815,988	477	617	190

**TABLE S6. TRAIN ACCIDENTS RESULTING FROM MECHANICAL AND ELECTRICAL FAILURES BY SPECIFIC CAUSE**

Cause Of Accident	Total		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
<b>BRAKES</b>						
400 Air hose uncoupled or burst.....	21	2,201,715	1	20	---	---
402 Broken brake pipe or connections.....	4	115,339	---	4	---	---
404 Other brake component failure, etc.....	7	570,935	1	6	---	---
404L Other brake component failure - loco.....	1	8,969	---	1	---	---
405 Brk valve malf. (undesired emergency).....	9	519,050	1	7	1	---
406 Brake valve malfunction/stuck brake/etc.....	6	45,740	---	---	6	---
407 Rigging down or dragging.....	40	2,051,063	---	39	1	---
408 Hand brake/gear broken or defective.....	8	116,645	5	1	2	---
409 Hand brk linkage/connections failure.....	9	115,067	3	3	3	---
410 Other brake failure(not on locomotive).....	9	465,152	1	5	3	---
<b>SUBTOTAL.....</b>	<b>114</b>	<b>6,209,675</b>	<b>12</b>	<b>86</b>	<b>16</b>	<b>---</b>
<b>TRAILER OR CONTAINER ON FLAT CAR</b>						
411 Broken or defective tiedown equipment.....	4	67,894	1	1	2	---
419 Oth trailer/container on flat car fail.....	5	512,897	---	4	1	---
<b>SUBTOTAL.....</b>	<b>9</b>	<b>580,791</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>---</b>
<b>BODY</b>						
420 Body bolster broken or defective.....	2	13,905	---	2	---	---
421 Center sill broken or bent.....	14	145,228	1	8	5	---
422 Draft sill broken or bent.....	4	154,400	---	4	---	---
423 Center plate broken or defective.....	13	1,999,842	---	13	---	---
424 Center plate disengaged from truck.....	22	702,385	---	22	---	---
425 Center pin broken or missing.....	7	2,458,525	---	6	1	---
426 Center plate attachment defective.....	1	9,205	---	1	---	---
429 Other causes due to body (not loco).....	10	1,531,951	1	9	---	---
<b>SUBTOTAL.....</b>	<b>73</b>	<b>7,015,441</b>	<b>2</b>	<b>65</b>	<b>6</b>	<b>---</b>
<b>COUPLER AND DRAFT SYSTEM</b>						
430 Knuckle broken or defective.....	11	434,892	3	8	---	---
431 Coupler mismatch, high/low.....	12	118,005	2	7	3	---
432 Coupler drawhead broken or defective.....	6	113,948	---	5	1	---
433 Coupler retainer pin/cross key missing.....	10	472,906	---	8	2	---
434 Draft gear/mechanism broken/defective.....	14	610,616	1	13	---	---
435 Coupler carrier broken or defective.....	8	239,787	1	7	---	---
436 Coupler shank broken or defective.....	6	205,758	---	5	1	---
439 Other coupler and draft system causes.....	12	382,093	6	5	1	---
<b>SUBTOTAL.....</b>	<b>79</b>	<b>2,578,005</b>	<b>13</b>	<b>58</b>	<b>8</b>	<b>---</b>
<b>TRUCK COMPONENTS</b>						
440 Side bearing clearance improper.....	50	2,007,834	---	50	---	---
441 Side bearing(s) broken.....	9	337,331	---	9	---	---
442 Side bearing(s) missing.....	7	628,179	---	7	---	---
443 Truck bolster broken.....	10	627,407	---	9	1	---
444 Side frame broken.....	6	227,370	---	6	---	---
445 Truck (stiff/improper lateral).....	65	4,341,578	---	64	1	---
445L Truck (stiff/improper lateral) - loco.....	4	142,320	---	4	---	---
446 Defective snubbing.....	1	640,500	---	1	---	---
446L Defective snubbing - locomotive.....	1	13,000	---	1	---	---
447 Broken/missing/defective springs.....	3	983,700	---	3	---	---
447L Broken/missing/defective springs-loco.....	1	66,858	---	1	---	---
449 Other truck component causes.....	9	806,332	---	9	---	---
<b>SUBTOTAL.....</b>	<b>166</b>	<b>10,822,409</b>	<b>---</b>	<b>164</b>	<b>2</b>	<b>---</b>
<b>AXLES AND JOURNAL BEARINGS</b>						
450 Broken or bent between wheel seats.....	4	98,969	---	4	---	---
450L Broken/bent between wheel seats-loco.....	4	2,557,224	---	4	---	---
451 Journal (plain) failure - overheating.....	69	4,893,928	---	67	2	---

TABLE S6. (CONTINUED)

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
AXLES AND JOURNAL BEARINGS (CONT.)						
452 Journal (R. B.) failure - overheat.....	46	4,776,754	---	45	1	---
452L Journal (R. B.) failure-overheat(loco).....	1	7,892	---	1	---	---
453 Journal fractured, new cold break.....	3	371,201	---	3	---	---
454 Journal fract., cold brk(prev. O.heat).....	2	13,681	---	2	---	---
459 Axles and journal bearings (other).....	1	183,065	---	1	---	---
459L Axles/journal bearings (other) - loco.....	1	6,300	---	1	---	---
SUBTOTAL.....	131	12,909,014	---	128	3	---
WHEELS						
460 Broken flange.....	13	968,067	---	13	---	---
461 Broken rim.....	19	3,237,162	---	19	---	---
462 Broken plate.....	15	1,143,563	---	14	1	---
463 Broken hub.....	1	568,600	---	1	---	---
464 Worn flange.....	51	993,411	---	50	1	---
464L Worn flange - locomotive.....	7	88,750	---	7	---	---
465 Worn thread.....	2	12,551	---	1	1	---
466 Damaged flange or tread, flat.....	3	527,325	---	3	---	---
467 Loose wheel.....	21	4,433,210	1	20	---	---
468 Thermal crack, flange or tread.....	2	662,800	---	2	---	---
469 Other causes involving wheels-not loco.....	9	1,087,608	---	9	---	---
469L Other causes involving wheel - loco.....	1	150,000	---	1	---	---
SUBTOTAL.....	144	13,873,047	1	140	3	---
LOCOMOTIVES						
470L Running gear failure - locomotive.....	1	1,200	---	1	---	---
471L Traction motor failure - locomotive.....	5	337,043	---	3	2	---
472L Crank case/air box explosion - loco.....	2	96,225	---	---	2	---
473L Oil fire - locomotive.....	6	358,930	---	---	6	---
474L Electrically caused fire - locomotive.....	24	818,503	---	---	24	---
475L Current collector system - loco.....	4	64,174	---	---	4	---
476L Remote control eqp. inoperative-loco.....	1	200,600	---	1	---	---
477L Broke/defect swing hanger or plank-loc.....	1	56,800	---	1	---	---
479L Other causes involving locomotives.....	11	209,534	1	5	4	1
SUBTOTAL.....	55	2,143,009	1	11	42	1
DOORS						
481 Box car plug door, attachment defective.....	3	90,625	---	2	1	---
484 Box car door(not plug) attach defect.....	1	6,250	1	---	---	---
486 Bottom outlet car door attach defect.....	1	8,500	---	1	---	---
489 Other causes involving doors.....	2	105,950	---	1	1	---
SUBTOTAL.....	7	211,325	1	4	2	---
GENERAL MECHANICAL AND ELECTRICAL FAILURES						
499 General mech/elect failures-not loco.....	14	1,851,174	1	9	4	---
499L General mech/elect failures - loco.....	4	129,329	1	1	2	---
SUBTOTAL.....	18	1,980,503	2	10	6	---
GRAND TOTAL.....	796	58,323,219	33	671	91	1

**TABLE S7. TRAIN ACCIDENTS RESULTING FROM DEFECTS IN TRACK, ROADBED,  
AND STRUCTURES**

Cause Of Accident	-----Total-----		Collisions	Derailments	Other
	Accidents	Damage			
<b>ROADBED DEFECTS</b>					
101 Roadbed settled or soft.....	60	1,152,092	---	60	---
102 Washout/rain/slide/ice,etc. dmg to trk.....	36	9,522,388	---	35	1
109 Other roadbed defects.....	13	376,630	---	13	---
SUBTOTAL.....	109	11,051,110	---	108	1
<b>TRACK GEOMETRY DEFECTS</b>					
110 Wide gage (defect/missing crossties).....	275	5,570,980	---	275	---
111 Wide gage (def/missing rail fasteners).....	51	1,064,699	---	51	---
112 Wide gage (involving gage rods).....	13	102,921	---	13	---
113 Wide gage due to worn rail.....	17	403,603	---	17	---
114 Track alignment irregular.....	31	2,027,269	---	31	---
115 Track alignment irregular (buckled).....	81	7,598,625	1	80	---
116 Track profile improper.....	6	84,112	1	5	---
117 Superelevation incorrect.....	15	616,410	---	15	---
118 Superelevation runoff improper.....	1	35,550	---	1	---
119 Cross level irregular at joints.....	169	6,725,460	1	166	2
120 Cross level irregular not at joints.....	66	3,042,562	---	66	---
129 Other track geometry defects.....	26	771,059	---	26	---
SUBTOTAL.....	751	28,043,250	3	746	2
<b>RAIL AND JOINT BAR DEFECTS</b>					
130 Bolt hole crack or break.....	28	4,170,871	---	28	---
131 Broken base of rail.....	75	4,692,355	2	72	1
132 Broken weld, field.....	9	2,430,114	1	8	---
133 Broken weld, plant.....	2	17,850	---	2	---
134 Detail fracture fm shelling/head check.....	18	3,677,223	---	18	---
135 Engine burn fracture.....	1	101,050	---	1	---
136 Head/web sep.(outside joint bar limit).....	47	2,374,150	---	47	---
137 Head/web sep.(within joint bar limits).....	18	1,462,356	---	18	---
138 Horizontal split head.....	9	1,672,930	---	9	---
139 Piped rail.....	2	191,600	1	1	---
140 Rail defect with joint bar repair.....	1	8,163	---	1	---
141 Transverse/compound fissure.....	74	4,479,045	1	73	---
142 Vertical split head.....	50	2,574,770	---	50	---
143 Worn rail.....	29	817,333	---	29	---
144 Mismatched rail-head contour.....	17	123,244	---	17	---
145 Joint bar broken, compromise.....	5	50,019	---	4	1
146 Joint bar broken, insulated.....	1	27,500	---	1	---
147 Joint bar broken, noninsulated.....	17	1,385,063	---	17	---
148 Joint bolts, broken or missing.....	6	224,224	---	6	---
149 Other rail and joint bar defects.....	50	4,757,233	---	49	1
SUBTOTAL.....	459	35,237,093	5	451	3

TABLE S7. (CONTINUED)

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	
	Accidents	Damage				
FROGS, SWITCHES AND TRACK APPLIANCES						
160	Guard rail loose/broken/etc.....	13	153,844	---	13	---
161	Switch damaged/out of adjustment.....	86	1,369,495	---	84	2
162	Switch stand failure (hand oper.).....	10	117,130	1	9	---
163	Switch connecting/oper. rod fail.....	6	233,094	---	6	---
164	Stock rail worn/broken/disconnect.....	14	314,739	1	13	---
165	Switch point worn or broken.....	207	3,055,123	---	206	1
166	Switch rod worn/bent/broken/etc.....	3	68,881	---	3	---
167	Frog, rigid, worn or broken.....	2	65,799	---	2	---
168	Frog, spring, worn or broken.....	3	699,243	---	3	---
169	Frog, self guarded, worn/broken.....	2	16,100	---	2	---
172	Expansion joint failure/malfunction.....	---	9,500	---	---	---
173	Retarder worn/broken/malfunction.....	16	152,763	8	4	4
174	Spring/power switch mech. malfunction.....	5	82,122	1	3	1
176	Switch out of adjust.(insuf rail anch).....	18	187,291	---	18	---
179	Other frog/switches/track appl. causes.....	43	608,696	---	42	1
	SUBTOTAL.....	428	7,133,820	11	408	9
OTHER WAY AND STRUCTURES						
180	Bridge misalignment or failure.....	2	928,000	---	1	1
181	Flangeway clogged.....	4	55,315	---	4	---
189	Other way and structure causes.....	11	536,594	---	2	9
	SUBTOTAL.....	17	1,519,909	---	7	10
SIGNAL AND COMMUNICATION FAILURES						
201	Radio communication equipment failure.....	1	34,881	---	---	1
209	Signal & communication failure N.O.C.....	4	88,307	---	3	1
	SUBTOTAL.....	5	123,188	---	3	2
	GRAND TOTAL.....	1,769	83,108,370	19	1,723	27

**TABLE S8. TRAIN ACCIDENTS RESULTING FROM MISCELLANEOUS CAUSES BY SPECIFIC CAUSE**

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
MISC CAUSES NOT OTHERWISE LISTED						
700 Collision with hwy user at grade xing.....	174	7,667,338	---	---	---	174
701 Emergency brk appl to avoid accident.....	9	430,528	---	7	1	1
702 Vandalism.....	78	4,471,820	7	38	32	1
703 Interference with RR oper.-not vandals.....	16	1,126,999	3	6	7	---
704 Load shifted.....	30	2,718,796	1	26	3	---
705 Load fell from car.....	6	219,204	---	2	4	---
706 Overloaded car.....	5	470,170	---	5	---	---
707 Improperly loaded car.....	17	874,500	1	16	---	---
708 Oversized load, misrouted.....	4	46,400	1	---	3	---
709 Object on or fouling track.....	38	1,362,294	---	14	23	1
710 Equipment on or fouling track.....	11	495,004	4	---	7	---
711 Trail/contain tiedown eqp-impr applied.....	4	84,185	---	1	3	---
712 Overload/improper loaded container etc.....	2	61,600	---	2	---	---
713 Interaction of lateral/vertical forces.....	129	4,782,188	1	128	---	---
714 Failure to control spd with hand brake.....	1	4,500	---	1	---	---
715 Snow, ice, or mud on track.....	61	1,561,242	7	50	4	---
716 Other acts of God.....	6	289,125	1	3	2	---
717 Fire, other than vandalism.....	24	2,216,860	---	---	24	---
718 Hump retarder failed to sufficiently slow car	21	232,152	8	3	10	---
719 Objects such as lading chains or strap.....	7	229,550	---	5	2	---
799 Other miscellaneous causes.....	97	9,623,560	9	65	23	---
SUBTOTAL.....	740	38,968,015	43	372	148	177
GRAND TOTAL.....	740	38,968,015	43	372	148	177

**TABLE S43. DAMAGES TO RAIL EQUIPMENT IN TRAIN ACCIDENTS BY CONSIST TYPE**

Type of consist	....Collisions....		...Derailments....		.....Other.....		..Rail-Hwy X-ing..		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Freight train....	235	12,933,016	2,293	122,391,552	136	5,515,573	123	4,081,909	2,787	144,922,050
Passenger train..	11	1,213,450	37	7,141,005	57	3,151,392	34	2,459,986	139	13,965,833
Mixed train.....	---	---	2	33,475	---	---	---	---	2	33,475
Work train.....	10	82,500	26	674,189	4	19,820	2	10,500	42	787,009
Single car.....	122	1,292,983	37	236,210	64	681,555	8	61,190	231	2,271,938
Cut of cars.....	215	2,355,811	98	988,441	105	860,984	2	8,900	420	4,214,136
Yard/switching...	367	4,887,215	814	6,713,269	102	1,366,796	6	45,904	1,289	13,013,184
Light loco(s)....	89	1,333,869	49	803,004	22	739,652	2	22,552	162	2,899,077
Unknown.....	---	---	---	---	---	---	---	---	---	---
Total.....	1,049	24,098,844	3,356	138,981,145	490	12,335,772	177	6,690,941	5,072	182,106,702

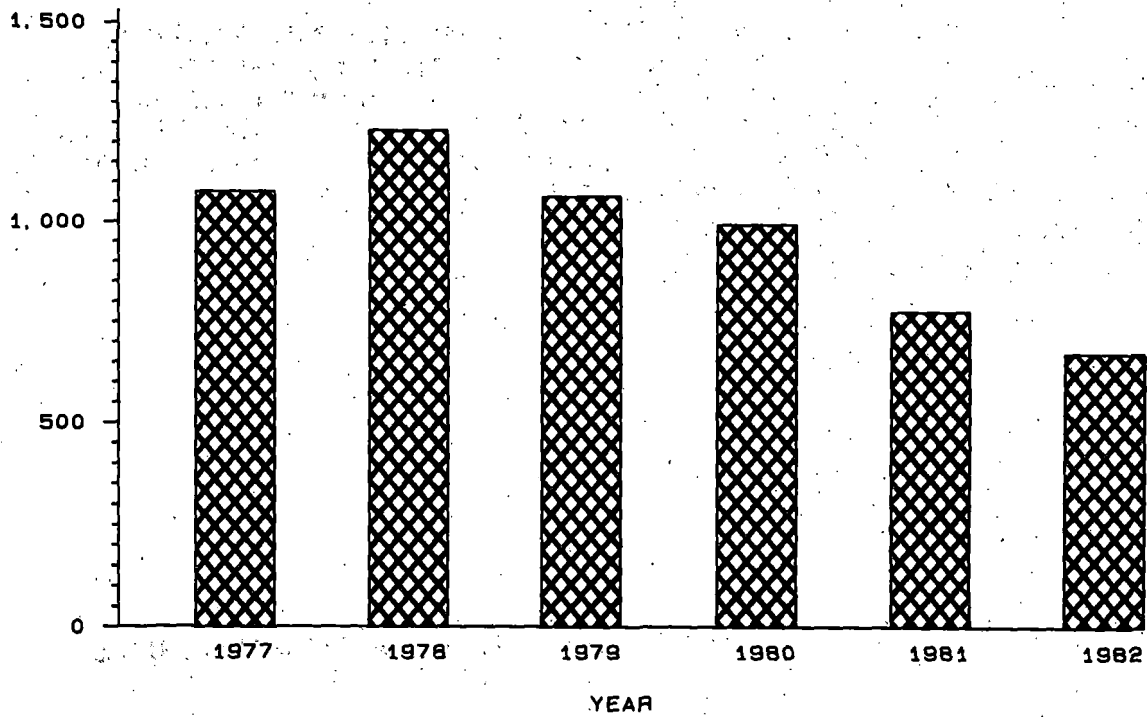
NOTE: "Number" represents the number of consists sustaining damage

#### 4. ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS

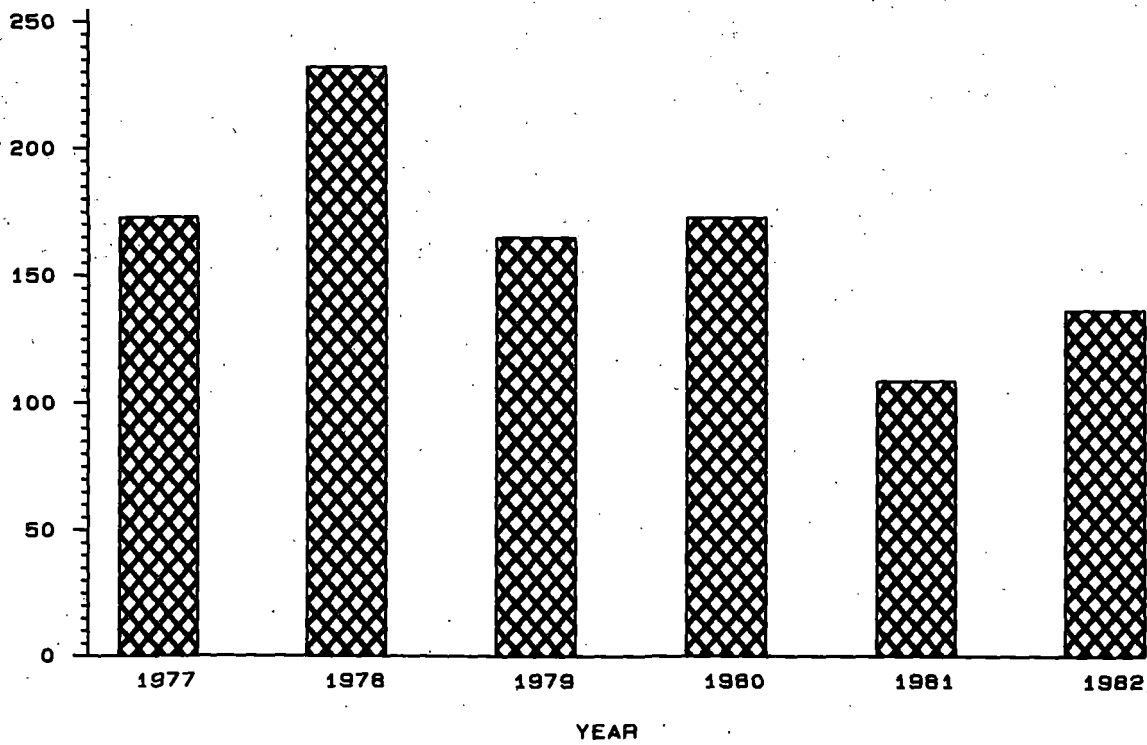
The information in this section represents only those accidents involving consists that contained at least one car carrying hazardous materials. The number of accidents, resulting damages, or casualties may or may not be attributable to the presence of these cars in the consists. While this does not represent a complete accounting of all hazardous materials releases, it does provide some insight into the extent of hazardous materials car involvement in train accidents.

**TABLE S10. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS**

Type Of Accident	Consists Carrying	.....Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
Derailment	394	29,579	1,940	572	123	7,220	32,625,344
Head on collision	3	219	10	---	---	---	5,000
Rear end collision	3	161	9	2	---	---	38,000
Side collision	43	2,067	127	47	4	---	550,975
Raking collision	8	232	17	13	---	---	130,550
Broken train collision	1	2	1	1	---	---	4,300
Rail-hwy crossing	15	1,108	66	16	6	6	1,165,208
RR grade crossing	---	---	---	---	---	---	---
Obstruction	2	181	9	---	---	---	534,000
Explosion-detonation	---	---	---	---	---	---	---
Fire or violent rupture	1	82	2	---	---	---	10,000
Other	34	1,637	116	20	4	---	491,525
TOTAL.....	504	35,268	2,297	671	137	7,226	35,554,902



**FIGURE 22. TOTAL NUMBER OF HAZARDOUS MATERIAL CARS DAMAGED, 1977-1982**



**FIGURE 23. TOTAL NUMBER OF CARS RELEASING HAZARDOUS MATERIAL BY YEAR, 1977-1982**



**TABLE S10A. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS BY CAUSE**

Cause	.....Cars.....					People Evacuated	Damage To Equipment
	Consists Carrying	In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
<b>TRACK, ROADBED AND STRUCTURES</b>							
Roadbed defects.....	12	511	31	7	---	---	67,772
Track geometry defects.....	75	4,462	317	122	9	10	3,435,407
Rail and joint bar defects.....	75	4,471	325	135	13	25	7,656,332
Frogs, switches and track appliances.....	30	2,223	166	43	2	20	486,865
Other way and structure.....	1	58	6	4	3	---	378,000
Signal and communication failures.....	---	---	---	---	---	---	---
Subtotal.....	193	11,725	845	311	27	55	12,024,376
<b>MECHANICAL AND ELECTRICAL FAILURES</b>							
Brakes.....	15	1,443	75	12	1	---	445,062
Trailer or container on flat car.....	1	48	1	---	---	---	2,150
Body.....	15	1,163	115	49	36	3,200	2,658,525
Coupler and draft system.....	15	1,401	119	8	---	---	306,387
Truck components.....	22	1,810	121	35	3	2,100	3,311,050
Axles and journal bearings.....	26	2,421	152	19	5	200	2,636,797
Wheels.....	14	1,233	36	14	4	15	2,891,022
Locomotives.....	1	118	8	---	---	---	173,900
Doors.....	---	---	---	---	---	---	---
General mechanical and electrical failures.....	1	92	1	---	---	---	8,425
Subtotal.....	110	9,729	628	137	49	5,515	12,433,318
<b>TRAIN OPERATION - HUMAN FACTORS</b>							
Brakes, use of.....	23	985	57	17	1	---	543,100
Employee physical condition.....	---	---	---	---	---	---	---
Flagging, fixed, hand and radio signals.....	5	329	15	2	---	---	13,200
Other rules and instructions.....	31	1,550	91	42	7	---	418,347
Speed.....	7	408	42	6	---	---	216,800
Switches, use of.....	16	1,185	63	15	1	---	347,150
Miscellaneous.....	43	3,802	201	50	9	---	1,083,247
Subtotal.....	125	8,259	469	132	18	---	2,621,844
<b>MISCELLANEOUS FACTORS</b>							
Collision with highway user at crossing site.....	14	919	64	16	6	6	968,840
Emergency brake application to avoid accident.....	2	276	3	---	---	---	211,118
Vandalism.....	2	96	54	7	2	550	72,200
Interference with rr operation, not vandals.....	1	100	1	1	---	---	602,400
Load shifted.....	7	660	19	5	3	---	863,250
Load fell from car.....	3	281	26	---	---	---	10,000
Overloaded car.....	---	---	---	---	---	---	---
Improperly loaded car.....	2	53	3	1	---	---	9,041
Oversized load, misrouted.....	---	---	---	---	---	---	---
Object on or fouling track.....	3	192	8	3	1	---	555,500
Equipment on or fouling track.....	3	222	3	1	---	---	23,000
Trail/container tiedown eqp impr applied.....	1	37	5	1	---	---	17,000
Overload/improper loaded container etc.....	---	---	---	---	---	---	---
Interaction of lateral/vertical forces.....	10	693	36	4	---	---	233,622
Failure to control car spd with hand brk.....	---	---	---	---	---	---	---
Snow, ice, or mud on track.....	3	168	5	3	3	100	23,900
Other acts of God.....	1	68	2	---	---	---	25,900
Fire, not due to vandalism.....	---	---	---	---	---	---	---
Hump retarder failed to slow car.....	6	435	21	4	1	1,000	46,150
Switch fouled by lading chains, etc.....	2	130	7	1	1	---	26,150
Other causes.....	16	1,225	98	44	26	---	4,787,293
Subtotal.....	76	5,555	355	91	43	1,656	8,475,364
<b>GRAND TOTAL.....</b>	<b>504</b>	<b>35,268</b>	<b>2,297</b>	<b>671</b>	<b>137</b>	<b>7,226</b>	<b>35,554,902</b>

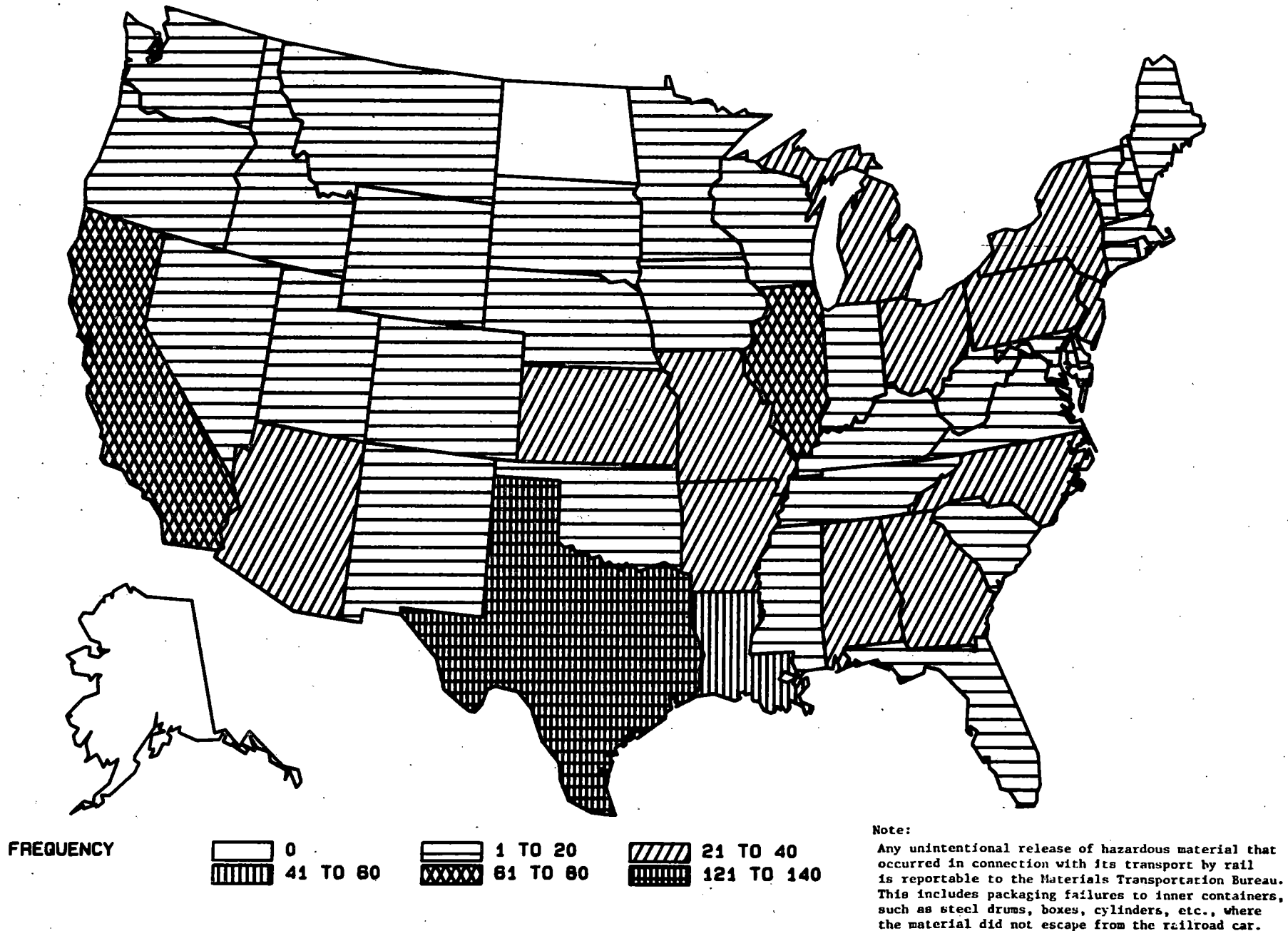
TABLE S9.

## TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS BY STATE

State	Consists Carrying	.....Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
Alabama.....	8	720	32	12	2	---	150,310
Alaska.....	1	85	11	11	5	---	390,240
Arizona.....	8	501	42	14	6	---	2,562,491
Arkansas.....	17	1,420	57	19	1	---	1,018,050
California.....	23	1,536	53	10	1	---	2,092,600
Colorado.....	2	147	2	1	---	---	72,800
Connecticut.....	---	---	---	---	---	---	---
Delaware.....	2	58	3	3	---	---	13,300
Dist of Columbia.....	---	---	---	---	---	---	---
Florida.....	4	376	32	1	---	---	246,368
Georgia.....	18	1,639	56	13	7	1,765	2,593,909
Idaho.....	6	530	28	9	2	---	112,800
Illinois.....	27	2,153	151	32	2	---	623,737
Indiana.....	23	1,648	72	27	6	120	990,000
Iowa.....	9	590	19	7	2	---	1,979,742
Kansas.....	9	755	41	5	3	---	418,850
Kentucky.....	7	174	31	11	---	---	108,300
Louisiana.....	38	2,496	277	84	37	2,700	3,448,310
Maine.....	4	101	7	7	---	---	133,300
Maryland.....	2	191	4	1	---	---	3,700
Massachusetts.....	5	207	17	5	---	---	28,651
Michigan.....	13	787	90	19	6	1,056	440,900
Minnesota.....	16	1,142	57	15	---	---	124,362
Mississippi.....	3	312	9	8	---	---	164,100
Missouri.....	21	1,767	81	38	22	---	2,326,415
Montana.....	3	95	6	6	---	---	355,250
Nebraska.....	3	145	14	4	1	---	684,500
Nevada.....	1	92	2	2	---	---	75,000
New Hampshire.....	2	38	6	2	---	---	15,000
New Jersey.....	7	270	13	13	1	---	46,150
New Mexico.....	9	545	45	13	3	---	653,951
New York.....	16	1,186	65	11	1	---	424,150
North Carolina.....	8	841	33	7	1	---	847,587
North Dakota.....	6	389	20	5	---	---	717,900
Ohio.....	25	1,738	117	41	7	1,350	1,533,955
Oklahoma.....	16	1,297	72	15	---	---	1,287,700
Oregon.....	5	543	32	3	---	---	125,800
Pennsylvania.....	35	2,391	325	68	3	200	805,329
Rhode Island.....	1	26	1	---	---	---	54,000
South Carolina.....	2	23	3	3	1	---	32,187
South Dakota.....	1	1	1	1	1	---	7,500
Tennessee.....	14	1,172	82	13	1	35	530,450
Texas.....	53	3,170	195	68	9	---	3,437,370
Utah.....	---	---	---	---	---	---	---
Vermont.....	2	129	4	---	---	---	485,122
Virginia.....	9	539	24	10	5	---	1,509,066
Washington.....	---	---	---	---	---	---	---
West Virginia.....	10	678	43	27	---	---	1,544,500
Wisconsin.....	9	539	20	5	1	---	110,200
Wyoming.....	1	86	2	2	---	---	229,000
Unknown.....	---	---	---	---	---	---	---
TOTAL.....	504	35,268	2,297	671	137	7,226	35,554,902

**TABLE R4. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS BY RAILROAD**

Railroad	Consists Carrying	.....Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
<b>CLASS I RAILROADS</b>							
Alabama Great Southern Railroad Co.....	1	111	1	---	---	---	105,700
Amtrak (National RR Passenger Corp).....	---	---	---	---	---	---	---
Atchison, Topeka And Santa Fe Rwy Co.....	31	1,910	112	29	5	---	1,691,753
Baltimore And Ohio Railroad Co.....	28	1,611	172	79	4	1,000	2,111,650
Bessemer And Lake Erie Railroad Co.....	1	92	2	---	---	---	39,850
Boston And Maine Corporation.....	7	356	34	2	---	---	515,773
Burlington Northern Incorporated.....	31	2,224	72	40	7	---	3,761,400
Central Of Georgia Railroad Company.....	1	108	1	1	---	---	9,150
Chesapeake And Ohio Railway Company.....	17	986	98	28	9	1,050	1,466,950
Chicago And Northwestern Transportation Co..	3	197	8	4	---	---	1,300,672
Chicago, Milw, St. Paul And Pacific RR Co...	10	654	31	9	---	---	761,590
Cincinnati, New Orleans And Texas Pacific...	1	128	2	1	---	---	10,800
Clinchfield Railroad Company.....	5	547	31	6	2	---	476,400
Consolidated Rail Corporation.....	53	3,418	269	80	9	320	1,129,170
Delaware And Hudson Railway.....	13	1,093	42	2	---	---	396,225
Denver And Rio Grande Western RR Co.....	1	58	1	---	---	---	70,000
Detroit, Toledo And Ironton RR Co.....	1	71	2	---	---	---	5,600
Duluth, Missabe And Iron Range Rwy Co.....	1	66	3	---	---	---	472
Elgin, Joliet And Eastern Railway Co.....	---	---	---	---	---	---	---
Florida East Coast Railway Co.....	1	13	3	---	---	---	30,000
Grand Truck Western Railroad Co.....	3	221	9	9	1	6	152,700
Illinois Central Gulf Railroad Co.....	16	1,099	85	67	43	2,700	2,728,285
Kansas City Southern Railway Co.....	23	2,180	133	11	---	---	1,926,850
Long Island Railroad Company.....	---	---	---	---	---	---	---
Louisiana And Arkansas Rwy Company.....	10	682	45	10	1	---	802,150
Louisville And Nashville Railroad Co.....	17	1,286	53	12	2	---	778,800
Missouri Pacific Railroad Co.....	38	2,583	214	64	15	10	2,889,825
Missouri-Kansas-Texas Railroad Co.....	3	157	9	4	---	---	30,900
Norfolk And Western Railway Co.....	23	1,890	92	20	4	350	1,513,110
Pittsburg And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Seaboard Coast Line Railroad Co.....	23	2,511	83	18	5	15	2,613,340
Sooline Railroad Company.....	20	1,398	74	16	1	---	192,500
Southern Pacific Transportation Co.....	59	3,871	248	59	11	---	5,324,591
Southern Railway Company.....	4	288	10	8	---	25	93,100
St. Louis Southwestern Railway Co.....	7	606	35	12	2	---	118,350
Union Pacific Railroad Co.....	8	667	34	3	1	---	192,600
Western Maryland Railway Company.....	1	4	2	2	---	---	15,600
Western Pacific Railroad Company.....	5	251	10	3	---	---	183,300
<b>TOTAL CLASS I RAILROADS.....</b>	<b>466</b>	<b>33,337</b>	<b>2,020</b>	<b>599</b>	<b>122</b>	<b>5,476</b>	<b>33,439,156</b>
<b>CLASS II RAILROADS</b>							
Atlanta And West Point Railroad Co.....	1	75	16	6	6	---	976,127
Bangor And Aroostook Railroad Co.....	---	---	---	---	---	---	---
Canadian Pacific Lines In Maine.....	---	---	---	---	---	---	---
Central Vermont Railway Inc.....	---	---	---	---	---	---	---
Chicago And Illinois Midland Rwy Co.....	---	---	---	---	---	---	---
Chicago South Shore And South Bend RR.....	---	---	---	---	---	---	---
Colorado And Wyoming Railway Company.....	---	---	---	---	---	---	---
Duluth, Winnipeg And Pacific Rwy Co.....	---	---	---	---	---	---	---
Georgia Railroad Lessee Organization.....	3	156	4	3	1	1,750	240,050
Georgia Southern And Florida Railway.....	---	---	---	---	---	---	---
Green Bay And Western Railroad.....	---	---	---	---	---	---	---
Interstate Railroad Company.....	---	---	---	---	---	---	---
Lake Superior And Ishpeming Railroad Co....	---	---	---	---	---	---	---
Maine Central Railroad Company.....	5	124	9	9	---	---	140,300
Michigan Interstate Railroad (Ann Arbor)....	---	---	---	---	---	---	---
Monogahela Railway.....	---	---	---	---	---	---	---
Norfolk Southern Railway Company.....	---	---	---	---	---	---	---
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---
Providence and Worcester Railroad Co.....	2	42	2	1	---	---	64,000
Richmond, Frederickburg And Potomac RR Co...	2	22	2	2	1	---	13,400
Spokane International Railroad.....	1	99	16	8	2	---	54,600
Texas And Northern Railway Company.....	---	---	---	---	---	---	---
Texas, Mexican Railway Company.....	---	---	---	---	---	---	---
Toledo, Peoria And Western Railroad Co.....	---	---	---	---	---	---	---
<b>TOTAL CLASS II RAILROADS.....</b>	<b>14</b>	<b>518</b>	<b>49</b>	<b>29</b>	<b>10</b>	<b>1,750</b>	<b>1,488,477</b>
<b>RECAPITULATION (INCLUDES CLASS III RAILROADS)</b>							
CLASS I RAILROADS.....	466	33,337	2,020	599	122	5,476	33,439,156
CLASS II RAILROADS.....	14	518	49	29	10	1,750	1,488,477
CLASS III RAILROADS.....	24	1,413	228	43	5	---	627,269
<b>TOTAL ALL RAILROADS.....</b>	<b>504</b>	<b>35,268</b>	<b>2,297</b>	<b>671</b>	<b>137</b>	<b>7,226</b>	<b>35,554,902</b>



