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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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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
INTRODUCTION . . . . .	1
1. HISTORICAL TRENDS, Last Six Years. . . . .	5
Operations . . . . .	5
Train Accidents . . . . .	7
Train Accidents, Train Incident and Nontrain Incidents. . .	14
Casualties. . . . .	16
2. OVERVIEW OF 1988 DATA. . . . .	19
Speed Factor in Accidents . . . . .	19
Accidents and Track Type. . . . .	21
Cause by Type of Accident . . . . .	22
Injuries and Fatalities by Type of Person . . . . .	23
3. ACCIDENTS: DETAIL OF 1988 OCCURRENCES . . . . .	31
4. ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS. .	39
5. ACCIDENTS AND CASUALTIES BY STATE. . . . .	45
6. SUMMARY OF ACCIDENT/INCIDENT DATA BY RAILROAD. . . . .	55
7. CASUALTIES: EMPLOYEES, TRESPASSERS, NONTRESPASSERS, AND OTHERS. .	71
Summary of Casualties . . . . .	71
Employee Casualties . . . . .	80
Casualties in Train Accidents . . . . .	89
Casualties in Train Incidents . . . . .	94
Casualties in Nontrain Incidents. . . . .	102
APPENDIX A. Reportability Requirements and Definitions	
APPENDIX B. Reporting Forms	

## LIST OF TABLES

<u>Table</u>		<u>Page</u>
1. HISTORICAL TRENDS, Last Six Years		
1.	Railroad Operational Profile . . . . .	5
2.	Revenue Ton-Miles. . . . .	6
3.	Train Accident Causes. . . . .	7
4.	Train Accidents and Reportable Damages by Train-Miles. . .	12
5.	Train Accidents and Reportable Damages by Type . . . . .	12
6.	Train Accidents and Reportable Damages by Cause. . . . .	13
7.	Total Accidents/Incidents. . . . .	15
8.	Casualties in Accidents/Incidents. . . . .	16
9.	Casualties by Type of Person . . . . .	17
2. OVERVIEW OF 1988 DATA		
10.	Train Accidents and Reportable Damages by Speed. . . . .	20
11.	Train Accidents and Reportable Damages by Track Class. . .	21
12.	Reportable Damages in Train Accidents by Type and Cause. . . . .	22
13.	Casualties by Type of Person . . . . .	24
14.	Total Fatalities by Type of Person . . . . .	25
15.	Total Nonfatal Casualties by Type of Person. . . . .	26
16.	Total Accidents/Incidents by Occurrence. . . . .	27
17.	Train Accidents by Month . . . . .	29
18.	Train Accidents by Type and Month. . . . .	29
3. ACCIDENTS: DETAIL OF 1988 OCCURRENCES		
19.	Train Accidents and Damages by Principal Causes and Subcauses. . . . .	31
20.	Train Accidents Resulting from Human Factors by Specific Causes . . . . .	32

LIST OF TABLES (continued)

<u>Table</u>		<u>Page</u>
21	Train Accidents Resulting from Mechanical and Electrical Failures by Specific Cause . . . . .	34
22	Train Accidents Resulting from Defects in Track, Roadbed and Structures . . . . .	36
23	Train Accidents Resulting from Miscellaneous Causes by Specific Cause . . . . .	38
24	Damages to Rail Equipment in Train Accidents by Consist Type . . . . .	38
4.	ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS	
25	Train Accidents Involving Hazardous Materials. . . . .	39
26	Train Accidents Involving Consists Transporting Hazardous Materials. . . . .	39
27	Train Accidents Involving Hazardous Materials by Cause . .	41
28	Train Accidents Involving Hazardous Materials by State . .	42
29	Train Accidents Involving Hazardous Materials by Railroad . . . . .	43
5.	ACCIDENTS AND CASUALTIES BY STATE	
30	Train Accidents by State and Type. . . . .	45
31	Train Accidents by State and Cause . . . . .	46
32	Train Accidents by State and Month . . . . .	48
33	Casualties by State and Class of Accident/Incident . . . .	49
34	Train Accident and Train Incident Fatalities to Trespassers and Nontrespassers by State. . . . .	50
35	Train Accident and Train Incident Injuries to Trespassers and Nontrespassers by State. . . . .	52
6.	SUMMARY OF ACCIDENT/INCIDENT DATA BY RAILROAD	
36	Summary of Train-Miles Operated. . . . .	55
37	Involvement in Train Accidents by Railroad, Type and Cause. . . . .	56

LIST OF TABLES (continued)

<u>Table</u>		<u>Page</u>
38	Fatalities by Railroad and Type of Accident/Incident . . . . .	58
39	Nonfatal Casualties by Railroad and Type of Accident/Incident. . . . .	60
40	Injuries to Employees on Duty by Type of Injury and Railroad . . . . .	62
41	Casualties in Train Accidents by Railroad. . . . .	64
42	Casualties to Employees on Duty by Job Category and Railroad . . . . .	65
43	Casualty Rates for Employees on Duty by Railroad . . . . .	67
44	Summary of Nonfatal Injuries to Employees on Duty by Railroad . . . . .	68
45	Summary of Employee on Duty Casualties by Reportability Criteria and Railroad. . . . .	69
7.	<b>CASUALTIES: EMPLOYEE, TRESPASSERS AND NON-TRESPASSERS AND OTHERS</b>	
46	Fatalities by Type of Accident/Incident, Type of Railroad, and Type of Person . . . . .	72
47	Injuries by Type of Accident/Incident, Type of Railroad, and Type of Person . . . . .	73
48	Illnesses by Type of Accident/Incident, Type of Railroad, and Type of Person . . . . .	75
49	Nature of Injuries by Type of Accident/Incident. . . . .	76
50	Nature of Injuries by Type of Person . . . . .	78
51	Employee on Duty Casualties by Type of Casualty. . . . .	81
52	Employee on Duty Casualties by Job Category. . . . .	82
53	Employee on Duty Fatalities by Job Category. . . . .	84
54	Employee on Duty Injuries by Job Category. . . . .	85
55	Lost Workdays Resulting from Nonfatal Injuries to Employees on Duty. . . . .	86

LIST OF TABLES (continued)

<u>Table</u>		<u>Page</u>
56	Employee on Duty Illnesses by Job Category. . . . .	87
57	Summary of Nonfatal Employee on Duty Injuries Due to Assault. . . . .	88
58	Fatalities Resulting from Train Accidents Caused by Miscellaneous Factors. . . . .	89
59	Nonfatal Casualties Resulting from Train Accidents Caused by Miscellaneous Factors . . . . .	89
60	Fatalities Resulting from Train Accidents Caused by Human Factors. . . . .	90
61	Nonfatal Casualties Resulting from Train Accidents Caused by Human Factors . . . . .	91
62	Fatalities Resulting from Train Accidents Caused by Mechanical/Electrical Failures . . . . .	92
63	Nonfatal Casualties Resulting from Train Accidents Caused by Mechanical/Electrical Failures . . . . .	92
64	Fatalities Resulting from Train Accidents Caused by Defects in Track, Roadbed, and Structures . . . . .	93
65	Nonfatal Casualties Resulting from Train Accidents Caused by Defects in Track, Roadbed, and Structures . . . . .	93
66	Fatalities in Train Incidents by Specific Occurrence and Type of Person . . . . .	94
67	Injuries in Train Incidents by Specific Occurrence and Type of Person . . . . .	96
68	Illness in Train Incidents by Specific Occurrence and Type of Person. . . . .	101
69	Fatalities in Non-train Incidents by Specific Occurrence and Type of Person . . . . .	102
70	Injuries in Non-train Incidents by Specific Occurrence and Type of Person . . . . .	103
71	Illnesses in Non-train Incidents by Specific Occurrence and Type of Person . . . . .	109

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Railroad Train Miles. . . . .	5
2	Revenue Ton-Miles . . . . .	6
3A	Accident Causes, Adjusted . . . . .	8
3B	Accident Causes, Unadjusted . . . . .	8
4A	Derailment Causes, Adjusted . . . . .	9
4B	Derailment Causes, Unadjusted . . . . .	9
5A	Collision Causes, Adjusted. . . . .	10
5B	Collision Causes, Unadjusted. . . . .	10
6A	Causes of Accidents Other Than Collisions and Derailments, Adjusted. . . . .	11
6B	Causes of Accidents Other Than Collisions and Derailments, Unadjusted. . . . .	11
7	Total Train Accidents and Train Incidents per Billion Revenue Ton-Miles . . . . .	14
8	Nontrain Incidents per 200,000 Man-Hours. . . . .	14
9	Total Accidents/Incidents . . . . .	15
10	Casualties in Train Accidents . . . . .	17
11	Casualties in Train Incidents . . . . .	17
12	Casualties in Nontrain Incidents. . . . .	18
13	Fatalities in Accidents/Incidents . . . . .	18
14	Causes of Accidents by Type of Track and Consist Speed. . .	19
15	Accident Damages by Speed and Cause . . . . .	20
16	Accident Damages by Track Class and Cause . . . . .	21
17	Accident Causes by Track Class. . . . .	22
18	Accident Causes by Accident Type. . . . .	23

LIST OF FIGURES (continued)

<u>Figure</u>		<u>Page</u>
19A	Fatalities by Type of Person. . . . .	23
19B	Injuries by Type of Person. . . . .	23
20	Fatalities at Rail-Highway Crossings by Type of Person. . .	28
21	Fatalities Not at Rail-Highway Crossings. . . . .	28
22	Total Number of Hazardous Material Car Damaged. . . . .	40
23	Total Number of Cars Releasing Hazardous Material by Year . . . . .	40
23A	Total Number of Accidents in Which There was a Release of Hazardous Materials . . . . .	40
24	All Hazardous Material Releases, Materials Transportation Bureau . . . . .	44
25	Train Accidents by State. . . . .	47
26	Fatalities by State . . . . .	51
27	Injuries by State . . . . .	53
28	Fatalities: Rail-Highway Crossings and Other. . . . .	71
29	Injuries: Rail-Highway Crossings and Other. . . . .	71
30	Injuries to Employees on Duty . . . . .	80
31A	Fatalities by Employee Job Category . . . . .	80
31B	Injuries by Employee Job Category . . . . .	80

Table Cross Reference

<u>Old Table Number</u>	<u>New Table Number</u>
H1	1
H2	7
H3	3
H4	8
H6	4
H7	5
H8	6
R1	36
R10	43
R12	40
R14	44
R15	57
R3	37
R4	29
R5	41
R7	38
R8	39
R9	42
S10	25
S10A	27
S11	14
S12	15
S12A	16
S13	46
S14	47
S15	48
S16	34
S17	35
S18	33
S2	17
S20	53
S21	54
S8	23

Table Cross Reference

<u>Old Table Number</u>	<u>New Table Number</u>
S21A	55
S22	56
S23	49
S24	50
S25	52
S27	51
S28	60
S29	61
S3A	30
S3B	31
S31	63
S32	64
S33	65
S34	58
S35	59
S36	66
S37	67
S38	68
S39A	69
S39B	70
S39C	71
S4	32
S40A	18
S40B	12
S41	19
S43	24
S44	10
S45	11
S5	20
S50	13
S6	21
S7	22
S9	28

## INTRODUCTION

Railroads are required to file monthly accident/incident reports with the Federal Railroad Administration's (FRA) Office of Safety in accordance with 49 CFR 225.

Bulletin 157 summarizes reportable accidents/incidents that occurred in the United States during 1988.

The reporting threshold that determines which accidents must be reported is adjusted to reflect the effect of inflation on damage costs. Between 1957 and 1974, any train accident exceeding \$750 in damages to railroad on-track equipment, signals, track or track structures, and roadbed had to be reported. Since the reporting threshold remained the same during this period, the rise in damage costs due to inflation contributed to an increasing number of reported accidents. In 1975, the FRA implemented new rules for reporting railroad accidents. The reporting threshold was raised to \$1,750; and the threshold was adjusted every 2 years to reflect inflationary changes. The reporting threshold in 1988 was \$5,200.

While this revision improved the comparability of the data, comparisons are valid only for those years when the threshold was adjusted. Generally, the number of reported accidents is higher in a year following an adjustment. Biennial adjustments not only make year-to-year statistical comparisons difficult, but also impose an unnecessary reporting burden to the railroads. To get a clearer picture of annual trends, it is necessary to adjust the second year of a threshold. This was done by limiting the count of accidents in 1984 to those over \$4,700, in 1986 to those over \$5,050, and in 1988 to those over \$5,452. For all other years, the actual number of accidents is reported.

To better 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. Therefore, the 1988 Accident/Incident Bulletin gives data for train accidents and train incidents by billions of revenue ton-miles, and data for non-train incidents by 200,000 man-hours.

The tables appearing in the bulletin have retained their basic format since 1975. In 1983 the tables were renumbered so that the sequence that they appear in the bulletin and the table number would be in agreement. A cross reference table appears on page viii that provides a bridge between the previous table numbers and those appearing in this publication.

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

Information about casualties and accidents at rail-highway crossings are shown in this Bulletin. However, detailed information is available in the Rail-Highway Crossing Accident/Incident and Inventory Bulletin published annually by the FRA Office of Safety.

## EMPLOYEE INJURIES

In order to gain a better understanding of the significance of certain statistics involving employee injuries, it is important that the reader be familiar with the basic reporting rules in this area. There are three main principles associated with the reporting of employee injuries. These are:

- 1) Any event or activity that causes an employee physical harm while in the work-environment is considered to be work-related. This means that an injury may occur in a derailment or it may be associated with routine activity, such as, the throwing of switches.
- 2) All employees, regardless of occupation or location of work assignment are covered by the rules. This includes every employee; from members of train crews and maintenance workers, to employees who work in office environments.
- 3) The physical harm sustained by an employee does not need to be major in nature, but there are certain consequences that must occur in order for an injury to be reportable. These are:
  - i) treatment beyond first aid was required (27.4% in 1988);
  - ii) the injury caused the employee to be absent from work for at least one day (64.2% in 1988);
  - iii) the injury caused the employee to be restricted in the performance of his work (8.4% in 1988).