**FIGURE 24. ALL HAZARDOUS MATERIAL RELEASES, 1982 - MATERIALS TRANSPORTATION BUREAU**

## 5. ACCIDENTS AND CASUALTIES BY STATE

### TABLE S3A. TRAIN ACCIDENTS BY STATE AND TYPE

State	....Collisions....		...Derailments....		.....Other.....		..Rail-Hwy X-ing..		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Alabama.....	6	136,575	45	1,525,121	4	170,150	5	1,066,250	60	2,898,096
Alaska.....	3	301,578	2	25,839	1	5,410	3	517,480	9	850,307
Arizona.....	2	20,250	36	4,188,455	4	47,000	---	---	42	4,255,705
Arkansas.....	11	1,064,430	65	4,066,433	8	265,630	3	72,800	87	5,469,293
California.....	29	2,532,673	180	11,458,822	30	2,634,186	9	284,846	248	16,910,527
Colorado.....	8	93,156	27	2,825,237	6	142,500	4	27,384	45	3,088,277
Connecticut.....	3	191,500	11	198,577	5	124,690	4	1,022,450	23	1,537,217
Delaware.....	1	15,500	5	333,850	4	28,380	1	7,100	11	384,830
Dist of Columbia.....	---	---	2	11,400	1	5,400	---	---	3	16,800
Florida.....	9	594,107	24	1,601,407	3	19,682	4	417,353	40	2,632,549
Georgia.....	13	996,676	73	5,458,528	13	138,165	3	426,750	102	7,020,119
Idaho.....	8	110,218	20	1,532,073	2	34,997	1	89,963	31	1,767,251
Illinois.....	60	1,122,548	260	10,062,205	24	276,331	12	212,611	356	11,673,695
Indiana.....	13	375,638	117	5,231,364	8	136,506	5	196,100	143	5,939,608
Iowa.....	15	1,135,791	165	9,260,146	13	231,420	6	217,060	199	10,844,417
Kansas.....	9	227,457	90	3,975,693	8	85,053	3	16,376	110	4,304,579
Kentucky.....	9	162,388	90	2,677,828	4	152,800	4	38,350	107	3,031,366
Louisiana.....	12	494,400	68	4,912,304	11	173,375	6	57,726	97	5,637,805
Maine.....	3	41,325	34	1,289,422	2	12,100	2	23,949	41	1,366,796
Maryland.....	10	654,544	20	1,435,479	9	102,100	1	9,500	40	2,201,623
Massachusetts.....	3	31,987	31	1,166,352	3	32,081	2	18,319	39	1,248,739
Michigan.....	14	1,138,715	81	3,658,283	8	74,399	4	115,584	107	4,986,981
Minnesota.....	18	361,214	190	4,590,580	32	2,147,866	4	203,733	244	7,303,393
Mississippi.....	6	676,700	45	2,105,232	2	23,000	---	---	53	2,804,932
Missouri.....	27	1,227,496	131	7,431,884	20	294,666	2	10,290	180	8,964,336
Montana.....	8	83,219	21	2,090,728	6	906,400	2	161,290	37	3,241,637
Nebraska.....	15	922,094	78	6,930,923	17	407,581	7	55,670	117	8,316,268
Nevada.....	2	37,415	11	630,563	1	27,400	---	---	14	695,378
New Hampshire.....	---	---	7	607,185	---	---	---	---	7	607,185
New Jersey.....	3	63,400	34	3,232,695	7	95,650	1	5,150	45	3,396,895
New Mexico.....	4	215,686	21	993,655	1	25,000	---	---	26	1,234,341
New York.....	16	397,896	110	2,518,602	30	1,038,757	4	145,350	160	4,100,605
North Carolina.....	7	965,961	25	2,188,273	9	172,375	5	37,546	46	3,364,155
North Dakota.....	1	19,250	40	3,041,510	2	23,000	2	27,800	45	3,111,560
Ohio.....	27	401,089	146	6,066,246	21	204,331	14	824,200	208	7,495,866
Oklahoma.....	9	147,440	50	4,436,166	6	113,281	3	64,824	68	4,761,711
Oregon.....	9	223,936	46	1,219,481	4	42,350	3	114,925	62	1,600,692
Pennsylvania.....	23	3,691,483	168	6,032,292	22	545,622	10	104,040	223	10,373,437
Rhode Island.....	1	64,694	1	16,752	1	20,000	---	---	3	101,446
South Carolina.....	---	---	12	434,085	4	48,000	3	466,056	19	948,141
South Dakota.....	2	26,500	32	724,176	4	21,500	1	10,000	39	782,176
Tennessee.....	9	377,172	53	2,100,134	2	33,000	2	39,750	66	2,550,056
Texas.....	69	2,089,660	337	16,747,954	46	1,662,208	23	705,499	475	21,205,321
Utah.....	3	58,091	15	1,120,625	1	14,672	---	---	19	1,193,388
Vermont.....	1	50,050	7	912,464	1	41,265	1	9,128	10	1,012,907
Virginia.....	27	599,259	68	6,127,800	16	219,053	2	16,100	113	6,962,212
Washington.....	8	285,180	40	1,366,272	6	125,700	---	---	54	1,777,152
West Virginia.....	7	233,400	91	6,377,061	1	15,870	4	75,100	103	6,701,431
Wisconsin.....	17	199,734	107	5,151,352	15	186,725	3	55,604	142	5,593,415
Wyoming.....	12	871,092	51	2,840,964	8	236,920	---	---	71	3,948,976
Unknown.....	---	---	---	---	---	---	---	---	---	---
<b>TOTAL.....</b>	<b>572</b>	<b>25,730,567</b>	<b>3,383</b>	<b>174,930,472</b>	<b>456</b>	<b>13,584,547</b>	<b>178</b>	<b>7,970,006</b>	<b>4,589</b>	<b>222,215,592</b>

TABLE S3B. TRAIN ACCIDENTS BY STATE AND CAUSE

State	.....Track.....		....Equipment.....		..Human Factors...		..Miscellaneous...		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Alabama.....	17	931,156	14	398,585	19	321,903	10	1,246,452	60	2,898,096
Alaska.....	1	16,870	1	8,969	4	306,988	3	517,480	9	850,307
Arizona.....	13	957,925	11	2,870,644	10	280,044	8	147,092	42	4,255,705
Arkansas.....	29	2,088,043	17	683,403	28	1,467,997	13	1,229,850	87	5,469,293
California.....	76	4,261,911	61	5,355,598	71	3,472,940	40	3,820,078	248	16,910,527
Colorado.....	12	1,707,011	3	213,896	22	827,911	8	339,459	45	3,088,277
Connecticut.....	8	175,744	3	106,836	5	85,753	7	1,168,884	23	1,537,217
Delaware.....	3	316,200	3	21,750	4	39,780	1	7,100	11	384,830
Dist of Columbia.	---	---	---	---	2	11,400	1	5,400	3	16,800
Florida.....	8	1,113,396	8	551,784	13	300,154	11	667,215	40	2,632,549
Georgia.....	31	595,394	14	2,703,489	45	1,925,542	12	1,795,694	102	7,020,119
Idaho.....	2	59,067	10	1,031,989	15	286,734	4	389,461	31	1,767,251
Illinois.....	149	5,947,404	45	2,042,327	107	2,168,225	55	1,515,739	356	11,673,695
Indiana.....	58	1,783,135	32	1,632,414	34	1,663,241	19	860,818	143	5,939,608
Iowa.....	98	7,576,336	30	1,061,315	38	1,527,128	33	679,638	199	10,844,417
Kansas.....	51	1,858,539	16	1,363,864	32	825,362	11	256,814	110	4,304,579
Kentucky.....	57	1,958,653	15	325,863	22	397,488	13	349,362	107	3,031,366
Louisiana.....	37	1,808,640	19	2,645,019	27	889,940	14	294,206	97	5,637,805
Maine.....	16	580,062	5	73,038	7	224,142	13	489,554	41	1,366,796
Maryland.....	9	1,187,807	5	166,000	19	750,716	7	97,100	40	2,201,623
Massachusetts....	12	931,874	4	28,745	12	126,257	11	161,863	39	1,248,739
Michigan.....	39	2,700,102	19	575,738	30	1,338,146	19	372,995	107	4,986,981
Minnesota.....	124	4,137,606	27	1,146,276	50	545,605	43	1,473,906	244	7,303,393
Mississippi.....	31	804,951	9	556,860	10	1,250,521	3	192,600	53	2,804,932
Missouri.....	64	3,867,816	26	1,779,822	63	2,391,954	27	924,744	180	8,964,336
Montana.....	9	556,564	7	932,900	13	125,287	8	1,626,886	37	3,241,637
Nebraska.....	42	3,676,265	22	2,819,481	35	1,629,382	18	191,140	117	8,316,268
Nevada.....	3	130,550	4	318,433	7	246,395	---	---	14	695,378
New Hampshire....	6	221,640	1	385,545	---	---	---	---	7	607,185
New Jersey.....	22	288,445	4	368,300	11	133,650	8	2,606,500	45	3,396,895
New Mexico.....	3	554,000	8	207,497	11	422,709	4	50,135	26	1,234,341
New York.....	55	1,093,628	33	1,557,007	39	797,696	33	652,274	160	4,100,605
North Carolina...	10	753,720	15	2,065,852	12	322,087	9	222,496	46	3,364,155
North Dakota.....	23	1,079,957	8	1,630,803	6	182,100	8	218,700	45	3,111,560
Ohio.....	72	1,976,762	38	3,057,418	58	871,298	40	1,590,388	208	7,495,866
Oklahoma.....	30	2,500,494	9	857,250	15	307,085	14	1,096,882	68	4,761,711
Oregon.....	20	840,097	14	252,426	17	283,802	11	224,367	62	1,600,692
Pennsylvania.....	96	2,214,782	40	3,714,963	47	3,451,333	40	992,359	223	10,373,437
Rhode Island.....	1	16,752	---	---	1	64,694	1	20,000	3	101,446
South Carolina...	5	63,998	3	311,067	5	71,020	6	502,056	19	948,141
South Dakota.....	25	433,966	5	173,405	4	40,000	5	134,805	39	782,176
Tennessee.....	28	1,304,528	8	487,849	19	325,937	11	431,742	66	2,550,056
Texas.....	183	9,218,986	80	4,343,316	161	5,020,179	51	2,622,840	475	21,205,321
Utah.....	3	316,896	8	670,126	5	110,741	3	95,625	19	1,193,388
Vermont.....	3	283,135	3	455,968	2	53,204	2	220,600	10	1,012,907
Virginia.....	36	1,850,755	20	1,447,568	37	1,022,436	20	2,641,453	113	6,962,212
Washington.....	21	442,585	7	240,165	12	365,599	14	728,803	54	1,777,152
West Virginia....	42	2,328,240	23	1,121,720	19	845,441	19	2,406,030	103	6,701,431
Wisconsin.....	71	2,229,958	23	2,578,668	31	520,271	17	264,518	142	5,593,415
Wyoming.....	15	1,366,025	16	981,268	28	1,177,771	12	423,912	71	3,948,976
Unknown.....	---	---	---	---	---	---	---	---	---	---
TOTAL.....	1,769	83,108,370	796	58,323,219	1,284	41,815,988	740	38,968,015	4,589	222,215,592

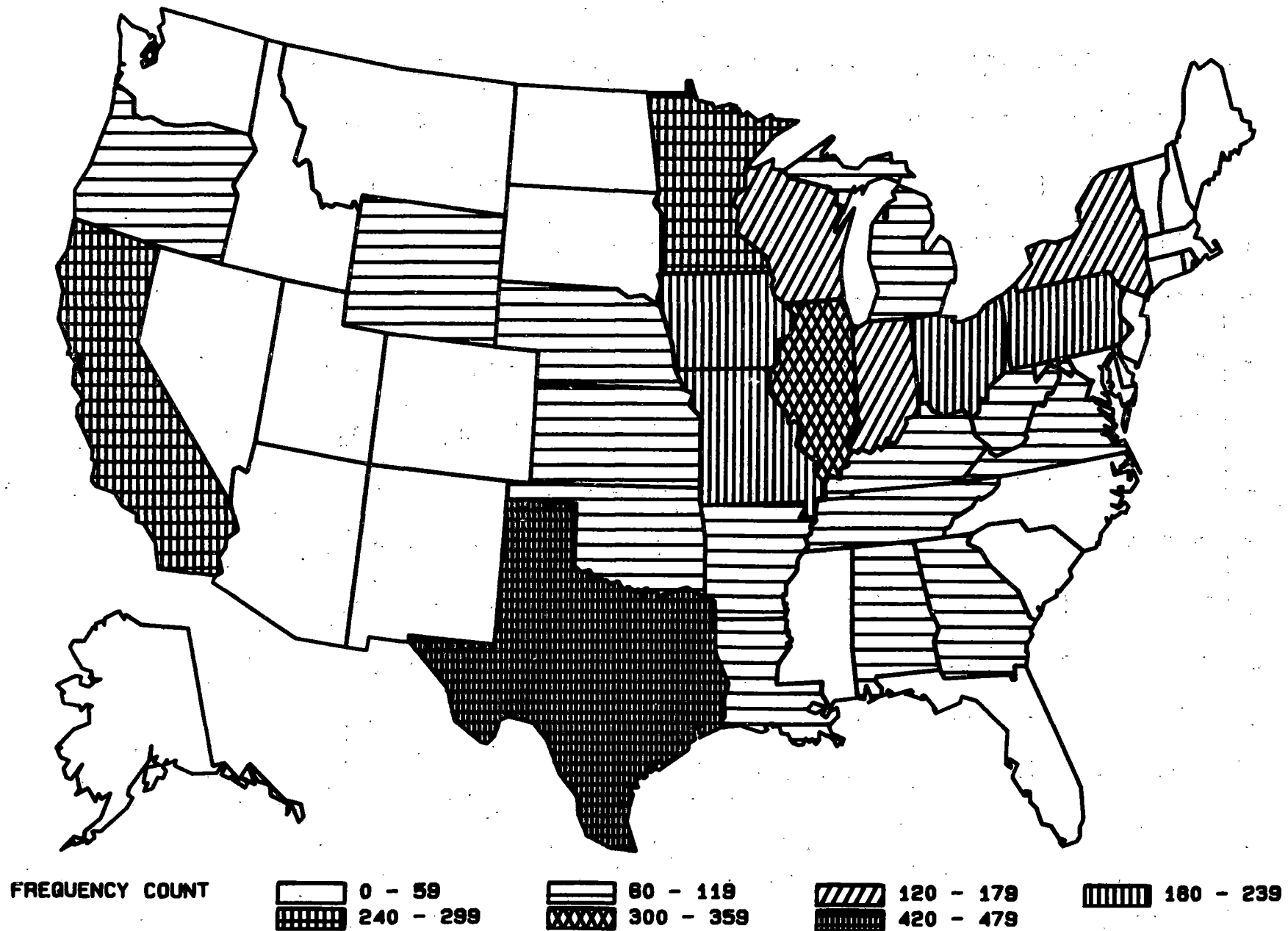


FIGURE 25. TRAIN ACCIDENTS BY STATE, 1982

TABLE S4.

## TRAIN ACCIDENTS BY STATE AND MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Alabama.....	4	6	6	5	8	4	4	5	2	7	3	6	60
Alaska.....	1	1	---	---	---	1	1	2	3	---	---	---	9
Arizona.....	4	1	6	4	4	2	1	4	6	---	6	4	42
Arkansas.....	12	14	7	6	8	4	5	3	3	9	7	9	87
California.....	28	17	26	19	16	24	17	19	13	20	28	21	248
Colorado.....	3	3	3	3	1	2	7	8	1	6	4	4	45
Connecticut.....	5	2	2	2	2	3	4	---	1	1	1	---	23
Delaware.....	1	2	1	1	1	1	---	1	1	---	1	1	11
Dist of Columbia.	---	---	2	---	---	---	---	---	---	---	---	1	3
Florida.....	8	4	4	6	2	4	---	2	3	5	---	2	40
Georgia.....	10	11	9	7	8	13	4	8	7	8	12	5	102
Idaho.....	1	4	3	4	3	5	1	2	1	3	1	3	31
Illinois.....	32	51	40	30	24	27	24	25	25	24	29	25	356
Indiana.....	14	12	15	19	19	14	8	3	7	7	14	11	143
Iowa.....	25	17	22	13	17	14	13	19	14	18	15	12	199
Kansas.....	7	9	15	5	7	4	23	11	7	6	6	10	110
Kentucky.....	13	11	3	12	9	8	7	4	13	6	9	12	107
Louisiana.....	10	9	4	10	11	7	3	10	8	10	6	9	97
Maine.....	---	2	2	10	3	5	3	1	4	3	3	5	41
Maryland.....	9	6	5	1	4	3	1	3	2	1	3	2	40
Massachusetts....	2	2	1	9	6	6	---	6	2	1	1	3	39
Michigan.....	8	9	9	13	12	12	5	6	5	10	8	10	107
Minnesota.....	20	14	13	29	25	19	14	25	23	21	26	15	244
Mississippi.....	13	4	7	1	3	1	6	2	3	5	2	6	53
Missouri.....	15	21	20	10	16	15	15	14	13	16	10	15	180
Montana.....	4	8	1	2	4	1	2	3	2	6	1	3	37
Nebraska.....	11	9	8	12	8	9	18	12	6	7	11	6	117
Nevada.....	---	1	1	1	2	---	1	2	2	3	1	---	14
New Hampshire....	1	---	---	2	2	---	1	1	---	---	---	---	7
New Jersey.....	2	3	5	4	2	4	5	3	1	5	9	2	45
New Mexico.....	2	1	3	3	3	2	3	4	1	3	1	---	26
New York.....	17	16	18	13	12	13	12	14	10	17	8	10	160
North Carolina...	4	5	6	8	5	---	6	2	1	4	3	2	46
North Dakota....	4	3	5	6	4	4	2	6	2	3	3	3	45
Ohio.....	29	26	29	9	19	16	10	13	7	16	12	22	208
Oklahoma.....	10	5	7	5	6	9	8	4	2	4	2	6	68
Oregon.....	5	13	4	5	2	5	5	5	1	8	6	3	62
Pennsylvania.....	24	28	26	19	20	16	19	14	11	19	14	13	223
Rhode Island.....	---	---	---	---	---	---	---	---	1	1	1	---	3
South Carolina...	8	1	1	1	---	1	2	1	1	---	---	3	19
South Dakota....	1	---	1	3	4	5	2	6	4	7	6	---	39
Tennessee.....	6	8	7	4	2	7	4	3	3	8	10	4	66
Texas.....	46	48	34	41	49	34	62	37	21	36	35	32	475
Utah.....	3	1	5	2	1	1	---	3	---	---	1	2	19
Vermont.....	---	2	---	1	2	1	---	1	---	---	2	1	10
Virginia.....	18	13	5	7	14	6	11	9	5	7	6	12	113
Washington.....	6	3	5	3	6	7	4	5	4	5	3	3	54
West Virginia....	9	10	12	6	7	14	7	10	6	5	7	10	103
Wisconsin.....	9	13	12	17	13	5	20	16	11	9	9	8	142
Wyoming.....	8	2	4	2	5	4	11	6	4	12	4	9	71
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	472	451	424	395	401	362	381	363	273	372	350	345	4,589



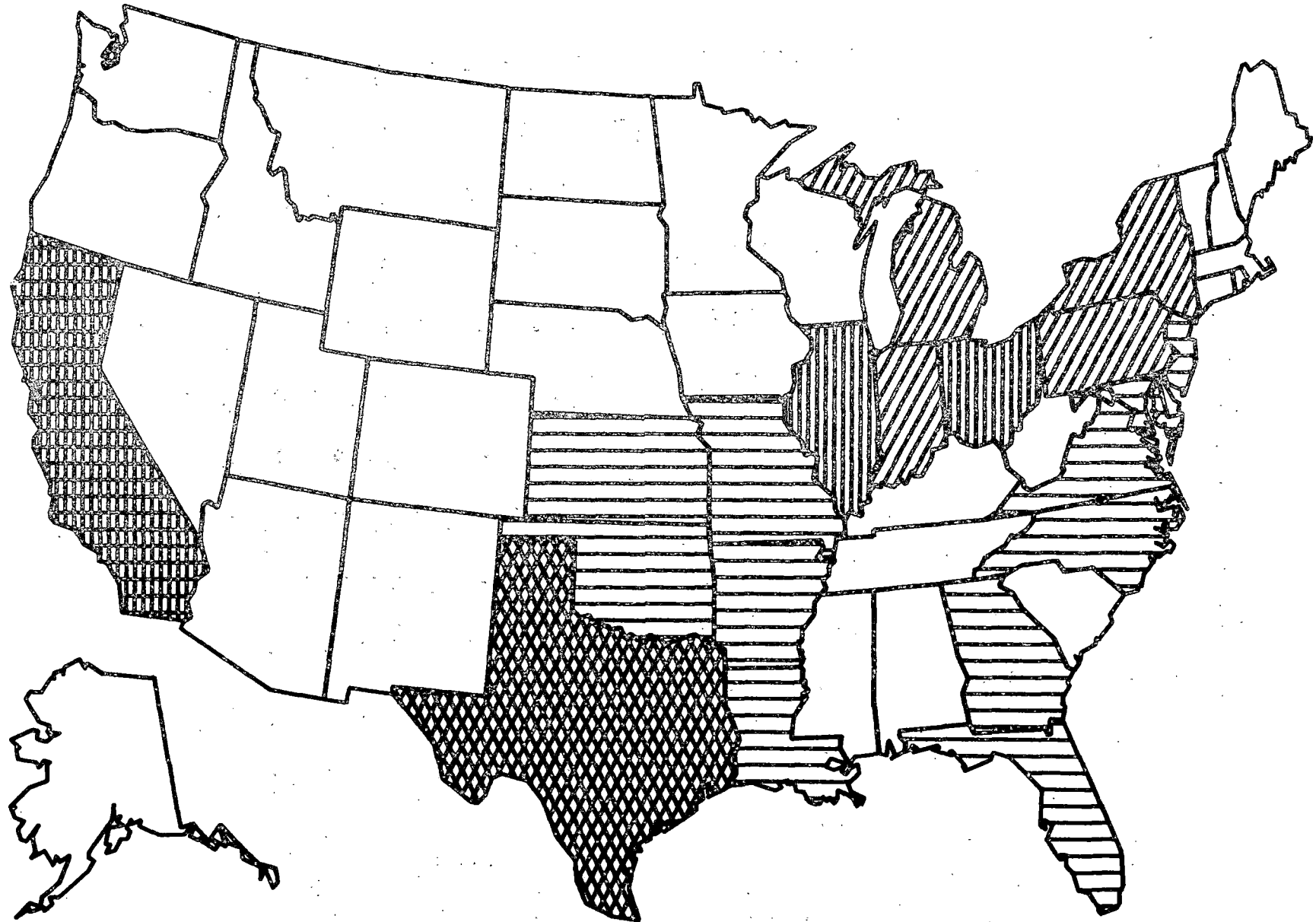
TABLE S18.

## CASUALTIES BY STATE AND CLASS OF ACCIDENT/INCIDENT

State	.....Train Accidents.....			.....Train Incidents.....			...Nontrain Incidents...			.....Total.....		
	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness
Alabama.....	3	13	---	12	185	2	2	504	4	17	702	6
Alaska.....	1	---	---	---	13	---	---	83	2	1	96	2
Arizona.....	---	5	1	11	60	1	---	125	2	11	190	4
Arkansas.....	2	9	---	33	147	2	1	546	14	36	702	16
California.....	13	47	1	81	465	11	6	1,484	71	100	1,996	83
Colorado.....	---	4	---	3	104	---	2	399	1	5	507	1
Connecticut.....	---	4	---	10	42	---	1	211	10	11	257	10
Delaware.....	---	2	---	2	25	---	2	163	5	4	190	5
Dist of Columbia.	---	---	---	---	9	---	---	85	4	---	94	4
Florida.....	---	4	---	33	194	3	---	440	3	33	638	6
Georgia.....	---	20	2	20	297	---	1	877	7	21	1,194	9
Idaho.....	---	8	---	8	64	3	---	239	3	8	311	6
Illinois.....	5	25	---	71	541	5	3	2,590	38	79	3,156	43
Indiana.....	---	9	---	41	241	3	1	775	16	42	1,025	19
Iowa.....	2	33	---	10	119	---	1	560	16	13	712	16
Kansas.....	---	14	---	19	145	1	1	489	3	20	648	4
Kentucky.....	---	7	---	4	172	2	1	1,077	12	5	1,256	14
Louisiana.....	---	15	---	23	292	3	3	639	8	26	946	11
Maine.....	1	---	---	1	44	---	1	208	5	3	252	5
Maryland.....	---	10	---	20	134	---	2	586	6	22	730	6
Massachusetts....	3	4	---	10	61	2	---	366	9	13	431	11
Michigan.....	---	12	---	42	322	2	3	1,080	17	45	1,414	19
Minnesota.....	---	12	---	13	114	1	1	638	12	14	764	13
Mississippi.....	---	3	---	18	141	1	---	278	5	18	422	6
Missouri.....	1	10	3	21	210	2	1	803	7	23	1,023	12
Montana.....	---	6	---	9	49	2	---	287	8	9	342	10
Nebraska.....	1	1	---	15	121	2	1	747	8	17	869	10
Nevada.....	---	---	---	5	40	---	---	87	1	5	127	1
New Hampshire....	---	---	---	1	4	---	---	19	---	1	23	---
New Jersey.....	1	3	---	23	95	---	---	712	27	24	810	27
New Mexico.....	---	---	---	7	39	---	---	106	---	7	145	---
New York.....	1	15	6	43	368	16	2	2,729	232	46	3,112	254
North Carolina..	1	3	1	23	190	1	3	374	5	27	567	7
North Dakota.....	2	2	---	6	40	---	---	118	1	8	160	1
Ohio.....	2	26	---	63	415	2	7	1,518	23	72	1,959	25
Oklahoma.....	---	10	---	23	153	1	2	266	6	25	429	7
Oregon.....	---	10	---	6	105	7	---	366	8	6	481	15
Pennsylvania.....	2	41	---	40	281	5	1	2,154	71	43	2,476	76
Rhode Island.....	---	---	---	---	5	---	---	37	2	---	42	2
South Carolina...	1	1	---	17	114	1	1	223	4	19	338	5
South Dakota.....	---	---	---	1	15	---	---	65	1	1	80	1
Tennessee.....	---	3	3	14	132	---	2	686	7	16	821	10
Texas.....	6	27	---	119	777	2	7	1,989	60	132	2,793	62
Utah.....	1	2	---	12	61	---	---	213	1	13	276	1
Vermont.....	---	1	---	1	9	---	---	48	---	1	58	---
Virginia.....	---	11	---	20	288	1	4	1,136	20	24	1,435	21
Washington.....	---	---	1	17	116	1	2	368	3	19	484	5
West Virginia....	---	15	---	13	123	1	1	623	2	14	761	3
Wisconsin.....	---	2	1	13	196	1	---	585	14	13	783	16
Wyoming.....	---	4	---	7	62	---	---	288	2	7	354	2
Unknown.....	---	---	---	---	---	---	---	2	---	---	2	---
TOTAL.....	49	453	19	1,004	7,939	87	66	30,991	786	1,119	39,383	892

**TABLE S16. TRAIN ACCIDENT AND TRAIN INCIDENT FATALITIES TO TRESPASSERS AND NON-TRESPASSERS BY STATE**

State	.....Trespassers.....				.....Nontrespassers.....				.....Total.....			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	---	3	---	3	1	8	---	9	1	11	---	12
Alaska.....	---	---	---	---	---	1	---	1	---	1	---	1
Arizona.....	---	7	1	8	---	---	3	3	---	7	4	11
Arkansas.....	---	7	---	7	7	19	---	26	7	26	---	33
California.....	1	61	4	66	2	9	13	24	3	70	17	90
Colorado.....	---	---	---	---	---	3	---	3	---	3	---	3
Connecticut.....	1	7	1	9	---	1	---	1	1	8	1	10
Delaware.....	1	1	---	2	---	---	---	---	1	1	---	2
Dist of Columbia.....	---	---	---	---	---	---	---	---	---	---	---	---
Florida.....	3	23	---	26	---	7	---	7	3	30	---	33
Georgia.....	1	9	---	10	---	9	---	9	1	18	---	19
Idaho.....	---	---	---	---	---	8	---	8	---	8	---	8
Illinois.....	1	19	5	25	1	39	3	43	2	58	8	68
Indiana.....	1	14	---	15	1	23	---	24	2	37	---	39
Iowa.....	---	2	---	2	1	4	3	8	1	6	3	10
Kansas.....	1	4	---	5	2	10	2	14	3	14	2	19
Kentucky.....	---	2	---	2	---	1	1	2	---	3	1	4
Louisiana.....	1	5	1	7	---	13	2	15	1	18	3	22
Maine.....	---	1	---	1	---	1	---	1	---	2	---	2
Maryland.....	---	17	1	18	---	1	---	1	---	18	1	19
Massachusetts.....	2	8	---	10	---	1	---	1	2	9	---	11
Michigan.....	1	14	---	15	1	25	---	26	2	39	---	41
Minnesota.....	1	3	---	4	2	5	2	9	3	8	2	13
Mississippi.....	---	2	2	4	3	10	1	14	3	12	3	18
Missouri.....	1	8	---	9	---	11	1	12	1	19	1	21
Montana.....	---	3	---	3	---	5	---	5	---	8	---	8
Nebraska.....	---	3	---	3	1	7	3	11	1	10	3	14
Nevada.....	---	1	---	1	---	4	---	4	---	5	---	5
New Hampshire.....	---	---	1	1	---	---	---	---	---	---	1	1
New Jersey.....	2	14	3	19	---	2	---	2	2	16	3	21
New Mexico.....	1	4	---	5	---	1	1	2	1	5	1	7
New York.....	1	37	3	41	---	2	1	3	1	39	4	44
North Carolina.....	1	10	---	11	1	12	---	13	2	22	---	24
North Dakota.....	---	2	---	2	---	5	---	5	---	7	---	7
Ohio.....	---	20	---	20	3	36	---	39	3	56	---	59
Oklahoma.....	1	4	1	6	1	14	1	16	2	18	2	22
Oregon.....	---	5	---	5	---	1	---	1	---	6	---	6
Pennsylvania.....	---	20	3	23	---	17	---	17	---	37	3	40
Rhode Island.....	---	---	---	---	---	---	---	---	---	---	---	---
South Carolina.....	---	11	---	11	---	5	---	5	---	16	---	16
South Dakota.....	---	1	---	1	---	---	---	---	---	1	---	1
Tennessee.....	---	4	---	4	1	9	---	10	1	13	---	14
Texas.....	2	34	2	38	4	70	12	86	6	104	14	124
Utah.....	---	3	---	3	---	6	2	8	---	9	2	11
Vermont.....	---	---	---	---	---	1	---	1	---	1	---	1
Virginia.....	1	11	---	12	1	5	---	6	2	16	---	18
Washington.....	2	9	1	12	---	4	---	4	2	13	1	16
West Virginia.....	1	10	---	11	---	2	---	2	1	12	---	13
Wisconsin.....	---	1	1	2	---	10	1	11	---	11	2	13
Wyoming.....	---	3	---	3	---	2	---	2	---	5	---	5
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	28	427	30	485	33	429	52	514	61	856	82	999



FREQUENCY COUNT



0 - 19



60 - 79



20 - 39



100 - 119



40 - 59



120 - 139

FIGURE 26. FATALITIES BY STATE, 1982

**TABLE S17. TRAIN ACCIDENT AND TRAIN INCIDENT INJURIES TO TRESPASSERS AND NON-TRESPASSERS BY STATE**

State	.....Trespassers.....				.....Nontrespassers.....				.....Total.....			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	---	7	---	7	5	48	7	60	5	55	7	67
Alaska.....	---	---	---	---	---	2	---	2	---	2	---	2
Arizona.....	2	7	---	9	---	---	---	---	2	7	---	9
Arkansas.....	2	3	1	6	4	21	6	31	6	24	7	37
California.....	1	20	---	21	1	9	2	12	2	29	2	33
Colorado.....	---	---	---	---	---	13	3	16	---	13	3	16
Connecticut.....	---	1	---	1	---	4	---	4	---	5	---	5
Delaware.....	---	---	---	---	---	2	---	2	---	2	---	2
Dist of Columbia.....	1	---	---	1	---	---	---	---	1	---	---	1
Florida.....	---	21	---	21	---	36	---	36	---	57	---	57
Georgia.....	---	13	---	13	5	44	---	49	5	57	---	62
Idaho.....	---	1	---	1	---	6	---	6	---	7	---	7
Illinois.....	3	11	5	19	8	67	40	115	11	78	45	134
Indiana.....	---	16	---	16	5	59	9	73	5	75	9	89
Iowa.....	---	---	3	3	1	19	23	43	1	19	26	46
Kansas.....	---	1	---	1	---	18	3	21	---	19	3	22
Kentucky.....	---	12	---	12	3	30	7	40	3	42	7	52
Louisiana.....	3	4	---	7	7	55	30	92	10	59	30	99
Maine.....	---	---	---	---	---	1	---	1	---	1	---	1
Maryland.....	1	6	1	8	---	4	1	5	1	10	2	13
Massachusetts.....	3	3	1	7	---	---	---	---	3	3	1	7
Michigan.....	1	8	---	9	9	60	---	69	10	68	---	78
Minnesota.....	2	---	---	2	4	6	15	25	6	6	15	27
Mississippi.....	---	2	3	5	7	26	53	86	7	28	56	91
Missouri.....	---	3	---	3	4	22	4	30	4	25	4	33
Montana.....	---	---	---	---	---	3	---	3	---	3	---	3
Nebraska.....	---	2	---	2	---	2	7	9	---	4	7	11
Nevada.....	---	1	---	1	---	---	---	---	---	1	---	1
New Hampshire.....	---	---	---	---	---	1	---	1	---	1	---	1
New Jersey.....	---	2	1	3	---	1	1	2	---	3	2	5
New Mexico.....	---	---	---	---	---	---	---	---	---	---	---	---
New York.....	1	10	---	11	1	5	3	9	2	15	3	20
North Carolina.....	---	7	---	7	1	48	1	50	1	55	1	57
North Dakota.....	---	1	---	1	---	4	---	4	---	5	---	5
Ohio.....	3	14	2	19	5	91	2	98	8	105	4	117
Oklahoma.....	---	---	---	---	1	20	7	28	1	20	7	28
Oregon.....	---	1	---	1	6	7	---	13	6	8	---	14
Pennsylvania.....	3	9	---	12	1	17	---	18	4	26	---	30
Rhode Island.....	---	---	---	---	---	---	---	---	---	---	---	---
South Carolina.....	2	4	---	6	---	30	---	30	2	34	---	36
South Dakota.....	---	---	---	---	---	4	1	5	---	4	1	5
Tennessee.....	---	3	2	5	3	24	9	36	3	27	11	41
Texas.....	6	14	1	21	11	102	34	147	17	116	35	168
Utah.....	---	1	---	1	---	12	2	14	---	13	2	15
Vermont.....	---	---	---	---	---	3	---	3	---	3	---	3
Virginia.....	1	8	---	9	2	30	---	32	3	38	---	41
Washington.....	---	---	---	---	---	10	---	10	---	10	---	10
West Virginia.....	1	7	---	8	1	20	---	21	2	27	---	29
Wisconsin.....	---	2	3	5	3	40	28	71	3	42	31	76
Wyoming.....	---	---	---	---	---	1	---	1	---	1	---	1
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	36	225	23	284	98	1,026	299	1,423	134	1,251	322	1,707