An example of the types of injuries reported can be found in this year's bulletin. In 1988, 47% of all injuries were sprains and strains, 17% were bruises and contusions, and 12% were cuts and lacerations. These injuries accounted for 76% of the total. Slightly more than 24% of these injuries were minor in nature and only required simple medical treatment, after which the employee was able to return to work the same day.

All eye injuries are potentially serious since they involve an extremely sensitive part of the body. Dust or other foreign particle in the eye accounted for 6.3% of the total employee injuries. In 55.4% of the eye injuries, the employee was treated and returned to work without any restriction. Serious injuries such as amputations and fractures accounted for .3% and 7.2%, respectively, of all injuries reported in 1988.

There is a common perception that most employee injuries occur in connection with the movement of on-track equipment. Approximately 84%, however, involve other circumstances. There were 18,463 employees hurt in 1988 in incidents where moving on-track equipment was not a factor. The majority of these injuries occurred while the employee was performing maintenance work. Employees in maintenance of way and maintenance of equipment occupational categories sustained 63% of the injuries that did not involve moving on-track equipment.

The severity of an injury can be measured to some extent by whether or not the injury caused the employee to miss one or more days of work, resulted in restriction while at work, or only required medical treatment. The length of time that an injury prevented the employee from performing his normally assigned duties is an additional indicator of seriousness. The following two tables provide insights concerning the severity of injuries to employees.

#### EMPLOYEE INJURIES BY TYPE INJURY

Injury	Total Cases	Absent From Work.....				Restricted Duty		Other
		Cases	1-5	6-10	11-15	>= 16		
<b>INJURIES ASSOCIATED WITH TRAIN MOVEMENTS</b>								
Bruise/contusion, unspecified	861	672	264	149	53	206	57	132
Sprain/strain, unspecified	1,488	1,255	428	266	122	439	94	139
Cut/abrasion, unspecified	341	208	79	55	20	54	16	117
Puncture wound, unspecified	13	10	5	3	---	2	---	3
Electric shock/burn, unspecified	5	5	2	---	1	2	---	---
Other burn, unspecified	33	22	11	7	---	4	1	10
Dislocation, unspecified	27	23	3	2	4	14	1	3
Fracture, unspecified	233	204	26	29	16	133	11	18
Dental related	6	1	---	---	---	1	---	5
Amputation, unspecified	21	20	2	2	1	15	---	1
Object in eye	412	215	177	19	9	10	14	183
Hernia	3	3	---	---	1	2	---	---
Concussion	13	11	3	2	2	4	2	---
Nervous shock	14	14	7	3	---	4	---	---
Internal injury	14	13	---	2	2	9	---	1
Skin reaction, unspecified	10	3	---	1	1	1	2	5
Unspecified injury	150	122	71	21	10	20	7	21
Subtotal	3,644	2,801	1,078	561	242	920	205	638
<b>INJURIES RESULTING FROM OTHER EVENTS</b>								
Bruise/contusion, unspecified	2,962	1,855	847	362	163	483	278	829
Sprain/strain, unspecified	8,881	6,609	2,503	1,345	625	2,136	834	1,438
Cut/abrasion, unspecified	2,335	724	375	158	56	135	190	1,421
Puncture wound, unspecified	331	131	79	20	10	22	26	174
Electric shock/burn, unspecified	79	62	30	12	3	17	---	17
Other burn, unspecified	291	114	63	19	10	22	24	153
Dislocation, unspecified	101	74	13	17	9	35	10	17
Fracture, unspecified	1,353	870	148	120	92	510	204	279
Dental related	88	16	13	2	---	1	---	72
Amputation, unspecified	50	38	6	3	4	25	6	6
Object in eye	973	342	291	30	4	17	47	584
Hernia	132	124	8	14	7	95	4	4
Concussion	38	30	8	7	---	15	1	7
Nervous shock	4	3	1	---	---	2	---	1
Internal injury	35	29	8	3	2	16	1	5
Skin reaction, unspecified	132	47	36	7	1	3	5	80
Unspecified injury	708	411	228	85	20	78	37	260
Subtotal	18,493	11,479	4,657	2,204	1,006	3,612	1,667	5,347
Total....	22,137	14,280	5,735	2,765	1,248	4,532	1,872	5,985

Note: The majority of cases appearing in the "Other" category are injuries that only required medical treatment.

### EMPLOYEE INJURIES BY JOB

Job*	Total Cases	Absent From Work..... Cases	Number of Days Off				Restricted Duty Other	
			1-5	6-10	11-15	>= 16	Duty	Other
<b>INJURIES ASSOCIATED WITH TRAIN MOVEMENTS</b>								
1	9	6	3	3	---	---	---	3
2	29	20	10	4	---	6	---	9
3	237	146	46	33	15	52	22	69
4	124	86	26	18	10	32	14	24
5	204	163	76	61	7	19	3	38
6	3,041	2,380	917	442	210	811	166	495
Total	3,644	2,801	1,078	561	242	920	205	638
<b>INJURIES RESULTING FROM OTHER EVENTS</b>								
1	52	26	10	5	---	11	2	24
2	1,021	665	322	123	51	169	67	289
3	6,281	3,309	1,335	638	272	1,064	714	2,258
4	5,281	2,951	1,232	538	247	934	539	1,791
5	577	427	193	102	32	100	19	131
6	5,281	4,101	1,565	798	404	1,334	326	854
Total	118,493	11,479	4,657	2,204	1,006	3,612	1,667	5,347
Total	22,137	14,280	5,735	2,765	1,248	4,532	1,872	5,985

\* 1 = Executives, officials, and staff assistants  
 2 = Professional and administrative  
 3 = Maintenance of way and structures  
 4 = Maintenance of equipment and stores  
 5 = Transportation, other than train and engine  
 6 = Transportation, train and engine

### EMPLOYEE FATALITIES

There were 43 employee fatalities reported in 1988. Of these, 12 occurred in train accidents, 16 in train incidents, 15 in non-train incidents.

Of the 12 fatalities in train accidents, 10 resulted from collisions. Accidents identified as being caused by human factors accounted for 8 of the train accident fatalities.

Five of the 16 employees killed in train incidents occurred while setting on or off equipment. The remaining 11 fatalities in this category were evenly distributed as to the type of occurrence; refer to Table 66.

Deaths associated with the operation of motor vehicles accounted for 7 of the 15 fatalities in the non-train group. Maintenance of equipment and maintenance of track were responsible for 1 and 4 deaths respectively. One death occurred in connection with a shooting incident; refer to Table 69.

## 1. HISTORICAL TRENDS, LAST 6 YEARS

### OPERATIONS

TABLE 1. RAILROAD OPERATIONAL PROFILE

Year	Man-Hours	Motor Train-Miles	Yard Switching Miles	Locomotive Miles	Total Train Miles
1983	730,001	27,787	122,234	408,170	558,191
1984	742,802	31,798	126,465	434,336	592,599
1985	696,911	32,457	117,059	421,395	570,911
1986	644,351	34,015	108,258	424,825	567,098
1987	618,992	34,077	101,955	445,282	581,314
1988	608,086	34,877	105,325	469,132	609,334

NOTE: All figures shown in thousands

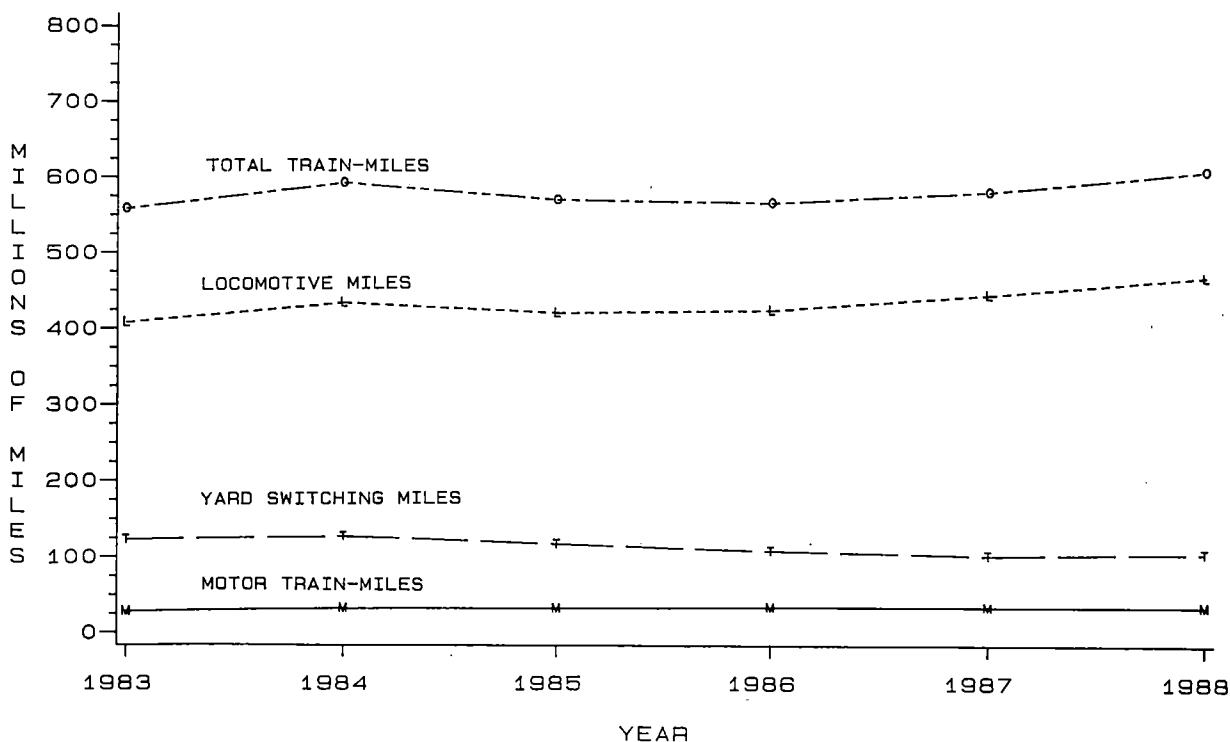
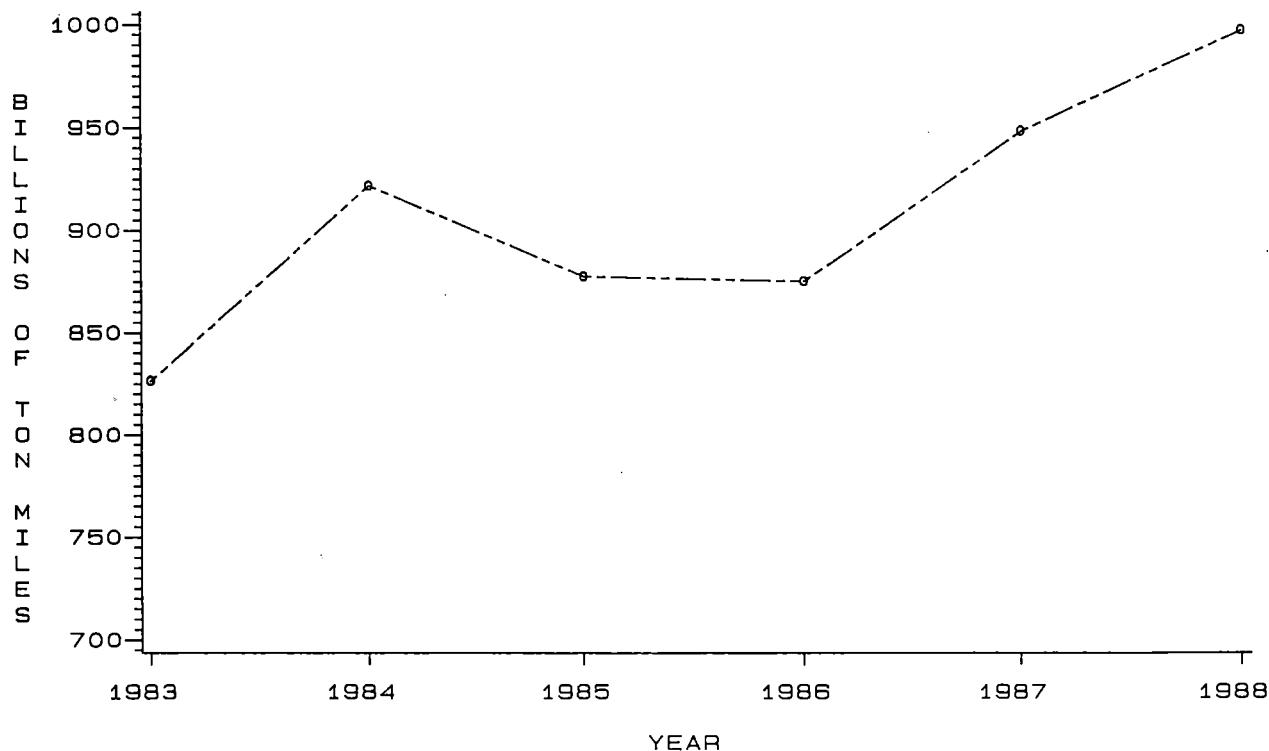