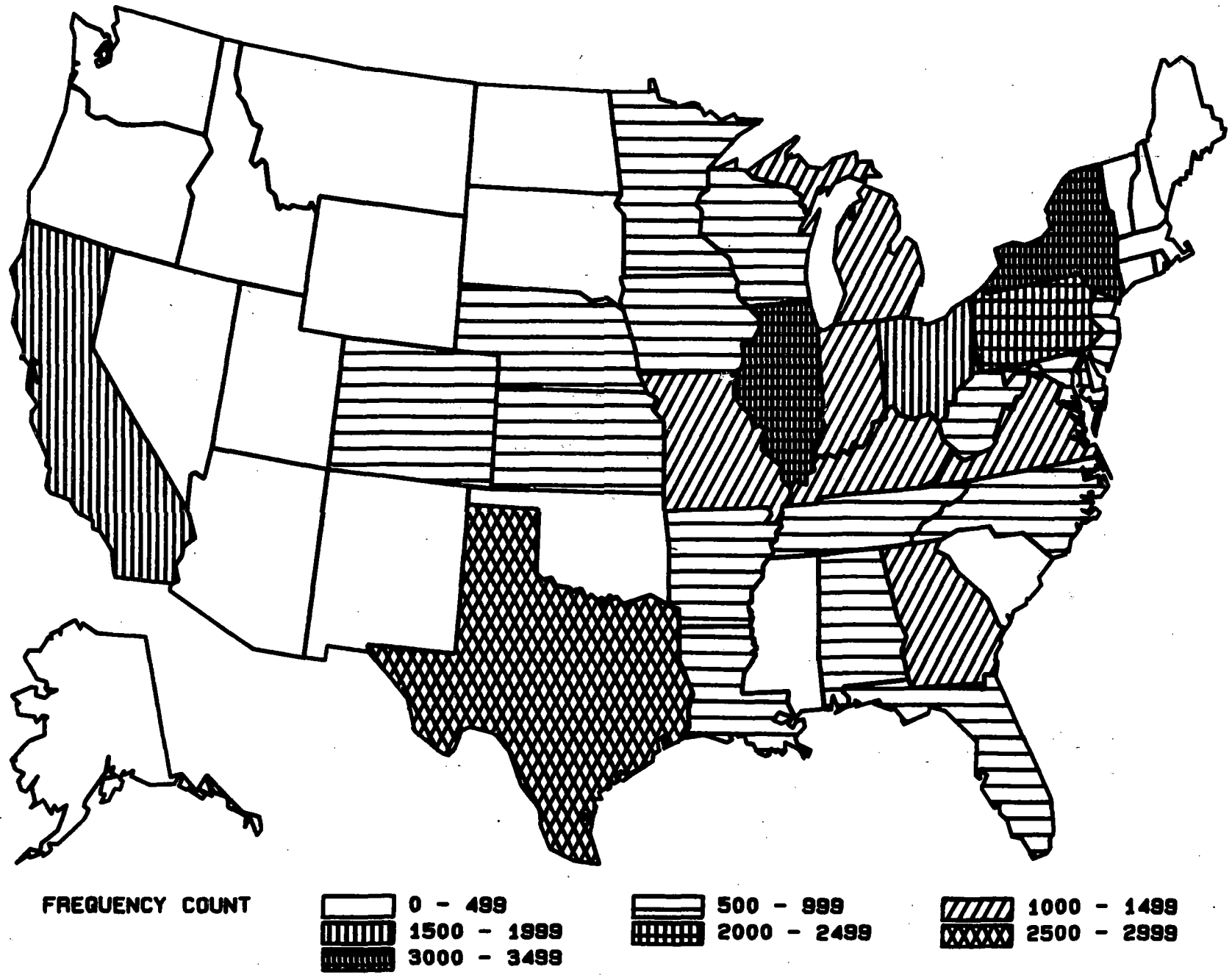


FIGURE 27. INJURIES BY STATE, 1982

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## 6. SUMMARY OF ACCIDENT/INCIDENT DATA BY RAILROAD

### TABLE R1. SUMMARY OF TRAIN-MILES OPERATED

Railroad	Train Miles			Total
	Locomotive	Motor	Yard Switching	
<b>CLASS I RAILROADS</b>				
Alabama Great Southern Railroad Co.....	2,023,148	---	583,398	2,606,546
Amtrak (National RR Passenger Corp).....	26,804,356	2,822,146	291,342	29,917,844
Atchison, Topeka And Santa Fe Rwy Co.....	41,175,907	---	5,980,212	47,156,119
Baltimore And Ohio Railroad Co.....	10,428,686	113,349	4,513,702	15,055,737
Bessemer And Lake Erie Railroad Co.....	558,157	---	92,604	650,761
Boston And Maine Corporation.....	1,592,030	1,371,333	851,294	3,814,657
Burlington Northern Incorporated.....	55,030,446	2,275,809	18,058,514	75,364,769
Central Of Georgia Railroad Company.....	2,109,114	---	1,200,113	3,309,227
Chesapeake And Ohio Railway Company.....	10,836,046	---	4,268,826	15,104,872
Chicago And Northwestern Transportation Co..	10,769,229	1,905,514	4,592,544	17,267,287
Chicago, Milw, St. Paul And Pacific RR Co..	6,146,043	---	2,380,822	8,526,865
Cincinnati, New Orleans And Texas Pacific...	2,449,888	---	850,173	3,300,061
Clinchfield Railroad Company.....	1,136,786	---	208,610	1,345,396
Consolidated Rail Corporation.....	37,005,325	10,564,759	13,736,898	61,306,982
Delaware And Hudson Railway.....	2,112,801	---	200,249	2,313,050
Denver And Rio Grande Western RR Co.....	4,785,231	---	979,172	5,764,403
Detroit, Toledo And Ironton RR Co.....	932,207	---	260,251	1,192,458
Duluth, Missabe And Iron Range Rwy Co.....	264,407	---	187,659	452,066
Elgin, Joliet And Eastern Railway Co.....	353,915	---	924,364	1,278,279
Florida East Coast Railway Co.....	2,249,352	---	673,193	2,922,545
Grand Truck Western Railroad Co.....	2,412,197	---	1,862,164	4,274,361
Illinois Central Gulf Railroad Co.....	13,367,782	1,050,993	4,581,536	19,000,311
Kansas City Southern Railway Co.....	2,450,086	---	1,053,576	3,503,662
Long Island Railroad Company.....	2,399,348	5,697,892	799,514	8,896,754
Louisiana And Arkansas Rwy Company.....	1,163,282	---	448,642	1,611,924
Louisville And Nashville Railroad Co.....	16,500,893	---	5,155,959	21,656,852
Missouri Pacific Railroad Co.....	22,903,008	---	7,793,919	30,696,927
Missouri-Kansas-Texas Railroad Co.....	2,852,694	---	1,296,903	4,149,597
Norfolk And Western Railway Co.....	14,135,210	---	6,037,650	20,172,860
Pittsburg And Lake Erie Railroad Co.....	269,572	---	368,680	638,252
Seaboard Coast Line Railroad Co.....	16,690,416	---	6,213,680	22,904,096
Sooline Railroad Company.....	3,410,971	---	1,353,691	4,764,662
Southern Pacific Transportation Co.....	26,279,441	---	9,136,972	35,416,413
Southern Railway Company.....	14,757,006	---	6,037,241	20,794,247
St. Louis Southwestern Railway Co.....	5,034,386	---	991,039	6,025,425
Union Pacific Railroad Co.....	28,597,172	---	3,634,212	32,231,384
Western Maryland Railway Company.....	533,936	---	275,858	809,794
Western Pacific Railroad Company.....	2,997,014	---	519,920	3,516,934
TOTAL CLASS I RAILROADS.....	395,517,488	25,801,795	118,395,096	539,714,379
<b>CLASS II RAILROADS</b>				
Atlanta And West Point Railroad Co.....	591,408	---	351,246	942,654
Bangor And Aroostook Railroad Co.....	404,896	---	115,245	520,141
Canadian Pacific Lines In Maine.....	242,194	---	---	242,194
Central Vermont Railway Inc.....	381,845	---	37,269	419,114
Chicago And Illinois Midland Rwy Co.....	59,673	---	52,823	112,496
Chicago South Shore And South Bend RR.....	212,159	1,514,810	---	1,726,969
Colorado And Wyoming Railway Company.....	4,150	---	87,360	91,510
Duluth, Winnipeg And Pacific Rwy Co.....	323,089	---	144,726	467,815
Georgia Railroad Lessee Organization.....	358,869	---	324,798	683,667
Georgia Southern And Florida Railway.....	895,184	---	165,739	1,060,923
Green Bay And Western Railroad.....	184,170	---	141,164	325,334
Interstate Railroad Company.....	61,449	---	37,263	98,712
Lake Superior And Ishpeming Railroad Co.....	23,995	---	36,159	60,154
Maine Central Railroad Company.....	724,018	---	403,348	1,127,366
Michigan Interstate Railroad (Ann Arbor)....	82,828	---	47,002	129,830
Monogahela Railway.....	158,852	---	2,492	161,344
Norfolk Southern Railway Company.....	429,530	---	54,851	484,381
Northwestern Pacific Railroad.....	167,242	---	28,769	196,011
Providence and Worcester Railroad Co.....	145,045	---	32,267	177,312
Richmond, Fredericksburg And Potomac RR Co..	1,717,186	---	435,989	2,153,175
Spokane International Railroad.....	142,599	---	16,590	159,189
Texas And Northern Railway Company.....	27,167	---	7,423	34,590
Texas, Mexican Railway Company.....	109,912	---	108,590	218,502
Toledo, Peoria And Western Railroad Co.....	291,955	---	115,240	407,195
TOTAL CLASS II RAILROADS.....	7,739,415	1,514,810	2,746,353	12,000,578
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROAD)</b>				
CLASS I RAILROADS.....	395,517,488	25,801,795	118,395,096	539,714,379
CLASS II RAILROADS.....	7,739,415	1,514,810	2,746,353	12,000,578
CLASS III RAILROADS.....	9,328,731	42,738	12,282,183	21,653,652
TOTAL ALL RAILROADS.....	412,585,634	27,359,343	133,423,632	573,368,609



**TABLE R3. INVOLVEMENT IN TRAIN ACCIDENTS BY RAILROAD, TYPE, AND CAUSE**

Railroad	.....Collisions.....					.....Derailments.....						
	Human	Equip	Track	Other	Total	Damages	Human	Equip	Track	Other	Total	Damages
<b>CLASS I RAILROADS</b>												
Alabama Great Southern Railroad Co.....	2	1	---	---	3	19,150	2	1	2	---	5	591,950
Amtrak (National RR Passenger Corp)....	4	2	---	3	9	1,071,600	11	6	30	4	51	4,838,680
Atchison, Topeka And Santa Fe Rwy Co...	27	2	1	1	31	2,139,924	27	25	63	10	125	6,336,077
Baltimore And Ohio Railroad Co.....	19	1	3	3	26	1,206,025	17	23	60	17	117	6,048,080
Bessemer And Lake Erie Railroad Co.....	3	---	---	---	3	1,491,538	---	1	2	2	5	134,531
Boston And Maine Corporation.....	3	---	---	---	3	39,987	4	7	17	8	36	2,122,248
Burlington Northern Incorporated.....	68	1	1	7	77	2,374,641	72	81	228	66	447	25,735,206
Central Of Georgia Railroad Company....	1	---	---	---	1	4,800	2	1	8	---	11	143,000
Chesapeake And Ohio Railway Company....	22	6	2	4	34	471,900	20	25	57	10	112	5,565,258
Chicago And Northwestern.....	38	3	---	3	44	755,452	28	35	208	34	305	9,413,599
Chicago, Milw, St. Paul And Pacific....	12	---	1	2	15	1,437,352	18	36	101	13	168	6,951,259
Cincinnati, New Orleans And TX Pac Co..	1	---	---	---	1	4,000	---	3	1	---	4	35,400
Clinchfield Railroad Company.....	---	---	---	---	---	---	3	3	5	3	14	1,998,800
Consolidated Rail Corporation.....	51	4	4	3	62	1,848,164	87	60	165	49	361	11,792,235
Delaware And Hudson Railway.....	2	---	---	---	2	84,196	11	9	18	3	41	1,446,080
Denver And Rio Grande Western RR Co....	1	---	---	---	1	---	2	1	1	1	5	707,099
Detroit, Toledo And Ironton RR Co.....	1	---	---	2	3	33,725	3	1	8	3	15	353,205
Duluth, Missabe And Iron Range Rwy Co..	1	---	---	1	2	19,853	---	---	2	1	3	20,253
Elgin, Joliet And Eastern Railway Co...	3	---	---	---	3	19,046	1	2	15	1	19	172,023
Florida East Coast Railway Co.....	2	1	---	---	3	258,964	---	---	3	1	4	1,054,113
Grand Truck Western Railroad Co.....	5	---	1	---	6	60,479	8	10	15	5	38	975,356
Illinois Central Gulf Railroad Co.....	10	2	---	2	14	814,385	15	14	78	7	114	6,189,473
Kansas City Southern Railway Co.....	7	---	---	---	7	309,490	4	20	21	8	53	4,304,666
Long Island Railroad Company.....	---	---	---	---	---	---	---	---	1	---	1	24,400
Louisiana And Arkansas Rwy Company....	2	2	---	---	4	77,893	9	3	6	3	21	1,110,704
Louisville And Nashville Railroad Co...	7	---	---	4	11	832,705	23	19	64	8	114	5,652,344
Missouri Pacific Railroad Co.....	30	1	1	1	33	1,601,993	32	34	88	17	171	7,787,557
Missouri-Kansas-Texas Railroad Co.....	12	---	---	---	12	324,166	8	6	34	2	50	3,167,822
Norfolk And Western Railway Co.....	12	1	---	---	13	399,639	15	26	62	19	122	6,520,592
Pittsburg And Lake Erie Railroad Co....	---	---	---	---	---	---	1	1	10	3	15	1,145,300
Seaboard Coast Line Railroad Co.....	11	3	---	3	17	1,254,766	22	27	18	10	77	6,427,204
Sooline Railroad Company.....	10	---	1	1	12	1,179,670	15	5	37	7	64	3,475,464
Southern Pacific Transportation Co.....	25	---	3	2	30	1,297,697	85	97	153	32	367	19,338,337
Southern Railway Company.....	17	1	---	---	18	1,075,725	24	9	28	1	62	1,506,539
St. Louis Southwestern Railway Co.....	10	---	---	2	12	633,080	22	16	36	4	78	2,875,037
Union Pacific Railroad Co.....	35	2	1	---	38	1,308,338	30	42	32	16	120	6,705,148
Western Maryland Railway Company.....	---	---	---	---	---	---	3	---	4	5	12	463,600
Western Pacific Railroad Company.....	4	1	---	1	6	58,693	5	4	6	4	19	635,180
TOTAL CLASS I RAILROADS.....	458	34	19	45	556	24,509,036	629	653	1,687	377	3,346	163,763,819
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
CLASS I RAILROADS.....	432	31	19	39	521	24,509,036	578	608	1,546	350	3,082	163,763,819
CLASS II RAILROADS.....	10	1	---	1	12	293,312	10	22	47	12	91	5,638,421
CLASS III RAILROADS.....	35	1	---	3	39	928,219	29	41	130	10	210	5,528,232
TOTAL ALL RAILROADS.....	477	33	19	43	572	25,730,567	617	671	1,723	372	3,383	174,930,472

**TABLE R3. (CONTINUED)**

Railroad	.....Other Accidents.....					.....Total.....			
	Human	Equip	Track	Other	Total	Damages	Accs.	Rate*	Damages
<b>CLASS I RAILROADS</b>									
Alabama Great Southern Railroad Co.....	---	---	---	2	2	540,250	10	3.83	1,151,350
Amtrak (National RR Passenger Corp)....	5	9	9	34	57	3,466,115	117	3.91	9,376,395
Atchison, Topeka And Santa Fe Rwy Co...	9	4	---	23	36	998,712	192	4.07	9,474,713
Baltimore And Ohio Railroad Co.....	1	2	---	10	13	164,400	156	10.35	7,418,505
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	8	12.30	1,626,069
Boston And Maine Corporation.....	2	---	---	1	3	61,417	42	11.02	2,223,652
Burlington Northern Incorporated.....	45	12	4	50	111	2,657,982	635	8.42	30,767,829
Central Of Georgia Railroad Company....	2	---	---	1	3	222,750	15	4.53	370,550
Chesapeake And Ohio Railway Company....	1	---	1	4	6	58,333	152	10.06	6,095,491
Chicago And Northwestern.....	7	1	---	8	16	201,665	365	21.13	10,370,716
Chicago, Milw, St. Paul And Pacific....	18	3	1	19	41	536,222	224	26.26	8,924,833
Cincinnati, New Orleans And TX Pac Co..	---	---	---	---	---	---	5	1.51	39,400
Clinchfield Railroad Company.....	---	---	---	1	1	384,100	15	11.11	2,382,900
Consolidated Rail Corporation.....	14	17	8	52	91	2,870,833	514	8.38	16,511,232
Delaware And Hudson Railway.....	---	---	---	---	---	---	43	18.61	1,530,276
Denver And Rio Grande Western RR Co....	---	---	---	---	---	---	6	1.04	707,099
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	18	15.12	386,930
Duluth, Missabe And Iron Range Rwy Co..	2	---	---	---	2	11,853	7	15.55	51,959
Elgin, Joliet And Eastern Railway Co...	1	---	---	---	1	12,051	23	17.96	203,120
Florida East Coast Railway Co.....	---	---	---	---	---	---	7	2.39	1,313,077
Grand Truck Western Railroad Co.....	3	---	2	2	7	128,967	51	11.94	1,164,802
Illinois Central Gulf Railroad Co.....	1	---	---	8	9	195,000	137	7.21	7,198,858
Kansas City Southern Railway Co.....	3	2	---	6	11	220,440	71	20.28	4,834,596
Long Island Railroad Company.....	---	2	---	1	3	105,000	4	0.44	129,400
Louisiana And Arkansas Rwy Company....	5	---	---	2	7	80,176	32	19.87	1,268,773
Louisville And Nashville Railroad Co...	3	2	---	7	12	269,400	137	6.32	6,754,449
Missouri Pacific Railroad Co.....	5	1	---	9	15	1,258,450	219	7.13	10,648,000
Missouri-Kansas-Texas Railroad Co.....	1	2	---	5	8	102,490	70	16.86	3,594,478
Norfolk And Western Railway Co.....	9	3	---	16	28	910,096	163	8.08	7,830,327
Pittsburg And Lake Erie Railroad Co....	---	---	---	1	1	10,000	16	25.00	1,155,300
Seaboard Coast Line Railroad Co.....	11	4	---	18	33	954,920	127	5.54	8,636,890
SooLine Railroad Company.....	2	2	1	3	8	2,081,477	84	17.64	6,736,611
Southern Pacific Transportation Co.....	26	12	4	27	69	941,551	466	13.15	21,577,585
Southern Railway Company.....	1	4	---	7	12	151,100	92	4.42	2,733,364
St. Louis Southwestern Railway Co.....	1	3	1	7	12	121,590	102	16.91	3,629,707
Union Pacific Railroad Co.....	1	5	---	7	13	279,118	171	5.30	8,292,604
Western Maryland Railway Company.....	---	1	---	---	1	10,000	13	16.04	473,600
Western Pacific Railroad Company.....	2	---	---	1	3	21,485	28	7.95	715,358
<b>TOTAL CLASS I RAILROADS.....</b>	<b>181</b>	<b>91</b>	<b>31</b>	<b>332</b>	<b>635</b>	<b>20,027,943</b>	<b>4,537</b>	<b>8.40</b>	<b>208,300,798</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>									
CLASS I RAILROADS.....	179	89	26	299	593	20,027,943	4,196	7.77	208,300,798
CLASS II RAILROADS.....	3	---	---	8	11	257,668	114	9.50	6,189,401
CLASS III RAILROADS.....	8	3	1	18	30	1,268,942	279	12.88	7,725,393
<b>TOTAL ALL RAILROADS.....</b>	<b>190</b>	<b>92</b>	<b>27</b>	<b>325</b>	<b>634</b>	<b>21,554,553</b>	<b>4,589</b>	<b>8.00</b>	<b>222,215,592</b>

Accident rate per million train miles

**TABLE R7. FATALITIES BY RAILROAD AND TYPE OF ACCIDENT/INCIDENT**

Railroad	.....Train Accident.....						.....Train Incident.....					
	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
<b>CLASS I RAILROADS</b>												
Alabama Great Southern Railroad Co.....	---	---	---	---	---	---	---	---	---	5	1	6
Amtrak (National RR Passenger Corp).....	---	---	3	1	---	4	1	---	1	---	25	27
Atchison, Topeka And Santa Fe Rwy Co....	---	---	---	6	---	6	1	---	---	36	23	60
Baltimore And Ohio Railroad Co.....	---	---	---	1	---	1	1	---	---	16	20	37
Bessemer And Lake Erie Railroad Co.....	1	---	---	---	---	1	---	---	---	---	---	---
Boston And Maine Corporation.....	---	---	---	---	---	---	---	---	---	---	10	10
Burlington Northern Incorporated.....	---	---	---	4	---	4	11	---	---	47	40	98
Central Of Georgia Railroad Company.....	---	---	---	---	---	---	---	---	---	---	---	---
Chesapeake And Ohio Railway Company.....	---	---	---	---	---	---	1	---	---	18	10	29
Chicago And Northwestern.....	---	---	---	1	---	1	3	---	---	9	8	20
Chicago, Milw, St. Paul And Pacific.....	---	---	---	1	---	1	---	---	---	3	8	11
Cincinnati, New Orleans And TX Pac Co...	---	---	---	---	---	---	---	---	---	2	---	2
Clinchfield Railroad Company.....	1	---	---	---	---	1	---	---	---	---	1	1
Consolidated Rail Corporation.....	1	---	---	3	---	4	9	---	1	49	79	138
Delaware And Hudson Railway.....	---	---	---	---	---	---	---	---	---	---	2	2
Denver And Rio Grande Western RR Co.....	---	---	---	---	---	---	---	---	---	2	1	3
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	---	---	---	1	2	3
Duluth, Missabe And Iron Range Rwy Co...	---	---	---	---	---	---	---	---	---	---	---	---
Elgin, Joliet And Eastern Railway Co....	---	---	---	---	---	---	---	---	---	---	---	---
Florida East Coast Railway Co.....	---	---	---	---	---	---	---	---	---	---	11	11
Grand Truck Western Railroad Co.....	---	---	---	---	---	---	---	---	---	7	7	14
Illinois Central Gulf Railroad Co.....	---	---	---	---	---	---	1	---	---	26	7	34
Kansas City Southern Railway Co.....	---	---	---	---	---	---	---	---	---	2	1	3
Long Island Railroad Company.....	---	---	---	---	---	---	---	---	---	---	20	20
Louisiana And Arkansas Rwy Company.....	---	---	---	---	---	---	---	---	---	---	3	3
Louisville And Nashville Railroad Co....	2	---	---	---	---	2	1	---	---	12	11	24
Missouri Pacific Railroad Co.....	3	---	---	1	---	4	---	---	---	96	17	113
Missouri-Kansas-Texas Railroad Co.....	---	---	---	---	---	---	---	---	---	4	5	9
Norfolk And Western Railway Co.....	1	---	---	---	---	1	2	---	---	31	19	52
Pittsburg And Lake Erie Railroad Co....	---	---	---	---	---	---	---	---	---	---	---	---
Seaboard Coast Line Railroad Co.....	---	---	---	1	---	1	---	---	---	27	28	55
SooLine Railroad Company.....	---	---	---	---	---	---	---	---	---	5	2	7
Southern Pacific Transportation Co.....	---	---	---	6	5	11	---	---	1	20	62	83
Southern Railway Company.....	---	---	---	1	---	1	1	---	---	9	21	31
St. Louis Southwestern Railway Co.....	---	---	---	---	---	---	---	---	---	5	6	11
Union Pacific Railroad Co.....	1	---	---	---	---	1	1	---	---	25	19	45
Western Maryland Railway Company.....	---	---	---	---	---	---	---	---	---	---	---	---
Western Pacific Railroad Company.....	---	---	---	---	---	---	---	---	---	2	3	5
<b>TOTAL CLASS I RAILROADS.....</b>	<b>10</b>	<b>---</b>	<b>3</b>	<b>26</b>	<b>5</b>	<b>44</b>	<b>33</b>	<b>---</b>	<b>3</b>	<b>459</b>	<b>472</b>	<b>967</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
CLASS I RAILROADS.....	10	---	3	26	5	44	33	---	3	459	472	967
CLASS II RAILROADS.....	2	---	---	1	---	3	---	---	---	15	3	18
CLASS III RAILROADS.....	---	---	---	2	---	2	3	---	---	11	5	19
<b>TOTAL ALL RAILROADS.....</b>	<b>12</b>	<b>---</b>	<b>3</b>	<b>29</b>	<b>5</b>	<b>49</b>	<b>36</b>	<b>---</b>	<b>3</b>	<b>485</b>	<b>480</b>	<b>1,004</b>

EOD = Employee on duty  
 ENOD = Employee not on duty  
 PSGR = Passenger on train  
 NONT = Nontrespasser  
 TRES = Trespasser

TABLE R7. (CONTINUED)

Railroad	.....Nontrain Incident.....						.....Total.....					
	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
CLASS I RAILROADS												
Alabama Great Southern Railroad Co.....	---	---	---	---	---	---	---	---	---	5	1	6
Amtrak (National RR Passenger Corp).....	3	---	2	1	2	8	4	---	6	2	27	39
Atchison, Topeka And Santa Fe Rwy Co....	2	---	---	---	1	3	3	---	---	42	24	69
Baltimore And Ohio Railroad Co.....	---	---	---	1	1	2	1	---	---	18	21	40
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	1	---	---	---	---	1
Boston And Maine Corporation.....	---	---	---	---	---	---	---	---	---	---	10	10
Burlington Northern Incorporated.....	3	---	---	1	2	6	14	---	---	52	42	108
Central Of Georgia Railroad Company.....	1	---	---	---	---	1	1	---	---	---	---	1
Chesapeake And Ohio Railway Company.....	---	1	1	1	1	4	1	1	1	19	11	33
Chicago And Northwestern.....	1	---	---	---	2	3	4	---	---	10	10	24
Chicago, Milw, St. Paul And Pacific.....	---	---	---	---	---	---	---	---	---	4	8	12
Cincinnati, New Orleans And TX Pac Co...	---	---	---	---	---	---	---	---	---	2	---	2
Clinchfield Railroad Company.....	---	---	---	---	---	---	1	---	---	---	1	2
Consolidated Rail Corporation.....	3	---	---	---	2	5	13	---	1	52	81	147
Delaware And Hudson Railway.....	---	---	---	---	---	---	---	---	---	---	2	2
Denver And Rio Grande Western RR Co.....	---	---	---	---	---	---	---	---	---	2	1	3
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	---	---	---	1	2	3
Duluth, Missabe And Iron Range Rwy Co...	---	---	---	---	---	---	---	---	---	---	---	---
Elgin, Joliet And Eastern Railway Co....	---	---	---	---	---	---	---	---	---	---	---	---
Florida East Coast Railway Co.....	---	---	---	---	---	---	---	---	---	---	11	11
Grand Truck Western Railroad Co.....	---	---	---	---	---	---	---	---	---	7	7	14
Illinois Central Gulf Railroad Co.....	---	---	---	---	3	3	1	---	---	26	10	37
Kansas City Southern Railway Co.....	---	---	---	---	---	---	---	---	---	2	1	3
Long Island Railroad Company.....	1	---	---	---	---	1	1	---	---	---	20	21
Louisiana And Arkansas Rwy Company.....	---	---	---	1	---	1	---	---	---	1	3	4
Louisville And Nashville Railroad Co....	---	---	---	---	---	---	3	---	---	12	11	26
Missouri Pacific Railroad Co.....	3	---	---	2	1	6	6	---	---	99	18	123
Missouri-Kansas-Texas Railroad Co.....	---	---	---	---	---	---	---	---	---	4	5	9
Norfolk And Western Railway Co.....	5	---	---	1	---	6	8	---	---	32	19	59
Pittsburg And Lake Erie Railroad Co.....	---	---	---	---	---	---	---	---	---	---	---	---
Seaboard Coast Line Railroad Co.....	1	1	---	1	---	3	1	1	---	29	28	59
Sooline Railroad Company.....	---	---	---	---	---	---	---	---	---	5	2	7
Southern Pacific Transportation Co.....	5	---	---	3	1	9	5	---	1	29	68	103
Southern Railway Company.....	1	---	---	1	---	2	2	---	---	11	21	34
St. Louis Southwestern Railway Co.....	---	---	---	---	---	---	---	---	---	5	6	11
Union Pacific Railroad Co.....	---	---	---	---	---	---	2	---	---	25	19	46
Western Maryland Railway Company.....	---	---	---	---	---	---	---	---	---	---	---	---
Western Pacific Railroad Company.....	1	---	---	1	---	2	1	---	---	3	3	7
TOTAL CLASS I RAILROADS.....	30	2	3	14	16	65	73	2	9	499	493	1,076
RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)												
CLASS I RAILROADS.....	30	2	3	14	16	65	73	2	9	499	493	1,076
CLASS II RAILROADS.....	---	---	---	1	---	1	2	---	---	17	3	22
CLASS III RAILROADS.....	---	---	---	---	---	---	3	---	---	13	5	21
TOTAL ALL RAILROADS.....	30	2	3	15	16	66	78	2	9	529	501	1,119

EOD = Employee on duty  
 ENOD = Employee not on duty  
 PSGR = Passenger on train  
 NONT = Nontrespasser  
 TRES = Trespasser

**TABLE R8. NONFATAL CASUALTIES BY RAILROAD AND TYPE OF ACCIDENT/INCIDENT**

Railroad	.....Train Accident.....					.....Train Incident.....						
	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
<b>CLASS I RAILROADS</b>												
Alabama Great Southern Railroad Co.....	---	---	---	---	---	---	5	---	---	12	1	18
Amtrak (National RR Passenger Corp).....	46	---	24	---	---	70	119	1	49	2	14	185
Atchison, Topeka And Santa Fe Rwy Co....	15	---	---	3	---	18	142	---	---	136	34	312
Baltimore And Ohio Railroad Co.....	10	---	---	1	1	12	175	---	2	81	24	282
Bessemer And Lake Erie Railroad Co.....	9	---	---	---	---	9	10	---	---	1	---	11
Boston And Maine Corporation.....	1	---	---	---	---	1	17	---	6	6	11	40
Burlington Northern Incorporated.....	30	1	---	3	4	38	404	2	2	152	34	594
Central Of Georgia Railroad Company.....	2	---	---	---	---	2	38	---	---	20	---	58
Chesapeake And Ohio Railway Company.....	16	---	---	---	2	18	236	1	2	89	24	352
Chicago And Northwestern.....	13	---	---	1	---	14	109	1	5	110	25	250
Chicago, Milw, St. Paul And Pacific.....	7	---	---	---	---	7	59	---	---	18	4	81
Cincinnati, New Orleans And TX Pac Co...	---	---	---	---	---	---	16	---	---	5	---	21
Clinchfield Railroad Company.....	2	---	---	---	---	2	7	---	---	4	---	11
Consolidated Rail Corporation.....	56	---	5	5	---	66	567	6	11	104	76	764
Delaware And Hudson Railway.....	3	---	---	---	---	3	20	---	---	1	1	22
Denver And Rio Grande Western RR Co.....	1	---	---	---	---	1	13	---	4	18	---	35
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	10	---	---	10	1	21
Duluth, Missabe And Iron Range Rwy Co...	---	---	---	---	---	---	3	---	---	2	---	5
Elgin, Joliet And Eastern Railway Co....	---	---	---	---	---	---	19	---	---	6	1	26
Florida East Coast Railway Co.....	---	---	---	---	---	---	2	---	---	1	15	18
Grand Truck Western Railroad Co.....	---	---	---	1	---	1	94	---	---	34	8	136
Illinois Central Gulf Railroad Co.....	10	---	---	---	---	10	190	1	---	180	18	389
Kansas City Southern Railway Co.....	8	---	---	1	---	9	50	---	---	29	4	83
Long Island Railroad Company.....	4	2	---	---	---	6	141	---	16	1	15	173
Louisiana And Arkansas Rwy Company.....	4	---	---	1	---	5	25	---	1	37	1	64
Louisville And Nashville Railroad Co....	11	---	---	4	---	15	176	---	---	61	19	256
Missouri Pacific Railroad Co.....	19	---	---	1	---	20	334	---	---	334	26	694
Missouri-Kansas-Texas Railroad Co.....	2	---	---	1	---	3	57	---	---	45	1	103
Norfolk And Western Railway Co.....	15	---	---	10	---	25	213	---	---	164	28	405
Pittsburg And Lake Erie Railroad Co.....	---	---	---	---	---	---	8	---	---	---	---	8
Seaboard Coast Line Railroad Co.....	10	---	---	5	---	15	309	---	---	113	36	458
Sooline Railroad Company.....	5	---	---	1	---	6	71	---	---	37	2	110
Southern Pacific Transportation Co.....	23	---	---	8	5	36	380	---	3	125	85	593
Southern Railway Company.....	5	---	---	2	---	7	169	---	---	102	29	300
St. Louis Southwestern Railway Co.....	6	---	---	1	---	7	32	---	---	27	9	68
Union Pacific Railroad Co.....	18	---	---	4	---	22	296	---	---	64	16	376
Western Maryland Railway Company.....	3	---	---	---	---	3	19	---	---	---	1	20
Western Pacific Railroad Company.....	2	---	---	---	1	3	30	---	---	12	5	47
TOTAL CLASS I RAILROADS.....	356	3	29	53	13	454	4,565	12	101	2,143	568	7,389
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
CLASS I RAILROADS.....	356	3	29	53	13	454	4,565	12	101	2,143	568	7,389
CLASS II RAILROADS.....	5	---	---	---	---	5	163	1	3	64	8	239
CLASS III RAILROADS.....	9	---	---	4	---	13	323	---	7	57	11	398
TOTAL ALL RAILROADS.....	370	3	29	57	13	472	5,051	13	111	2,264	587	8,026

EOD = Employee on duty  
 ENOD = Employee not on duty  
 PSGR = Passenger on train  
 NONT = Nontrespasser  
 TRES = Trespasser

TABLE R8. (CONTINUED)

Railroad	.....Nontrain Incident.....						.....Total.....					
	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
CLASS I RAILROADS												
Alabama Great Southern Railroad Co.....	23	---	---	1	---	24	28	---	---	13	1	42
Amtrak (National RR Passenger Corp).....	1,311	39	54	44	6	1,454	1,476	40	127	46	20	1,709
Atchison, Topeka And Santa Fe Rwy Co....	950	24	---	6	---	980	1,107	24	---	145	34	1,310
Baltimore And Ohio Railroad Co.....	944	31	7	10	---	992	1,129	31	9	92	25	1,286
Bessemer And Lake Erie Railroad Co.....	35	2	---	---	1	38	54	2	---	1	1	58
Boston And Maine Corporation.....	141	4	11	2	---	158	159	4	17	8	11	199
Burlington Northern Incorporated.....	2,536	54	2	31	10	2,633	2,970	57	4	186	48	3,265
Central Of Georgia Railroad Company.....	83	1	---	2	---	86	123	1	---	22	---	146
Chesapeake And Ohio Railway Company.....	1,154	25	3	3	3	1,188	1,406	26	5	92	29	1,558
Chicago And Northwestern.....	932	14	48	10	8	1,012	1,054	15	53	121	33	1,276
Chicago, Milw, St. Paul And Pacific.....	522	2	1	3	---	528	588	2	1	21	4	616
Cincinnati, New Orleans And TX Pac Co...	30	1	---	1	---	32	46	1	---	6	---	53
Clinchfield Railroad Company.....	54	---	---	---	---	54	63	---	---	4	---	67
Consolidated Rail Corporation.....	4,759	99	11	26	12	4,907	5,382	105	27	135	88	5,737
Delaware And Hudson Railway.....	138	---	---	---	---	138	161	---	---	1	1	163
Denver And Rio Grande Western RR Co.....	96	---	1	1	1	99	110	---	5	19	1	135
Detroit, Toledo And Ironton RR Co.....	67	---	---	1	---	68	77	---	---	11	1	89
Duluth, Missabe And Iron Range Rwy Co...	45	---	---	43	---	88	48	---	---	45	---	93
Elgin, Joliet And Eastern Railway Co....	70	4	---	1	---	75	89	4	---	7	1	101
Florida East Coast Railway Co.....	25	---	---	---	---	25	27	---	---	1	15	43
Grand Truck Western Railroad Co.....	348	6	4	2	---	360	442	6	4	37	8	497
Illinois Central Gulf Railroad Co.....	1,246	19	34	3	2	1,304	1,446	20	34	183	20	1,703
Kansas City Southern Railway Co.....	239	---	---	8	---	247	297	---	---	38	4	339
Long Island Railroad Company.....	1,283	11	34	33	7	1,368	1,428	13	50	34	22	1,547
Louisiana And Arkansas Rwy Company.....	71	---	---	---	---	71	100	---	1	38	1	140
Louisville And Nashville Railroad Co....	1,184	12	---	3	---	1,199	1,371	12	---	68	19	1,470
Missouri Pacific Railroad Co.....	1,436	10	---	7	---	1,453	1,789	10	---	342	26	2,167
Missouri-Kansas-Texas Railroad Co.....	175	---	---	10	1	186	234	---	---	56	2	292
Norfolk And Western Railway Co.....	1,641	26	3	28	4	1,702	1,869	26	3	202	32	2,132
Pittsburg And Lake Erie Railroad Co.....	130	---	---	---	---	130	138	---	---	---	---	138
Seaboard Coast Line Railroad Co.....	1,165	8	---	8	1	1,182	1,484	8	---	126	37	1,655
Souline Railroad Company.....	349	---	---	1	---	350	425	---	---	39	2	466
Southern Pacific Transportation Co.....	1,939	16	---	10	11	1,976	2,342	16	3	143	101	2,605
Southern Railway Company.....	960	15	---	21	1	997	1,134	15	---	125	30	1,304
St. Louis Southwestern Railway Co.....	295	4	---	1	1	301	333	4	---	29	10	376
Union Pacific Railroad Co.....	1,390	46	---	8	---	1,444	1,704	46	---	76	16	1,842
Western Maryland Railway Company.....	56	1	---	---	---	57	78	1	---	---	1	80
Western Pacific Railroad Company.....	142	---	---	---	1	143	174	---	---	12	7	193
TOTAL CLASS I RAILROADS.....	27,964	474	213	328	70	29,049	32,885	489	343	2,524	651	36,892
RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)												
CLASS I RAILROADS.....	27,964	474	213	328	70	29,049	32,885	489	343	2,524	651	36,892
CLASS II RAILROADS.....	782	9	2	3	---	796	950	10	5	67	8	1,040
CLASS III RAILROADS.....	1,865	10	32	24	1	1,932	2,197	10	39	85	12	2,343
TOTAL ALL RAILROADS.....	30,611	493	247	355	71	31,777	36,032	509	387	2,676	671	40,275

EOD = Employee on duty  
 ENOD = Employee not on duty  
 PSGR = Passenger on train  
 NONT = Nontrespasser  
 TRES = Trespasser

**TABLE R12. INJURIES TO EMPLOYEES ON DUTY BY TYPE OF INJURY AND RAILROAD**

Railroad	.....Amputations.....					.....Fractures.....					
	Arm/ Hand Finger	Leg/ Foot	Toe	Other Part	Total	Arm/ Hand Finger	Leg/ Foot	Toe	Other Part	Total	
<b>CLASS I RAILROADS</b>											
Alabama Great Southern Railroad Co.....	---	---	---	---	---	1	2	1	---	4	8
Amtrak (National RR Passenger Corp)....	1	4	4	---	9	14	44	40	16	37	151
Atchison, Topeka And Santa Fe Rwy Co...	---	1	8	2	11	24	63	39	19	30	175
Baltimore And Ohio Railroad Co.....	---	5	1	---	6	18	29	24	13	21	105
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	2	---	---	2	4
Boston And Maine Corporation.....	---	---	3	2	5	4	3	9	5	7	28
Burlington Northern Incorporated.....	1	6	13	3	23	41	96	102	22	97	358
Central Of Georgia Railroad Company....	---	---	---	---	---	2	6	---	1	1	10
Chesapeake And Ohio Railway Company....	2	3	4	1	10	22	46	24	14	21	127
Chicago And Northwestern.....	1	7	1	4	13	13	33	20	7	16	89
Chicago, Milw, St. Paul And Pacific....	---	1	1	---	2	7	26	13	7	18	71
Cincinnati, New Orleans And TX Pac Co..	---	---	---	---	---	---	1	1	1	2	5
Clinchfield Railroad Company.....	---	---	1	---	1	---	2	1	3	1	7
Consolidated Rail Corporation.....	3	6	19	3	31	91	179	121	85	126	602
Delaware And Hudson Railway.....	---	---	1	---	1	5	2	2	3	2	14
Denver And Rio Grande Western RR Co....	---	---	---	---	---	5	7	6	2	8	28
Detroit, Toledo And Ironton RR Co.....	---	---	1	---	1	---	3	1	2	1	7
Duluth, Missabe And Iron Range Rwy Co..	---	---	---	---	---	---	4	---	1	---	5
Elgin, Joliet And Eastern Railway Co...	---	---	---	---	---	2	---	1	---	2	5
Florida East Coast Railway Co.....	2	1	3	1	7	2	1	1	2	2	8
Grand Truck Western Railroad Co.....	---	2	2	---	4	10	13	6	4	17	50
Illinois Central Gulf Railroad Co.....	---	4	6	---	10	25	46	39	16	36	162
Kansas City Southern Railway Co.....	---	1	2	---	3	9	10	4	3	7	33
Long Island Railroad Company.....	2	---	1	1	4	19	17	23	11	10	80
Louisiana And Arkansas Rwy Company.....	---	---	---	1	1	5	1	4	1	4	15
Louisville And Nashville Railroad Co...	2	2	3	---	7	19	32	24	13	23	111
Missouri Pacific Railroad Co.....	2	4	11	4	21	29	48	42	30	62	211
Missouri-Kansas-Texas Railroad Co.....	---	3	---	1	4	3	7	7	2	6	25
Norfolk And Western Railway Co.....	---	8	3	2	13	25	73	42	35	56	231
Pittsburg And Lake Erie Railroad Co....	---	---	---	---	---	1	3	1	---	2	7
Seaboard Coast Line Railroad Co.....	---	3	7	---	10	24	33	49	18	36	160
Sooline Railroad Company.....	---	1	---	---	1	10	12	9	4	10	45
Southern Pacific Transportation Co.....	3	7	21	2	34	41	54	61	16	36	208
Southern Railway Company.....	3	2	5	1	11	17	20	37	4	22	100
St. Louis Southwestern Railway Co.....	---	---	---	---	---	4	9	7	1	7	28
Union Pacific Railroad Co.....	---	8	4	2	14	30	60	31	21	38	180
Western Maryland Railway Company.....	---	---	---	---	---	2	2	2	5	---	11
Western Pacific Railroad Company.....	---	---	3	---	3	1	6	4	2	3	16
<b>TOTAL CLASS I RAILROADS.....</b>	<b>22</b>	<b>79</b>	<b>128</b>	<b>30</b>	<b>1</b>	<b>260</b>	<b>525</b>	<b>995</b>	<b>798</b>	<b>389</b>	<b>3,480</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>											
CLASS I RAILROADS.....	22	79	128	30	1	260	525	995	798	389	3,480
CLASS II RAILROADS.....	---	1	2	---	---	3	15	21	17	6	79
CLASS III RAILROADS.....	1	5	5	2	---	13	22	49	39	12	150
<b>TOTAL ALL RAILROADS.....</b>	<b>23</b>	<b>85</b>	<b>135</b>	<b>32</b>	<b>1</b>	<b>276</b>	<b>562</b>	<b>1,065</b>	<b>854</b>	<b>407</b>	<b>3,709</b>

TABLE R12. (CONTINUED)

Railroad	.....Other Injuries.....								Total	Total Injured
	Bruise	Sprain/ Strain	Cut	Elec. Burn	Other Burns	Disloc- Cation	Object In Eye	Other		
CLASS I RAILROADS										
Alabama Great Southern Railroad Co.....	7	14	8	---	---	---	---	5	34	42
Amtrak (National RR Passenger Corp)....	411	591	273	17	31	6	60	129	1,518	1,678
Atchison, Topeka And Santa Fe Rwy Co...	254	401	238	2	22	13	65	120	1,115	1,301
Baltimore And Ohio Railroad Co.....	244	441	226	2	25	11	95	125	1,169	1,280
Bessemer And Lake Erie Railroad Co.....	8	25	5	---	---	---	4	10	52	56
Boston And Maine Corporation.....	25	67	49	---	4	---	12	8	165	198
Burlington Northern Incorporated.....	592	1,321	506	2	49	20	179	162	2,831	3,212
Central Of Georgia Railroad Company....	43	44	39	1	1	1	---	6	135	145
Chesapeake And Ohio Railway Company....	272	640	234	9	36	9	81	132	1,413	1,550
Chicago And Northwestern.....	197	458	225	7	23	6	88	150	1,154	1,256
Chicago, Milw, St. Paul And Pacific....	104	300	62	2	18	4	11	30	531	604
Cincinnati, New Orleans And TX Pac Co..	6	17	21	---	---	---	1	1	46	51
Clinchfield Railroad Company.....	12	28	15	---	---	---	2	1	58	66
Consolidated Rail Corporation.....	1,067	2,210	721	30	107	18	365	388	4,906	5,539
Delaware And Hudson Railway.....	36	53	22	1	4	1	13	13	143	158
Denver And Rio Grande Western RR Co....	13	47	21	---	---	1	7	18	107	135
Detroit, Toledo And Ironton RR Co.....	12	33	20	---	1	1	4	7	78	86
Duluth, Missabe And Iron Range Rwy Co..	16	37	8	---	5	3	13	6	88	93
Elgin, Joliet And Eastern Railway Co...	21	37	21	---	2	---	11	3	95	100
Florida East Coast Railway Co.....	5	9	11	---	1	---	1	1	28	43
Grand Truck Western Railroad Co.....	85	205	44	---	10	2	37	56	439	493
Illinois Central Gulf Railroad Co.....	358	641	235	4	28	4	91	144	1,505	1,677
Kansas City Southern Railway Co.....	71	134	48	---	3	1	21	22	300	336
Long Island Railroad Company.....	389	499	168	24	18	5	121	51	1,275	1,359
Louisiana And Arkansas Rwy Company.....	37	50	16	---	1	1	6	11	122	138
Louisville And Nashville Railroad Co...	285	575	245	10	33	5	102	85	1,340	1,458
Missouri Pacific Railroad Co.....	470	760	293	3	30	15	167	149	1,887	2,119
Missouri-Kansas-Texas Railroad Co.....	38	84	64	---	4	1	43	29	263	292
Norfolk And Western Railway Co.....	423	774	341	9	44	7	116	143	1,857	2,101
Pittsburg And Lake Erie Railroad Co....	36	48	16	---	8	---	10	12	130	137
Seaboard Coast Line Railroad Co.....	303	647	257	11	11	9	127	98	1,463	1,633
Sooline Railroad Company.....	78	198	56	4	3	3	24	35	401	447
Southern Pacific Transportation Co.....	516	1,014	399	2	39	19	166	93	2,248	2,490
Southern Railway Company.....	278	480	340	4	18	7	9	54	1,190	1,301
St. Louis Southwestern Railway Co.....	71	167	55	1	4	3	28	11	340	368
Union Pacific Railroad Co.....	332	763	250	11	52	21	112	90	1,631	1,825
Western Maryland Railway Company.....	18	26	11	---	3	---	9	2	69	80
Western Pacific Railroad Company.....	40	74	23	---	6	2	13	10	168	187
TOTAL CLASS I RAILROADS.....	7,173	13,912	5,586	156	644	199	2,214	2,410	32,294	36,034
RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)										
CLASS I RAILROADS.....	7,173	13,912	5,586	156	644	199	2,214	2,410	32,294	36,034
CLASS II RAILROADS.....	213	419	140	2	25	7	93	45	944	1,026
CLASS III RAILROADS.....	583	835	322	10	36	16	190	168	2,160	2,323
TOTAL ALL RAILROADS.....	7,969	15,166	6,048	168	705	222	2,497	2,623	35,398	39,383



**TABLE R5. CASUALTIES IN TRAIN ACCIDENTS BY RAILROAD**

Railroad	..Collisions..		..Derailments..		.....Other.....		.....Total.....		Rate*	Train Miles
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured		
<b>CLASS I RAILROADS</b>										
Alabama Great Southern Railroad Co....	---	---	---	---	---	---	---	---	0.00	2,606,546
Amtrak (National RR Passenger Corp)...	---	8	1	40	3	22	4	70	2.47	29,917,844
Atchison, Topeka And Santa Fe Rwy Co..	---	4	---	4	6	10	6	18	0.51	47,156,119
Baltimore And Ohio Railroad Co.....	---	4	---	3	1	5	1	12	0.86	15,055,737
Bessemer And Lake Erie Railroad Co....	1	7	---	2	---	---	1	9	15.37	650,761
Boston And Maine Corporation.....	---	---	---	1	---	---	---	1	0.26	3,814,657
Burlington Northern Incorporated.....	---	5	---	23	4	10	4	38	0.56	75,364,769
Central Of Georgia Railroad Company...	---	---	---	---	---	2	---	2	0.60	3,309,227
Chesapeake And Ohio Railway Company...	---	3	---	10	---	5	---	18	1.19	15,104,872
Chicago And Northwestern.....	---	2	---	10	1	2	1	14	0.87	17,267,287
Chicago, Milw, St. Paul And Pacific...	---	5	---	1	1	1	1	7	0.94	8,526,865
Cincinnati, New Orleans And TX Pac Co.	---	---	---	---	---	---	---	---	0.00	3,300,061
Clinchfield Railroad Company.....	---	---	---	1	1	1	1	2	2.23	1,345,396
Consolidated Rail Corporation.....	---	24	1	24	3	18	4	66	1.14	61,306,982
Delaware And Hudson Railway.....	---	1	---	2	---	---	---	3	1.30	2,313,050
Denver And Rio Grande Western RR Co..	---	---	---	1	---	---	---	1	0.17	5,764,403
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	---	---	0.00	1,192,458
Duluth, Missabe And Iron Range Rwy Co.	---	---	---	---	---	---	---	---	0.00	452,066
Elgin, Joliet And Eastern Railway Co..	---	---	---	---	---	---	---	---	0.00	1,278,279
Florida East Coast Railway Co.....	---	---	---	---	---	---	---	---	0.00	2,922,545
Grand Trunk Western Railroad Co.....	---	---	---	---	---	1	---	1	0.23	4,274,361
Illinois Central Gulf Railroad Co.....	---	3	---	3	---	4	---	10	0.53	19,000,311
Kansas City Southern Railway Co.....	---	4	---	4	---	1	---	9	2.57	3,503,662
Long Island Railroad Company.....	---	---	---	---	---	6	---	6	0.67	8,896,754
Louisiana And Arkansas Rwy Company...	---	---	---	1	---	4	---	5	3.10	1,611,924
Louisville And Nashville Railroad Co..	---	2	2	6	---	7	2	15	0.78	21,656,852
Missouri Pacific Railroad Co.....	2	5	---	6	2	9	4	20	0.78	30,696,927
Missouri-Kansas-Texas Railroad Co....	---	---	---	2	---	1	---	3	0.72	4,149,597
Norfolk And Western Railway Co.....	---	5	1	9	---	11	1	25	1.29	20,172,860
Pittsburg And Lake Erie Railroad Co...	---	---	---	---	---	---	---	---	0.00	638,252
Seaboard Coast Line Railroad Co.....	---	2	---	2	1	11	1	15	0.70	22,904,096
Sooline Railroad Company.....	---	1	---	1	---	4	---	6	1.26	4,764,662
Southern Pacific Transportation Co....	---	5	2	16	9	15	11	36	1.33	35,416,413
Southern Railway Company.....	---	3	---	2	1	2	1	7	0.38	20,794,247
St. Louis Southwestern Railway Co....	---	4	---	2	---	1	---	7	1.16	6,025,425
Union Pacific Railroad Co.....	---	6	1	10	---	6	1	22	0.71	32,231,384
Western Maryland Railway Company.....	---	---	---	3	---	---	---	3	3.70	809,794
Western Pacific Railroad Company.....	---	1	---	2	---	---	---	3	0.85	3,516,934
<b>TOTAL CLASS I RAILROADS.....</b>	<b>3</b>	<b>104</b>	<b>8</b>	<b>191</b>	<b>33</b>	<b>159</b>	<b>44</b>	<b>454</b>	<b>0.92</b>	<b>539,714,379</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>										
CLASS I RAILROADS.....	3	104	8	191	33	159	44	454	0.92	539,714,379
CLASS II RAILROADS.....	1	---	---	4	2	1	3	5	0.67	12,000,578
CLASS III RAILROADS.....	---	4	---	5	2	4	2	13	0.69	21,653,652
<b>TOTAL ALL RAILROADS.....</b>	<b>4</b>	<b>108</b>	<b>8</b>	<b>200</b>	<b>37</b>	<b>164</b>	<b>49</b>	<b>472</b>	<b>0.91</b>	<b>573,368,609</b>

NOTE: "Rate" is the frequency per 200,000 train miles.

Injured column includes nonfatal occupational illnesses.

**TABLE R9. CASUALTIES TO EMPLOYEES ON DUTY BY JOB  
CATEGORY AND RAILROAD**

Railroad	I. Exec Office Staff II. Prof, Clerical, General			III. Maintenance of Way and Structures			IV. Maintenance of Equipment and Stores		
	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness
<b>CLASS I RAILROADS</b>									
Alabama Great Southern Railroad Co....	---	1	---	---	8	---	---	3	---
Amtrak (National RR Passenger Corp)...	---	223	2	3	517	22	1	362	3
Atchison, Topeka And Santa Fe Rwy Co..	---	37	---	1	327	4	1	346	---
Baltimore And Ohio Railroad Co.....	---	73	1	---	403	2	---	224	---
Bessemer And Lake Erie Railroad Co....	---	5	1	---	13	---	---	11	1
Boston And Maine Corporation.....	---	17	---	---	56	1	---	45	---
Burlington Northern Incorporated.....	1	126	---	6	1,128	24	1	702	14
Central Of Georgia Railroad Company...	1	5	---	---	16	---	---	13	---
Chesapeake And Ohio Railway Company...	---	62	---	---	384	2	---	395	---
Chicago And Northwestern.....	---	66	1	3	364	9	---	277	5
Chicago, Milw, St. Paul And Pacific...	---	60	---	---	237	7	---	101	2
Cincinnati, New Orleans And TX Pac Co.	---	1	---	---	7	---	---	---	---
Clinchfield Railroad Company.....	---	---	---	---	25	---	---	13	---
Consolidated Rail Corporation.....	---	388	10	4	1,781	82	1	1,388	55
Delaware And Hudson Railway.....	---	6	---	---	50	4	---	49	1
Denver And Rio Grande Western RR Co...	---	4	---	---	47	---	---	15	---
Detroit, Toledo And Ironton RR Co.....	---	5	---	---	26	1	---	21	2
Duluth, Missabe And Iron Range Rwy Co.	---	4	---	---	16	---	---	21	---
Elgin, Joliet And Eastern Railway Co..	---	13	---	---	23	---	---	9	---
Florida East Coast Railway Co.....	---	---	---	---	11	---	---	9	---
Grand Trunk Western Railroad Co.....	---	38	---	---	65	2	---	123	1
Illinois Central Gulf Railroad Co.....	---	42	1	---	544	10	---	410	7
Kansas City Southern Railway Co.....	---	3	---	---	119	---	---	64	1
Long Island Railroad Company.....	---	101	8	1	345	119	---	483	37
Louisiana And Arkansas Rwy Company....	---	3	---	---	28	1	---	6	---
Louisville And Nashville Railroad Co..	1	49	1	---	525	4	---	331	3
Missouri Pacific Railroad Co.....	---	49	---	1	666	20	---	335	10
Missouri-Kansas-Texas Railroad Co.....	---	7	---	---	127	---	---	17	---
Norfolk And Western Railway Co.....	1	96	1	2	796	14	2	538	9
Pittsburg And Lake Erie Railroad Co...	---	11	---	---	40	---	---	77	1
Seaboard Coast Line Railroad Co.....	---	57	4	---	433	13	---	294	1
Sooline Railroad Company.....	---	7	---	---	160	13	---	87	3
Southern Pacific Transportation Co....	3	221	7	2	656	30	---	474	24
Southern Railway Company.....	---	55	---	---	255	---	1	377	2
St. Louis Southwestern Railway Co.....	---	31	---	---	112	2	---	59	2
Union Pacific Railroad Co.....	---	112	---	2	601	2	---	411	3
Western Maryland Railway Company.....	---	1	---	---	19	---	---	13	---
Western Pacific Railroad Company.....	---	9	---	---	75	6	1	35	---
<b>TOTAL CLASS I RAILROADS.....</b>	<b>7</b>	<b>1,988</b>	<b>37</b>	<b>25</b>	<b>11,005</b>	<b>394</b>	<b>8</b>	<b>8,138</b>	<b>187</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>									
CLASS I RAILROADS.....	7	1,988	37	25	11,005	394	8	8,138	187
CLASS II RAILROADS.....	---	28	2	1	322	4	---	234	3
CLASS III RAILROADS.....	---	184	1	1	807	7	---	413	7
<b>TOTAL ALL RAILROADS.....</b>	<b>7</b>	<b>2,200</b>	<b>40</b>	<b>27</b>	<b>12,134</b>	<b>405</b>	<b>8</b>	<b>8,785</b>	<b>197</b>

TABLE R9. (CONTINUED)

Railroad	V. Transportation Not train, engine, yard			Via Transportation Ydmstrs, Swtch Tender, Host.			Vib Transportation Train and Engine		
	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness
CLASS I RAILROADS									
Alabama Great Southern Railroad Co....	---	---	---	---	---	---	---	16	---
Amtrak (National RR Passenger Corp)...	---	343	4	---	---	---	---	---	---
Atchison, Topeka And Santa Fe Rwy Co..	---	1	1	---	7	---	1	380	4
Baltimore And Ohio Railroad Co.....	---	15	---	---	8	---	1	400	3
Bessemer And Lake Erie Railroad Co....	---	---	---	---	---	---	1	23	---
Boston And Maine Corporation.....	---	1	---	---	---	---	---	39	---
Burlington Northern Incorporated.....	---	30	---	---	26	---	6	906	14
Central Of Georgia Railroad Company...	---	2	---	---	---	---	---	86	1
Chesapeake And Ohio Railway Company...	---	38	---	---	10	1	1	509	5
Chicago And Northwestern.....	---	18	---	1	27	---	---	282	5
Chicago, Milw, St. Paul And Pacific...	---	7	---	---	6	---	---	165	3
Cincinnati, New Orleans And TX Pac Co.	---	1	---	---	1	---	---	34	2
Clinchfield Railroad Company.....	---	---	---	---	1	---	1	23	1
Consolidated Rail Corporation.....	---	95	1	---	41	1	8	1,493	47
Delaware And Hudson Railway.....	---	1	---	---	1	---	---	49	---
Denver And Rio Grande Western RR Co...	---	---	---	---	---	---	---	44	---
Detroit, Toledo And Ironton RR Co....	---	---	---	---	2	---	---	20	---
Duluth, Missabe And Iron Range Rwy Co.	---	1	---	---	---	---	---	6	---
Elgin, Joliet And Eastern Railway Co..	---	3	---	---	1	---	---	39	1
Florida East Coast Railway Co.....	---	---	---	---	---	---	---	7	---
Grand Trunk Western Railroad Co.....	---	9	---	---	1	---	---	202	1
Illinois Central Gulf Railroad Co.....	---	14	---	---	1	---	1	410	7
Kansas City Southern Railway Co.....	---	---	---	---	---	---	---	108	2
Long Island Railroad Company.....	---	34	1	---	3	---	---	276	21
Louisiana And Arkansas Rwy Company....	---	1	---	---	---	---	---	60	1
Louisville And Nashville Railroad Co..	---	9	---	---	10	---	2	435	4
Missouri Pacific Railroad Co.....	---	15	---	---	22	---	5	654	18
Missouri-Kansas-Texas Railroad Co....	---	---	---	---	29	---	---	54	---
Norfolk And Western Railway Co.....	---	12	---	---	7	---	3	389	7
Pittsburg And Lake Erie Railroad Co...	---	---	---	---	---	---	---	9	---
Seaboard Coast Line Railroad Co.....	1	22	---	---	34	---	---	622	4
SooLine Railroad Company.....	---	6	---	---	3	---	---	143	3
Southern Pacific Transportation Co....	---	13	---	---	41	1	---	822	53
Southern Railway Company.....	---	29	1	---	10	---	1	405	---
St. Louis Southwestern Railway Co.....	---	1	---	---	3	---	---	119	4
Union Pacific Railroad Co.....	---	19	---	---	15	1	---	529	11
Western Maryland Railway Company.....	---	1	---	---	---	---	---	44	---
Western Pacific Railroad Company.....	---	---	---	---	---	---	---	49	---
TOTAL CLASS I RAILROADS.....	1	741	8	1	310	4	31	9,851	222
RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)									
CLASS I RAILROADS.....	1	741	8	1	310	4	31	9,851	222
CLASS II RAILROADS.....	---	20	---	---	3	---	1	329	5
CLASS III RAILROADS.....	---	69	---	---	24	---	2	680	5
TOTAL ALL RAILROADS.....	1	830	8	1	337	4	34	10,860	232

**TABLE R10. CASUALTY RATES FOR EMPLOYEES ON DUTY  
BY RAILROAD**

Railroad	Fatalities		Injuries		Illnesses		...Total...		Employee Manhours
	#	Rate	#	Rate	#	Rate	#	Rate	
Alabama Great Southern Railroad Co....	---	0.00	28	A	---	0.00	28	A	---
Amtrak (National RR Passenger Corp)...	4	0.02	1,445	7.86	31	0.17	1,480	8.05	36,769,467
Atchison, Topeka And Santa Fe Rwy Co..	3	0.01	1,098	4.43	9	0.04	1,110	4.48	49,586,030
Baltimore And Ohio Railroad Co.....	1	0.01	1,123	8.71	6	0.05	1,130	8.76	25,799,938
Bessemer And Lake Erie Railroad Co....	1	0.11	52	5.91	2	0.23	55	6.25	1,759,186
Boston And Maine Corporation.....	---	0.00	158	5.70	1	0.04	159	5.74	5,542,995
Burlington Northern Incorporated.....	14	0.03	2,918	6.78	52	0.12	2,984	6.94	86,044,048
Central Of Georgia Railroad Company...	1	A	122	A	1	A	124	A	---
Chesapeake And Ohio Railway Company...	1	0.01	1,398	8.31	8	0.05	1,407	8.36	33,660,967
Chicago And Northwestern.....	4	0.03	1,034	8.35	20	0.16	1,058	8.55	24,758,406
Chicago, Milw, St. Paul And Pacific...	---	0.00	576	10.37	12	0.22	588	10.59	11,104,458
Cincinnati, New Orleans And TX Pac Co.	---	0.00	44	A	2	A	46	A	---
Clinchfield Railroad Company.....	1	0.11	62	6.67	1	0.11	64	6.89	1,858,528
Consolidated Rail Corporation.....	13	0.02	5,186	9.56	196	0.36	5,395	9.94	108,543,212
Delaware And Hudson Railway.....	---	0.00	156	10.22	5	0.33	161	10.54	3,054,804
Denver And Rio Grande Western RR Co...	---	0.00	110	3.25	---	0.00	110	3.25	6,775,804
Detroit, Toledo And Ironton RR Co.....	---	0.00	74	8.22	3	0.33	77	8.56	1,799,352
Duluth, Missabe And Iron Range Rwy Co.	---	0.00	48	4.93	---	0.00	48	4.93	1,947,117
Elgin, Joliet And Eastern Railway Co...	---	0.00	88	5.99	1	0.07	89	6.05	2,940,962
Florida East Coast Railway Co.....	---	0.00	27	2.50	---	0.00	27	2.50	2,162,967
Grand Trunk Western Railroad Co.....	---	0.00	438	11.45	4	0.10	442	11.56	7,650,021
Illinois Central Gulf Railroad Co.....	1	0.01	1,421	10.07	25	0.18	1,447	10.25	28,223,465
Kansas City Southern Railway Co.....	---	0.00	294	10.21	3	0.10	297	10.32	5,758,274
Long Island Railroad Company.....	1	0.02	1,242	19.41	186	2.91	1,429	22.33	12,797,646
Louisiana And Arkansas Rwy Company...	---	0.00	98	B	2	B	100	B	---
Louisville And Nashville Railroad Co..	3	0.03	1,359	11.71	12	0.10	1,374	11.84	23,215,088
Missouri Pacific Railroad Co.....	6	0.03	1,741	9.79	48	0.27	1,795	10.10	35,553,495
Missouri-Kansas-Texas Railroad Co....	---	0.00	234	8.77	---	0.00	234	8.77	5,335,374
Norfolk And Western Railway Co.....	8	0.04	1,838	9.90	31	0.17	1,877	10.11	37,125,792
Pittsburg And Lake Erie Railroad Co...	---	0.00	137	10.32	1	0.08	138	10.39	2,656,759
Seaboard Coast Line Railroad Co.....	1	0.01	1,462	8.29	22	0.12	1,485	8.42	35,292,977
Sooline Railroad Company.....	---	0.00	406	11.46	19	0.54	425	12.00	7,085,597
Southern Pacific Transportation Co....	5	0.02	2,227	8.31	115	0.43	2,347	8.75	53,615,652
Southern Railway Company.....	2	0.01	1,131	6.66	3	0.02	1,136	6.69	33,961,330
St. Louis Southwestern Railway Co.....	---	0.00	325	9.25	8	0.23	333	9.48	7,023,373
Union Pacific Railroad Co.....	2	0.01	1,687	8.51	17	0.09	1,706	8.60	39,657,974
Western Maryland Railway Company.....	---	0.00	78	8.32	---	0.00	78	8.32	1,875,309
Western Pacific Railroad Company.....	1	0.05	168	8.28	6	0.30	175	8.63	4,055,956
TOTAL CLASS I RAILROADS.....	73	0.02	32,033	8.60	852	0.23	32,958	8.85	744,992,323
CLASS I RAILROADS.....	73	0.02	32,033	8.60	852	0.23	32,958	8.85	744,992,323
CLASS II RAILROADS.....	2	0.03	936	13.26	14	0.20	952	13.49	14,118,857
CLASS III RAILROADS.....	3	0.01	2,177	10.29	20	0.09	2,200	10.39	42,330,874
TOTAL ALL RAILROADS.....	78	0.02	35,146	8.77	886	0.22	36,110	9.01	801,442,054

NOTE: Manhours for Class I railroads were obtained from the Interstate Commerce Commission.

"Rate" is the frequency per 200,000 manhours.

"A" - Manhours are reported by Southern Railway.

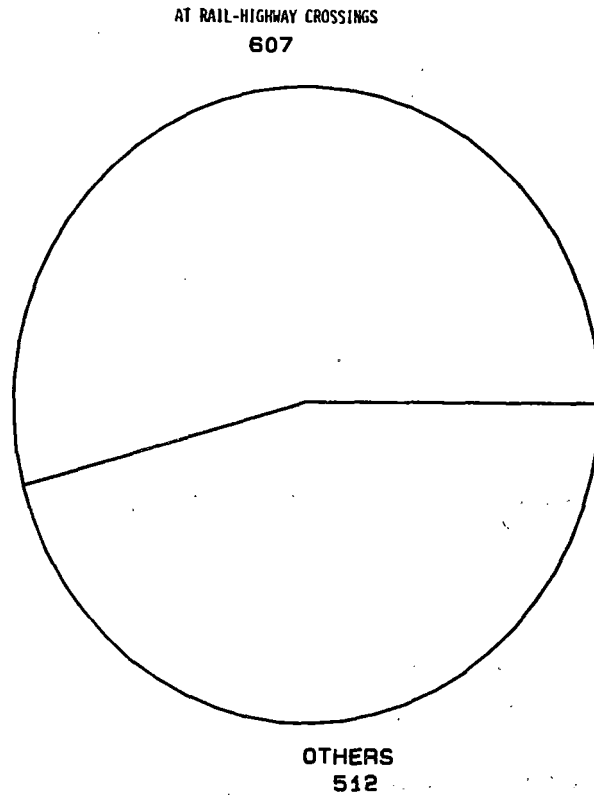
"B" - Manhours are reported by Kansas City Southern Railway.