FIGURE 1. RAILROAD TRAIN-MILES

**TABLE 2. REVENUE TON-MILES  
(BILLIONS)**

1983	826.2
1984	921.2
1985	877.0
1986	874.6
1987	948.0
1988	997.0

1988 figures are preliminary



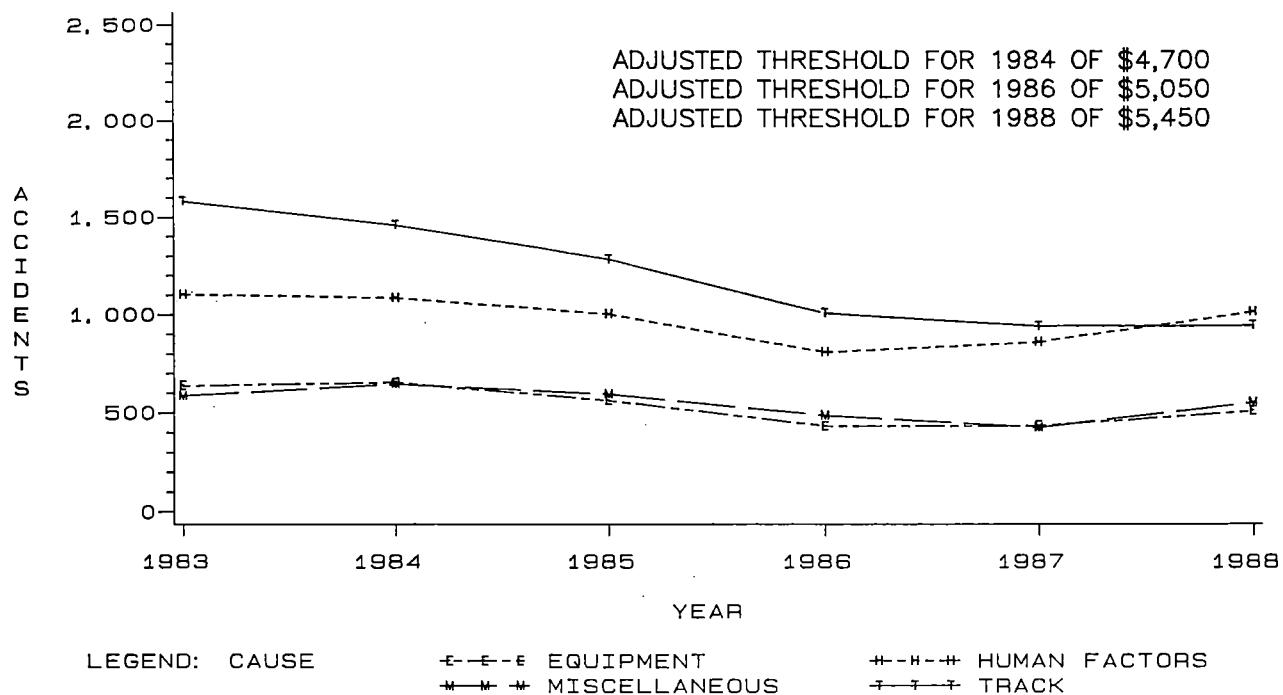
SOURCE: ASSOCIATION OF AMERICAN RAILROADS

**FIGURE 2. REVENUE TON-MILES**

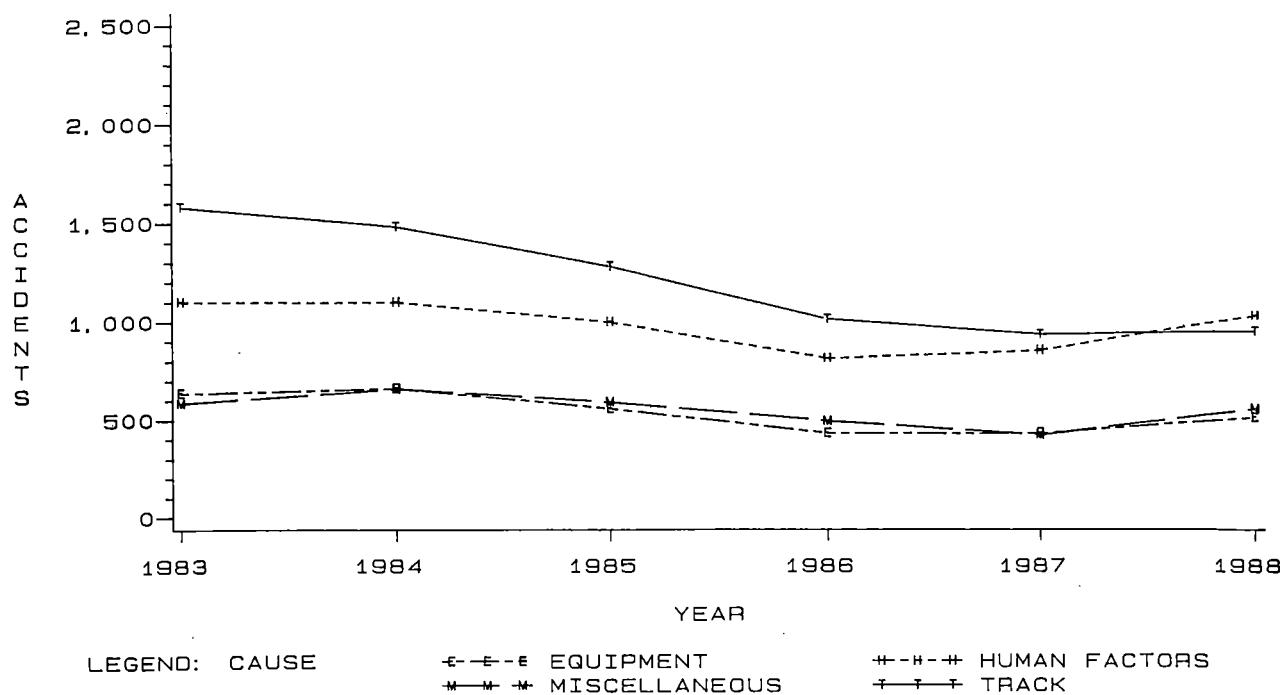
## TRAIN ACCIDENTS

**TABLE 3. TRAIN ACCIDENT CAUSES**

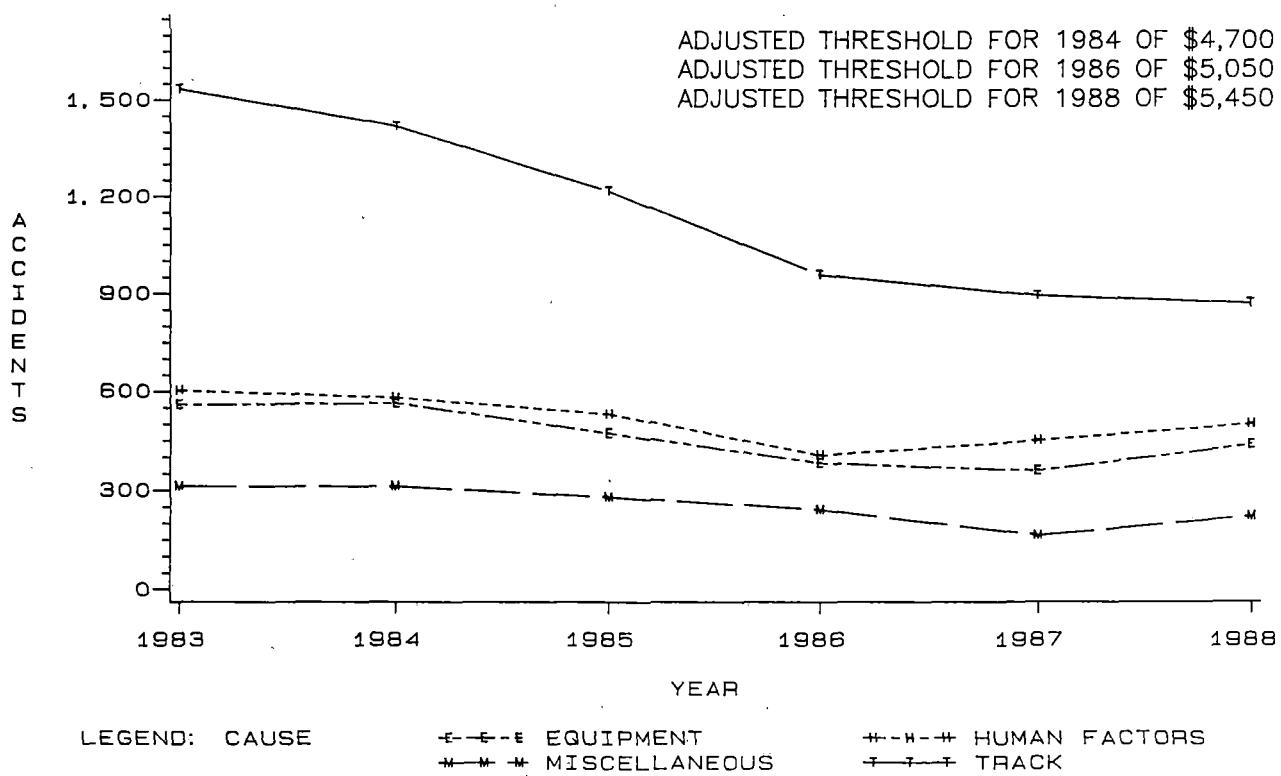
<u>Year</u>	<u>Human Factors</u>	<u>Mechanical &amp; Electrical Failures</u>	<u>Track Defects</u>	<u>Other</u>	<u>Total Accidents</u>
1983	1,101	638	1,581	586	3,906
1984	1,100	661	1,481	658	3,900
1985	999	559	1,280	592	3,430
1986	816	433	1,016	496	2,761
1987	856	430	938	423	2,647
1988	1,031	512	952	556	3,051



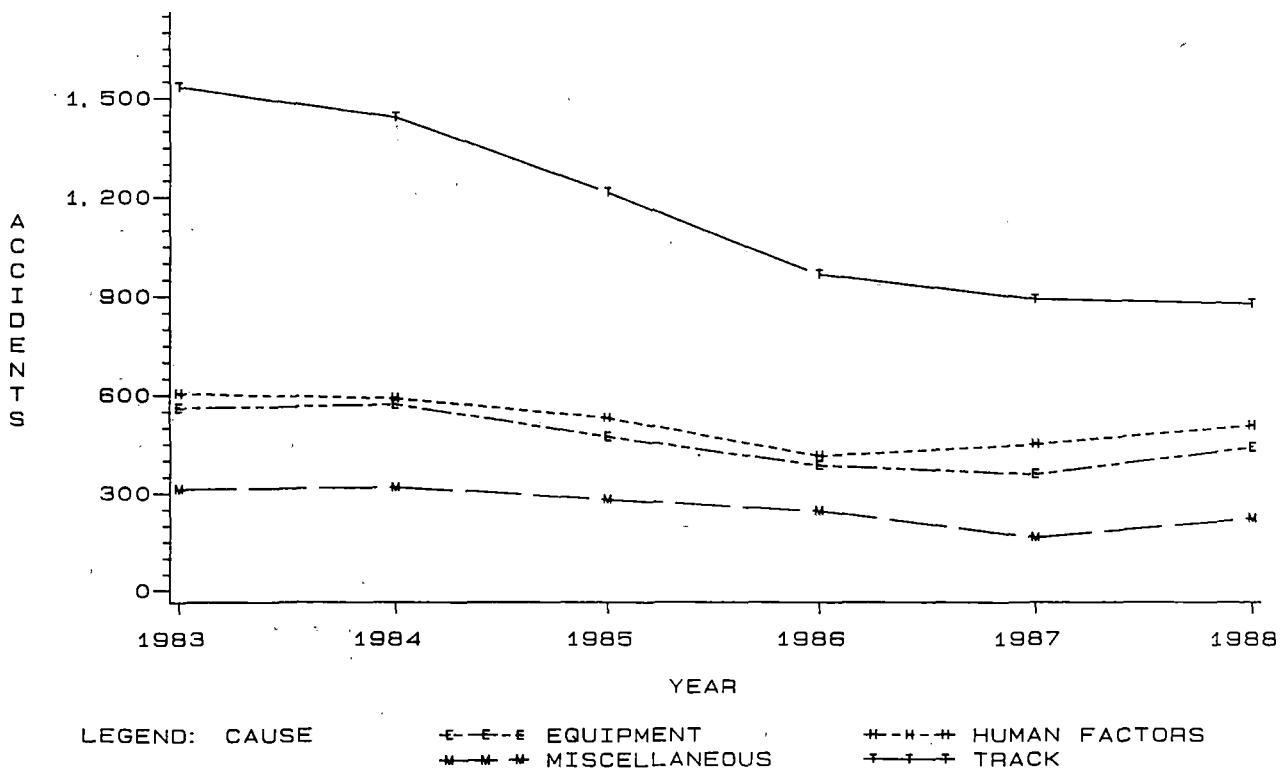
**FIGURE 3A. ACCIDENT CAUSES - ADJUSTED**