**TABLE R14. SUMMARY OF NONFATAL INJURIES TO EMPLOYEES ON DUTY BY RAILROAD**

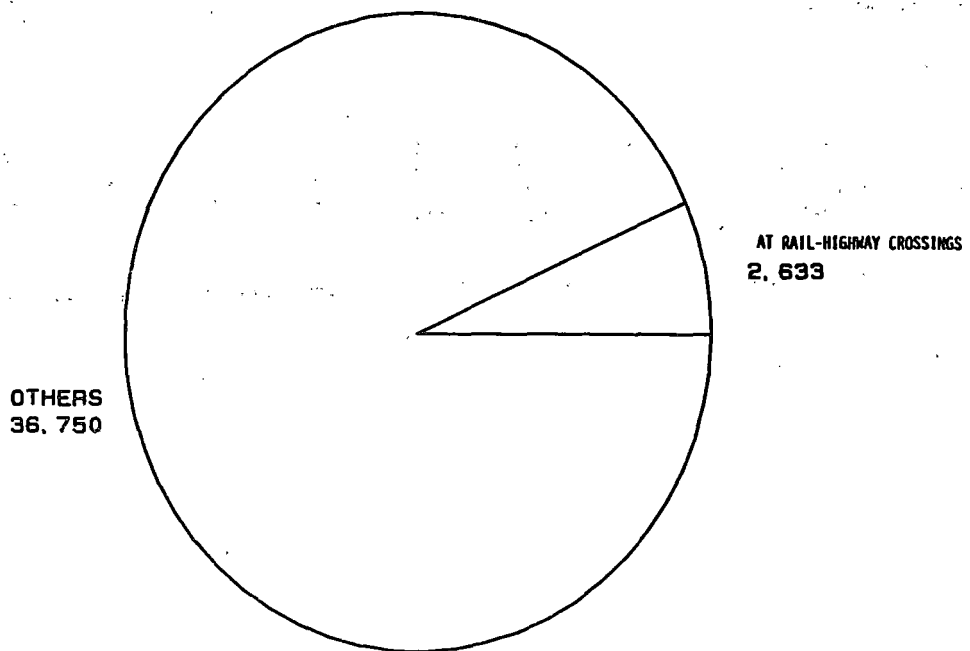
Railroad	Total Cases	Cases With Days Away From Work			Or Days Of Restricted Days Away From Work	Days Of Restriction	Other Cases
		Total Cases	Lost Day Cases	Restricted Cases			
<b>CLASS I RAILROADS</b>							
Alabama Great Southern Railroad Co.....	28	12	8	4	81	24	16
Amtrak (National RR Passenger Corp).....	1,445	1,108	1,086	22	12,054	91	337
Atchison, Topeka And Santa Fe Rwy Co.....	1,098	681	529	152	5,950	2,625	417
Baltimore And Ohio Railroad Co.....	1,123	742	305	437	3,429	3,665	381
Bessemer And Lake Erie Railroad Co.....	52	29	28	1	768	1	23
Boston And Maine Corporation.....	158	97	96	1	2,000	2	61
Burlington Northern Incorporated.....	2,918	1,765	1,694	71	15,289	510	1,153
Central Of Georgia Railroad Company.....	122	45	35	10	742	122	77
Chesapeake And Ohio Railway Company.....	1,398	1,038	483	555	5,402	4,531	360
Chicago And Northwestern Transportation Co..	1,034	586	357	229	5,216	1,856	448
Chicago, Milw, St. Paul And Pacific RR Co...	576	492	476	16	5,210	93	84
Cincinnati, New Orleans And Texas Pacific...	44	13	13	---	199	---	31
Clinchfield Railroad Company.....	62	53	47	6	501	74	9
Consolidated Rail Corporation.....	5,186	3,669	2,697	972	75,214	11,748	1,517
Delaware And Hudson Railway.....	156	131	128	3	1,920	33	25
Denver And Rio Grande Western RR Co.....	110	79	78	1	1,571	30	31
Detroit, Toledo And Ironton RR Co.....	74	34	21	13	369	206	40
Duluth, Missabe And Ironton Rwy Co.....	48	31	25	6	351	58	17
Elgin, Joliet And Eastern Railway Co.....	88	52	49	3	1,255	128	36
Florida East Coast Railway Co.....	27	19	3	16	164	234	8
Grand Truck Western Railroad Co.....	438	282	129	153	3,858	2,734	156
Illinois Central Gulf Railroad Co.....	1,421	947	402	545	7,185	9,528	474
Kansas City Southern Railway Co.....	294	266	266	---	3,083	---	28
Long Island Railroad Company.....	1,242	1,191	1,191	---	14,801	---	51
Louisiana And Arkansas Rwy Company.....	98	93	93	---	1,048	---	5
Louisville And Nashville Railroad Co.....	1,359	875	316	559	4,084	5,721	484
Missouri Pacific Railroad Co.....	1,741	1,209	598	611	18,145	5,953	532
Missouri-Kansas-Texas Railroad Co.....	234	135	134	1	1,427	18	99
Norfolk And Western Railway Co.....	1,838	841	674	167	13,452	1,229	997
Pittsburg And Lake Erie Railroad Co.....	137	46	46	---	1,084	---	91
Seaboard Coast Line Railroad Co.....	1,462	1,063	291	772	4,759	7,313	399
Souline Railroad Company.....	406	336	316	20	4,378	284	70
Southern Pacific Transportation Co.....	2,227	1,288	818	470	16,809	5,620	939
Southern Railway Company.....	1,131	538	263	275	5,001	2,590	593
St. Louis Southwestern Railway Co.....	325	193	105	88	2,238	1,015	132
Union Pacific Railroad Co.....	1,687	1,140	646	494	8,624	4,967	547
Western Maryland Railway Company.....	78	56	17	39	222	393	22
Western Pacific Railroad Company.....	168	129	128	1	2,522	25	39
<b>TOTAL CLASS I RAILROADS.....</b>	<b>32,033</b>	<b>21,304</b>	<b>14,591</b>	<b>6,713</b>	<b>250,405</b>	<b>73,421</b>	<b>10,729</b>
<b>CLASS II RAILROADS</b>							
Atlanta And West Point Railroad Co.....	49	42	19	23	216	124	7
Bangor And Aroostook Railroad Co.....	45	33	32	1	500	1	12
Canadian Pacific Lines In Maine.....	18	9	5	4	150	26	9
Central Vermont Railway Inc.....	12	9	9	---	154	---	3
Chicago And Illinois Midland Rwy Co.....	72	59	57	2	369	5	13
Chicago South Shore And South Bend RR.....	23	22	22	---	94	---	1
Colorado And Wyoming Railway Company.....	10	8	8	---	161	---	2
Duluth, Winnipeg And Pacific Rwy Co.....	14	13	9	4	68	20	1
Georgia Railroad Lessee Organization.....	47	30	10	20	156	124	17
Georgia Southern And Florida Railway.....	42	17	12	5	253	34	25
Green Bay And Western Railroad.....	46	42	41	1	417	2	4
Interstate Railroad Company.....	1	1	---	1	---	5	---
Lake Superior And Ishpeming Railroad Co.....	12	11	11	---	99	---	1
Maine Central Railroad Company.....	138	111	104	7	1,150	54	27
Michigan Interstate Railroad (Ann Arbor)....	6	6	6	---	65	---	---
Monogahela Railway.....	18	12	12	---	177	3	6
Norfolk Southern Railway Company.....	8	6	4	2	46	11	2
Northwestern Pacific Railroad.....	26	21	9	12	302	155	5
Providence and Worcester Railroad Co.....	37	30	22	8	233	52	7
Richmond, Fredericksburg And Potomac RR Co..	135	88	87	1	1,174	1	47
Spokane International Railroad.....	5	3	3	---	54	---	2
Texas And Northern Railway Company.....	11	10	7	3	196	20	1
Texas, Mexican Railway Company.....	135	63	62	1	675	10	72
Toledo, Peoria And Western Railroad Co.....	26	21	21	---	432	---	5
<b>TOTAL CLASS II RAILROADS.....</b>	<b>936</b>	<b>667</b>	<b>572</b>	<b>95</b>	<b>7,141</b>	<b>647</b>	<b>269</b>
<b>RECAPITULATION (INCLUDES CLASS III RAILROADS)</b>							
CLASS I RAILROADS.....	32,033	21,304	14,591	6,713	250,405	73,421	10,729
CLASS II RAILROADS.....	936	667	572	95	7,141	647	269
CLASS III RAILROADS.....	2,177	1,241	1,057	184	14,878	2,214	936
<b>TOTAL ALL RAILROADS.....</b>	<b>35,146</b>	<b>23,212</b>	<b>16,220</b>	<b>6,992</b>	<b>272,424</b>	<b>76,282</b>	<b>11,934</b>

**7. CASUALTIES: EMPLOYEES, TRESPASSERS, NONTRESPASSERS AND OTHERS**

**SUMMARY OF CASUALTIES**



**FIGURE 28. FATALITIES IN 1982: RAIL-HIGHWAY CROSSINGS AND OTHER**



**FIGURE 29. INJURIES IN 1982: RAIL-HIGHWAY CROSSINGS AND OTHER**

**TABLE S13. FATALITIES BY TYPE OF ACCIDENT/INCIDENT, TYPE OF RAILROAD,  
AND TYPE OF PERSON**

Type Of Accident/Incident	Total A/I W. Cas	Fatal A/I	Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers	
				Trainmen	Other					
				Total	Total					
<b>TRAIN ACCIDENTS</b>										
Class I Railroads.....	187	10	13	7	1	8	---	3	---	2
Class II Railroads.....	4	1	1	1	---	1	---	---	---	---
Class III Railroads.....	6	---	---	---	---	---	---	---	---	---
Total All Railroads.....	197	11	14	8	1	9	---	3	---	2
<b>TRAIN INCIDENTS</b>										
Class I Railroads.....	5,413	427	433	19	13	32	---	3	8	390
Class II Railroads.....	176	3	3	---	---	---	---	---	---	3
Class III Railroads.....	335	7	8	2	1	3	---	---	1	4
Total All Railroads.....	5,924	437	444	21	14	35	---	3	9	397
<b>NONTRAIN INCIDENTS</b>										
Class I Railroads.....	28,817	52	54	2	28	30	2	3	4	15
Class II Railroads.....	795	---	---	---	---	---	---	---	---	---
Class III Railroads.....	1,925	---	---	---	---	---	---	---	---	---
Total All Railroads.....	31,537	52	54	2	28	30	2	3	4	15
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>										
Class I Railroads.....	2,249	460	576	3	---	3	---	---	487	86
Class II Railroads.....	62	15	18	---	1	1	---	---	17	---
Class III Railroads.....	72	13	13	---	---	---	---	---	12	1
Total All Railroads.....	2,383	488	607	3	1	4	---	---	516	87
<b>GRAND TOTAL</b>										
Class I Railroads.....	36,666	949	1,076	31	42	73	2	9	499	493
Class II Railroads.....	1,037	19	22	1	1	2	---	---	17	3
Class III Railroads.....	2,338	20	21	2	1	3	---	---	13	5
Total All Railroads.....	40,041	988	1,119	34	44	78	2	9	529	501

NOTE: Column 1 is the count of accidents/incidents resulting in at least one reportable casualty.

**TABLE S14. INJURIES BY TYPE OF ACCIDENT/INCIDENT, TYPE OF RAILROAD, AND TYPE OF PERSON**

Type Of Accident/Incident	Total A/I W. Cas	Injury A/I	Total Injured	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers	
				Trainmen	Other	Total				
<b>TRAIN ACCIDENTS</b>										
Class I Railroads.....	187	172	331	236	51	287	1	26	5	12
Class II Railroads.....	4	2	2	2	---	2	---	---	---	---
Class III Railroads.....	6	6	9	9	---	9	---	---	---	---
Total All Railroads.....	197	180	342	247	51	298	1	26	5	12
<b>TRAIN INCIDENTS</b>										
Class I Railroads.....	5,413	4,919	5,001	3,745	678	4,423	6	101	41	430
Class II Railroads.....	176	172	169	134	23	157	1	3	2	6
Class III Railroads.....	335	328	337	266	56	322	---	7	1	7
Total All Railroads.....	5,924	5,419	5,507	4,145	757	4,902	7	111	44	443
<b>NONTRAIN INCIDENTS</b>										
Class I Railroads.....	28,817	28,063	28,207	5,787	21,420	27,207	472	213	251	64
Class II Railroads.....	795	784	774	187	574	761	9	2	2	---
Class III Railroads.....	1,925	1,905	1,920	405	1,450	1,855	10	32	22	1
Total All Railroads.....	31,537	30,752	30,901	6,379	23,444	29,823	491	247	275	65
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>										
Class I Railroads.....	2,249	1,788	2,495	83	33	116	4	3	2,227	145
Class II Railroads.....	62	47	66	2	---	2	---	---	62	2
Class III Railroads.....	72	59	72	4	1	5	---	---	63	4
Total All Railroads.....	2,383	1,894	2,633	89	34	123	4	3	2,352	151
<b>GRAND TOTAL</b>										
Class I Railroads.....	36,666	34,942	36,034	9,851	22,182	32,033	483	343	2,524	651
Class II Railroads.....	1,037	1,005	1,011	325	597	922	10	5	66	8
Class III Railroads.....	2,338	2,298	2,338	684	1,507	2,191	10	39	86	12
Total All Railroads.....	40,041	38,245	39,383	10,860	24,286	35,146	503	387	2,676	671

NOTE: Column 1 is the count of accidents/incidents resulting in at least one reportable casualty.



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**TABLE S15. ILLNESSES BY TYPE OF ACCIDENT/INCIDENT, TYPE OF RAILROAD,  
AND TYPE OF PERSON**

Type Of Accident/Incident	Total A/I W. Cas	Illness A/I	Total Illness	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers	
				Trainmen	Other					
<b>TRAIN ACCIDENTS</b>										
Class I Railroads.....	187	5	14	11	1	12	2	---	---	---
Class II Railroads.....	4	1	2	2	---	2	---	---	---	
Class III Railroads.....	6	---	---	---	---	---	---	---	---	
Total All Railroads.....	197	6	16	13	1	14	2	---	---	---
<b>TRAIN INCIDENTS</b>										
Class I Railroads.....	5,413	67	85	77	5	82	3	---	---	---
Class II Railroads.....	176	1	1	1	---	1	---	---	---	
Class III Railroads.....	335	---	---	---	---	---	---	---	---	
Total All Railroads.....	5,924	68	86	78	5	83	3	---	---	---
<b>NONTRAIN INCIDENTS</b>										
Class I Railroads.....	28,817	702	755	130	624	754	1	---	---	---
Class II Railroads.....	795	11	11	2	9	11	---	---	---	
Class III Railroads.....	1,925	20	20	5	15	20	---	---	---	
Total All Railroads.....	31,537	733	786	137	648	785	1	---	---	---
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>										
Class I Railroads.....	2,249	1	4	4	---	4	---	---	---	
Class II Railroads.....	62	---	---	---	---	---	---	---	---	
Class III Railroads.....	72	---	---	---	---	---	---	---	---	
Total All Railroads.....	2,383	1	4	4	---	4	---	---	---	
<b>GRAND TOTAL</b>										
Class I Railroads.....	36,666	775	858	222	630	852	6	---	---	---
Class II Railroads.....	1,037	13	14	5	9	14	---	---	---	
Class III Railroads.....	2,338	20	20	5	15	20	---	---	---	
Total All Railroads.....	40,041	808	892	232	654	886	6	---	---	---

NOTE: Column 1 is the count of accidents/incidents resulting in at least one reportable casualty.

**TABLE S23. NATURE OF INJURIES BY TYPE OF ACCIDENT/INCIDENT**

Type of Accident/Incident	.....Amputations.....					.....Fractures.....					Total
	Arm/ Hand	Finger	Leg/ Foot	Toe	Other Part	Arm/ Hand	Finger	Leg/ Foot	Toe	Other Part	
<b>TRAIN ACCIDENTS</b>											
Collisions.....	---	---	---	---	---	1	1	3	---	5	10
Derailments.....	---	---	1	---	---	1	1	2	---	14	18
Rail-highway x-ing.....	---	---	---	---	---	2	---	9	---	8	19
Miscellaneous.....	---	---	---	---	---	---	1	1	---	---	2
Total.....	---	---	1	---	---	1	4	3	15	---	49
<b>TRAIN INCIDENTS</b>											
Coupling and uncoupling locomotives....	---	2	4	---	---	6	5	3	2	6	24
Coupling/uncoupling air/steam hose.....	---	---	2	1	---	3	3	---	---	1	4
Operating or on locomotives.....	---	1	1	---	---	2	2	4	2	4	22
Operating rail motorcars.....	---	---	---	---	---	---	---	1	2	---	5
Operating hand brakes.....	---	---	1	---	---	1	3	4	4	2	19
Operating switches or derails.....	---	---	1	---	---	1	---	---	---	---	1
Contacting fixed objects while on.....	1	---	---	1	---	2	2	2	---	2	13
Getting on or off cars or locomotives..	3	2	29	11	1	46	25	18	53	4	124
Collisions, derailments, etc.....	---	---	2	---	---	2	3	---	4	---	16
Rail-highway crossing.....	---	---	4	2	---	6	55	2	91	2	349
Struck by/ran into loco/car.....	15	4	76	8	---	103	18	3	32	1	105
Servicing or maintenance of equipment..	---	2	2	1	---	5	2	7	3	2	16
Maintenance of way and structures.....	---	1	---	1	---	2	---	7	6	4	23
Freight, baggage, express or mail.....	---	---	---	1	---	1	---	---	---	---	1
Windows, doors, etc., on on-track.....	---	4	---	---	---	4	2	12	---	---	15
Passenger car doors.....	---	---	---	---	---	---	---	1	---	---	1
Stumbling, slipping, falling, caught...	---	1	7	4	---	12	9	6	16	2	41
Flying or falling objects, burns.....	---	---	---	---	---	---	1	1	2	3	10
Operation of on-track work equipment...	---	1	1	---	---	2	2	2	6	2	16
Assault.....	---	---	---	---	---	---	4	---	---	---	10
Other occurrences.....	---	3	---	---	---	3	9	13	3	---	48
Total.....	19	21	130	30	1	201	145	86	226	34	863
<b>NONTRAIN INCIDENTS</b>											
Coupling and uncoupling locomotives....	1	1	---	---	---	2	9	16	13	5	47
Coupling/uncoupling air/steam hose.....	---	---	---	---	---	---	2	5	1	---	14
Operating or on locomotives.....	---	---	---	1	---	1	3	15	4	5	34
Operating rail motorcars.....	---	---	---	---	---	---	1	---	2	---	5
Operating hand brakes.....	1	---	---	---	---	1	5	15	4	2	33
Operating switches or derails.....	---	---	---	---	---	---	10	21	7	19	66
Contacting fixed objects while on.....	---	---	---	---	---	---	---	---	1	---	1
Getting on or off cars or locomotives..	---	---	---	---	---	---	21	9	67	5	127
Collisions, derailments, etc.....	---	---	---	---	---	---	---	---	---	---	---
Rail-highway crossing.....	---	---	1	---	---	1	3	---	4	---	9
Struck by/ran into loco/car.....	---	---	---	---	---	---	---	---	5	1	7
Servicing or maintenance of equipment..	---	20	1	1	---	22	82	311	106	111	698
Maintenance of way and structures.....	1	33	---	---	---	34	130	445	238	176	1,115
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	4	3	2	10
Windows, doors, etc., on on-track.....	---	6	---	---	---	6	10	59	2	5	77
Passenger car doors.....	---	---	---	---	---	---	1	2	---	---	3
Stumbling, slipping, falling, caught...	1	1	1	---	---	3	103	20	128	19	346
Flying or falling objects, burns.....	---	---	---	---	---	---	---	7	2	10	23
Operation of on-track work equipment...	---	1	---	---	---	1	4	1	2	1	10
Assault.....	---	---	---	---	---	---	3	6	1	1	19
Other occurrences.....	---	2	1	---	---	3	26	40	23	9	153
Total.....	4	64	4	2	---	74	413	976	613	373	2,797
Grand Total.....	23	85	135	32	1	276	562	1,065	854	407	3,709

TABLE S23. (CONTINUED)

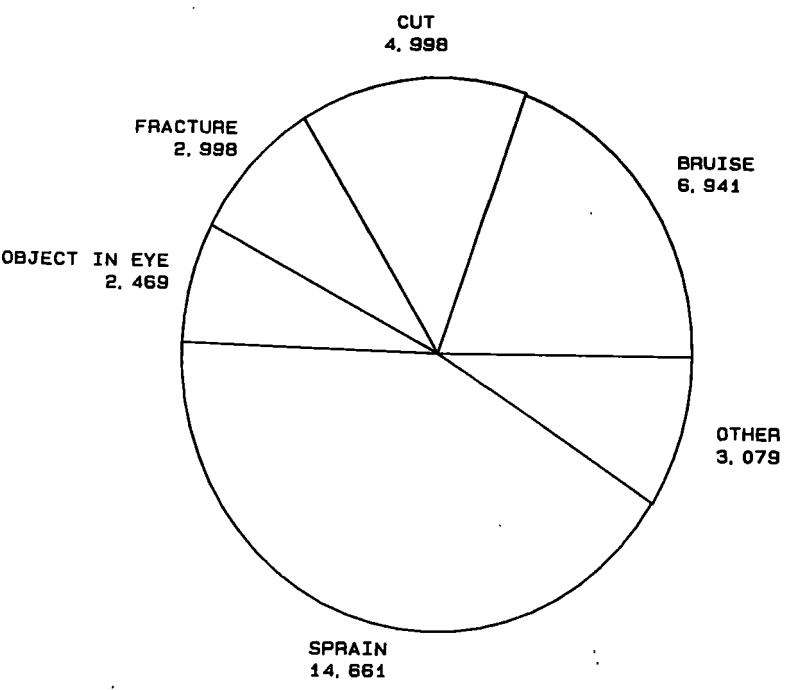
Type of Accident/Incident	.....Other Injuries.....							Total Injured		
	Sprain/ Bruise	Strain	Cut	Elec. Burn	Other Burns	Disloc- Cation	Object In Eye		Other	
<b>TRAIN ACCIDENTS</b>										
Collisions.....	31	44	12	---	---	---	---	8	95	105
Derailments.....	74	70	17	---	1	---	2	12	176	195
Rail-highway x-ing.....	28	22	19	---	1	1	1	20	92	111
Miscellaneous.....	17	15	---	---	---	---	---	8	40	42
Total.....	150	151	48	---	2	1	3	48	403	453
<b>TRAIN INCIDENTS</b>										
Coupling and uncoupling locomotives....	72	138	25	---	---	2	13	7	257	287
Coupling/uncoupling air/steam hose.....	19	11	8	---	---	---	---	---	38	45
Operating or on locomotives.....	114	128	53	2	6	2	267	28	600	624
Operating rail motorcars.....	14	10	8	---	---	1	10	2	36	41
Operating hand brakes.....	28	55	14	---	---	2	---	3	102	122
Operating switches or derails.....	7	12	3	---	---	---	3	1	26	28
Contacting fixed objects while on.....	58	13	15	1	---	---	1	1	89	104
Getting on or off cars or locomotives..	264	667	96	1	---	12	---	21	1,061	1,231
Collisions, derailments, etc.....	61	83	12	---	---	3	1	5	165	183
Rail-highway crossing.....	659	196	683	1	4	8	3	523	2,077	2,432
Struck by/ran into loco/car.....	61	21	82	---	---	3	---	54	221	429
Servicing or maintenance of equipment..	29	57	24	1	---	1	1	5	118	139
Maintenance of way and structures.....	57	29	34	---	---	3	2	5	130	155
Freight, baggage, express or mail.....	10	5	2	---	---	---	2	1	20	22
Windows, doors, etc., on on-track.....	51	47	35	---	---	---	---	5	138	157
Passenger car doors.....	5	---	4	---	---	---	---	---	9	10
Stumbling, slipping, falling, caught...	80	159	34	1	1	2	2	8	287	340
Flying or falling objects, burns.....	34	7	118	3	34	---	408	21	625	635
Operation of on-track work equipment...	57	47	15	---	---	3	2	4	128	146
Assault.....	32	8	56	---	---	---	17	13	126	136
Other occurrences.....	225	265	87	---	6	6	5	28	622	673
Total.....	1,937	1,958	1,408	10	51	48	728	735	6,875	7,939
<b>NONTRAIN INCIDENTS</b>										
Coupling and uncoupling locomotives....	122	464	51	---	1	5	9	23	675	724
Coupling/uncoupling air/steam hose.....	112	97	56	---	1	1	19	7	293	307
Operating or on locomotives.....	86	128	45	2	17	2	70	22	372	407
Operating rail motorcars.....	8	75	7	---	---	---	2	1	93	98
Operating hand brakes.....	98	342	33	---	1	6	2	7	489	523
Operating switches or derails.....	164	1,067	24	---	1	9	7	52	1,324	1,390
Contacting fixed objects while on.....	4	5	2	---	---	---	---	---	11	12
Getting on or off cars or locomotives..	363	808	99	---	2	12	---	28	1,312	1,439
Collisions, derailments, etc.....	---	---	---	---	---	---	---	---	---	---
Rail-highway crossing.....	16	8	46	---	---	---	---	10	80	90
Struck by/ran into loco/car.....	6	2	9	---	---	---	---	---	17	24
Servicing or maintenance of equipment..	1,435	2,808	1,352	93	351	31	670	360	7,100	7,820
Maintenance of way and structures.....	1,982	4,462	1,961	37	211	61	609	618	9,941	11,090
Freight, baggage, express or mail.....	31	116	15	---	---	1	3	8	174	184
Windows, doors, etc., on on-track.....	155	169	146	---	---	1	5	21	497	580
Passenger car doors.....	4	4	7	---	---	---	---	---	15	18
Stumbling, slipping, falling, caught...	750	1,576	239	1	2	24	1	62	2,655	3,004
Flying or falling objects, burns.....	58	17	97	25	50	---	332	44	623	646
Operation of on-track work equipment...	23	80	33	---	2	1	1	5	145	156
Assault.....	82	40	52	---	3	2	8	25	212	231
Other occurrences.....	383	789	318	---	10	17	28	547	2,092	2,248
Total.....	5,882	13,057	4,592	158	652	173	1,766	1,840	28,120	30,991
Grand Total.....	7,969	15,166	6,048	168	705	222	2,497	2,623	35,398	39,383

TABLE S24. NATURE OF INJURIES BY TYPE OF PERSON

Type Person	Amputations					Fractures						
	Arm/ Hand Finger	Leg/ Foot	Toe	Other Part	Total	Arm/ Hand Finger	Leg/ Foot	Toe	Other Part	Total		
<b>EMPLOYEES ON DUTY</b>												
<b>YARD SERVICE:</b>												
Engineers and Motormen	---	1	---	---	1	7	8	6	2	6	29	
Firemen and Helpers	---	---	---	---	---	1	1	1	1	3	7	
Conductors and Foremen	---	1	1	---	2	3	15	12	6	16	52	
Brakemen and Helpers	---	3	5	1	9	40	43	59	22	47	211	
Total.....	---	4	6	2	12	51	67	78	31	72	299	
<b>FREIGHT SERVICE:</b>												
Engineers and Motormen	---	1	---	1	2	8	14	12	1	17	52	
Firemen and Helpers	---	2	---	---	2	4	1	---	2	3	10	
Conductors and Foremen	1	---	1	---	2	18	18	28	10	35	109	
Brakemen and Helpers	2	2	11	3	19	46	53	39	22	46	206	
Total.....	3	5	12	4	25	76	86	79	35	101	377	
<b>PASSENGER SERVICE:</b>												
Engineers and Motormen	---	---	---	---	---	3	3	4	2	1	13	
Firemen and Helpers	---	---	---	---	---	2	2	---	---	2	4	
Conductors and Foremen	---	---	---	---	---	3	13	5	2	2	25	
Baggagemen	---	---	---	---	---	---	2	---	---	1	3	
Brakemen and Helpers	---	---	---	---	---	4	7	2	---	3	16	
Total.....	---	---	---	---	---	10	27	11	4	9	61	
<b>HOSTLERS</b>												
Hostlers	---	---	---	---	---	2	4	4	2	1	13	
<b>--SUMMARY--</b>												
Total employees on duty	4	75	26	12	1	118	439	1,041	624	389	505	2,998
Employees not on duty	---	---	---	---	---	23	4	28	8	24	87	
Passengers	1	1	2	1	---	5	10	8	26	3	17	64
Nontravellers	1	2	7	2	---	12	69	7	120	5	210	411
Trespassers	17	7	100	17	---	141	21	5	56	2	65	149
Grand total	23	85	135	32	1	276	562	1,065	854	407	821	3,709

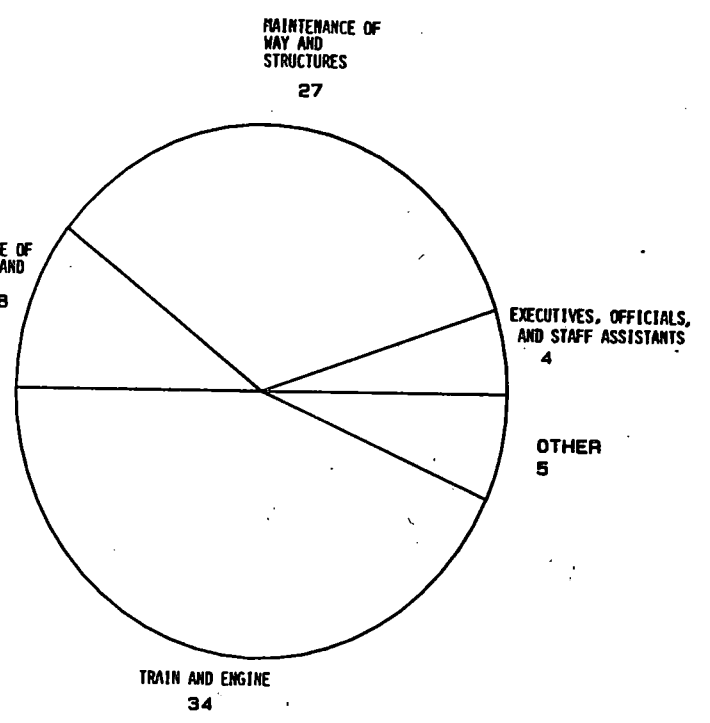
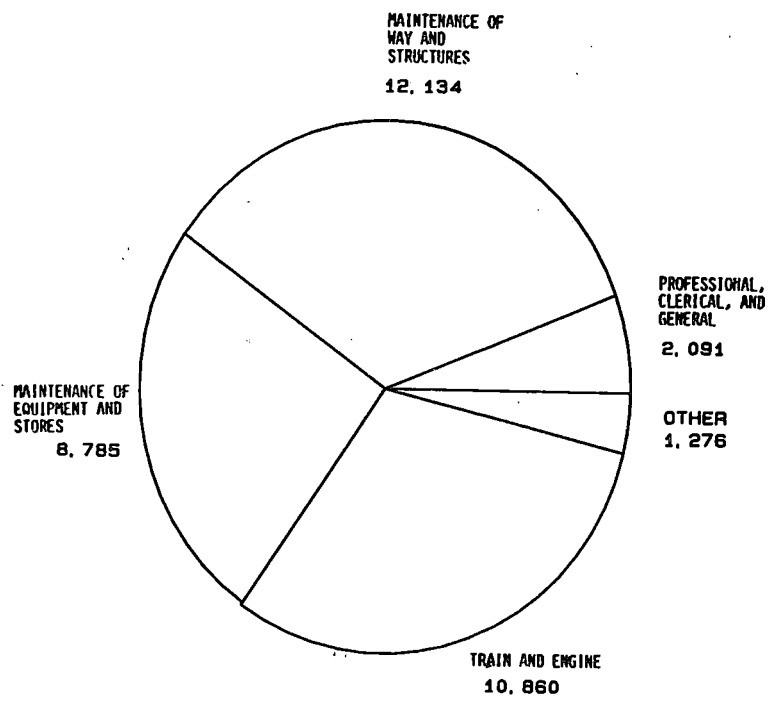
Type Person	Other Injuries							Total Injured		
	Bruise	Sprain/ Strain	Cut	Elec. Burn	Other Disloc- Cation	Object In Eye	Other			
<b>EMPLOYEES ON DUTY</b>										
<b>YARD SERVICE:</b>										
Engineers and Motormen	91	183	49	---	8	1	77	21	430	460
Firemen and Helpers	21	48	11	1	---	1	11	5	98	105
Conductors and Foremen	188	459	88	---	5	4	67	56	867	921
Brakemen and Helpers	754	1,797	291	1	23	21	293	126	3,306	3,526
Total.....	1,054	2,487	439	2	36	27	448	208	4,701	5,012
<b>FREIGHT SERVICE:</b>										
Engineers and Motormen	139	247	69	2	7	2	130	28	624	678
Firemen and Helpers	41	76	35	---	6	---	38	12	208	220
Conductors and Foremen	285	510	113	---	3	9	71	46	1,037	1,148
Brakemen and Helpers	605	1,491	289	---	20	25	251	116	2,797	3,022
Total.....	1,070	2,324	506	2	36	36	490	202	4,666	5,068
<b>PASSENGER SERVICE:</b>										
Engineers and Motormen	33	44	17	1	2	---	18	8	123	136
Firemen and Helpers	15	12	5	1	2	---	6	3	44	48
Conductors and Foremen	109	174	32	1	---	1	48	19	384	409
Baggagemen	6	9	4	1	---	---	2	---	22	25
Brakemen and Helpers	37	61	19	---	2	2	14	11	146	162
Total.....	200	300	77	4	6	3	88	41	719	780
<b>HOSTLERS</b>										
Hostlers	34	88	14	---	1	---	17	10	164	177
<b>--SUMMARY--</b>										
Total employees on duty	6,941	14,661	4,998	145	684	198	2,469	1,934	32,030	35,146
Employees not on duty	116	185	55	1	7	6	12	34	416	503
Passengers	115	71	93	1	4	3	29	318	387	467
Nontravellers	717	231	746	5	8	12	14	520	2,253	2,676
Trespassers	80	18	156	16	2	3	106	381	671	877
Grand total	7,969	15,166	6,048	168	705	222	2,497	2,623	35,398	39,383

**EMPLOYEE CASUALTIES**



**FIGURE 30.  
INJURIES TO EMPLOYEES  
ON DUTY**

**FIGURE 31A.  
FATALITIES BY EMPLOYEE JOB CATEGORY**



**FIGURE 31B.  
INJURIES BY EMPLOYEE JOB CATEGORY**

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**TABLE S27. EMPLOYEE ON DUTY CASUALTIES BY TYPE OF CASUALTY**

Type/Location Of Casualty	Total Cases	Cases With Days Away From Work Or Days Of Restriction					Other Cases
		Total Cases	Lost Day Cases	Restricted Cases	Days Away From Work	Days Of Restriction	
<b>I N J U R I E S</b>							
Bruise - Contusion--Arm or hand.	1,226	814	503	311	5,366	2,484	412
Fingers.....	861	433	243	190	2,187	1,420	428
Leg or foot.	2,258	1,677	1,136	541	12,970	4,192	581
Toes.....	212	164	110	54	930	346	48
Torso.....	1,643	1,238	927	311	15,317	3,371	405
Other parts.	741	513	414	99	6,149	1,076	228
Sprain - Strain-- Arm or hand.	1,235	915	541	374	7,313	4,073	320
Fingers.....	234	158	101	57	1,243	546	76
Leg or foot.	3,513	2,988	2,080	908	33,495	10,533	525
Toes.....	22	17	14	3	113	36	5
Torso.....	8,791	6,884	5,019	1,865	85,041	21,069	1,907
Other parts.	866	655	498	157	8,377	1,789	211
Cut or Laceration-- Arm or hand.	908	325	189	136	2,002	1,095	583
Fingers.....	1,527	595	314	281	3,369	2,794	932
Leg or foot.	673	343	229	114	2,595	954	330
Toes.....	46	24	16	8	183	71	22
Head or Face	1,707	513	381	132	4,167	1,019	1,194
Torso.....	94	45	37	8	549	89	49
Other parts.	43	19	17	2	274	73	24
Electrical burn or shock.....	145	100	75	25	954	208	45
Other burns.....	684	350	239	111	2,325	966	334
Dislocation.....	198	164	120	44	3,104	767	34
Fracture-- Arm or hand.	439	364	257	107	8,221	3,293	75
Fingers.....	1,041	631	328	303	6,309	4,881	410
Leg or foot.	624	572	491	81	18,410	2,373	52
Toes.....	389	274	169	105	3,288	1,498	115
Head or Face	118	90	76	14	1,786	274	28
Torso.....	340	273	234	39	8,566	939	67
Other parts.	47	36	23	13	1,054	249	11
Amputation-- Arm or hand.	4	3	3	---	665	---	1
Fingers.....	75	63	49	14	1,650	347	12
Leg or foot.	26	25	25	---	5,182	---	1
Toes.....	12	11	11	---	796	10	1
Other parts.	1	1	1	---	19	---	---
Dust or other object in eye.....	2,469	943	584	359	2,428	997	1,526
Hernia.....	240	230	212	18	7,682	657	10
Concussion.....	103	91	84	7	1,980	61	12
Nervous shock.....	17	14	13	1	142	29	3
Internal injuries.....	42	39	38	1	1,520	65	3
Loss of eye.....	3	3	3	---	95	---	---
Puncture type wound.....	514	219	142	77	1,437	654	295
Dental related injuries.....	131	22	18	4	151	61	109
Skin reaction (one-time exposure	108	35	27	8	114	18	73
Not otherwise classified.....	776	339	229	110	2,906	905	437
Total nonfatal injuries.....	35,146	23,212	16,220	6,992	272,424	76,282	11,934

**I L L N E S S E S**

Skin diseases or disorders.....	372	197	172	25	1,145	179	175
Dust diseases of the lungs.....	4	4	2	2	18	13	---
Respiratory conditions.....	210	125	118	7	845	34	85
Poisoning.....	26	19	18	1	89	17	7
Disorders due to physical agents	191	113	86	27	668	152	78
Disorders due to repeated trauma	27	16	14	2	217	16	11
All other occupational illnesses	56	42	39	3	168	29	14
Total nonfatal illnesses.....	886	516	449	67	3,150	440	370

**-----F A T A L I T I E S-----**

Fatal injuries.....	78
Fatal illnesses.....	---
Total fatalities..	78

**TABLE S25. EMPLOYEE ON DUTY CASUALTIES BY JOB CATEGORY**

Job Description	.....All Railroads.....			.....Class I Railroads.....			Total	Rate*	Manhours
	Killed	Injured	Illness	Killed	Injured	Illness			
<b>EXECUTIVES, OFFICIALS, AND STAFF ASSISTANTS</b>									
Executive, General Officers, and Assistants.....	---	8	1	---	4	---	4	.07	11,803,233
Division Officers, Assistants, and Staff Assistant Total.....	4	101	1	4	94	---	98	.81	24,249,980
	4	109	1	4	98	---	102	.57	36,053,213
<b>PROFESSIONAL, CLERICAL, AND GENERAL</b>									
Professional and Subprofessional Assistants.....	---	59	2	---	56	2	58	.59	19,647,613
Supervisory or Chief Clerks (Major Departments)...	---	29	1	---	28	1	29	1.42	4,083,021
Chief Clerks (Minor Departments) and Assistants...	---	31	---	---	28	---	28	.43	12,970,341
Clerks and Clerical Specialists.....	---	74	---	---	67	---	67	1.17	11,467,930
Clerks.....	2	714	15	2	660	14	676	2.07	65,326,768
Mechanical Device Operators (Office).....	---	17	---	---	17	---	17	.63	5,379,287
Stenographers and Secretaries.....	---	19	---	---	17	---	17	.70	4,833,708
Stenographers and Typists.....	---	10	---	---	9	---	9	.27	6,561,615
Storekeepers, Sales Agents, and Buyers.....	---	34	---	---	28	---	28	2.10	2,661,544
Ticket Agents and Assistant Ticket Agents.....	---	58	1	---	57	1	58	81.29	142,699
Traveling Auditors or Accountants.....	---	2	---	---	2	---	2	.47	853,988
Telephone Switchboard Operators and Office Assist. Messengers and Office Boys.....	---	4	---	---	4	---	4	.93	857,420
Elevator Operators and Other Office Attendants....	---	18	---	---	15	---	15	4.24	707,540
Lieutenants and Sergeants of Police.....	---	5	---	---	5	---	5	8.27	120,923
Patrolmen and Watchmen.....	---	61	1	---	59	1	60	5.23	2,295,989
Traffic and Various Other Agents, Inspectors, Etc. Claim Agents or Investigators.....	---	304	8	---	287	8	295	13.65	4,321,514
Freight Claim Agents or Investigators.....	---	18	---	---	16	---	16	.46	7,018,944
Chief Claim Agents or Investigators.....	---	15	---	---	12	---	12	1.94	1,238,174
Miscellaneous Trade Workers (Other Than Plumbers). Motor Vehicle and Motor Car Operators.....	---	8	---	---	7	---	7	2.45	570,997
Teamsters and Stablemen.....	---	1	---	---	1	---	1	.60	333,556
Janitors and Cleaners.....	---	129	1	---	54	1	55	73.49	149,688
Total.....	368	7	---	354	6	360	8.24	8,736,004	
	1	---	---	1	---	1	.56	354,992	
	1	112	3	1	106	3	110	8.17	2,691,756
Total.....	3	2,091	39	3	1,890	37	1,930	2.36	163,326,011
<b>MAINTENANCE OF WAY AND STRUCTURES</b>									
Roadmasters, General Foreman, and Assistants.....	1	120	---	1	106	---	107	3.34	6,402,438
Maintenance of Way and Scale Inspectors.....	---	79	---	---	79	---	79	5.93	2,662,616
Bridge and Building Gang Foremen (Skilled Labor)..	2	141	7	2	134	7	143	8.36	3,420,574
Bridge and Building Carpenters.....	1	701	24	1	652	24	677	19.44	6,965,073
Bridge and Building Ironworkers.....	---	151	2	---	130	2	132	34.26	770,470
Bridge and Building Painters.....	---	57	3	---	30	3	33	15.30	431,240
Masons, Bricklayers, Plasterers, and Plumbers....	---	402	20	---	388	20	408	14.45	5,648,532
Maintenance of Way/Structure Helpers & Assistants. Portable Steam Equipment Operators.....	1	433	6	1	396	5	402	18.79	4,278,335
Portable Steam Equipment Operator Helpers.....	3	1,053	21	2	1,027	20	1,049	9.63	21,792,907
Pumping Equipment Operators.....	---	23	1	---	20	1	21	11.79	356,245
Gang Foremen (Extra Gang and Work-Train Laborers). Gang Foremen (Bridge and Building, Signal etc)....	---	6	---	---	5	---	5	16.27	61,479
Gang or Section Foremen.....	---	191	3	---	186	3	189	5.94	6,361,194
	---	30	2	---	27	2	29	142.15	40,801
	3	774	12	3	697	12	712	10.33	13,782,345
Extra Gang Men.....	2	2,134	63	2	2,056	61	2,119	26.42	16,042,254
Section Men.....	6	4,317	150	5	3,639	145	3,789	23.04	32,892,748
Maintenance of Way Laborers (Other Than Track/Rdwy General & Ass't Gen Foremen/Inspectors (Signal, Et Gang Foremen (Signal and Telegraph Skilled Trades) Signalmen and Signal Maintainers.....	1	181	4	1	164	4	169	114.46	295,296
Linemen and Groundmen.....	---	49	7	---	49	7	57	3.24	3,521,825
Assistant Signalmen and Assistant Signal Maint....	---	56	6	---	55	6	61	4.01	3,038,873
Signalmen and Signal Maintainer Helpers.....	1	720	27	1	668	25	694	9.67	14,354,874
Total.....	4	246	23	4	243	23	270	12.84	4,204,048
	1	213	18	1	202	18	221	18.61	2,375,026
	---	57	6	---	52	6	58	55.37	209,488
Total.....	27	12,134	405	25	11,005	394	11,424	15.24	149,908,681
<b>MAINTENANCE OF EQUIPMENT AND STORES</b>									
General, Assistant General, and Department Foremen General and Assistant General Foremen (Stores)....	---	113	1	---	96	1	97	1.93	10,070,499
Equipment, Shop, Elec, Material, & Supplies Insptr Gang Foremen and Gang Leaders (Skilled Labor)....	---	13	---	---	10	---	10	7.51	266,218
Blacksmiths.....	---	87	2	---	78	2	80	23.48	681,366
Boilermakers.....	1	155	3	1	141	3	145	2.90	10,001,614
Carmen (A and B).....	---	60	---	---	59	---	59	8.65	1,364,124
Carmen (C and D).....	---	173	5	---	167	4	171	15.09	2,266,809
Electrical Workers (A).....	2	1,928	34	2	1,763	33	1,798	26.45	13,595,145
Electrical Workers (B).....	3	1,677	28	3	1,564	27	1,594	8.79	36,281,964
Electrical Workers (C).....	1	871	26	1	826	26	853	9.29	18,360,238
Machinists.....	---	28	---	---	26	---	26	4.29	1,212,021
Molders.....	---	3	---	---	2	---	2	1.36	294,183
Sheet-Metal Workers.....	---	1,676	40	---	1,566	38	1,604	11.96	26,817,059
Skilled Trades Helpers (M of E and Stores).....	---	15	---	---	4	---	4	63.09	12,680
Helper Apprentices (M of E and Stores).....	---	348	13	---	340	12	352	9.50	7,409,420
Regular Apprentices (M of E and Stores).....	---	177	2	---	158	2	160	12.83	2,494,742
Coach Cleaners.....	---	18	1	---	10	---	10	9.16	218,279
Gang Foremen (Shops, Engine Houses, & Power Plants Gang Foremen (Stores and Ice, Reclamation, Etc)....	---	126	2	---	123	2	125	13.12	1,905,453
Classified Laborers (Shops, Engine Houses, Etc)....	---	209	16	---	199	15	214	12.77	3,351,497
General Laborers (Shop, Engine Houses, Etc).....	---	35	---	---	32	---	32	12.75	502,139
General Laborers (Stores and Ice, Reclamation, Etc Stationary Engineers (Steam).....	---	12	---	---	12	---	12	4.29	558,994
Stationary Firemen, Oilers, Coal Passers, and Etc. Total.....	---	314	7	---	276	7	283	9.72	5,823,453
	1	496	11	1	448	10	459	16.85	5,449,602
	---	234	5	---	225	4	229	14.06	3,258,529
	---	10	---	---	8	---	8	3.60	444,513
	---	7	1	---	5	1	6	4.40	272,470
Total.....	8	8,785	197	8	8,138	187	8,333	10.90	152,913,011

NOTE: Manhours for Class I railroads were obtained from the Interstate Commerce Commission.

\*Rate" is the frequency per 200,000 manhours.

TABLE S25. (CONTINUED)

Job Description	.....All Railroads.....			.....Class I Railroads.....			Total	Rate*	MANHOURS
	Killed	Injured	Illness	Killed	Injured	Illness			
TRANSPORTATION (NOT TRAIN, ENGINE, AND YARD)									
Chief Train Dispatchers.....	---	3	---	---	3	---	3	.32	1,896,518
Train Dispatchers.....	---	7	---	---	7	---	7	.32	4,376,159
Train Directors.....	---	3	---	---	3	---	3	1.88	318,789
Station Agents (Supervisory, Major Stations).....	---	6	---	---	6	---	6	.52	2,288,290
Station Agents (Smaller Stations, Nontelegraphers)	---	17	1	---	15	1	16	1.36	2,351,788
Station Agents (Telegraphers and Telephoners).....	---	16	---	---	12	---	12	.60	3,994,160
Chief Telegraphers and Telephoners or Wire Chiefs.	---	3	---	---	3	---	3	.56	1,071,973
Clerk-Foremen (Freight Stations, Warehouses, Etc.)	---	47	---	---	45	---	45	1.81	4,984,121
Telegraphers, Telephoners, and Towermen.....	---	70	2	---	67	2	69	1.68	8,225,071
Stationmasters and Assistants.....	---	5	---	---	4	---	4	5.01	159,775
Supervising Baggage Agents.....	---	1	---	---	1	---	1	8.28	24,148
Baggage Agents and Assistants.....	---	21	---	---	20	---	20	129.47	30,895
Baggage, Parcel Room, and Station Attendants.....	---	45	---	---	45	---	45	5.50	1,635,098
General Foremen (Freight Stations, Warehouses, Etc)	---	3	---	---	3	---	3	4.66	128,654
Asst. General Foreman (Frt Stations, Warehouses)..	---	3	---	---	2	---	2	4.57	87,559
Gang Foremen (Freight Station, Warehouse, Etc)....	---	7	---	---	5	---	5	4.02	248,512
Callers, Loaders, Sealers, Scalers, Etc.....	---	15	---	---	14	---	14	9.18	305,082
Truckers (Stations, Warehouses, and Platforms)....	---	27	---	---	25	---	25	18.85	265,245
Laborers (Coal and Ore Docks and Grain Elevators..	---	54	---	---	44	---	44	8.33	1,056,577
Common Laborers (Stations, Warehouses, Platforms).	1	128	2	1	80	2	83	36.45	455,420
Stewards, Restaurant & Lodging-House Managers, Etc	---	38	1	---	38	1	39	66.29	117,670
Chefs and Cooks (Restaurants or Dining Cars).....	---	20	1	---	20	1	21	7.35	571,198
Waiters, Camp Cooks, Kitchen Helpers, Etc.....	---	70	---	---	70	---	70	4.05	3,458,283
Officers, Workers, Att'ants on Barges, Launches...	---	18	---	---	13	---	13	5.93	438,256
Transportation and Dining-Service Inspectors.....	---	2	---	---	2	---	2	1.32	303,329
Train Attendants.....	---	175	1	---	175	1	176	48.49	725,902
Bridge Operators and Helpers.....	---	18	---	---	11	---	11	1.93	1,142,514
Crossing and Bridge Flagmen and Gatemen.....	---	8	---	---	8	---	8	2.70	592,280
TOTAL.....	1	830	8	1	741	8	750	3.64	41,253,266
TRANSPORTATION (YARDMASTERS, SWITCHTENDERS, HOSTLERS)									
Yardmasters.....	---	52	3	---	48	3	51	1.48	6,908,583
Assistant Yardmasters.....	---	3	---	---	---	---	---	.00	186,322
Switch Tenders.....	1	58	---	1	54	---	55	30.17	364,626
Outside Hostlers.....	---	149	1	---	143	1	144	9.24	3,117,616
Inside Hostlers.....	---	28	---	---	23	---	23	3.22	1,428,437
Outside Hostlers Helpers.....	---	47	---	---	42	---	42	7.68	1,093,900
TOTAL.....	1	337	4	1	310	4	315	4.81	13,099,484
TRANSPORTATION (TRAIN AND ENGINE)									
Road Passenger Conductors.....	---	214	9	---	199	9	208	14.00	2,972,398
Assist Road Passenger Conductors & Ticket Collecto	---	195	9	---	191	9	200	11.24	3,560,166
Road Freight Conductors (Through Freight).....	2	618	14	2	597	13	612	8.98	13,630,614
Road Freight Conductors (Local and Way Freight)...	---	530	9	---	483	8	491	9.00	10,908,198
Road Passenger Baggage-men.....	---	25	---	---	25	---	25	15.25	327,915
Road Passenger Brakemen and Flagmen.....	---	162	2	---	154	2	156	35.40	881,365
Road Freight Brakemen and Flagmen (Through Freight	5	1,535	29	5	1,504	29	1,538	11.88	25,882,680
Road Freight Brakemen and Flagmen (Local & Way Frg	7	1,487	17	7	1,368	16	1,391	13.90	20,013,102
Yard Conductors and Yard Foremen.....	5	921	9	4	781	8	793	8.68	18,275,296
Yard Brakemen and Yard Helpers.....	8	3,526	43	6	3,031	39	3,076	19.44	31,644,876
Road Passenger Engineers and Motormen.....	1	136	14	1	130	14	145	9.81	2,957,617
Road Freight Engineers and Motormen (Through Frght	2	398	25	2	383	24	409	5.63	14,519,199
Road Freight Engineers & Motormen (Local & Way Frg	3	280	13	3	256	13	272	5.08	10,700,989
Yard Engineers and Motormen.....	1	460	19	1	398	18	417	4.91	16,974,855
Road Passenger Firemen and Helpers.....	---	48	4	---	48	4	52	9.13	1,138,514
Road Freight Firemen and Helpers (Through Freight)	---	139	8	---	135	8	143	4.82	5,927,976
Road Freight Firemen & Helpers (Local & Way Frght)	---	81	2	---	76	2	78	4.28	3,648,423
Yard Firemen and Helpers.....	---	105	6	---	92	6	98	4.39	4,465,675
TOTAL.....	34	10,860	232	31	9,851	222	10,104	10.72	188,429,858
GRAND TOTAL									
TOTAL.....	78	35,146	886	73	32,033	852	32,958	8.85	744,983,524

NOTE: Manhours for Class I railroads were obtained from the Interstate Commerce Commission.

\*Rate is the frequency per 200,000 manhours.

**TABLE S20. EMPLOYEE ON DUTY FATALITIES BY JOB CATEGORY**

Type accident/incident	I	II	III	IV	V	VI	VII	Total
<b>TRAIN ACCIDENTS</b>								
Collisions.....	---	---	---	---	---	---	4	4
Derailments.....	---	---	1	---	---	---	4	5
Rail-highway x-ing.....	---	---	1	---	---	---	2	3
Miscellaneous.....	---	---	---	---	---	---	---	---
Total.....	---	---	2	---	---	---	10	12
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	1	---	---	---	---	---	3	4
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	2	2
Operating switches or derails.....	---	---	1	---	---	---	1	2
Contacting fixed objects while on locos or cars....	---	---	---	---	---	---	1	1
Getting on or off cars or locomotives.....	---	---	---	---	---	---	3	3
Collisions, derailments, etc. (<= \$3,701).....	---	---	1	---	---	---	1	2
Rail-highway crossing accidents/incidents.....	---	---	---	---	---	---	1	1
Struck by/ran into loco/car(not at rr-hwy x-ing)...	---	1	5	---	---	1	5	12
Servicing or maintenance of equipment.....	---	---	---	---	---	---	---	---
Maintenance of way and structures.....	---	---	1	---	---	---	---	1
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	1	1
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	---	---	---	---	---
Operation of on-track work equipment.....	---	---	2	---	---	---	---	2
Assault.....	---	---	---	---	---	---	---	---
Other occurrences.....	---	---	1	---	---	---	4	5
Total.....	1	1	11	---	---	1	22	36
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	---	---
Operating switches or derails.....	---	---	---	---	---	---	---	---
Contacting fixed objects while on locos or cars....	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	---	---
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	---	---	---	---
Struck by/ran into loco/car(not at rr-hwy x-ing)...	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	---	1	4	---	---	---	5
Maintenance of way and structures.....	---	---	3	---	---	---	---	3
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	1	3	---	---	---	---	4
Flying or falling objects, burns, etc., N.O.C.....	---	---	2	---	---	---	---	2
Operation of on-track work equipment.....	---	---	---	---	---	---	---	---
Assault.....	---	---	1	2	---	---	---	3
Other occurrences.....	3	1	4	2	1	---	2	13
Total.....	3	2	14	8	1	---	2	30
Grand total.....	4	3	27	8	1	1	34	78

NOTE: I = Executives, officials, and staff assistants  
 II = Professional, clerical, and general  
 III = Maintenance of way and structures  
 IV = Maintenance of equipment and stores  
 V = Transportation (other than train, engine, and yard)  
 VI = Transportation (yardmasters, switchtenders, hostlers)  
 VII = Transportation (train and engine)

**TABLE S21. EMPLOYEE ON DUTY INJURIES BY JOB CATEGORY**

Type accident/incident	I	II	III	IV	V	VI	VII	Total
<b>TRAIN ACCIDENTS</b>								
Collisions.....	1	---	6	---	4	---	90	101
Derailments.....	---	1	2	1	24	1	132	161
Rail-highway x-ing.....	---	1	5	---	9	---	40	55
Miscellaneous.....	---	---	4	---	7	---	25	36
Total.....	1	2	17	1	44	1	287	353
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	4	2	3	---	4	273	286
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	1	44	45
Operating or on locomotives.....	2	2	1	4	---	10	603	622
Operating rail motorcars.....	---	---	34	2	---	---	5	41
Operating hand brakes.....	---	---	2	2	---	2	116	122
Operating switches or derails.....	---	---	---	---	---	---	28	28
Contacting fixed objects while on locos or cars....	---	1	---	1	1	3	95	101
Getting on or off cars or locomotives.....	5	13	5	8	3	12	1,098	1,144
Collisions, derailments, etc. (<= \$3,701).....	---	---	19	3	---	1	145	168
Rail-highway crossing accidents/incidents.....	---	---	12	3	1	---	49	65
Struck by/ran into loco/car(not at rr-hwy x-ing)...	2	1	11	3	---	---	41	58
Servicing or maintenance of equipment.....	---	1	11	116	8	1	1	138
Maintenance of way and structures.....	---	2	144	3	4	---	2	155
Freight, baggage, express or mail.....	---	---	---	1	8	---	9	18
Windows, doors, etc., on on-track equipment.....	---	---	6	1	12	1	120	140
Passenger car doors.....	---	1	---	1	2	---	3	7
Stumbling, slipping, falling, caught, N.O.C.....	---	2	3	7	19	2	259	292
Flying or falling objects, burns, etc., N.O.C.....	2	6	9	4	17	9	573	620
Operation of on-track work equipment.....	1	3	130	3	---	---	9	146
Assault.....	---	1	---	---	---	---	127	128
Other occurrences.....	---	7	6	10	25	1	594	643
Total.....	12	44	395	175	100	47	4,194	4,967
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	2	2	34	---	15	670	723
Coupling/uncoupling air/steam hose, safety chains...	2	---	1	47	---	6	251	307
Operating or on locomotives.....	---	1	5	42	---	20	338	406
Operating rail motorcars.....	---	4	89	3	1	---	1	98
Operating hand brakes.....	---	1	1	24	---	16	481	523
Operating switches or derails.....	2	4	33	30	13	39	1,269	1,390
Contacting fixed objects while on locos or cars....	1	---	3	---	1	---	7	12
Getting on or off cars or locomotives.....	2	56	33	186	15	39	986	1,317
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	3	---	---	---	---	3
Struck by/ran into loco/car(not at rr-hwy x-ing)...	---	---	1	2	---	---	12	15
Servicing or maintenance of equipment.....	16	167	386	6,973	94	46	56	7,738
Maintenance of way and structures.....	29	377	10,023	464	65	5	23	10,986
Freight, baggage, express or mail.....	---	56	4	10	90	2	15	177
Windows, doors, etc., on on-track equipment.....	2	41	47	179	42	10	231	552
Passenger car doors.....	---	---	---	3	2	---	6	11
Stumbling, slipping, falling, caught, N.O.C.....	17	473	316	290	159	54	1,189	2,498
Flying or falling objects, burns, etc., N.O.C.....	4	82	65	38	64	12	334	599
Operation of on-track work equipment.....	---	5	139	9	1	---	2	156
Assault.....	1	101	25	21	8	2	49	207
Other occurrences.....	20	675	546	254	131	23	459	2,108
Total.....	96	2,045	11,722	8,609	686	289	6,379	29,826
Grand total.....	109	2,091	12,134	8,785	830	337	10,860	35,146

NOTE: I = Executives, officials, and staff assistants  
 II = Professional, clerical, and general  
 III = Maintenance of way and structures  
 IV = Maintenance of equipment and stores  
 V = Transportation (other than train, engine, and yard)  
 VI = Transportation (yardmasters, switchtenders, hostlers)  
 VII = Transportation (train and engine)

**TABLE S21A. LOST WORKDAYS RESULTING FROM NONFATAL INJURIES TO EMPLOYEES ON DUTY**

Type of Occurrence	Total Cases	Cases With Days Away From Work Or Days Of Restriction				Other Cases	
		Total Cases	Lost Day Cases	Restricted Cases	Days Away From Work		Days Of Restriction
<b>TRAIN ACCIDENTS</b>							
Collisions.....	101	89	81	8	2,453	85	12
Derailments.....	161	148	136	12	3,430	250	13
Rail-highway x-ing.....	55	47	41	6	638	35	8
Miscellaneous.....	36	34	30	4	660	56	2
Total.....	353	318	288	30	7,181	426	35
<b>TRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	286	225	164	61	3,575	864	61
Coupling/uncoupling air/steam hose, safety chains...	45	38	25	13	825	182	7
Operating or on locomotives.....	622	387	262	125	3,895	980	235
Operating rail motorcars.....	41	28	24	4	269	93	13
Operating hand brakes.....	122	100	64	36	1,555	504	22
Operating switches or derails.....	28	24	16	8	461	82	4
Contacting fixed objects while on locos or cars....	101	82	65	17	1,908	351	19
Getting on or off cars or locomotives.....	1,144	950	679	271	12,867	3,313	194
Collisions, derailments, etc. (<= \$3,701).....	168	132	99	33	2,533	469	36
Rail-highway crossing accidents/incidents.....	65	57	45	12	844	178	8
Struck by/ran into loco/car(not at rr-hwy x-ing)...	58	52	47	5	1,816	106	6
Servicing or maintenance of equipment.....	138	99	75	24	1,957	312	39
Maintenance of way and structures.....	155	108	80	28	1,367	381	47
Freight, baggage, express or mail.....	18	14	10	4	182	77	4
Windows, doors, etc., on on-track equipment.....	140	118	97	21	1,648	278	22
Passenger car doors.....	7	5	4	1	31	11	2
Stumbling, slipping, falling, caught, N.O.C.....	292	257	198	59	5,378	763	35
Flying or falling objects, burns, etc., N.O.C.....	620	271	192	79	1,502	361	349
Operation of on-track work equipment.....	146	116	82	34	1,788	376	30
Assault.....	128	102	72	30	951	250	26
Other occurrences.....	643	475	362	113	6,418	1,545	168
Total.....	4,967	3,640	2,662	978	51,770	11,476	1,327
<b>NONTRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	723	577	395	182	7,004	1,894	146
Coupling/uncoupling air/steam hose, safety chains...	307	209	136	73	1,960	711	98
Operating or on locomotives.....	406	276	197	79	3,362	809	130
Operating rail motorcars.....	98	66	41	25	767	250	32
Operating hand brakes.....	523	398	270	128	5,028	1,447	125
Operating switches or derails.....	1,390	1,118	809	309	15,797	3,776	272
Contacting fixed objects while on locos or cars....	12	9	5	4	35	24	3
Getting on or off cars or locomotives.....	1,317	1,099	799	300	13,937	3,754	218
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	3	1	1	---	10	---	2
Struck by/ran into loco/car(not at rr-hwy x-ing)...	15	7	6	1	300	6	8
Servicing or maintenance of equipment.....	7,738	4,545	3,045	1,500	47,445	15,711	3,193
Maintenance of way and structures.....	10,986	6,649	4,192	2,457	61,825	24,876	4,337
Freight, baggage, express or mail.....	177	145	133	12	1,829	198	32
Windows, doors, etc., on on-track equipment.....	552	363	278	85	4,300	1,034	189
Passenger car doors.....	11	7	7	---	126	5	4
Stumbling, slipping, falling, caught, N.O.C.....	2,498	1,975	1,543	432	29,266	5,804	523
Flying or falling objects, burns, etc., N.O.C.....	599	303	227	76	1,957	333	296
Operation of on-track work equipment.....	156	106	64	42	1,333	444	50
Assault.....	207	172	157	15	2,029	151	35
Other occurrences.....	2,108	1,229	965	264	15,163	3,153	879
Total.....	29,826	19,254	13,270	5,984	213,473	64,380	10,572
Grand total.....	35,146	23,212	16,220	6,992	272,424	76,282	11,934

**TABLE S22. EMPLOYEE ON DUTY ILLNESSES BY JOB CATEGORY**

Type accident/incident	I	II	III	IV	V	VI	VII	Total
<b>TRAIN ACCIDENTS</b>								
Collisions.....	---	---	---	---	---	---	3	3
Derailments.....	---	---	---	---	---	---	5	5
Rail-highway x-ing.....	---	---	---	---	---	---	3	3
Miscellaneous.....	---	---	---	---	1	---	5	6
Total.....	---	---	---	---	1	---	16	17
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	1	1
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	---	---	33	33
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	1	---	---	---	1
Operating switches or derails.....	---	---	---	---	---	---	---	---
Contacting fixed objects while on locos or cars....	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	1	1
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	---	---	1	1
Struck by/ran into loco/car(not at rr-hwy x-ing)...	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	---	---	---	1	---	---	1
Maintenance of way and structures.....	---	---	---	---	---	---	---	---
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	1	1
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	---	---
Flying or falling objects, burns, etc., N.O.C.....	---	1	---	---	---	---	35	36
Operation of on-track work equipment.....	---	---	1	1	---	---	---	2
Assault.....	---	---	---	---	---	---	---	---
Other occurrences.....	---	---	---	---	---	---	7	7
Total.....	---	1	1	2	1	---	79	84
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	2	2
Coupling/uncoupling air/steam hose, safety chains...	---	---	---	---	---	---	1	1
Operating or on locomotives.....	---	---	---	---	---	---	49	49
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	2	2
Operating switches or derails.....	---	---	---	---	---	---	2	2
Contacting fixed objects while on locos or cars....	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	1	1
Collisions, derailments, etc. (<= \$3,701).....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	---	---	---	---
Struck by/ran into loco/car(not at rr-hwy x-ing)...	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	2	2	172	1	1	2	180
Maintenance of way and structures.....	---	3	177	7	---	---	1	188
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	1	---	---	---	---	3	4
Flying or falling objects, burns, etc., N.O.C.....	---	13	11	5	4	3	46	82
Operation of on-track work equipment.....	---	---	3	1	---	---	---	4
Assault.....	---	---	---	---	---	---	---	---
Other occurrences.....	1	19	211	10	1	---	28	270
Total.....	1	38	404	195	6	4	137	785
Grand total.....	1	39	405	197	8	4	232	886

NOTE: I = Executives, officials, and staff assistants  
 II = Professional, clerical, and general  
 III = Maintenance of way and structures  
 IV = Maintenance of equipment and stores  
 V = Transportation (other than train, engine, and yard)  
 VI = Transportation (yardmasters, switchtenders, hostlers)  
 VII = Transportation (train and engine)



**TABLE R15. SUMMARY OF NONFATAL EMPLOYEE ON DUTY INJURIES DUE TO ASSAULT, 1982**

Railroad	.....Struck By Thrown Or Otherwise..... Propelled Object While:				...Other Assaults...		Grand Total
	On Locomotive	On Caboose	On Cars	Not On Consist	On Consists	Not On Consists	
<b>CLASS I RAILROADS</b>							
Alabama Great Southern Railroad Co.....	---	---	---	---	---	---	---
Amtrak (National RR Passenger Corp).....	---	---	2	1	---	39	42
Atchison, Topeka And Santa Fe Rwy Co....	1	1	---	---	1	1	4
Baltimore And Ohio Railroad Co.....	4	1	1	3	1	2	12
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Boston And Maine Corporation.....	1	1	---	---	---	1	3
Burlington Northern Incorporated.....	1	3	---	---	---	3	7
Central Of Georgia Railroad Company.....	---	---	---	---	---	---	---
Chesapeake And Ohio Railway Company.....	2	---	---	---	---	3	5
Chicago And Northwestern.....	3	1	---	1	---	2	7
Chicago, Milw, St. Paul And Pacific.....	---	1	---	1	---	2	4
Cincinnati, New Orleans And TX Pac Co...	---	---	---	---	---	---	---
Clinchfield Railroad Company.....	---	---	---	---	---	---	---
Consolidated Rail Corporation.....	22	5	2	3	10	51	93
Delaware And Hudson Railway.....	1	---	---	---	---	---	1
Denver And Rio Grande Western RR Co....	---	---	---	1	---	3	4
Detroit, Toledo And Ironton RR Co.....	1	---	---	---	---	---	1
Duluth, Missabe And Iron Range Rwy Co...	---	---	---	---	---	---	---
Elgin, Joliet And Eastern Railway Co....	---	---	---	---	---	---	---
Florida East Coast Railway Co.....	---	---	---	1	1	1	3
Grand Truck Western Railroad Co.....	---	---	---	---	1	3	8
Illinois Central Gulf Railroad Co.....	1	2	---	---	---	---	---
Kansas City Southern Railway Co.....	---	---	5	---	5	35	47
Long Island Railroad Company.....	2	---	---	---	---	1	2
Louisiana And Arkansas Rwy Company.....	---	1	---	---	---	---	---
Louisville And Nashville Railroad Co....	3	1	---	1	2	---	7
Missouri Pacific Railroad Co.....	3	5	---	2	5	3	18
Missouri-Kansas-Texas Railroad Co.....	---	1	---	---	1	---	2
Norfolk And Western Railway Co.....	---	1	---	1	---	---	2
Pittsburg And Lake Erie Railroad Co....	---	---	1	---	---	---	1
Seaboard Coast Line Railroad Co.....	3	2	2	1	1	2	11
Sooline Railroad Company.....	---	1	---	---	---	1	2
Southern Pacific Transportation Co.....	9	4	1	---	1	12	27
Southern Railway Company.....	---	---	---	---	---	---	---
St. Louis Southwestern Railway Co.....	---	---	---	---	---	---	---
Union Pacific Railroad Co.....	---	---	---	---	---	1	1
Western Maryland Railway Company.....	---	---	---	---	---	---	---
Western Pacific Railroad Company.....	---	1	1	---	---	1	3
<b>TOTAL CLASS I RAILROADS.....</b>	<b>57</b>	<b>32</b>	<b>15</b>	<b>17</b>	<b>29</b>	<b>167</b>	<b>317</b>
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROAD)</b>							
CLASS I RAILROADS.....	57	32	15	17	29	167	317
CLASS II RAILROADS.....	2	2	---	---	---	6	10
CLASS III RAILROADS.....	1	---	---	1	---	6	8
<b>TOTAL ALL RAILROADS.....</b>	<b>60</b>	<b>34</b>	<b>15</b>	<b>18</b>	<b>29</b>	<b>179</b>	<b>335</b>

**CASUALTIES IN TRAIN ACCIDENTS**

**TABLE S34. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MISCELLANEOUS FACTORS**

Cause	Total Killed	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
MISC CAUSES NOT OTHERWISE LISTED								
700 Collision with hwy user at grade xing..	34	2	1	3	---	---	28	3
702 Vandalism.....	1	1	---	1	---	---	---	---
703 Interference with RR oper.-not vandals.	1	---	---	---	---	---	---	1
709 Object on or fouling track.....	1	---	---	---	---	---	1	---
717 Fire, other than vandalism, involving..	2	---	---	---	---	2	---	---
SUBTOTAL.....	39	3	1	4	---	2	29	4
GRAND TOTAL.....	39	3	1	4	---	2	29	4

**TABLE S35. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MISCELLANEOUS FACTORS**

Cause	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
MISC CAUSES NOT OTHERWISE LISTED								
700 Collision with hwy user at grade xing..	114	43	15	58	---	3	52	1
701 Emergency brk appl to avoid accident...	3	3	---	3	---	---	---	---
702 Vandalism.....	15	12	2	14	---	1	---	---
703 Interference with RR oper.-not vandals.	2	2	---	2	---	---	---	---
704 Load shifted.....	5	5	---	5	---	---	---	---
709 Object on or fouling track.....	8	8	---	8	---	---	---	---
710 Equipment on or fouling track.....	3	1	2	3	---	---	---	---
712 Overload/improper loaded container etc.	1	1	---	1	---	---	---	---
713 Interaction of lateral/vertical forces.	4	3	---	3	---	---	---	1
715 Snow, ice, or mud on track.....	5	4	1	5	---	---	---	---
716 Other acts of God.....	4	3	---	3	1	---	---	---
717 Fire, other than vandalism, involving..	7	1	2	3	---	4	---	---
799 Other miscellaneous causes.....	11	9	1	10	---	1	---	---
SUBTOTAL.....	182	95	23	118	1	9	52	2
GRAND TOTAL.....	182	95	23	118	1	9	52	2

**TABLE S28. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY HUMAN FACTORS**

Cause	Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
		Trainmen	Other				
-----							
BRAKES, USE OF							
504 Failure to apply sufficient hand brake.	1	1	---	1	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---
FLAGGING, FIXED, HAND AND RADIO SIGNALS							
520 Fixed signal, failure to comply.....	3	3	---	3	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---
GRAND TOTAL.....	4	4	---	4	---	---	---

**TABLE S29. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY HUMAN FACTORS**

Cause	Total Injured	Employees On Duty... Trainmen	Other	Emp Not On Duty Total	Passen- gers	Non Tres- passers	Tres- passers
<b>BRAKES, USE OF</b>							
500 Automatic brake, improper use.....	4	4	---	4	---	---	---
503 Failure to secure hnd brk (R.R. emp)...	2	2	---	2	---	---	---
504 Failure to apply sufficient hand brake.	1	1	---	1	---	---	---
509 Other causes involving use of brakes...	3	2	1	3	---	---	---
SUBTOTAL.....	10	9	1	10	---	---	---
<b>EMPLOYEE PHYSICAL CONDITION</b>							
513 Employee falling asleep.....	7	7	---	7	---	---	---
SUBTOTAL.....	7	7	---	7	---	---	---
<b>FLAGGING, FIXED, HAND AND RADIO SIGNALS</b>							
52A Block signal, failure to comply.....	3	3	---	3	---	---	---
52B Interlocking signal, failure to comply.	1	1	---	1	---	---	---
520 Fixed signal, failure to comply.....	19	17	1	18	1	---	---
521 Flagging, improper or failure to flag..	2	2	---	2	---	---	---
525 Hand signal, failure to give/receive...	1	1	---	1	---	---	---
SUBTOTAL.....	26	24	1	25	1	---	---
<b>OTHER RULES AND INSTRUCTIONS</b>							
533 Failure to stop train in clear.....	9	9	---	9	---	---	---
535 Instruction to trn/yard crew improper..	3	3	---	3	---	---	---
536 Mtr car/on-trk eqp rules, fail to cmpl.	8	6	2	8	---	---	---
537 Equip move without authority (RR emp)..	2	2	---	2	---	---	---
538 Shoving move, missing man at lead.....	1	---	1	1	---	---	---
541 Special op. instr., failure to comply..	3	3	---	3	---	---	---
542 Trn ord/timetable auth, fail to comply.	10	4	2	6	4	---	---
549 Rules and instructions, other.....	2	1	1	2	---	---	---
SUBTOTAL.....	38	28	6	34	4	---	---
<b>SPEED</b>							
550 Coupling speed excessive.....	10	4	6	10	---	---	---
553 Switch movement, excessive speed.....	2	2	---	2	---	---	---
554 Trn inside yrd limit, excess speed....	7	7	---	7	---	---	---
555 Trn out yrd limit, clear blk, excess spd.	3	1	---	1	---	---	2
SUBTOTAL.....	22	14	6	20	---	---	2
<b>SWITCHES, USE OF</b>							
560 Spring switch not clear before reverse.	1	---	---	---	---	1	---
561 Switch improperly lined.....	12	11	---	11	---	1	---
SUBTOTAL.....	13	11	---	11	---	2	---
<b>MISCELLANEOUS</b>							
570 Buffing or slack action excessive.....	5	5	---	5	---	---	---
599 Other train operation/human factors....	8	5	3	8	---	---	---
SUBTOTAL.....	13	10	3	13	---	---	---
<b>GRAND TOTAL.....</b>	<b>129</b>	<b>103</b>	<b>17</b>	<b>120</b>	<b>5</b>	<b>2</b>	<b>2</b>

**TABLE S30. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MECHANICAL/ELECTRICAL FAILURES**

Cause	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
BODY						
423 Center plate broken or defective.....	1	---	1	---	---	---
SUBTOTAL.....	1	---	1	---	---	---
GRAND TOTAL.....	1	---	1	---	---	---