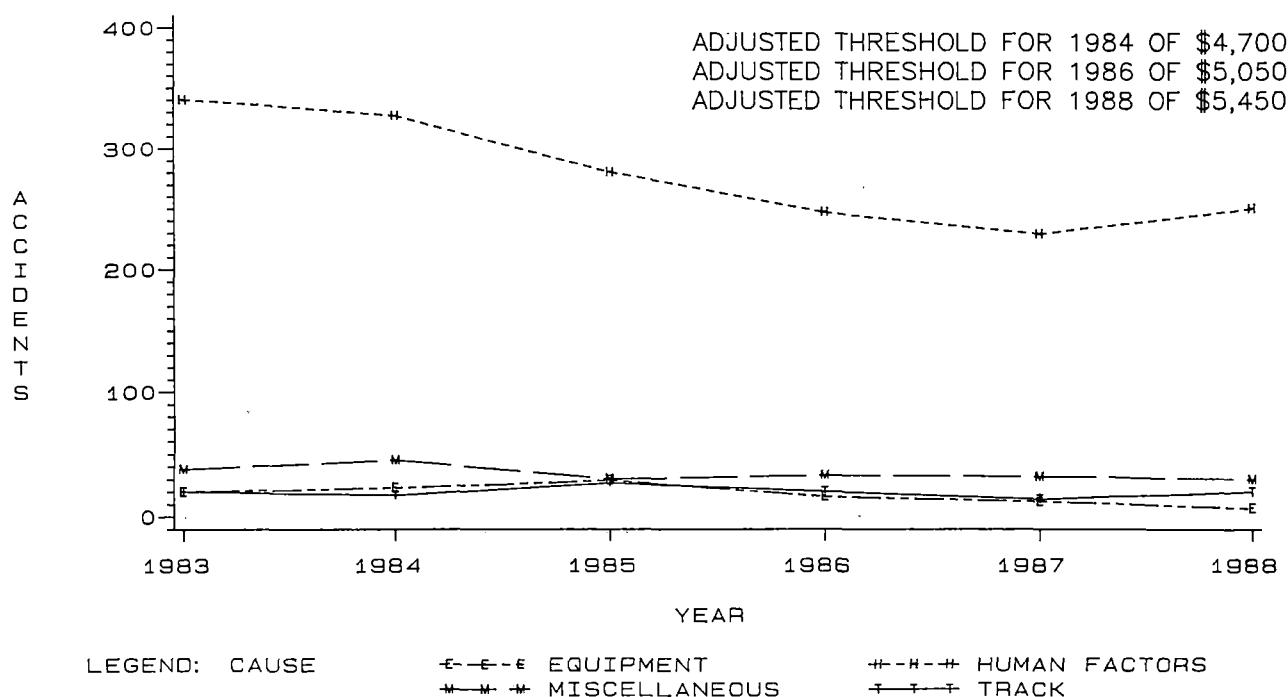
**FIGURE 3B. ACCIDENT CAUSES - UNADJUSTED**



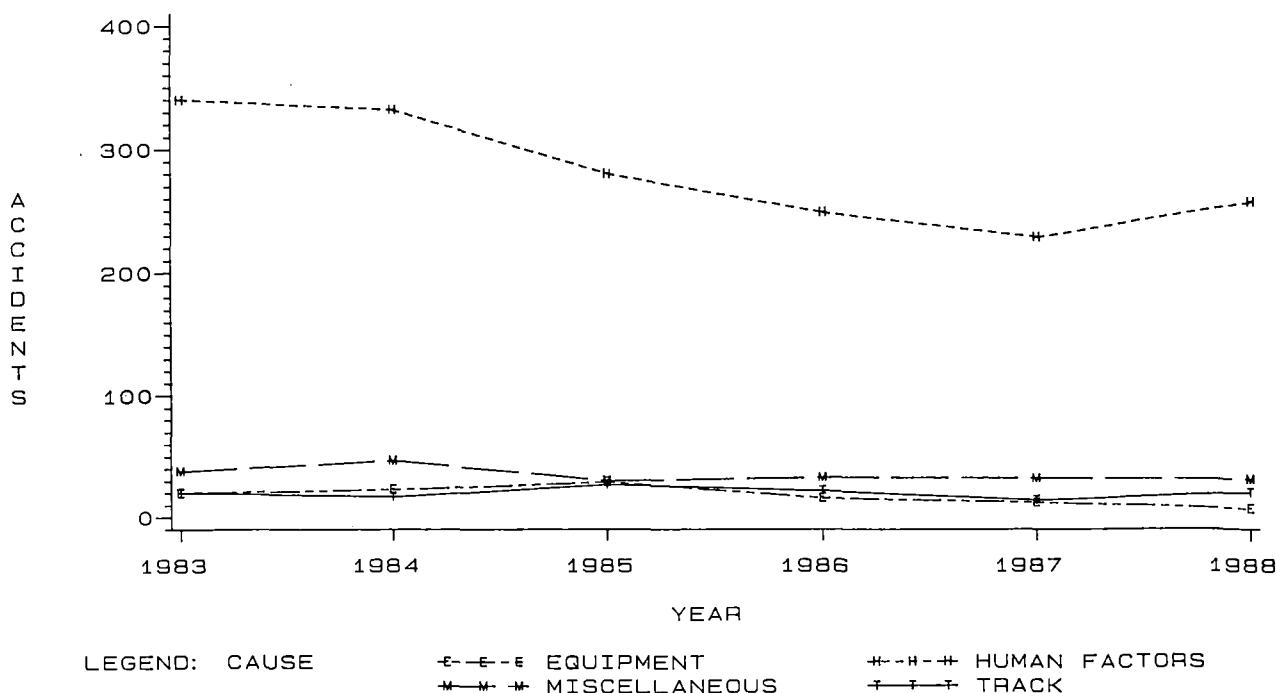
**FIGURE 4A. DERAILMENT CAUSES - ADJUSTED**



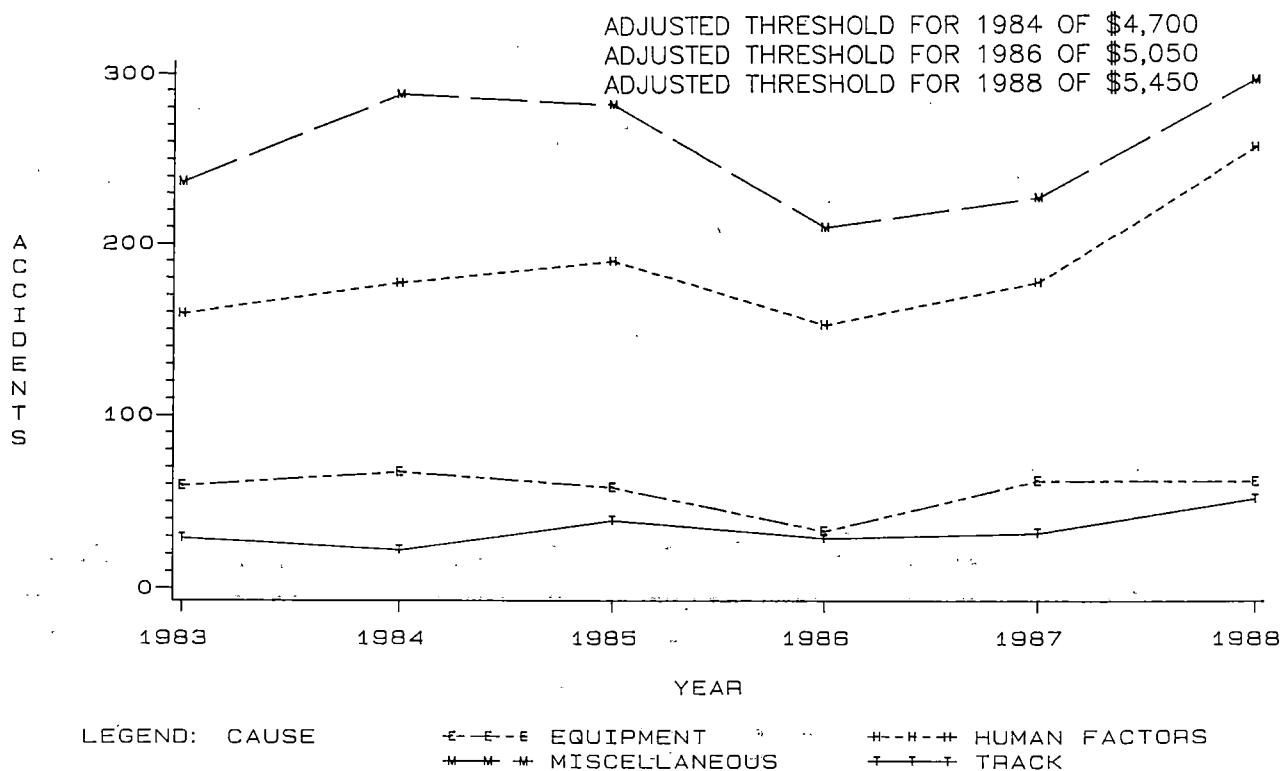
**FIGURE 4B. DERAILMENT CAUSES - UNADJUSTED**



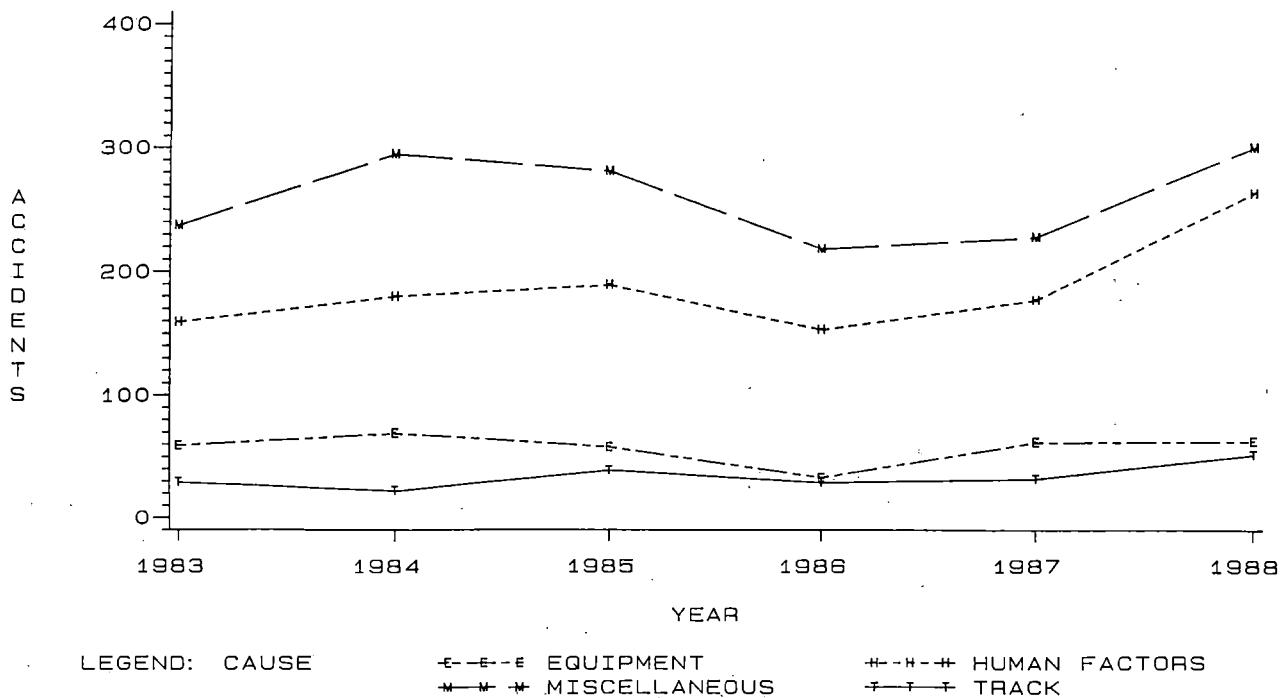
**FIGURE 5A. COLLISION CAUSES - ADJUSTED**



**FIGURE 5B. COLLISION CAUSES - UNADJUSTED**



**FIGURE 6A. CAUSES OF ACCIDENTS OTHER THAN COLLISIONS AND DERAILMENTS - ADJUSTED**



**FIGURE 6B. CAUSES OF ACCIDENTS OTHER THAN COLLISIONS AND DERAILMENTS - UNADJUSTED**

**TABLE 4. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TRAIN-MILES**

<u>Year</u>	<u>Total Accidents</u>	<u>Total Damage (\$)</u>	<u>Average Damage (\$)</u>	<u>Damage/Million Train-Miles (\$)</u>	<u>Accidents/Million Train-Miles</u>
1983	3,906	208,350,456	53,341	373,261	7.00
1984	3,900	240,462,514	61,657	405,775	6.58
1985	3,430	188,017,822	54,816	329,330	6.01
1986	2,761	167,549,306	60,684	295,450	4.87
1987	2,647	177,185,352	66,938	304,801	4.55
1988	3,051	191,110,633	62,639	313,638	5.01

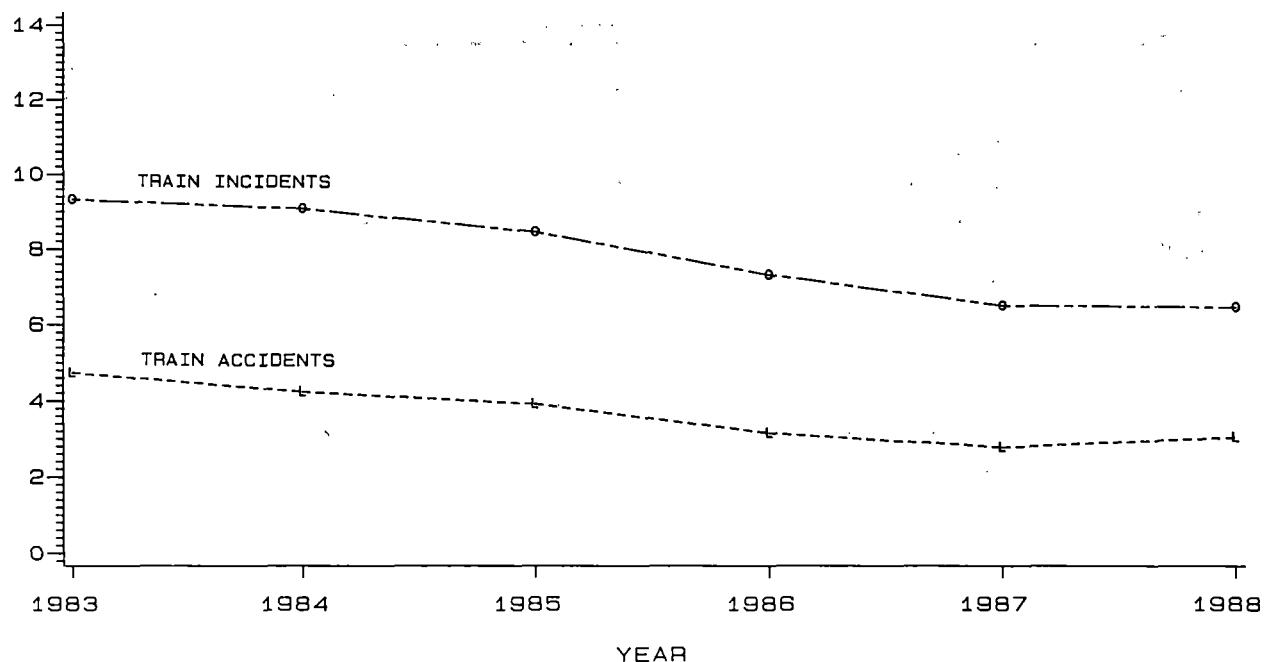
**TABLE 5. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TYPE**

<u>Year</u>	<u>Total Accidents</u>	<u>Total Damage (\$)</u>	<u>Average Damage (\$)</u>	<u>Damage/Million Train-Miles (\$)</u>	<u>Accident/Million Train-Miles</u>
<b>COLLISIONS</b>					
1983	418	27,476,243	65,733	49,224	.75
1984	419	30,185,019	72,041	50,937	.71
1985	366	21,785,209	59,522	38,159	.64
1986	320	14,945,554	46,705	26,308	.56
1987	287	29,001,769	101,051	49,890	.49
1988	315	23,245,428	73,795	38,149	.52
<b>DERAILMENTS</b>					
1983	3,004	164,659,964	54,814	294,989	5.38
1984	2,915	190,265,177	65,271	321,068	4.92
1985	2,495	145,634,901	58,371	255,092	4.37
1986	2,006	135,903,081	67,748	239,224	3.54
1987	1,859	125,683,151	67,608	216,205	3.20
1988	2,054	139,410,287	67,873	228,791	3.37
<b>OTHER</b>					
1983	484	16,214,249	33,501	29,048	.87
1984	566	20,012,318	35,357	33,770	.96
1985	569	20,597,712	36,200	36,079	1.00
1986	435	16,700,671	38,392	29,397	.77
1987	501	22,500,432	44,911	38,706	.86
1988	682	28,454,918	41,723	46,698	1.12

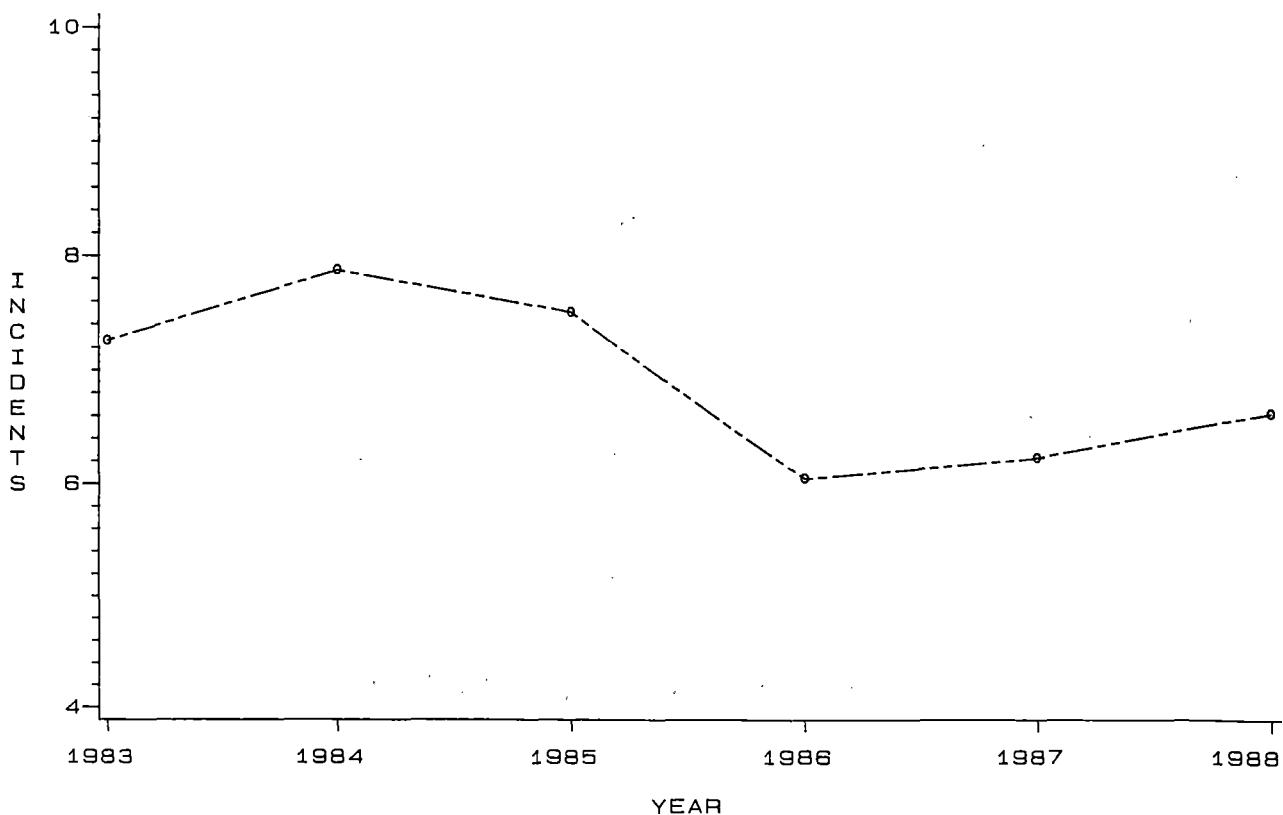
**TABLE 6. TRAIN ACCIDENTS AND REPORTABLE DAMAGE BY CAUSE**

<u>Year</u>	<u>Total Accidents</u>	<u>Total Damage (\$)</u>	<u>Average Damage (\$)</u>	<u>Damage/Million Train-Miles (\$)</u>	<u>Accident/Million Train-Miles</u>
<b>HUMAN FACTORS</b>					
1983	1,101	48,359,615	43,923	86,636	1.97
1984	1,100	54,963,882	49,967	92,750	1.86
1985	999	46,566,550	46,613	81,565	1.75
1986	816	36,994,772	45,337	65,235	1.44
1987	856	53,381,979	63,362	91,830	1.47
1988	1,031	52,946,735	51,355	88,893	1.69
<b>EQUIPMENT FAILURES</b>					
1983	638	50,293,734	78,830	90,101	1.14
1984	661	56,137,827	84,929	94,731	1.12
1985	559	47,584,553	85,124	83,349	.98
1986	433	42,162,233	97,372	74,216	.76
1987	430	38,129,194	88,673	65,591	.74
1988	512	46,491,145	90,803	76,298	.84
<b>TRACK DEFECTS</b>					
1983	1,581	83,340,024	52,713	149,304	2.83
1984	1,481	84,215,013	56,864	142,111	2.50
1985	1,280	59,720,068	46,656	104,605	2.24
1986	1,016	48,459,373	47,696	85,301	1.79
1987	938	60,162,651	64,139	103,494	1.61
1988	952	58,291,881	61,231	95,665	1.56
<b>OTHER</b>					
1983	586	26,357,083	44,978	47,219	1.05
1984	658	45,145,792	68,611	76,183	1.11
1985	592	34,146,651	57,680	59,811	1.04
1986	496	39,932,928	80,510	70,292	.87
1987	423	25,511,528	60,311	43,886	.73
1988	556	33,380,872	60,038	54,782	.91

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



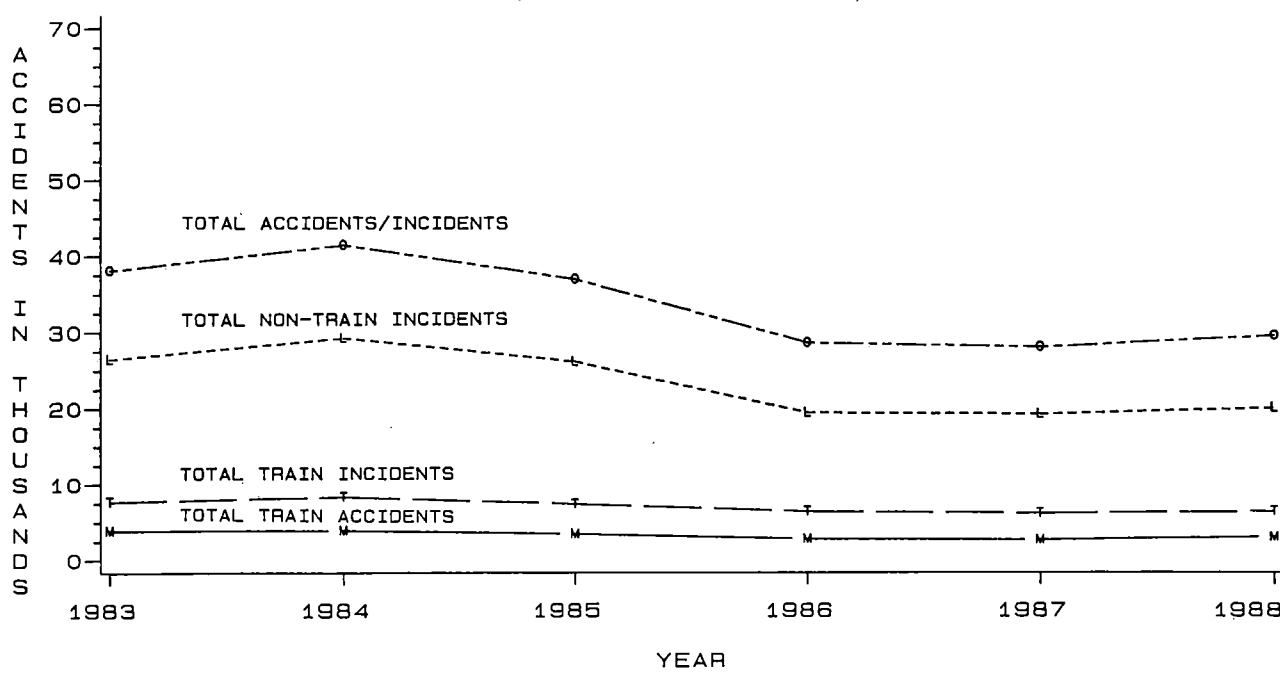
**FIGURE 7. TOTAL TRAIN ACCIDENTS AND TRAIN INCIDENTS PER BILLION REVENUE TON-MILES**



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

**TABLE 7. TOTAL ACCIDENTS/INCIDENTS**

<u>Year</u>	<u>Train Accidents</u>	<u>Train Incidents</u>	<u>Nontrain Incidents</u>	<u>Total</u>
1983	3,906	7,695	26,485	38,086
1984	3,900	8,346	29,256	41,502
1985	3,430	7,418	26,146	36,994
1986	2,761	6,407	19,455	26,623
1987	2,647	6,179	19,289	28,115
1988	3,051	6,465	20,141	27,054



**FIGURE 9. TOTAL ACCIDENTS/INCIDENTS**

## CASUALTIES

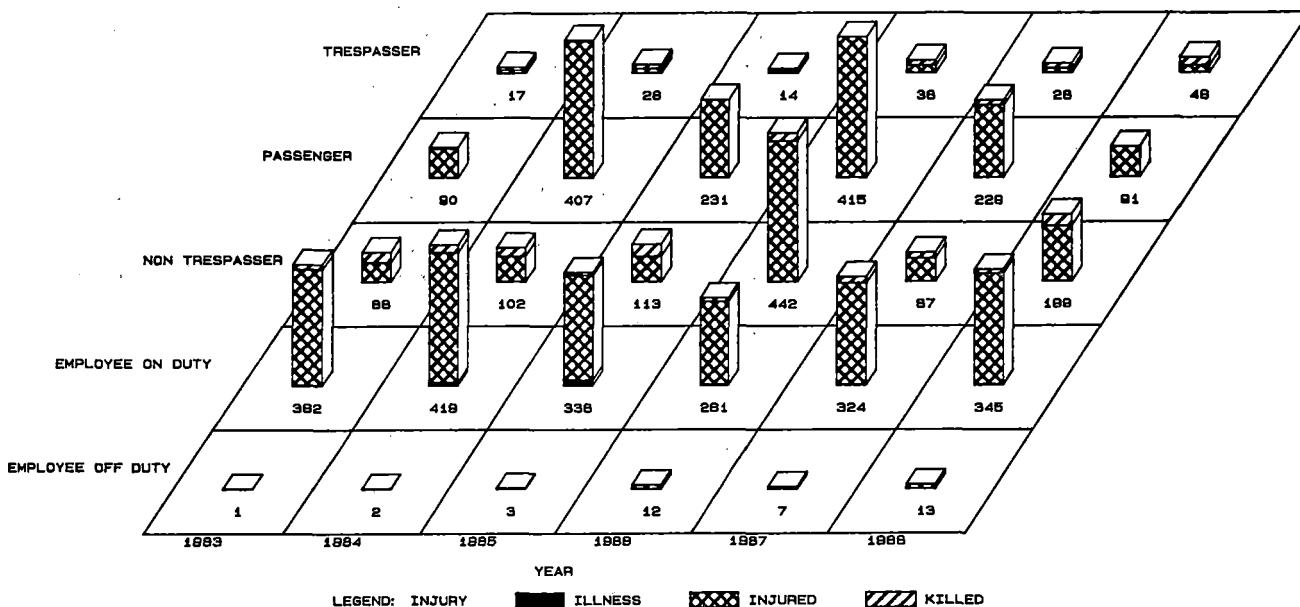
### TABLE 8. CASUALTIES IN ACCIDENTS/INCIDENTS

Class of Acc/Inc by Year	.....Casualties.....			Accidents	Casualties per Million Train Miles
	Fatal	Nonfatal	Total		
<b>TRAIN ACCIDENTS</b>					
1983	56	502	558	3,906	1.00
1984	63	893	956	3,900	1.61
1985	52	647	699	3,430	1.13
1986	51	1,117	1,168	2,761	2.06
1987	66	609	675	2,647	1.16
1988	72	622	694	3,051	1.14
<b>TRAIN INCIDENTS</b>					
1983	966	7,642	8,608	7,695	15.42
1984	1,118	8,245	9,363	8,346	15.80
1985	930	7,384	8,314	7,418	14.56
1986	980	6,256	7,236	6,407	12.74
1987	1,047	5,996	7,043	6,179	12.12
1988	1,073	6,291	7,364	6,465	12.09
<b>NONTRAIN INCIDENTS</b>					
1983	51	26,675	26,726	26,485	47.88
1984	66	29,432	29,498	29,256	49.78
1985	54	26,273	26,327	26,146	46.11
1986	60	19,550	19,610	19,455	34.52
1987	52	19,428	19,480	19,280	33.51
1988	54	20,141	20,195	19,878	33.14
<b>ALL ACCIDENTS</b>					
1983	1,073	34,819	35,892	38,086	64.30
1984	1,247	38,570	39,817	41,502	67.19
1985	1,036	34,304	35,340	36,994	61.90
1986	1,091	26,923	28,014	26,623	49.31
1987	1,165	26,033	27,198	28,115	46.79
1988	1,199	27,054	28,253	29,394	46.37