**TABLE S31. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS  
CAUSED BY MECHANICAL/ELECTRICAL FAILURES**

Cause	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
<b>BRAKES</b>						
400 Air hose uncoupled or burst.....	1	---	---	---	---	1
405 Brk valve malf. (undesired emergency)..	5	5	---	---	---	---
SUBTOTAL.....	6	5	---	---	---	1
<b>BODY</b>						
425 Center pin broken or missing.....	3	1	---	---	---	2
SUBTOTAL.....	3	1	---	---	---	2
<b>COUPLER AND DRAFT SYSTEM</b>						
432 Coupler drawhead broken or defective...	2	2	---	---	---	---
433 Coupler retainer pin/cross key missing.	1	1	---	---	---	---
434 Draft gear/mechanism broken/defective..	1	1	---	---	---	---
SUBTOTAL.....	4	4	---	---	---	---
<b>TRUCK COMPONENTS</b>						
440 Side bearing clearance improper.....	1	1	---	---	---	---
443 Truck bolster broken.....	2	2	---	---	---	---
445 Truck (stiff/improper lateral).....	1	1	---	---	---	---
445L Truck (stiff/improper lateral) - loco..	2	2	---	---	---	---
SUBTOTAL.....	6	6	---	---	---	---
<b>AXLES AND JOURNAL BEARINGS</b>						
451 Journal (plain) failure - overheating..	4	3	---	---	---	1
SUBTOTAL.....	4	3	---	---	---	1
<b>WHEELS</b>						
460 Broken flange.....	3	3	---	---	---	---
461 Broken rim.....	1	1	---	---	---	---
464L Worn flange - locomotive.....	2	2	---	---	---	---
467 Loose wheel.....	3	3	---	---	---	---
468 Thermal crack, flange or tread.....	1	1	---	---	---	---
469 Other causes involving wheels-not loco.	2	2	---	---	---	---
SUBTOTAL.....	12	12	---	---	---	---
<b>LOCOMOTIVES</b>						
472L Crank case/air box explosion - loco....	1	1	---	---	---	---
475L Current collector system - loco.....	6	4	---	2	---	---
SUBTOTAL.....	7	5	---	2	---	---
<b>DOORS</b>						
481 Box car plug door, attachment defective.	2	2	---	---	---	---
SUBTOTAL.....	2	2	---	---	---	---
<b>GENERAL MECHANICAL AND ELECTRICAL</b>						
499L General mech/elect failures - loco.....	1	1	---	---	---	---
SUBTOTAL.....	1	1	---	---	---	---
<b>GRAND TOTAL.....</b>	<b>45</b>	<b>39</b>	<b>---</b>	<b>2</b>	<b>---</b>	<b>4</b>

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**TABLE S32. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY DEFECTS IN TRACK, ROADBED, AND STRUCTURES**

Cause	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
<b>ROADBED DEFECTS</b>								
102 Washout/rain/slide/ice, etc. dmg to trk.	4	3	---	3	---	1	---	---
SUBTOTAL.....	4	3	---	3	---	1	---	---
<b>RAIL AND JOINT BAR DEFECTS</b>								
134 Detail fracture fm shelling/head check.	1	---	---	---	---	---	---	1
SUBTOTAL.....	1	---	---	---	---	---	---	1
GRAND TOTAL.....	5	3	---	3	---	1	---	1

**TABLE S33. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY DEFECTS IN TRACK, ROADBED AND STRUCTURES**

Cause	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
<b>ROADBED DEFECTS</b>								
101 Roadbed settled or soft.....	1	1	---	1	---	---	---	---
102 Washout/rain/slide/ice, etc. dmg to trk.	41	6	22	28	---	13	---	---
SUBTOTAL.....	42	7	22	29	---	13	---	---
<b>TRACK GEOMETRY DEFECTS</b>								
110 Wide gage (defect/missing crossties)...	5	5	---	5	---	---	---	---
111 Wide gage (def/missing rail fasteners)..	3	2	1	3	---	---	---	---
114 Track alignment irregular.....	6	1	3	4	---	2	---	---
115 Track alignment irregular (buckled)....	7	6	---	6	---	---	---	1
119 Cross level irregular at joints.....	3	3	---	3	---	---	---	---
129 Other track geometry defects.....	2	2	---	2	---	---	---	---
SUBTOTAL.....	26	19	4	23	---	2	---	1
<b>RAIL AND JOINT BAR DEFECTS</b>								
130 Bolt hole crack or break.....	4	4	---	4	---	---	---	---
131 Broken base of rail.....	8	7	1	8	---	---	---	---
134 Detail fracture fm shelling/head check.	6	2	---	2	---	---	---	4
135 Engine burn fracture.....	1	1	---	1	---	---	---	---
136 Head/web sep.(outside joint bar limit).	3	3	---	3	---	---	---	---
137 Head/web sep.(within joint bar limits).	4	1	---	1	---	---	3	---
141 Transverse/compound fissure.....	6	6	---	6	---	---	---	---
142 Vertical split head.....	1	1	---	1	---	---	---	---
147 Joint bar broken, noninsulated.....	2	2	---	2	---	---	---	---
149 Other rail and joint bar defects.....	8	8	---	8	---	---	---	---
SUBTOTAL.....	43	35	1	36	---	---	3	4
<b>FROGS, SWITCHES AND TRACK APPLIANCES</b>								
161 Switch damaged/out of adjustment.....	1	1	---	1	---	---	---	---
163 Switch connecting/oper. rod fail.....	1	1	---	1	---	---	---	---
165 Switch point worn or broken.....	3	3	---	3	---	---	---	---
SUBTOTAL.....	5	5	---	5	---	---	---	---
GRAND TOTAL.....	116	66	27	93	---	15	3	5

**CASUALTIES IN TRAIN INCIDENTS**

**TABLE S36. FATALITIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passengers	Nontrespassers	Trespassers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>						
002T Adjusting coupler - equipment moving	2	2	---	---	---	---
007T Striking parts of body against equipment - equipment moving	1	1	---	---	---	---
009T Other acc/inc while coupling/uncoupling cars or locos - equip moving	1	---	1	---	---	---
SUBTOTAL.....	4	3	1	4	---	---
<b>OPERATING HAND BRAKES</b>						
200T Manipulating hand brakes, no defects, equipment moving	1	1	---	---	---	---
203T Striking body due to movement of equipment	1	1	---	---	---	---
SUBTOTAL.....	2	2	---	2	---	---
<b>OPERATING SWITCHES OR DERAILS</b>						
304T Struck by moving on-track equipment	2	1	1	2	---	---
SUBTOTAL.....	2	1	1	2	---	---
<b>CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS</b>						
402T Persons on side/end of locos/cars contacting fixed objects - eqp mov	1	1	---	---	---	---
SUBTOTAL.....	1	1	---	1	---	---
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>						
501T Slip/fell due to lost/missed hold of grabiron, handhold, etc.-eqp mov	3	1	---	---	---	2
507T Falling, slipping, tripping, not elsewhere classified - eqp moving	6	1	---	---	---	5
508T Slipping/falling while boarding/alighting fm passenger eqp (moving)	2	---	---	---	1	1
510T Striking body or falling due to sudden movement of equipment	1	---	---	---	---	1
511T Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp mov	1	1	---	---	---	---
512T Striking or being struck by bridges or trestles - equipment moving	1	---	---	---	---	1
519T Other acc/inc while getting on or off cars or locos - equipment mov	3	---	---	---	---	3
SUBTOTAL.....	17	3	---	3	1	13
<b>COLLISIONS, DERAILMENTS, ETC.(=&lt; \$3,701)</b>						
601T Casualty resulting fm a collision which did not satisfy \$ threshold	2	1	1	2	---	---
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	7	---	---	---	---	2
SUBTOTAL.....	9	1	1	2	---	2
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>						
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	535	---	---	---	---	454
610T Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp mov	25	1	---	1	---	22
SUBTOTAL.....	560	1	---	1	---	476

TABLE S36. (CONTINUED)

Occurrence	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)						
701T Standing, walking or running on or along track - equipment moving	114	3	2	5	---	109
702T Crossing track at private rail-highway crossing - equipment moving	2	---	---	---	---	2
703T Crossing track not at a crossing - equipment moving	35	---	---	---	---	34
704T While on public thoroughfare - equipment moving	1	---	---	---	---	1
705T On bridges or trestles - equipment moving	15	---	---	---	---	14
706T Sitting or lying on track or near track, not in clear - eqp moving	159	---	---	---	---	159
707T While working on or along track - equipment moving	8	2	4	6	---	1
708T Passing over, through, or under cars - equipment moving	11	---	1	1	---	10
709T Struck by or ran into loco/car (not at hwy x-ing), misc-eqp mov	44	---	---	---	---	42
SUBTOTAL.....	389	5	7	12	---	372
MAINTENANCE OF WAY AND STRUCTURES						
853T Striking or being struck by eqp, structures, or material-eqp mov	1	---	1	1	---	---
SUBTOTAL.....	1	---	1	1	---	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED						
934T Slip/fall, etc. between loco/car and other cars and struct-eqp mov	1	---	---	---	---	1
935T From bridges of trestles-equipment moving	1	---	---	---	---	1
938T While on locomotive or car-equipment moving	5	1	---	1	1	3
SUBTOTAL.....	7	1	---	1	1	5
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.						
941T Struck by flying of falling object (except assaults)-eqp mov	1	---	---	---	---	1
SUBTOTAL.....	1	---	---	---	---	1
OPERATION OF ON-TRACK WORK EQUIPMENT						
959T Other A/I involving on-track work equipment - equipment moving	2	---	2	2	---	---
SUBTOTAL.....	2	---	2	2	---	---
OTHER OCCURRENCES						
972T Sudden movement of car, not otherwise classified	1	---	---	---	---	1
974T Slack action in caboose	1	1	---	1	---	---
975T Slack action, other	1	1	---	1	---	---
989T Other accidents/incidents-equipment moving	6	2	1	3	1	2
SUBTOTAL.....	9	4	1	5	1	2
GRAND TOTAL.....	1,004	22	14	36	3	485

**TABLE S37. INJURIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passengers	Nontrespassers	Trespassers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>						
001T Adjusting coupler, equipment moving unexpectedly	15	12 3	15	---	---	---
002T Adjusting coupler - equipment moving	15	15	15	---	---	---
003T Crossing over, under or between on-track equipment, equipment moving	1	1	1	---	---	---
004T Adjusting coupler, part of coupler fell striking person - eqp moving	2	2	2	---	---	---
005T Use of uncoupling lever - equipment moving	76	73 3	76	---	---	---
006T Use of uncoupling lever - equipment moving unexpectedly	5	4 1	5	---	---	---
007T Striking parts of body against equipment - equipment moving	51	50	50	---	1	---
008T Stumbled,slipped,fell,etc. on foreign obj/irreg surface-eqp moving	59	55 4	59	---	---	---
009T Other acc/inc while coupling/uncoupling cars or locos - equip moving	63	61 2	63	---	---	---
SUBTOTAL.....	287	273 13	286	---	1	---
<b>COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.</b>						
052T Uncoupl air hose,struck by hose due to sudden release of air-eqp mov	5	5	5	---	---	---
053T Coupling air hose,stk by hose due to sudden release of air - eqp mov	3	3	3	---	---	---
054T Stumbled,slipped,fell, or stepped on foreign obj, etc., eqp moving	11	11	11	---	---	---
057T Opening or closing angle cocks - equipment moving	9	9	9	---	---	---
059T Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp mov	17	16 1	17	---	---	---
SUBTOTAL.....	45	44 1	45	---	---	---
<b>OPERATING OR ON LOCOMOTIVES</b>						
101T Burn or electrical shock - equipment moving	3	3	3	---	---	---
102T Striking parts of body against equipment, moving about loco-eqp mov	47	45 2	47	---	---	---
103T Struck by tools or other objects falling - equipment moving	12	11 1	12	---	---	---
104T Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp moving	25	24 1	25	---	---	---
105T Checking, oiling, servicing locomotive, etc. - equipment moving	8	7 1	8	---	---	---
106T Unexpected movement of locomotive, other than slack action	79	78	78	---	1	---
107T Slack action in locomotive	34	32 2	34	---	---	---
108T Striking parts of body against equipment due to sudden stop of loco	61	56 5	61	---	---	---
109T Inhalation of or contact with fumes or gases - equipment moving	7	7	7	---	---	---
110T Defective locomotive seat - equipment moving	11	11	11	---	---	---
111T Adjusting locomotive seat - equipment moving	4	4	4	---	---	---
112T Foreign object in eye - equipment moving	264	257 6	263	---	1	---
119T Other accidents/incidents while operating locomotives - eqp moving	69	68 1	69	---	---	---
SUBTOTAL.....	624	603 19	622	---	2	---
<b>OPERATING RAIL MOTORCARS</b>						
151T Striking parts of body against equipment - equipment moving	6	1 5	6	---	---	---
152T Struck by tools or other objects falling - equipment moving	7	2 5	7	---	---	---
153T Stumbled, slipped, fell or stepped on foreign obj, etc., - eqp mov	2	1 1	2	---	---	---
154T Unexpected movement of rail motorcar	7	---	7	---	---	---
159T Other accidents/incidents while operating rail motorcars - eqp mov	19	1 18	19	---	---	---
SUBTOTAL.....	41	5 36	41	---	---	---

TABLE S37. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>OPERATING HAND BRAKES</b>						
00T Manipulating hand brakes, no defects, equipment moving	16	16	---	16	---	---
01T Defective equipment - equipment moving	15	15	---	15	---	---
03T Striking body due to movement of equipment	21	20	1	21	---	---
04T Losing hold, slipping or falling due to coupling impact	14	14	---	14	---	---
05T Caught between parts of equipment or lading - equipment moving	9	8	1	9	---	---
06T Brake chains or bolts, breaking or giving way - equipment moving	3	3	---	3	---	---
07T Losing hold, slipping, or falling - equipment moving	12	12	---	12	---	---
08T Caught hand or fingers in spinning brake wheel - equipment moving	1	1	---	1	---	---
09T Other accidents/incidents while operating hand brakes - eqp moving	31	27	4	31	---	---
SUBTOTAL.....	122	116	6	122	---	---
<b>OPERATING SWITCHES OR DERAILS</b>						
04T Struck by moving on-track equipment	6	6	---	6	---	---
06T Lining switches, no defects, eqp moving	2	2	---	2	---	---
09T Other acc/inc while operating switches/derails - equipment moving	20	20	---	20	---	---
SUBTOTAL.....	28	28	---	28	---	---
<b>CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS</b>						
01T Persons on top locos/cars contacting fixed objects - equipment mov	7	6	1	7	---	---
02T Persons on side/end of locos/cars contacting fixed objects - eqp mov	82	78	3	81	---	1
09T Persons on loco/car coming in contact with fixed obj(other)-eqp mov	15	11	2	13	1	1
SUBTOTAL.....	104	95	6	101	1	1
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>						
01T Slip/fell due to lost/misssed hold of grabiron,handhold,etc.-eqp mov	85	70	4	74	1	10
02T Slip/fell due to losing/missing footing on step,stirrup,etc.-eqp mov	179	164	7	171	1	7
03T Stepping or tripping on parts of track in place - equipment moving	50	49	1	50	---	---
04T Stepping or tripping on foreign material or irreg surface - eqp mov	280	274	6	280	---	---
05T Slipping on ice or snow on ground - equipment moving	51	49	2	51	---	---
06T Slipping on ice/snow on cars or locomotives - equipment moving	13	13	---	13	---	---
07T Falling, slipping, tripping, not elsewhere classified - eqp moving	127	97	7	104	3	19
08T Slipping/falling while boarding/alighting fm passenger eqp (moving)	18	4	---	4	11	3
10T Striking body or falling due to sudden movement of equipment	24	17	6	23	---	1
11T Strike/struck by eqp/structures(not bridge/trestle), or nat -eqp mov	57	52	4	56	---	1
12T Striking or being struck by bridges or trestles - equipment moving	2	1	1	2	---	---
13T Jumping from equipment - equipment moving	83	60	3	63	7	11
14T Defective equipment - equipment moving	37	37	---	37	---	---
19T Other acc/inc while getting on or off cars or locos - equipment mov	225	211	5	216	---	9
SUBTOTAL.....	1,231	1,098	46	1,144	23	40

**TABLE S37. (CONTINUED)**

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COLLISIONS, DERAILMENTS, ETC. (&lt;= \$3,701)</b>						
601T Casualty resulting fm a collision which did not satisfy \$ threshold	78	67	10	77	---	1
602T Casualty resulting fm a derailment which did not satisfy \$ threshold	73	61	11	72	---	1
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	32	17	2	19	---	4
SUBTOTAL.....	183	145	23	168	---	5
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>						
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	2,310	44	13	57	1	2,109
610T Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp mov	122	5	3	8	2	111
SUBTOTAL.....	2,432	49	16	65	3	2,220
<b>STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)</b>						
701T Standing, walking or running on or along track - equipment moving	132	18	2	20	1	2
702T Crossing track at private rail-highway crossing - equipment moving	6	1	1	2	---	4
703T Crossing track not at a crossing - equipment moving	38	2	---	2	---	1
704T While on public thoroughfare - equipment moving	2	---	---	---	---	1
705T On bridges or trestles - equipment moving	20	1	---	1	---	18
706T Sitting or lying on track or near track, not in clear - eqp moving	104	1	---	1	---	1
707T While working on or along track - equipment moving	27	13	12	25	---	2
708T Passing over, through, or under cars - equipment moving	36	1	---	1	---	35
709T Struck by or ran into loco/car (not at hwy x-ing), misc-eqp mov	64	4	2	6	1	9
SUBTOTAL.....	429	41	17	58	2	17
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>						
800T Absence of fixed signal (Blue Signal) - equipment moving	16	---	16	16	---	---
801T Fixed signal (Blue Signal) improperly displayed - equipment moving	2	---	2	2	---	---
802T Crossing over, under, or between locos or cars - equipment moving	5	---	5	5	---	---
803T Striking or being struck by eqp, structures, or material-eqp mov	47	---	46	46	---	1
815T Moving equipment for repairs	37	1	36	37	---	---
825T Other acc/inc while servicing or maintaining eqp-eqp moving	32	---	32	32	---	---
SUBTOTAL.....	139	1	137	138	---	1
<b>MAINTENANCE OF WAY AND STRUCTURES</b>						
852T Crossing over, under, or between locos or cars-eqp moving	1	---	1	1	---	---
853T Striking or being struck by eqp, structures, or material-eqp mov	106	1	105	106	---	---
874T Stumbling, slipping, falling, caught, N.O.C. - equipment moving	2	---	2	2	---	---
899T Other accs/incs while maintaining way and structures - eqp moving	46	1	45	46	---	---
SUBTOTAL.....	155	2	153	155	---	---

TABLE S37. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Emp Not On Duty Total	Passengers	Nontrespassers	Trespassers
<b>FREIGHT, BAGGAGE, EXPRESS OR MAIL</b>							
901T Handling freight, baggage, express or mail-eqp moving	6	2	4	6	---	---	---
902T Struck or caught by shifted lading-eqp moving	4	3	---	3	---	---	1
903T Tripping over, or struck by falling baggage in passenger car-eqp mov	4	2	---	2	2	---	---
904T Other acc/inc involving freight, baggage, express, or mail - eqp mov	8	2	5	7	1	---	---
SUBTOTAL.....	22	9	9	18	3	---	1
<b>WINDOWS, DOORS, ETC., ON ON-TRACK EQUIPMENT</b>							
907T Opening/closing hopper or gondola hatches, end or bottom doors, eqp moving	3	---	3	3	---	---	---
908T Clo/opn frt/bag car doors, exc plug type car doors, def eqp-eqp mov	1	1	---	1	---	---	---
909T Clo/opn frt/bag car doors, exc plug type car doors, no def-eqp mov	1	---	1	1	---	---	---
911T Closing or opening plug type car doors, no defects-equipment mov	3	---	1	1	2	---	---
912T Closing or opening coach trap doors-equipment moving	6	6	---	6	---	---	---
913T Interior doors-equipment moving	48	35	2	37	11	---	---
914T Opening or closing locomotive doors-equipment moving	25	24	1	25	---	---	---
915T Opening or closing locomotive windows-equipment moving	13	13	---	13	---	---	---
916T Opening or closing caboose doors-equipment moving	12	11	1	12	---	---	---
917T Opening or closing caboose windows-equipment moving	5	4	---	4	1	---	---
918T Opening and closing other windows-equipment moving	7	6	---	6	1	---	---
919T Other accidents/incidents involving windows or doors-eqp mov	33	20	11	31	1	---	1
SUBTOTAL.....	157	120	20	140	15	---	1
<b>PASSENGER CAR DOORS</b>							
920T Caught by side doors while entering coach-equipment moving	5	1	3	4	1	---	---
922T Dragged by train while caught in side doors, entering coach	1	---	---	---	1	---	---
925T Struck by side doors while exiting coach-equipment moving	2	1	---	1	---	---	---
926T Striking side door while entering coach-equipment moving	1	---	1	1	---	---	---
927T Striking side door while exiting coach-equipment moving	1	1	---	1	---	---	---
SUBTOTAL.....	10	3	4	7	2	---	---
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>							
930T Stumbling/slipping, etc. on snow or ice - equipment moving	28	26	2	28	---	---	---
931T Stumbling/slipping, etc. on foreign mat./irregular surface-eqp mov	75	68	7	75	---	---	---
932T Stumbling/slipping, etc. on parts of track in place-equipment moving	16	14	1	15	---	---	1
933T Slipping, caught, etc. on stairs, ramps, platforms - eqp mov	4	---	1	1	3	---	---
934T Slip/fall, etc. between loco/car and other cars and struct-eqp mov	20	10	---	10	4	1	5
935T From bridges of trestles-equipment moving	7	3	---	3	---	---	4
936T From structures other than bridges or trestles-equipment moving	3	1	2	3	---	---	---
937T Into depressions - equipment moving	9	9	---	9	---	---	---
938T While on locomotive or car-equipment moving	144	111	10	121	20	2	1
939T Other, stumbling, slipping, falling, caught, etc. - equipment moving	34	17	10	27	6	---	1
SUBTOTAL.....	340	259	33	292	33	3	12

TABLE S37. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Duty... Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.							
940T Foreign object in eye-equipment moving	508	481	24	505	1	1	---
941T Struck by flying of falling object (except assaults)-eqp mov	61	37	17	54	---	6	1
942T Electrical flash, shock, or burn-equipment moving	3	2	---	2	---	1	---
943T Fire or explosion of fusees or torpedoes-equipment moving	9	9	---	9	---	---	---
944T Other fire or explosion-equipment moving	3	2	---	2	---	1	---
945T Burned by hot or corrosive substances-equipment moving	30	24	4	28	---	2	---
946T Inhalation of or contact with fumes or gases-equipment moving	8	8	---	8	---	---	---
949T Other A/I resulting from flying/falling objs, burns, etc. - eqp mov	13	10	2	12	---	1	---
SUBTOTAL.....	635	573	47	620	1	12	2
OPERATION OF ON-TRACK WORK EQUIPMENT							
950T Collision with train or car	8	4	4	8	---	---	---
951T Collision with other on-track work equipment	18	---	18	18	---	---	---
952T Jumping from equipment in anticipation of a collision	12	2	10	12	---	---	---
953T Derailment that does not satisfy monetary threshold	48	1	47	48	---	---	---
954T Getting on/off on-track work equipment - equipment moving	12	---	12	12	---	---	---
959T Other A/I involving on-track work equipment - equipment moving	48	2	46	48	---	---	---
SUBTOTAL.....	146	9	137	146	---	---	---
ASSAULT							
96AT Shot while on moving on-track equipment	11	11	---	11	---	---	---
96CT Struck by other propelled object while on locomotive - equip moving	57	57	---	57	---	---	---
96DT Struck by other propelled object while on car - equip moving	14	9	1	10	---	4	---
96ET Struck by other propelled object while on caboose - equip moving	33	33	---	33	---	---	---
96GT Other unprovoked assaults to persons on moving on-track equipment	19	15	---	15	1	2	---
96MT All other assaults involving moving on-track equipment	2	2	---	2	---	---	---
SUBTOTAL.....	136	127	1	128	1	6	---
OTHER OCCURRENCES							
970T Performing rerailling or other clearing operations-equipment moving	1	---	1	1	---	---	---
971T Loco or car coming against car placed for loading or unloading	8	4	1	5	---	---	3
972T Sudden movement of car, not otherwise classified	62	31	21	52	---	7	3
974T Slack action in caboose	279	278	1	279	---	---	---
975T Slack action, other	91	89	1	90	---	1	---
976T Emergency or severe application of air brakes due to def eqp	13	11	2	13	---	---	---
977T Emergency or severe application of air brakes not due to def eqp	45	43	2	45	---	---	---
978T Motor vehicle A/I (other than rail highway grade crossing) - eqp std	3	---	3	3	---	---	---
982T Insect bites, moving	4	4	---	4	---	---	---
986T Unexpected move of caboose, not slack action (include emergency & severe brking)	53	52	---	52	1	---	---
987T Caboose fire, equipment moving	1	1	---	1	---	---	---
988T Other accidents/incidents while in caboose, equipment moving	43	42	---	42	---	1	---
989T Other accidents/incidents-equipment moving	70	39	17	56	---	7	2
SUBTOTAL.....	673	594	49	643	1	16	8
GRAND TOTAL.....	7,939	4,194	773	4,967	10	111	2,264

NOTE: Contractor employees are included with nontrespassers



**TABLE S38. ILLNESS IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Illness	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>						
009T Other acc/inc while coupling/uncoupling cars or locos - equip moving	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
<b>OPERATING OR ON LOCOMOTIVES</b>						
109T Inhalation of or contact with fumes or gases - equipment moving	28	27	---	27	1	---
119T Other accidents/incidents while operating locomotives - eqp moving	6	6	---	6	---	---
SUBTOTAL.....	34	33	---	33	1	---
<b>OPERATING HAND BRAKES</b>						
203T Striking body due to movement of equipment	1	---	1	1	---	---
SUBTOTAL.....	1	---	1	1	---	---
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>						
519T Other acc/inc while getting on or off cars or locos - equipment mov	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>						
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>						
825T Other acc/inc while servicing or maintaining eqp-eqp moving	1	---	1	1	---	---
SUBTOTAL.....	1	---	1	1	---	---
<b>WINDOWS, DOORS, ETC., ON ON-TRACK EQUIPMENT</b>						
917T Opening or closing caboose windows-equipment moving	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>						
941T Struck by flying or falling object (except assaults)-eqp mov	1	1	---	1	---	---
942T Electrical flash, shock, or burn-equipment moving	2	1	---	1	1	---
945T Burned by hot or corrosive substances-equipment moving	1	1	---	1	---	---
946T Inhalation of or contact with fumes or gases-equipment moving	32	31	1	32	---	---
949T Other A/I resulting from flying/falling objs, burns, etc. - eqp mov	1	1	---	1	---	---
SUBTOTAL.....	37	35	1	36	1	---
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>						
959T Other A/I involving on-track work equipment - equipment moving	2	---	2	2	---	---
SUBTOTAL.....	2	---	2	2	---	---
<b>OTHER OCCURRENCES</b>						
987T Caboose fire, equipment moving	2	2	---	2	---	---
988T Other accidents/incidents while in caboose, equipment moving	2	2	---	2	---	---
989T Other accidents/incidents-equipment moving	4	3	---	3	1	---
SUBTOTAL.....	8	7	---	7	1	---
GRAND TOTAL.....	87	79	5	84	3	---

**CASUALTIES IN NON-TRAIN INCIDENTS**

**TABLE S39A. FATALITIES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>						
507 Falling, slipping, tripping, not elsewhere classified - eqp std	1	---	---	---	---	1
SUBTOTAL.....	1	---	---	---	---	1
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>						
609 Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp std	12	---	---	---	11	1
SUBTOTAL.....	12	---	---	---	11	1
<b>STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)</b>						
709 Struck by or ran into loco/car (not at hwy x-ing), misc-eqp std	3	---	---	---	---	3
SUBTOTAL.....	3	---	---	---	---	3
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>						
803 Striking or being struck by eqp, structures, or material-eqp std	1	---	1	1	---	---
804 Use of hand tools	2	---	2	2	---	---
819 Struck by flying or falling object	1	---	1	1	---	---
820 Electrical flash, shock, or burn	1	---	1	1	---	---
SUBTOTAL.....	5	---	5	5	---	---
<b>MAINTENANCE OF WAY AND STRUCTURES</b>						
860 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	---	---	1	---
861 Use of lift trucks and other portable material handling eqp	1	---	1	1	---	---
870 Electrical flash, shock, or burn	1	---	1	1	---	---
872 Other fire or explosion	1	---	---	1	---	---
892 Working on or about sgml or comm. poles, sgml masts,sgml cantilevers or catenary	1	---	1	1	---	---
SUBTOTAL.....	5	---	3	3	1	1
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>						
932 Stumbling/slipping, etc. on parts of track in place	1	---	---	---	---	1
935 From bridges or trestles	5	---	3	3	---	2
938 While on locomotive or car-equipment standing	1	---	---	---	---	1
939 Other, stumbling, slipping, falling, caught, etc.	1	---	1	1	---	---
SUBTOTAL.....	8	---	4	4	---	4
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>						
942 Electrical flash, shock, or burn	3	---	1	1	---	1
947 Electrical injury due to contact with catenary, pantograph or 3rd rail	5	---	1	1	---	3
SUBTOTAL.....	8	---	2	2	---	4
<b>ASSAULT</b>						
96A Shot while on standing on-track equipment	1	---	---	---	1	---
96B Shooting incidents not involving persons on on-track equipment	3	---	3	3	---	---
96G All other unprovoked assaults	1	---	---	---	1	---
SUBTOTAL.....	5	---	3	3	2	---
<b>OTHER OCCURRENCES</b>						
970 Performing rerailling or other clearing operations	1	---	1	1	---	---
978 Motor vehicle acc/inc (other than rail-highway grade crossing)	12	2	8	10	---	1
989 Other accidents/incidents	6	---	2	2	1	2
SUBTOTAL.....	19	2	11	13	1	3
GRAND TOTAL.....	66	2	28	30	2	16

**TABLE S39B. INJURIES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>						
002 Adjusting coupler - equipment standing	326	310	15	325	1	---
003 Crossing over, under or between on-track equipment, equipment standing	2	2	---	2	---	---
004 Adjusting coupler, part of coupler fell striking person-eqp standing	39	36	3	39	---	---
005 Use of uncoupling lever - equipment standing	112	102	10	112	---	---
007 Striking parts of body against equipment - equipment standing	33	30	3	33	---	---
008 Stumbled, slipped, fell, stepped on foreign obj/irreg surface-eqp std	97	90	7	97	---	---
009 Other acc/inc while coupling/uncoupling cars or locos - equip std	115	100	15	115	---	---
SUBTOTAL.....	724	670	53	723	1	---
<b>COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.</b>						
051 Crossing over, under or between on-track equipment, equipment standing	6	6	---	6	---	---
052 Uncoupl air hose, struck by hose due to sudden release of air-eqp std	38	30	8	38	---	---
053 Coupling air hose, stk by hose due to sudden release of air - eqp std	23	17	6	23	---	---
054 Stumbled, slipped, fell, or stepped on foreign obj, etc., eqp standing	40	35	5	40	---	---
055 Defective equipment - equipment standing	7	6	1	7	---	---
057 Opening or closing angle cocks - equipment standing	60	49	11	60	---	---
059 Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp std	133	108	25	133	---	---
SUBTOTAL.....	307	251	56	307	---	---
<b>OPERATING OR ON LOCOMOTIVES</b>						
101 Burn or electrical shock - equipment standing	11	9	2	11	---	---
102 Striking parts of body against equipment, moving about loco-eqp std	48	40	8	48	---	---
103 Struck by tools or other objects falling - equipment standing	11	8	3	11	---	---
104 Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp std	94	78	16	94	---	---
105 Checking, oiling, servicing locomotive, etc. - equipment standing	53	37	16	53	---	---
109 Inhalation of or contact with fumes or gases - equipment standing	8	7	1	8	---	---
110 Defective locomotive seat - equipment standing	21	17	4	21	---	---
111 Adjusting locomotive seat - equipment standing	32	29	3	32	---	---
112 Foreign object in eye - equipment standing	62	56	5	61	1	---
119 Other accidents/incidents while operating locomotives - eqp standing	67	57	10	67	---	---
SUBTOTAL.....	407	338	68	406	1	---
<b>OPERATING RAIL MOTORCARS</b>						
151 Striking parts of body against equipment - equipment standing	3	---	3	3	---	---
152 Struck by tools or other objects falling - equipment standing	1	---	1	1	---	---
153 Stumbled, slipped, fell or stepped on foreign obj, etc., - eqp std	6	1	5	6	---	---
155 Placing or removing rail motorcar on or off rail	80	---	80	80	---	---
159 Other accidents/incidents while operating rail motorcars - eqp std	8	---	8	8	---	---
SUBTOTAL.....	98	1	97	98	---	---

TABLE S39B. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
OPERATING HAND BRAKES								
200	232	218	14	232	---	---	---	---
201	32	30	2	32	---	---	---	---
202	12	12	---	12	---	---	---	---
203	27	24	3	27	---	---	---	---
205	9	8	1	9	---	---	---	---
206	16	14	2	16	---	---	---	---
207	56	53	3	56	---	---	---	---
208	14	13	1	14	---	---	---	---
209	125	109	16	125	---	---	---	---
SUBTOTAL.....	523	481	42	523	---	---	---	---
OPERATING SWITCHES OR DERAILS								
301	64	58	6	64	---	---	---	---
302	67	65	2	67	---	---	---	---
303	87	73	14	87	---	---	---	---
305	194	180	14	194	---	---	---	---
306	770	717	53	770	---	---	---	---
307	42	35	7	42	---	---	---	---
308	6	5	1	6	---	---	---	---
309	160	136	24	160	---	---	---	---
SUBTOTAL.....	1,390	1,269	121	1,390	---	---	---	---
CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS								
401	1	1	---	1	---	---	---	---
402	5	3	2	5	---	---	---	---
409	6	3	3	6	---	---	---	---
SUBTOTAL.....	12	7	5	12	---	---	---	---
GETTING ON OR OFF CARS OR LOCOMOTIVES								
501	79	53	26	79	---	---	---	---
502	267	161	96	257	---	8	1	1
503	59	49	9	58	1	---	---	---
504	354	284	65	349	1	4	---	---
505	67	61	4	65	---	2	---	---
506	40	34	5	39	---	---	1	---
507	125	84	30	114	1	8	1	1
508	106	15	12	27	---	76	3	---
511	49	34	12	46	---	1	1	1
513	26	13	9	22	1	2	1	---
514	23	17	6	23	---	---	---	---
519	244	181	57	238	3	2	1	---
SUBTOTAL.....	1,439	986	331	1,317	7	103	9	3

TABLE S39B. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passengers	Nontrespassers	Trespassers
RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS								
609 Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp std	90	---	3	3	1	---	80	6
SUBTOTAL.....	90	---	3	3	1	---	80	6
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)								
701 Standing, walking or running on or along track - equipment standing	7	6	---	6	---	---	---	1
703 Crossing track not at a crossing - equipment standing	4	3	1	4	---	---	---	---
708 Passing over, through, or under cars - equipment standing	8	2	1	3	---	---	---	5
709 Struck by or ran into loco/car (not at hwy x-ing), misc-eqp std	5	1	1	2	---	---	---	3
SUBTOTAL.....	24	12	3	15	---	---	---	9
SERVICING OR MAINTENANCE OF EQUIPMENT								
802 Crossing over, under, or between locos or cars - equipment standing	58	1	56	57	1	---	---	---
803 Striking or being struck by eqp, structures, or material-eqp std	616	1	611	612	4	---	---	---
804 Use of hand tools	933	4	924	928	1	---	4	---
805 Use of portable power tools	149	---	148	148	---	---	1	---
806 Use of welding equipment	123	---	123	123	---	---	---	---
807 Use of oxygen-acetylene, natural gas cutting equipment	104	---	103	103	---	---	1	---
808 Use of grinding equipment	54	1	53	54	---	---	---	---
809 Use of scaffolds, ladders, etc.	91	1	90	91	---	---	---	---
81A Lifting parts to install while making repairs	195	2	193	195	---	---	---	---
810 Use of cranes, hoists, derricks, piledrivers, etc.	123	---	122	122	---	---	1	---
811 Use of lift trucks and other portable material handling eqp	141	---	140	140	---	---	1	---
812 Use of shop machinery not elsewhere classified	138	---	138	138	---	---	---	---
813 Loading and unloading materials	251	---	251	251	---	---	---	---
814 Handling material by hand	1,063	8	1,053	1,061	---	---	2	---
816 Inhalation of or contact with fumes or gases	12	1	11	12	---	---	---	---
817 Foreign object in eye, using eye protection	315	3	312	315	---	---	---	---
818 Foreign object in eye, not using eye protection	307	12	292	304	3	---	---	---
819 Struck by flying or falling object	334	---	333	333	1	---	---	---
820 Electrical flash, shock, or burn	97	1	94	95	---	---	2	---
821 Fire or explosion of fuses or torpedoes	3	---	3	3	---	---	---	---
822 Other fire or explosion	19	1	18	19	---	---	---	---
823 Burned or irritated by hot, corrosive, or toxic substances	172	3	167	170	1	---	1	---
824 Stumbling, slipping, falling, caught, not elsewhere classified	1,401	7	1,343	1,350	46	---	5	---
825 Other acc/inc while servicing or maintaining eqp-eqp std	1,121	10	1,104	1,114	4	---	3	---
SUBTOTAL.....	7,820	56	7,682	7,738	61	---	21	---
MAINTENANCE OF WAY AND STRUCTURES								
852 Crossing over, under, or between locos or cars-eqp std	9	---	9	9	---	---	---	---
853 Striking or being struck by eqp, structures, or material-eqp std	511	---	504	504	4	---	3	---
854 Use of hand tools	1,268	1	1,264	1,265	---	---	3	---
855 Use of portable power tools	314	---	311	311	---	---	3	---
856 Use of welding equipment	71	---	67	67	---	---	4	---
857 Use of oxygen-acetylene, natural gas cutting equipment	49	---	47	47	---	---	2	---