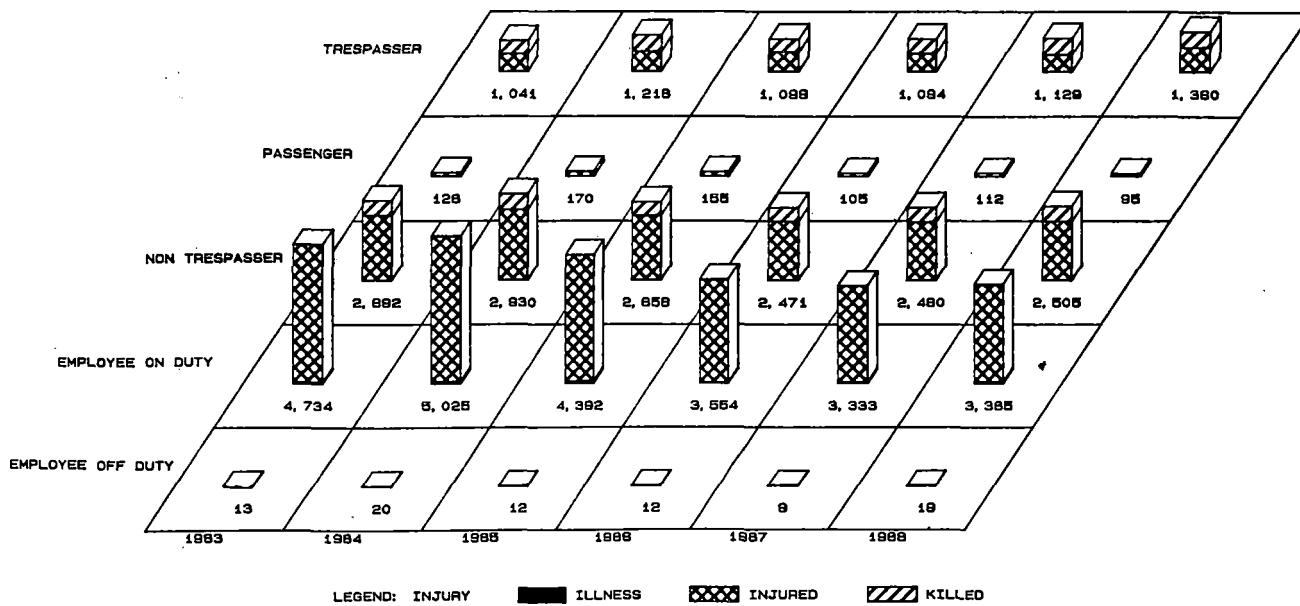
**TABLE 9. CASUALTIES BY TYPE OF PERSON**

Year	Employees On Duty		Employees Not on Duty		Passengers On Trains		Nontrespassers		Trespassers		Contractor Employees		Total	
	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj	Kld	Inj
1983	61	30,416	3	395	4	502	527	2,728	472	683	6	95	1,073	34,819
1984	59	33,364	5	444	12	1,000	576	2,881	588	773	7	108	1,247	38,570
1985	46	29,822	2	419	3	657	507	2,562	474	734	4	110	1,036	34,304
1986	57	22,387	2	384	4	686	505	2,639	519	706	4	121	1,091	26,923
1987	55	21,982	1	396	16	475	506	2,354	584	673	3	153	1,165	26,033
1988	43	22,573	1	427	2	337	554	2,575	598	920	1	221	1,199	27,054

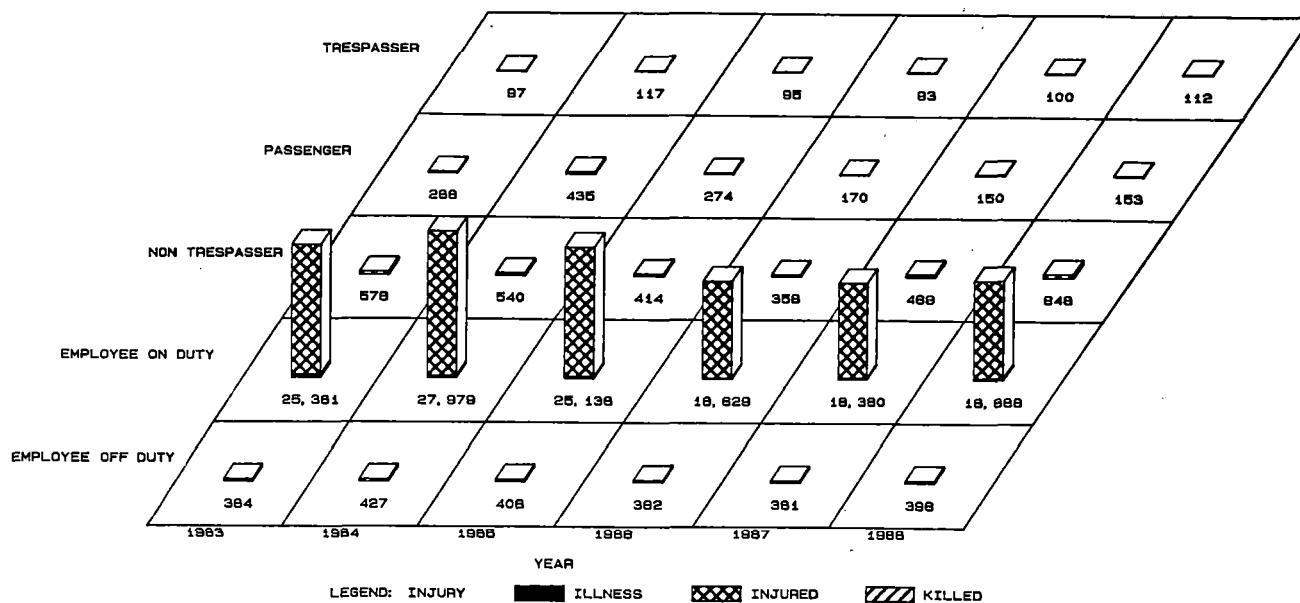
NOTE: "Contractor employee" casualties are shown separately in this table.  
In other tables they are included with "Nontrespassers".  
"Inj" columns include occupational illnesses.



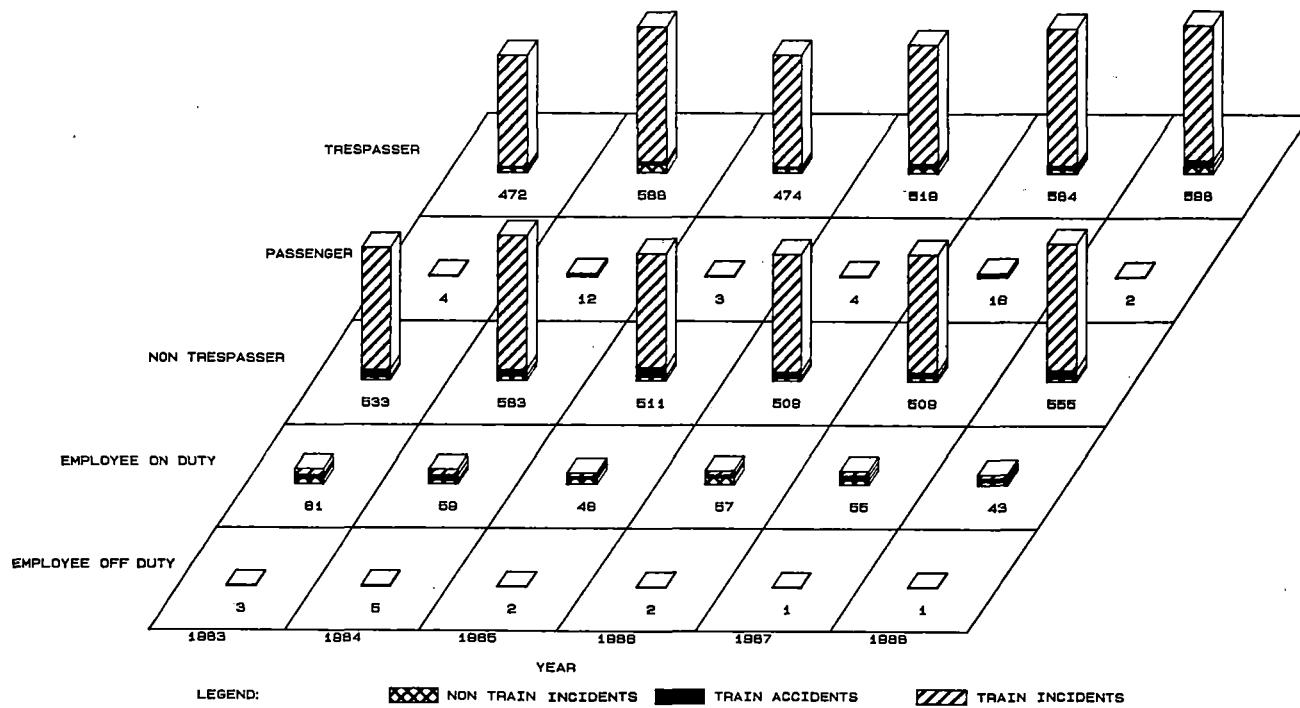
**FIGURE 10. CASUALTIES IN TRAIN ACCIDENTS**



**FIGURE 11. CASUALTIES IN TRAIN INCIDENTS**



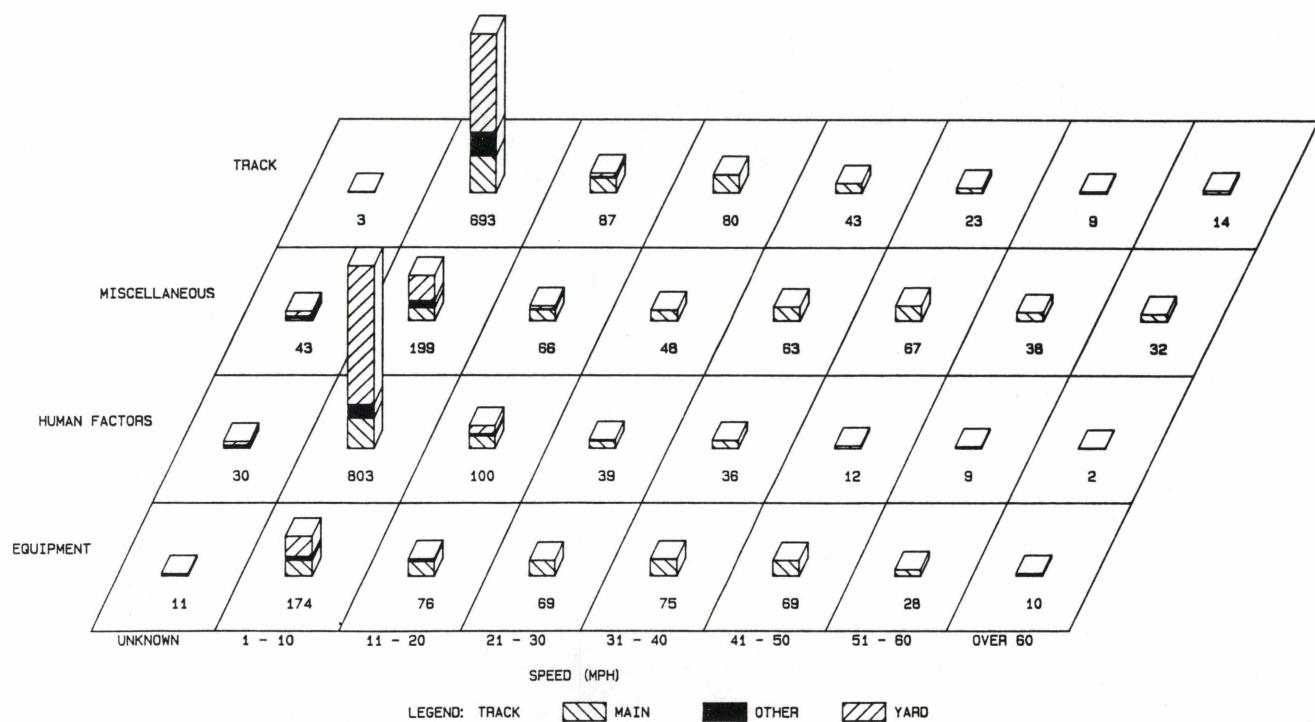
**FIGURE 12. CASUALTIES IN NON-TRAIN INCIDENTS**