TABLE S39B. (CONTINUED)

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passengers	Nontrespassers	Trespassers
MAINTENANCE OF WAY AND STRUCTURES (CONT.)								
858 Use of grinding equipment	82	---	82	82	---	---	---	---
859 Use of scaffolds, ladders, etc.	72	---	72	72	---	---	---	---
860 Use of cranes, hoists, derricks, piledrivers, etc.	169	3	162	165	---	---	4	---
861 Use of lift trucks and other portable material handling eqp	96	---	95	95	1	---	---	---
862 Use of shop machinery not elsewhere classified	56	---	56	56	---	---	---	---
863 Loading and unloading materials	835	1	825	826	2	---	7	---
864 Handling material by hand	1,196	2	1,186	1,188	---	---	8	---
866 Inhalation of or contact with fumes or gases	7	---	7	7	---	---	---	---
867 Foreign object in eye, using eye protection	190	1	185	186	1	---	3	---
868 Foreign object in eye, not using eye protection	284	2	277	279	1	---	4	---
869 Struck by flying of falling object	506	---	502	502	1	---	3	---
870 Electrical flash, shock, or burn	33	---	32	32	---	---	1	---
871 Fire or explosion of fuses or torpedoes	2	---	2	2	---	---	---	---
872 Other fire or explosion	24	---	23	23	1	---	---	---
873 Burned or irritated by hot, corrosive or toxic substances	96	---	94	94	2	---	---	---
874 Stumbling, slipping, falling, caught, not elsewhere classified	1,337	4	1,300	1,304	30	---	3	---
875 Use of maintenance of way equipment not elsewhere classified	222	---	222	222	---	---	---	---
876 Inserting or removing ties, switch timbers and tie plates by use of hand tools	850	---	850	850	---	---	---	---
877 Insert/remove ties, switch timbers and tie plates using portable power tools	140	1	139	140	---	---	---	---
878 Loading/unloading ties, switch timbers, tie plates and fastenings	494	2	491	493	---	---	1	---
879 Handling rail by use of power tools	99	1	98	99	---	---	---	---
880 Handling rail by use of hand tools	417	2	414	416	---	---	1	---
890 Handling/inserting/removing rail anchors (includes being struck by anchors)	157	---	157	157	---	---	---	---
891 Handling/inserting/removing track spikes (includes being struck by flying spike)	634	2	632	634	---	---	---	---
892 Working on or about sgnl or comm. poles, sgnl masts,sgnl cantilevers or catenary	192	---	192	192	---	---	---	---
893 Servicing or repairing MOW equipment at work site	137	---	135	135	---	---	2	---
899 Other accs/incs while maintaining way and structures - eqp standing	541	1	531	532	2	---	7	---
SUBTOTAL.....	11,090	23	10,963	10,986	45	---	59	---
FREIGHT, BAGGAGE, EXPRESS OR MAIL								
901 Handling freight, baggage, express or mail	144	11	131	142	---	---	2	---
902 Struck or caught by shifted lading	12	2	8	10	---	---	1	1
903 Tripping over, or struck by falling baggage in passenger car-eqp std	2	1	---	1	---	1	---	---
904 Other accident/incident involving freight, baggage, express, or mail	26	1	23	24	1	---	1	---
SUBTOTAL.....	184	15	162	177	1	1	4	1

**TABLE S39B. (CONTINUED)**

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>WINDOWS, DOORS, ETC., ON ON-TRACK EQUIPMENT</b>						
907 Opening/closing hopper or gondola hatches, end or bottom doors, eqp standing	31	3 28	31	---	---	---
908 Clo/opn frt/bag car doors, exc plug type car doors, def eqp-eqp std	28	5 22	27	---	---	1
909 Clo/opn frt/bag car doors, exc plug type car doors, no def-eqp std	60	10 49	59	---	---	1
910 Closing or opening plug type car doors, defective equipment-eqp std	19	4 15	19	---	---	---
911 Closing or opening plug type car doors, no defects-equipment std	47	5 39	44	---	1	2
912 Closing or opening coach trap doors-equipment standing	53	39 12	51	1	1	---
913 Interior doors-equipment standing	52	21 28	49	---	3	---
914 Opening or closing locomotive doors-equipment standing	64	50 14	64	---	---	---
915 Opening or closing locomotive windows-equipment standing	19	17 2	19	---	---	---
916 Opening or closing caboose doors-equipment standing	13	12 1	13	---	---	---
917 Opening or closing caboose windows-equipment standing	4	4 ---	4	---	---	---
918 Opening and closing other windows	10	4 4	8	2	---	---
919 Other accidents/incidents involving windows or doors	180	57 107	164	5	6	4 1
SUBTOTAL.....	580	231 321	552	8	11	8 1
<b>PASSENGER CAR DOORS</b>						
920 Caught by side doors while entering coach-equipment standing	3	1 ---	1	---	2	---
921 Caught by side doors while exiting coach-equipment standing	7	1 2	3	---	4	---
924 Struck by side doors while entering coach-equipment standing	5	2 2	4	---	1	---
925 Struck by side doors while exiting coach-equipment standing	1	1 ---	1	---	---	---
926 Striking side door while entering coach-equipment standing	1	--- 1	1	---	---	---
927 Striking side door while exiting coach-equipment standing	1	1 ---	1	---	---	---
SUBTOTAL.....	18	6 5	11	---	7	---
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>						
930 Stumbling/slipping, etc. on snow or ice	691	278 317	595	82	6	8
931 Stumbling/slipping, etc. on foreign material or irregular surface	891	482 321	803	65	9	14
932 Stumbling/slipping, etc. on parts of track in place	224	121 85	206	7	3	6 2
933 Stumbling/slipping, etc. on stairways, ramps or platforms	499	71 229	300	57	71	71
934 Slip/fall, etc. between loco/car and other cars and struct-eqp std	35	17 13	30	1	4	---
935 From bridges or trestles	47	6 35	41	1	---	3 2
936 From structures other than bridges or trestles	37	3 26	29	---	1	3 4
937 Into depressions	128	58 61	119	6	---	3
938 While on locomotive or car-equipment standing	128	48 57	105	4	12	7
939 Other, stumbling, slipping, falling, caught, etc.	324	105 165	270	35	3	16
SUBTOTAL.....	3,004	1,189 1,309	2,498	258	109	131 8
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>						
940 Foreign object in eye	366	251 108	359	7	---	---
941 Struck by flying of falling object (except assaults)	131	41 78	119	1	2	8 1
942 Electrical flash, shock, or burn	20	2 9	11	1	1	1 6
943 Fire or explosion of fusees or torpedoes	7	6 1	7	---	---	---
944 Other fire or explosion	26	3 20	23	2	---	1
945 Burned by hot or corrosive substances	24	8 16	24	---	---	---
946 Inhalation of or contact with fumes or gases	26	12 12	24	1	---	1

**TABLE S39B. (CONTINUED)**

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C. (CONT.)								
947 Electrical injury due to contact with catenary, pantograph or 3rd rail	10	---	---	---	---	---	1	9
949 Other acc/inc resulting from flying/falling objs, burns, etc.	36	11	21	32	2	1	1	---
SUBTOTAL.....	646	334	265	599	14	4	13	16
OPERATION OF ON-TRACK WORK EQUIPMENT								
954 Getting on/off on-track work equipment - equipment standing	56	---	56	56	---	---	---	---
959 Other A/I involving on-track work equipment - equipment standing	100	2	98	100	---	---	---	---
SUBTOTAL.....	156	2	154	156	---	---	---	---
ASSAULT								
96B Shooting incidents not involving persons on on-track equipment	3	2	1	3	---	---	---	---
96C Struck by other propelled object while on locomotive - equip standing	3	2	1	3	---	---	---	---
96D Struck by other propelled object while on car - equip standing	5	3	2	5	---	---	---	---
96E Struck by other propelled object while on caboose - equip standing	3	---	1	1	---	2	---	---
96F Struck by other propelled object, not on on-track equipment	20	8	10	18	1	1	---	---
96G All other unprovoked assaults	119	29	74	103	11	3	2	---
96J Shot while on standing on-track equipment	1	---	1	1	---	---	---	---
96K Shooting incidents that did not involve persons on on-track equipment	1	---	1	1	---	---	---	---
96L Other assaults connected with the protection of RR property - eqp standing	43	2	41	43	---	---	---	---
96M All other assaults not involving moving on-track equipment	27	3	23	26	1	---	---	---
96N Injuries sustained by ther perpetrator of an assault	6	---	3	3	---	---	---	3
SUBTOTAL.....	231	49	158	207	13	6	2	3
OTHER OCCURRENCES								
970 Performing rerailling or other clearing operations	76	10	65	75	---	---	1	---
978 Motor vehicle acc/inc (other than rail-highway grade crossing)	707	108	540	648	32	---	12	15
979 Servicing and maintenance of highway vehicles	46	---	44	44	1	---	1	---
980 Horseplay	16	1	10	11	4	1	---	---
981 Animal bites, including snake bites	23	7	12	19	3	---	---	1
982 Insect bites	334	92	232	324	7	3	---	---
983 Incidents occurring in office setting involving clerical, staff, etc., personnel	409	7	393	400	8	---	1	---
984 Contact with poisonous plants	24	4	19	23	---	---	---	1
985 Stepping on nails or other sharp objects	82	30	48	78	4	---	---	---
988 Other accidents/incidents while in caboose, equipment standing	40	36	4	40	---	---	---	---
989 Other accidents/incidents	491	164	282	446	23	2	13	7
SUBTOTAL.....	2,248	459	1,649	2,108	82	6	28	24
GRAND TOTAL.....	30,991	6,379	23,447	29,826	492	247	355	71

NOTE: Contractor employees are included with nontrespassers



TABLE S39C.

ILLNESSES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE  
AND TYPE OF PERSON

Occurrence	Total Illness	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS						
009 Other acc/inc while coupling/uncoupling cars or locos - equip std	2	2	---	2	---	---
SUBTOTAL.....	2	2	---	2	---	---
COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.						
052 Uncoupl air hose, struck by hose due to sudden release of air-eqp std	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
OPERATING OR ON LOCOMOTIVES						
109 Inhalation of or contact with fumes or gases - equipment standing	40	40	---	40	---	---
110 Defective locomotive seat - equipment standing	1	1	---	1	---	---
119 Other accidents/incidents while operating locomotives - eqp standing	8	8	---	8	---	---
SUBTOTAL.....	49	49	---	49	---	---
OPERATING HAND BRAKES						
209 Other accidents/incidents while operating hand brakes - eqp standing	2	2	---	2	---	---
SUBTOTAL.....	2	2	---	2	---	---
OPERATING SWITCHES OR DERAILS						
306 Lining switches, no defects	1	1	---	1	---	---
309 Other acc/inc while operating switches/derails - equipment standing	1	1	---	1	---	---
SUBTOTAL.....	2	2	---	2	---	---
GETTING ON OR OFF CARS OR LOCOMOTIVES						
508 Slipping/falling while boarding/alighting fm passenger eqp(standing)	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
SERVICING OR MAINTENANCE OF EQUIPMENT						
804 Use of hand tools	3	---	3	3	---	---
806 Use of welding equipment	25	---	25	25	---	---
807 Use of oxygen-acytelene, natural gas cutting equipment	1	---	1	1	---	---
810 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	1	1	---	---
812 Use of shop machinery not elsewhere classified	2	---	2	2	---	---
814 Handling material by hand	15	---	15	15	---	---
816 Inhalation of or contact with fumes or gases	40	---	40	40	---	---
818 Foreign object in eye, not using eye protection	3	1	2	3	---	---
820 Electrical flash, shock, or burn	16	---	16	16	---	---
822 Other fire or explosion	1	---	1	1	---	---
823 Burned or irritated by hot, corrosive, or toxic substances	35	---	35	35	---	---
824 Stumbling, slipping, falling, caught, not elsewhere classified	1	---	1	1	---	---
825 Other acc/inc while servicing or maintaining eqp-eqp std	37	1	36	37	---	---
SUBTOTAL.....	180	2	178	180	---	---

TABLE S39C. (CONTINUED)

Occurrence	Total Illness	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
MAINTENANCE OF WAY AND STRUCTURES						
854 Use of hand tools	8	---	8	8	---	---
855 Use of portable power tools	10	---	10	10	---	---
856 Use of welding equipment	8	---	8	8	---	---
857 Use of oxygen-acetylene, natural gas cutting equipment	2	---	2	2	---	---
858 Use of grinding equipment	1	---	1	1	---	---
860 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	1	1	---	---
863 Loading and unloading materials	4	---	4	4	---	---
864 Handling material by hand	11	---	11	11	---	---
866 Inhalation of or contact with fumes or gases	10	---	10	10	---	---
867 Foreign object in eye, using eye protection	1	---	1	1	---	---
868 Foreign object in eye, not using eye protection	1	---	1	1	---	---
870 Electrical flash, shock, or burn	15	---	15	15	---	---
873 Burned or irritated by hot, corrosive or toxic substances	15	---	15	15	---	---
874 Stumbling, slipping, falling, caught, not elsewhere classified	1	---	1	1	---	---
875 Use of maintenance of way equipment not elsewhere classified	1	---	1	1	---	---
876 Inserting or removing ties, switch timbers and tie plates by use of hand tools	22	---	22	22	---	---
877 Insert/remove ties, switch timbers and tie plates using portable power tools	5	---	5	5	---	---
878 Loading/unloading ties, switch timbers, tie plates and fastenings	7	---	7	7	---	---
880 Handling rail by use of hand tools	1	---	1	1	---	---
890 Handling/inserting/removing rail anchors (includes being struck by anchors)	6	---	6	6	---	---
891 Handling/inserting/removing track spikes (includes being struck by flying spike)	4	---	4	4	---	---
892 Working on or about sgnl or comm. poles, sgnl masts,sgnl cantilevers or catenary	1	---	1	1	---	---
893 Servicing or repairing MOW equipment at work site	1	---	1	1	---	---
899 Other accs/incs while maintaining way and structures - eqp standing	52	1	51	52	---	---
SUBTOTAL.....	188	1	187	188	---	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED						
930 Stumbling/slipping, etc. on snow or ice	1	---	1	1	---	---
931 Stumbling/slipping, etc. on foreign material or irregular surface	1	1	---	1	---	---
937 Into depressions	1	1	---	1	---	---
938 While on locomotive or car-equipment standing	1	1	---	1	---	---
SUBTOTAL.....	4	3	1	4	---	---
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.						
940 Foreign object in eye	2	---	2	2	---	---
942 Electrical flash, shock, or burn	2	2	---	2	---	---
944 Other fire or explosion	2	---	2	2	---	---
945 Burned by hot or corrosive substances	2	---	2	2	---	---
946 Inhalation of or contact with fumes or gases	69	40	29	69	---	---
949 Other acc/inc resulting from flying/falling objjs, burns, etc.	5	4	1	5	---	---
SUBTOTAL.....	82	46	36	82	---	---
OPERATION OF ON-TRACK WORK EQUIPMENT						
959 Other A/I involving on-track work equipment - equipment standing	4	---	4	4	---	---
SUBTOTAL.....	4	---	4	4	---	---

TABLE S39C. (CONTINUED)

Occurrence	Total Illness	...Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
OTHER OCCURRENCES								
978 Motor vehicle acc/inc (other than rail-highway grade crossing)	6	1	5	6	---	---	---	---
981 Animal bites, including snake bites	1	---	1	1	---	---	---	---
982 Insect bites	8	5	3	8	---	---	---	---
983 Incidents occurring in office setting involving clerical, staff, etc., personnel	5	---	5	5	---	---	---	---
984 Contact with poisonous plants	218	7	211	218	---	---	---	---
988 Other accidents/incidents while in caboose, equipment standing	3	3	---	3	---	---	---	---
989 Other accidents/incidents	30	12	17	29	1	---	---	---
SUBTOTAL.....	271	28	242	270	1	---	---	---
GRAND TOTAL.....	786	137	648	785	1	---	---	---

**APPENDIX A**  
**REPORTABILITY REQUIREMENTS AND DEFINITIONS**

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## REPORTABILITY REQUIREMENTS

The rules governing the monthly reporting of railroad accidents/incidents in effect at the end of 1981 define a reportable accident/incident as an event arising from the operation of a railroad which, with minor exceptions, results in one or more of the following circumstances:

(a) Any impact between railroad on-track equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle, pedestrian, or other highway user at a rail-highway crossing:

(b) Any collision, derailment, fire, explosion, act of God, or other event involving the operation of railroad on-track equipment, standing or moving, which results in more than \$3,700 in damages to railroad on-track equipment, signals, track, track structures, and roadbed;

(c) Any event arising from the operation of a railroad which results in:

- (i) the death of one or more persons;
- (ii) an injury to one or more persons, other than railroad employees, which requires medical treatment;
- (iii) an injury to one or more employees which requires medical treatment or results in: restriction of work or motion for one or more days, or one or more lost work days; transfer to another job; termination of employment; or loss of consciousness; or
- (iv) any occupational illness of a railroad employee as diagnosed by a physician.

## CLASSIFICATION OF ACCIDENTS/INCIDENTS

**Train Accident.** A collision, derailment, or other event involving the operation of railroad on-track equipment resulting in damages that exceed the reporting threshold.

**Train Incident.** An event involving the movement of railroad on-track equipment that results in a death, a reportable injury, or a reportable illness, but in which railroad property damage does not exceed the reporting threshold.

**Non-train Incident.** An event arising from railroad operations but not from the movement of on-track equipment, which does not exceed the reporting threshold, and results in a death, a reportable injury, or a reportable occupational illness.

## DEFINITIONS

Accident. See "train accident," above.

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

Casualty. A fatality, a nonfatal injury, or an occupational illness resulting from railroad operations.

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

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

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

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

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

Derailment. A derailment occurs when one or more than one unit of rolling stock equipment leaves the rails during train operations for a cause other than collision, explosion, or fire.

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

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

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

Hazardous materials. Any toxic substance, explosive, corrosive material, combustible material, poison, or radioactive material that poses a risk to the public's health, safety, or property when transported in commerce.



Human factor. Behavior affecting elements of railroad employee job performance.

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

Locomotive-mile. The movement of a locomotive under its own power the distance of one mile.

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

Man-hour. An industrial unit of production reflecting paid labor hours.

Nonfatal casualty. Injuries and occupational illnesses incurred during railroad operations and maintenance procedures.

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

Occupational illness. Any abnormal condition or disorder caused by environmental factors associated with a worker's employment, but not the result of an injury.

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

Operating practice. Railroad employee performance and adherence to the established operating rules of a railroad company.

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

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

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

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

Reporting threshold. The level of railroad property damage, resulting from a train accident involving on-track equipment, over which a railroad

company must report the accident to the Federal Railroad Administration. Reportable damages include the cost of labor and the cost of repairing (or replacing in kind) damaged on-track equipment, track, track structures, or roadbed.

Revenue ton-mile. Revenue freight traffic measured in ton-miles.

Tank car. A railroad car consisting of a large cylindrical container attached to the railcar truck and used to transport liquids in bulk.

Ton-mile. A unit of measure equal to the movement of one ton of railroad lading for a distance of one mile.

Train. Locomotive unit or units, with or without cars, involved in railroad operations.

Trainmen. Persons employed as engineers and motormen, firemen and helpers, conductors, brakemen, and flagmen engaged in passenger, freight, yard or work service, and train baggagemen. Does not include hostlers.

Train-mile. A unit of comparative measure equal to the movement of one train for a distance of one mile.

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

**APPENDIX B**  
**REPORTING FORMS**

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DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION  
**RAILROAD INJURY AND ILLNESS SUMMARY**

*Form Approved  
OMB No. 04-R4009*

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

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

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

(Use an im-  
[L.S]  
pression seal) \_\_\_\_\_

(Notary Public) \_\_\_\_\_ (Signature of affiant)

7. **MILES RUN DURING MONTH**

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

8.

A. EMPLOYEE MANHOURS WORKED	B. PASSENGER MILES OPERATED	C. NUMBER OF PASSENGERS TRANSPORTED
-----------------------------	-----------------------------	-------------------------------------

TOTAL TRAIN ACCIDENTS	TOTAL FRA FORMS 6180-55A	TOTAL FRA FORMS 6180-54	TOTAL FRA FORMS 6180-57
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SECTION A—RECAPITULATION OF ALL CASUALTIES INCLUDING HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES								CLASS OF PERSON FOR SECTIONS A AND B	SECTION B—RECAPITULATION OF ALL HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES							
TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS		TOTAL			TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS		TOTAL	
Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj		Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj
								1. Employees on duty								
								2. Employees not on duty								
								3. Passengers on trains								
								4. Other nontrespassers								
								5. Trespassers (all classes)								
								6. Contractor Employees								
								7. GRAND TOTAL								

**SECTION C—MEMORANDUM—SUBSEQUENT FATALITIES DEVELOPED FROM REPORTED CASUALTIES**

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

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

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





# RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT

1. NAME OF REPORTING RAILROAD <div style="text-align: right;">Amtrak Autotrain</div>		1a. Alphabetic Code	1b. Railroad Accident/Incident No.	
2. NAME OF OTHER RAILROAD INVOLVED IN TRAIN ACCIDENT/INCIDENT		2a. Alphabetic Code	2b. Railroad Accident/Incident No.	
3. NAME OF RAILROAD RESPONSIBLE FOR TRACK MAINTENANCE (single entry)		3a. Alphabetic Code	3b. Railroad Accidents/Incident No.	
4. U. S. DOT-AAR GRADE CROSSING IDENTIFICATION NUMBER		5. DATE OF ACCIDENT/INCIDENT month      day      year		6. TIME OF ACCIDENT/INCIDENT am <input type="checkbox"/> pm <input type="checkbox"/>
7. TYPE OF ACCIDENT/INCIDENT (enter number in code box, single entry) 1. Derailment      3. Rear end collision      5. Raking collision      7. Rail-Hwy crossing      9. Obstruction      11. Fire or violent rupture      12. Other (specify) 2. Head on collision      4. Side collision      6. Broken train collision      8. RR grade crossing      10. Explosion-Detonation				
<b>HAZARDOUS MATERIALS (number of)</b>				
8. CARS CARRYING	9. CARS DAMAGED OR DERAILED	10. CARS WHICH RELEASED HAZ. MAT.	11. PEOPLE EVACUATED (est.)	
<b>LOCATION</b>				
12. DIVISION	13. NEAREST STATION	14. MILEPOST (to nearest tenth)	15. STATE (two letter code)	CODE
<b>ENVIRONMENTAL CONDITIONS</b>				
16. TEMPERATURE (specify if minus) °F	17. VISIBILITY (single entry) 1. Dawn      3. Dusk 2. Day      4. Dark	CODE	18. WEATHER (single entry) 1. Clear    2. Cloudy    3. Rain    4. Fog    5. Sleet    6. Snow	
<b>OPERATIONAL DATA</b>				
19. METHOD (place X in appropriate box(es))				
1 <input type="checkbox"/> Manual block	4 <input type="checkbox"/> Automatic block	7 <input type="checkbox"/> Yard rules	10 <input type="checkbox"/> Auto. train control	13 <input type="checkbox"/> Other (specify)
2 <input type="checkbox"/> Interlocking	5 <input type="checkbox"/> Traffic control	8 <input type="checkbox"/> Time table	11 <input type="checkbox"/> Verbal permission	
3 <input type="checkbox"/> Cab signal	6 <input type="checkbox"/> Auto. train stop	9 <input type="checkbox"/> Radio	12 <input type="checkbox"/> Train orders	
20. SPEED (recorded speed, if available) Est.      MPH      Recorded	21. TRAIN NUMBER	22. TIME TABLE DIRECTION 1. North    2. South    3. East    4. West		CODE
<b>EQUIPMENT</b>				
23. TRAILING TONS (gross tonnage, excluding power units)	24. TYPE OF EQUIPMENT CONSIST (single entry) 1. Freight train    3. Mixed train    5. Single car    7. Yard/switching 2. Passenger train    4. Work train    6. Cut of cars    8. Light loco(s)		CODE	25. WAS THE EQUIPMENT IDENTIFIED IN ITEM 24 UNATTENDED? 1. Yes    2. No
26. TRACK NUMBER OR NAME	27. FRA TRACK CLASSIFICATION	28. ANNUAL TRACK DENSITY (gross tons in millions)	29. TYPE OF TRACK 1. Main    3. Siding 2. Yard    4. Industry	
30. PRINCIPLE CAR/UNIT	30a. Initial and Number	30b. Position in Train	30c. Loaded (yes or no)	
(1) First Involved (derailed, struck, striking, etc.)				
(2) Causing (mechanical failures)				
31. LOCOMOTIVE UNITS (no. of)	a. Head End	Mid Train b. Manual    c. Remote	Rear End d. Manual    e. Remote	32. CARS (no. of)
(1) Total in Train				(1) Total in Equipment Consist
(2) Total Derailed				(2) Total Derailed
<b>PROPERTY DAMAGE (estimated cost, including labor, to repair or replace)</b>				
33. EQUIPMENT DAMAGE (to be reported for this equipment consist only)		\$	34. TRACK, SIGNAL, WAY AND STRUCTURES DAMAGE (to be reported by railroad in item 3 only)	
<b>ACCIDENT/INCIDENT CAUSE CODE</b>				
35. PRIMARY CAUSE	CODE	36. CONTRIBUTING CAUSE	CODE	37. If no code available, explain cause.
<b>CASUALTIES</b>				
38. NUMBER OF PERSONS INJURED		39. ESTIMATED TOTAL DAYS DISABILITY		40. NUMBER OF FATALITIES
<b>CREW (no. of)</b>				
41. ENGINEERS	42. FIREMEN	43. CONDUCTORS	44. BRAKEMEN	45. ENGINEER
				Hrs:      Mins:
<b>HOURS ON DUTY</b>				46. CONDUCTOR
				Hrs:      Mins:
47. TYPED NAME AND TITLE		48. SIGNATURE		49. DATE
50. NARRATIVE DESCRIPTION - Describe the cause, nature and circumstances of accident/incident				





**ANNUAL SUMMARY REPORT**  
of  
**RAILROAD INJURY AND ILLNESS**  
(Covering Calendar Year \_\_\_\_)

**COMPLETE THIS REPORT WHETHER OR NOT THERE WERE  
ANY REPORTABLE OCCUPATIONAL INJURIES OR ILLNESSES.  
READ INSTRUCTIONS BEFORE COMPLETING THIS FORM**

**I. ESTABLISHMENTS INCLUDED IN THIS REPORT**

This report should include all establishments located in, or identified by, the reporting railroad. Enter the number of establishments (see definition in the FRA Guide).

\_\_\_\_\_

**II. AVERAGE EMPLOYMENT IN REPORTING YEAR**

Enter the average number of employees during calendar year. Count all classes of employees, including seasonal, temporary, part-time, etc. See instructions in the FRA Guide for examples of computing your average employment.

\_\_\_\_\_ (Round to the nearest whole number)

**III. TOTAL HOURS WORKED IN REPORTING YEAR**

Enter the total number of hours actually worked by all employees. DO NOT include any non-work time even

though paid, such as vacations, sick leave, holidays, etc.

\_\_\_\_\_ (Round to the nearest whole number)

**IV. REPORTABLE INJURIES AND ILLNESSES**

Did you have any reportable injuries or illnesses during the reporting year? (Check one)

- (1)  No - complete Section VII,
- (2)  Yes - complete Sections V, VI and VII.

**V. MONTHLY DATA OF REPORTABLE INJURIES AND ILLNESSES**

Of the Total Reportable Occupational Injuries and Illnesses (Section VI, Line 10 column 1), how many occurred in the following months?

<u>Calendar Year</u>					
Jan. _____	Apr. _____	July _____	Oct. _____		
Feb. _____	May _____	Aug. _____	Nov. _____		
Mar. _____	June _____	Sept. _____	Dec. _____		

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CORPORATE NAME AND MAILING ADDRESS OF REPORTING RAILROAD →

Name	Alphabetic Railroad Code (See FRA Guide, Appendix A)	
STREET		
CITY	STATE	ZIP CODE

**VI. INJURY AND ILLNESS SUMMARY** (Covering Calendar Year \_\_\_\_\_ )

- INSTRUCTIONS:**
- This section may be completed by Copying data from the "Annual Summary" which you are required to complete and post in your establishment.
  - Leave Section VI blank if there were no reportable injuries or illnesses during the reporting year.
  - Line 9 – Add all Occupational Illnesses (Lines 2 through 8) and enter on this line for each column (1) through (8).
  - Line 10 - Add Occupational Injuries (Line 1) and the sum of all Occupational Illnesses (Line 9) and enter on this line for each column (1) through (8).

LINE	INJURY AND ILLNESS CATEGORY	TOTAL CASES (1)	DEATHS (2)	LOST WORKDAY CASES ONLY				NONFATAL CASES WITH-OUT LOST WORKDAYS (7)	TERMINATIONS OR PERMANENT TRANSFERS (8)
				Total lost work-day cases (includes restricted workday cases) (3)	Cases involving days away from work (4)	Days away from work (5)	Days of restricted work activity (6)		
1	<b>OCCUPATIONAL INJURIES</b>								
2	<b>OCCUPATIONAL ILLNESSES</b>	Occupational Skin Diseases or Disorders							
3		Dust Diseases of the Lungs							
4		Respiratory Conditions Due to Toxic Agents							
5		Poisoning (Systemic Effects of Toxic Materials)							
6		Disorders Due to Physical Agents							
7		Disorders Associated With Repeated Trauma							
8		All Other Occupational Illnesses							
9		<b>TOTAL OCCUPATIONAL ILLNESSES</b> (Add Lines 2 through 8)							
10	<b>TOTAL OCCUPATIONAL INJURIES AND ILLNESSES</b> (Add Lines 1 and 9)								

**VII. COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Report prepared by: \_\_\_\_\_ Area Code and Phone: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**ANNUAL RAILROAD REPORT  
OF  
MANHOURS BY STATE**

1. REPORTING RAILROAD	ALPHABETIC CODE	2. REPORT YEAR
-----------------------	-----------------	----------------

3. ANNUAL MANHOURS							
A.	STATE	B. CODE	C. M/HRS.	A.	STATE	B. CODE	C. M/HRS.
(1)	ALABAMA	AL		(26)	MONTANA	MT	
(2)	ALASKA	AK		(27)	NEBRASKA	NE	
(3)	ARIZONA	AZ		(28)	NEVADA	NV	
(4)	ARKANSAS	AR		(29)	NEW HAMPSHIRE	NH	
(5)	CALIFORNIA	CA		(30)	NEW JERSEY	NJ	
(6)	COLORADO	CO		(31)	NEW MEXICO	NM	
(7)	CONNECTICUT	CT		(32)	NEW YORK	NY	
(8)	DELAWARE	DE		(33)	NORTH CAROLINA	NC	
(9)	DISTRICT OF COLUMBIA	DC		(34)	NORTH DAKOTA	ND	
(10)	FLORIDA	FL		(35)	OHIO	OH	
(11)	GEORGIA	GA		(36)	OKLAHOMA	OK	
(12)	IDAHO	ID		(37)	OREGON	OR	
(13)	ILLINOIS	IL		(38)	PENNSYLVANIA	PA	
(14)	INDIANA	IN		(39)	RHODE ISLAND	RI	
(15)	IOWA	IA		(40)	SOUTH CAROLINA	SC	
(16)	KANSAS	KS		(41)	SOUTH DAKOTA	SD	
(17)	KENTUCKY	KY		(42)	TENNESSEE	TN	
(18)	LOUISIANA	LA		(43)	TEXAS	TX	
(19)	MAINE	ME		(44)	UTAH	UT	
(20)	MARYLAND	MD		(45)	VERMONT	VT	
(21)	MASSACHUSETTS	MA		(46)	VIRGINIA	VA	
(22)	MICHIGAN	MI		(47)	WASHINGTON	WA	
(23)	MINNESOTA	MN		(48)	WEST VIRGINIA	WV	
(24)	MISSISSIPPI	MS		(49)	WISCONSIN	WI	
(25)	MISSOURI	MO		(50)	WYOMING	WY	

4. TYPED NAME AND TITLE	5. SIGNATURE	6. DATE
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<u>Subject</u>	<u>Page</u>
fatalities	
to employees . . . . .	23, 56, 63, 80
to others . . . . .	23, 56, 68
at rail-highway crossings . . . . .	22, 26, 68, 92
by state . . . . .	47, 48
by railroad . . . . .	56
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to employees . . . . .	24, 58, 78, 81, 82
by type of injury . . . . .	72, 74, 77
to others . . . . .	69, 72, 74
at rail-highway crossings . . . . .	22, 69, 96
by state . . . . .	47
by railroad . . . . .	58, 65, 66
illnesses	
to employees . . . . .	, 107
by state . . . . .	

hazardous materials  
 train accidents involving . .

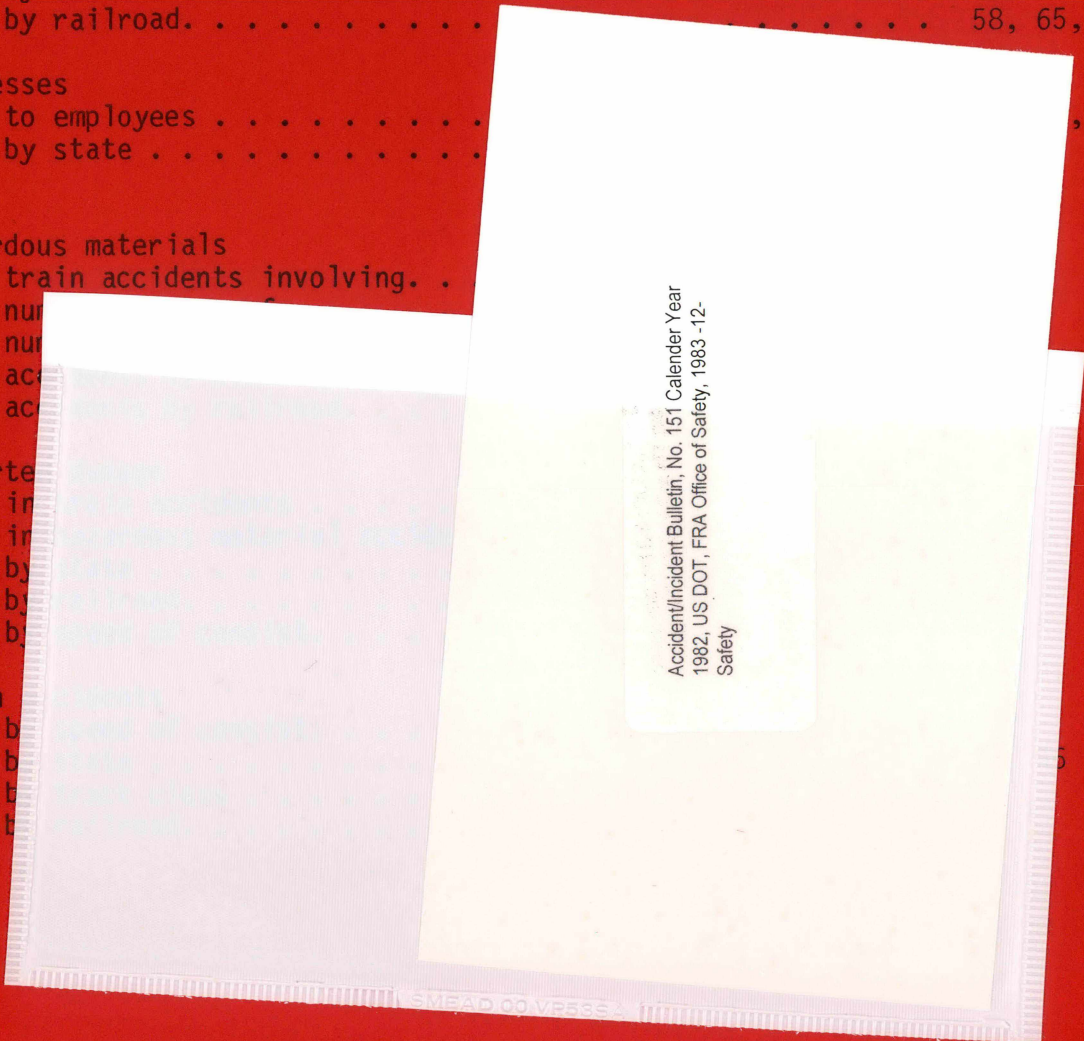
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