**FIGURE 13. FATALITIES IN ACCIDENTS/INCIDENTS**

## 2. OVERVIEW OF 1988 DATA

### SPEED FACTOR IN ACCIDENTS

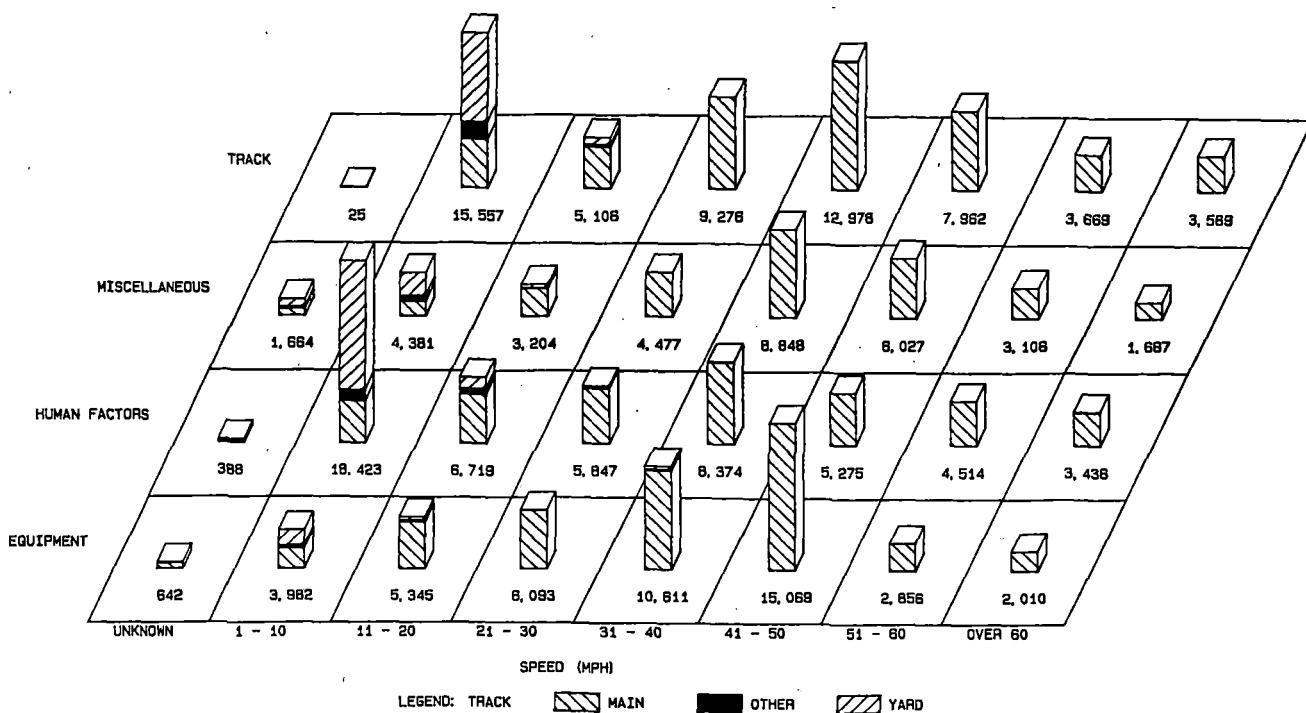


**FIGURE 14. CAUSES OF ACCIDENTS BY TYPE OF TRACK AND CONSIST SPEED**

**TABLE 10. 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	HUMAN FACTORS	OTHER FACTOR CAUSES
<b>ACCIDENTS ON MAIN LINE TRACK</b>											
UNKNOWN	24	1,386,777	1,140,013	246,764	2	7	15	0	7	6	11
1-10	418	12,628,742	9,370,584	3,258,158	30	333	55	161	69	132	56
11-20	233	16,796,752	12,644,488	4,152,264	15	188	30	64	65	55	49
21-30	226	25,317,941	20,481,509	4,836,432	8	174	44	79	68	32	47
31-40	211	40,190,761	34,493,656	5,697,105	11	141	59	42	73	34	62
41-50	171	34,335,570	29,365,229	4,968,341	8	94	69	23	69	12	67
51-60	84	14,144,227	12,277,668	1,866,559	1	44	39	9	28	9	38
61-70	25	3,005,657	2,623,869	381,788	0	7	18	6	7	0	12
71-80	24	3,950,671	3,895,895	54,776	0	2	22	4	1	0	19
81-90	7	3,654,550	3,442,500	212,050	0	1	6	3	2	1	1
>=91	1	35,000	20,000	15,000	0	0	1	1	0	0	0
<b>TOTAL</b>	<b>1,424</b>	<b>155,444,648</b>	<b>129,755,411</b>	<b>25,689,237</b>	<b>75</b>	<b>991</b>	<b>358</b>	<b>392</b>	<b>389</b>	<b>281</b>	<b>362</b>
<b>ACCIDENTS ON YARD TRACK</b>											
UNKNOWN	43	1,052,103	892,920	159,183	5	10	28	1	4	15	23
1-10	1,236	25,843,196	20,712,428	5,130,768	208	797	231	429	87	610	110
11-20	72	2,462,849	1,811,721	651,128	11	44	17	16	8	35	13
21-30	6	155,050	135,950	19,100	1	2	3	0	0	5	1
31-40	3	365,620	161,620	204,000	0	2	1	0	1	1	1
<b>TOTAL</b>	<b>1,360</b>	<b>29,878,818</b>	<b>23,714,639</b>	<b>6,164,179</b>	<b>225</b>	<b>855</b>	<b>280</b>	<b>446</b>	<b>100</b>	<b>666</b>	<b>148</b>
<b>ACCIDENTS ON INDUSTRY, SIDING OR UNKNOWN TRACK TYPE</b>											
UNKNOWN	20	277,563	217,828	59,735	3	11	6	2	0	9	9
1-10	215	3,869,426	3,065,673	803,753	9	171	35	103	18	61	33
11-20	24	1,112,179	851,179	261,000	2	19	3	7	3	10	4
21-30	4	219,252	187,752	31,500	0	4	0	1	1	2	0
31-40	3	252,305	179,300	73,005	0	3	0	1	1	1	0
81-90	1	56,442	54,000	2,442	1	0	0	0	0	1	0
<b>TOTAL</b>	<b>267</b>	<b>5,787,167</b>	<b>4,555,732</b>	<b>1,231,435</b>	<b>15</b>	<b>208</b>	<b>44</b>	<b>114</b>	<b>23</b>	<b>84</b>	<b>46</b>
<b>FINAL</b>	<b>3,051</b>	<b>191,110,633</b>	<b>158,025,782</b>	<b>33,084,851</b>	<b>315</b>	<b>2,054</b>	<b>682</b>	<b>952</b>	<b>512</b>	<b>1,031</b>	<b>556</b>

In those accidents that involve more than one moving consist, the highest reported speed appears in this table.

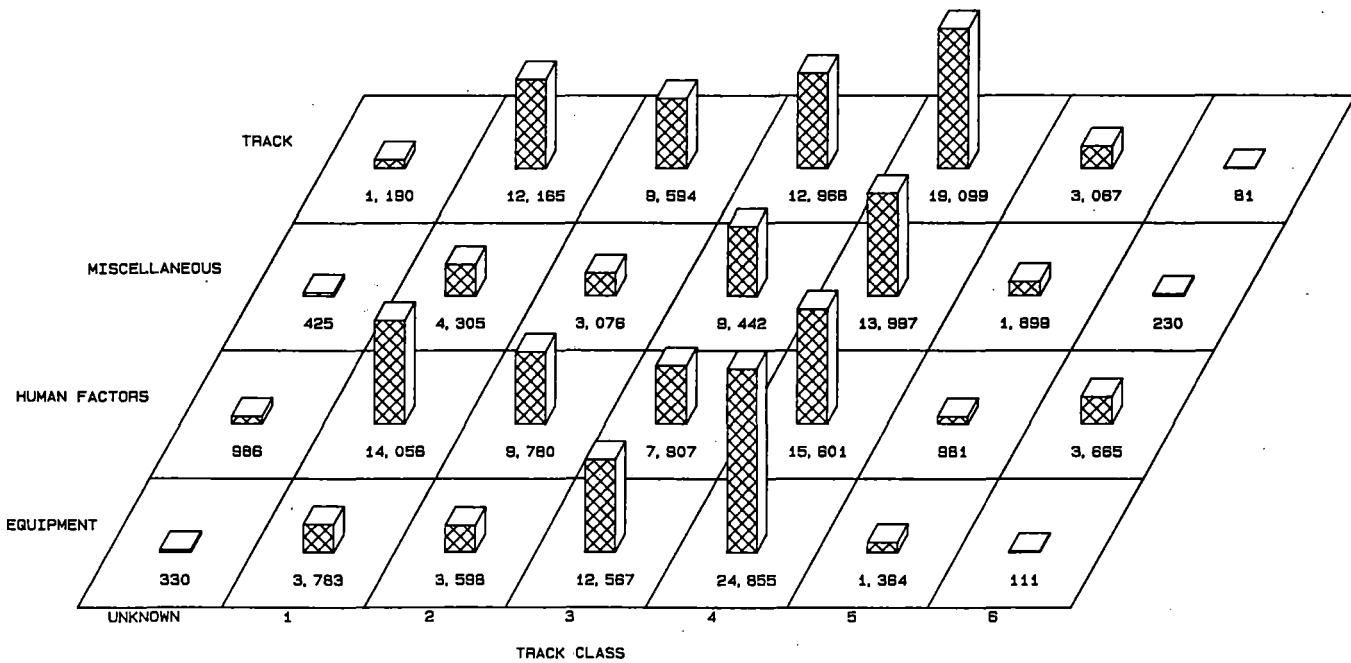


**FIGURE 15. ACCIDENT DAMAGES BY SPEED AND CAUSE (\$ 000's)**

## ACCIDENTS AND TRACK TYPE

**TABLE 11. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY TRACK CLASS**

TRACK CLASS	TOTAL ACCIDENTS	TOTAL DAMAGE	EQUIPMENT DAMAGE	TRACK DAMAGE	COLLISIONS	DERAILMENTS	OTHER ACCIDENTS	TRACK CAUSED	EQUIPMENT FAILURE	HUMAN FACTORS	OTHER CAUSES
?	136	2,931,219	2,259,729	671,490	14	79	43	50	11	58	17
1	1,418	34,308,336	27,416,292	6,892,044	185	991	242	519	114	612	173
2	533	26,043,801	20,589,267	5,454,534	63	381	89	191	82	183	77
3	412	42,878,574	35,816,661	7,061,913	23	280	109	105	121	79	107
4	469	73,550,392	61,984,735	11,565,657	24	287	158	71	163	81	154
5	68	7,310,417	6,138,998	1,171,419	4	33	31	11	17	15	25
6	15	4,087,894	3,820,100	267,794	2	3	10	5	4	3	3
FINAL	3,051	191,110,633	158,025,782	33,084,851	315	2,054	682	952	512	1,031	556

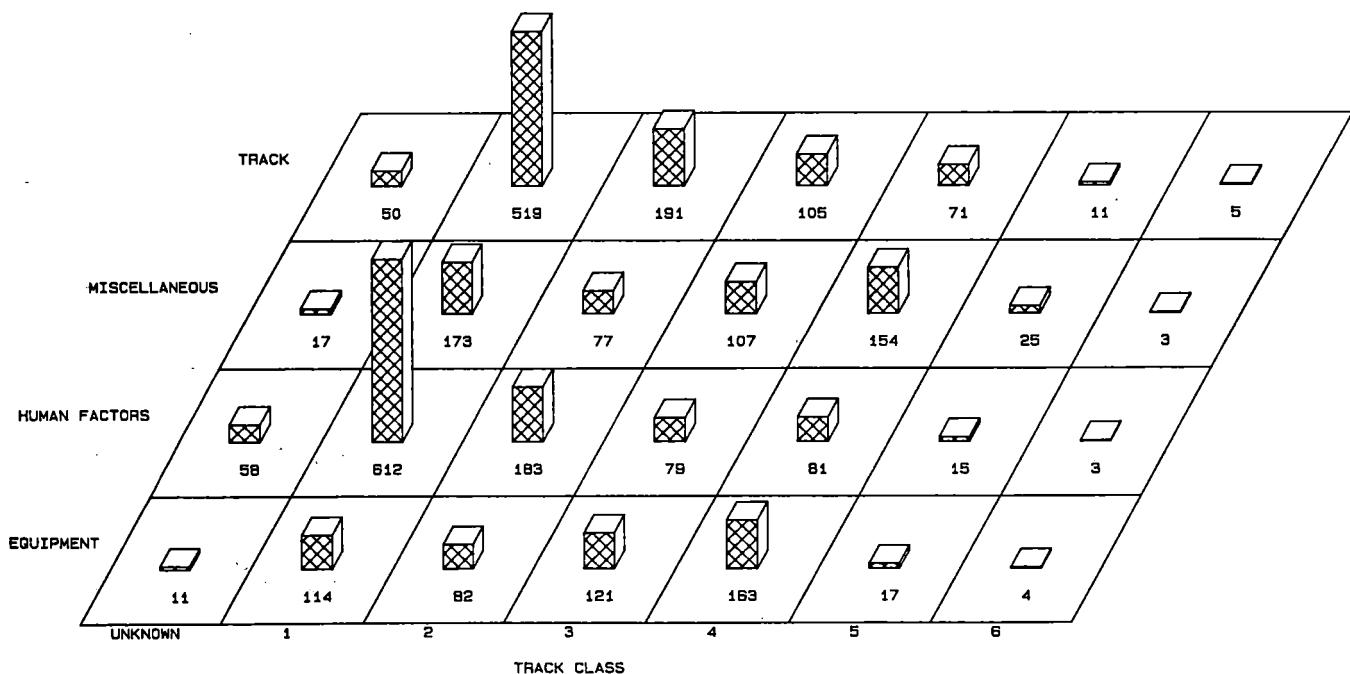


**FIGURE 16. ACCIDENT DAMAGES BY TRACK CLASS AND CAUSE  
(\$ 000's)**

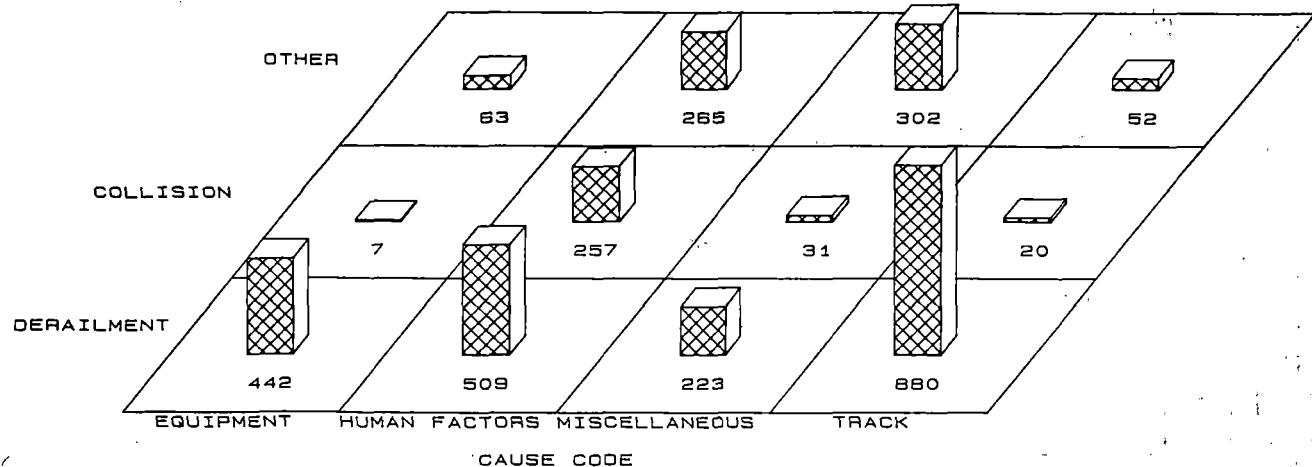
## CAUSE BY TYPE OF ACCIDENT

**TABLE 12. 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
Deraiment	8,918,326	45,214,487	10,928,021	33,393,083	4,828,350	19,546,420	3,304,847	13,276,753	27,979,544	111,430,743
Head on collision	---	---	---	---	764,077	4,746,210	---	19,350	764,077	4,765,560
Rear end collision	37,500	2,001,275	---	---	269,365	6,505,320	---	33,500	306,865	8,540,095
Side collision	11,672	334,085	5,900	376,450	623,758	5,267,129	35,280	726,896	676,610	6,704,560
Raking collision	3,662	79,850	---	---	5,410	565,859	67,349	76,300	76,421	722,009
Broken trn collisin	---	---	---	---	10,300	659,655	2,736	16,540	13,036	676,195
Rail-hwy crossing	---	---	---	---	---	---	1,567,448	9,973,783	1,567,448	9,973,783
RR grade crossing	---	---	---	---	---	---	---	---	---	---
Obstruction	10,500	24,000	1,900	4,500	270,692	3,721,317	67,840	1,236,688	350,932	4,986,505
Explosion-detonatin	---	---	---	---	---	---	7,000	100,686	1,746,308	105,206
Fire/violent ruptre	---	21,521	4,520	869,645	---	---	192,097	936,471	1,244,712	2,644,474
Other	244,926	1,390,077	247,826	659,300	559,863	4,596,010	192,097	936,471	1,244,712	7,581,858
TOTAL.....	9,226,586	49,065,295	11,188,167	35,302,978	7,331,815	45,614,920	5,338,283	28,042,589	33,084,851	158,025,782

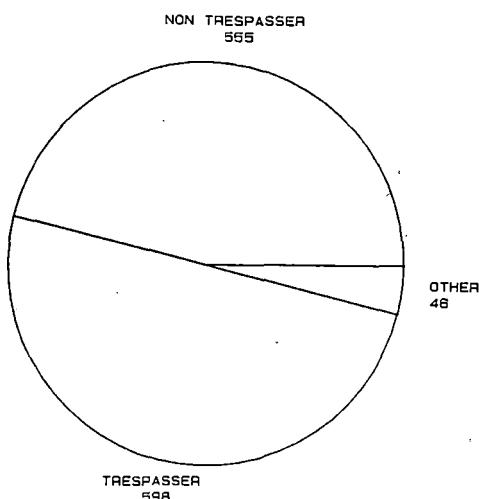


**FIGURE 17. ACCIDENT CAUSES BY TRACK CLASS**

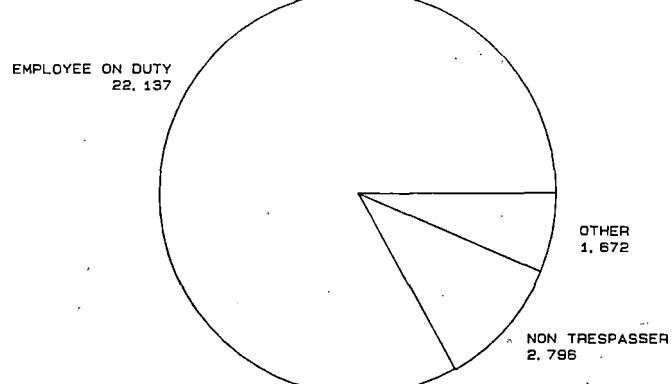


**FIGURE 18. ACCIDENT CAUSES BY ACCIDENT TYPE**

#### **INJURIES AND FATALITIES BY TYPE OF PERSON**



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



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

**TABLE 13. CASUALTIES BY TYPE OF PERSON**

	Employees On Duty	Employees Not On Duty	Passengers On Trains	Non- trespassers	Trespassers	Contractor Employees	Total
<b>TRAIN ACCIDENTS</b>							
Fatalities.....	12	1	---	2	3	---	18
Injuries.....	263	12	72	118	3	---	468
Occupational illnesses...	3	---	---	---	---	---	3
Total casualties.....	278	13	72	120	6	---	489
<b>TRAIN INCIDENTS</b>							
Fatalities.....	16	---	2	10	417	---	445
Injuries.....	3,228	16	93	45	480	17	3,879
Occupational illnesses...	54	3	---	---	---	---	57
Total casualties.....	3,298	19	95	55	897	17	4,381
<b>NONTRAIN INCIDENTS</b>							
Fatalities.....	15	---	---	3	28	1	47
Injuries.....	18,493	387	153	354	79	204	19,670
Occupational illnesses...	378	9	---	---	---	1	388
Total casualties.....	18,886	396	153	357	107	206	20,105
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>							
Fatalities.....	---	---	---	539	150	---	689
Injuries.....	153	---	19	2,058	358	---	2,588
Occupational illnesses...	1	---	---	---	---	---	1
Total casualties.....	154	---	19	2,597	508	---	3,278
<b>GRAND TOTAL</b>							
Fatalities.....	43	1	2	554	598	1	1,199
Injuries.....	22,137	415	337	2,575	920	221	26,605
Occupational illnesses...	436	12	---	---	---	1	449
Total casualties.....	22,616	428	339	3,129	1,518	223	28,253

Contractor employees are included with nontrespassers in all other tables in this publication.

Rail-highway crossing accidents/incidents may be classified as train accidents, train incidents, or nontrain incidents. In this table these casualties are shown separately.

**TABLE 14. TOTAL FATALITIES BY TYPE OF PERSON**

Type Of Accident/Incident	Total Killed	Employees Trainmen	On Duty Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>TRAIN ACCIDENTS</b>								
Collisions	11	9	1	10	---	---	1	---
Derailments	---	---	---	---	---	---	---	---
Rail-highway x-ing	54	---	---	---	---	---	32	22
Miscellaneous	7	---	2	2	1	---	1	3
Total.....	72	9	3	12	1	---	34	25
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars....	---	---	---	---	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains.	1	1	---	1	---	---	---	---
Operating or on locomotives....	---	---	---	---	---	---	---	---
Operating rail motorcars....	---	---	---	---	---	---	---	---
Operating hand brakes....	---	---	---	---	---	---	---	---
Operating switches or derails....	1	1	---	1	---	---	---	---
Contacting fixed objects while on locos or cars..	1	1	---	1	---	---	---	---
Getting on or off cars or locomotives....	15	3	2	5	---	1	---	9
Collisions, derailments, etc. (<= \$4,901)....	4	---	---	---	---	---	4	4
Rail-highway crossing accidents/incidents....	628	---	---	---	---	---	500	128
Struck by/ran into loco/car(not at rr-hwy x-ing).	400	3	---	3	---	---	10	387
Servicing or maintenance of equipment....	1	---	1	1	---	---	---	---
Maintenance of way and structures....	2	---	2	2	---	---	---	---
Freight, baggage, express or mail....	4	---	---	---	---	---	4	4
Windows, doors, etc., on on-track equipment....	---	---	---	---	---	---	---	---
Passenger car doors....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C....	3	---	---	---	---	---	---	3
Flying or falling objects, burns, etc., N.O.C....	---	---	---	---	---	---	---	---
Operation of on-track work equipment....	1	---	1	1	---	---	---	---
Assault....	---	---	---	---	---	---	---	---
Other occurrences....	12	---	1	1	---	1	---	10
Total.....	1,073	9	7	16	---	2	510	545
<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....	1	1	---	1	---	---	---	---
Contacting fixed objects while on locos or cars..	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives....	---	---	---	---	---	---	---	---
Collisions, derailments, etc. (<= \$4,901)....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents....	7	---	---	---	---	---	7	---
Struck by/ran into loco/car(not at rr-hwy x-ing).	5	1	---	1	---	---	4	4
Servicing or maintenance of equipment....	1	---	1	1	---	---	---	---
Maintenance of way and structures....	4	---	4	4	---	---	---	---
Freight, baggage, express or mail....	---	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment....	---	---	---	---	---	---	---	---
Passenger car doors....	---	---	---	---	---	---	1	6
Stumbling, slipping, falling, caught, N.O.C....	7	---	---	---	---	---	4	4
Flying or falling objects, burns, etc., N.O.C....	4	---	---	---	---	---	---	---
Operation of on-track work equipment....	---	---	---	---	---	---	---	---
Assault....	2	---	1	1	---	---	3	1
Other occurrences....	23	1	6	7	---	---	3	13
Total.....	54	3	12	15	---	---	11	28
Grand total.....	1,199	21	22	43	1	2	555	598

**TABLE 15. TOTAL NONFATAL CASUALTIES BY TYPE OF PERSON**

Type Of Accident/Incident	Total Injured	Employees Trainmen	On Duty Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>TRAIN ACCIDENTS</b>								
Collisions	148	74	24	98	1	47	2	---
Derailments	237	80	33	113	---	7	115	2
Rail-highway x-ing	151	58	9	67	---	19	47	18
Miscellaneous	86	42	13	55	11	18	1	1
Total.....	622	254	79	333	12	91	165	21
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	218	215	3	218	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains.	39	35	3	38	---	---	1	---
Operating or on locomotives.....	795	774	20	794	1	---	---	---
Operating rail motorcars.....	20	7	13	20	---	---	---	---
Operating hand brakes.....	68	63	5	68	---	---	---	---
Operating switches or derails.....	18	16	2	18	---	---	---	---
Contacting fixed objects while on locos or cars..	92	81	7	88	---	---	4	---
Getting on or off cars or locomotives.....	869	752	27	779	---	32	4	54
Collisions, derailments, etc. (<= \$4,901).....	116	80	7	97	---	1	7	11
Rail-highway crossing accidents/incidents.....	2,355	80	7	87	---	---	1,933	335
Struck by/ran into loco/car(not at rr-hwy x-ing).....	442	32	13	45	1	---	23	373
Servicing or maintenance of equipment.....	73	3	70	73	---	---	---	---
Maintenance of way and structures.....	80	---	79	79	1	---	---	---
Freight, baggage, express or mail.....	19	7	8	15	---	1	---	3
Windows, doors, etc., on on-track equipment.....	68	43	19	62	2	4	---	---
Passenger car doors.....	8	1	1	2	---	6	---	---
Stumbling, slipping, falling, caught, N.O.C.....	279	119	105	224	6	24	7	18
Flying or falling objects, burns, etc., N.O.C.....	190	167	12	179	2	6	2	1
Operation of on-track work equipment.....	83	6	73	79	1	---	2	1
Assault.....	66	52	7	59	---	6	---	1
Other occurrences.....	393	310	35	345	5	13	12	18
Total.....	6,291	2,843	526	3,369	19	93	1,995	815
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	505	473	32	505	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains.	283	239	43	282	1	---	---	---
Operating or on locomotives.....	531	486	43	529	2	---	---	---
Operating rail motorcars.....	25	7	18	25	---	---	---	---
Operating hand brakes.....	378	350	28	378	---	---	---	---
Operating switches or derails.....	1,020	943	77	1,020	---	---	---	---
Contacting fixed objects while on locos or cars..	22	14	5	19	---	---	2	1
Getting on or off cars or locomotives.....	1,048	760	174	934	12	79	21	2
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	83	---	---	---	---	---	78	5
Struck by/ran into loco/car(not at rr-hwy x-ing).....	24	4	7	11	---	---	2	11
Servicing or maintenance of equipment.....	4,552	88	4,411	4,499	31	---	22	---
Maintenance of way and structures.....	5,985	46	5,811	5,857	88	---	40	---
Freight, baggage, express or mail.....	106	11	92	103	1	---	2	---
Windows, doors, etc., on on-track equipment.....	325	129	181	310	2	4	9	---
Passenger car doors.....	24	3	2	5	---	15	4	---
Stumbling, slipping, falling, caught, N.O.C.....	2,095	838	802	1,640	129	43	268	15
Flying or falling objects, burns, etc., N.O.C.....	543	342	143	485	12	3	30	13
Operation of on-track work equipment.....	70	2	66	68	1	---	1	---
Assault.....	191	58	113	171	11	2	5	2
Other occurrences.....	2,331	596	1,434	2,030	106	7	153	35
Total.....	20,141	5,389	13,482	18,871	396	153	637	84
Grand total.....	27,054	8,486	14,087	22,573	427	337	2,797	920

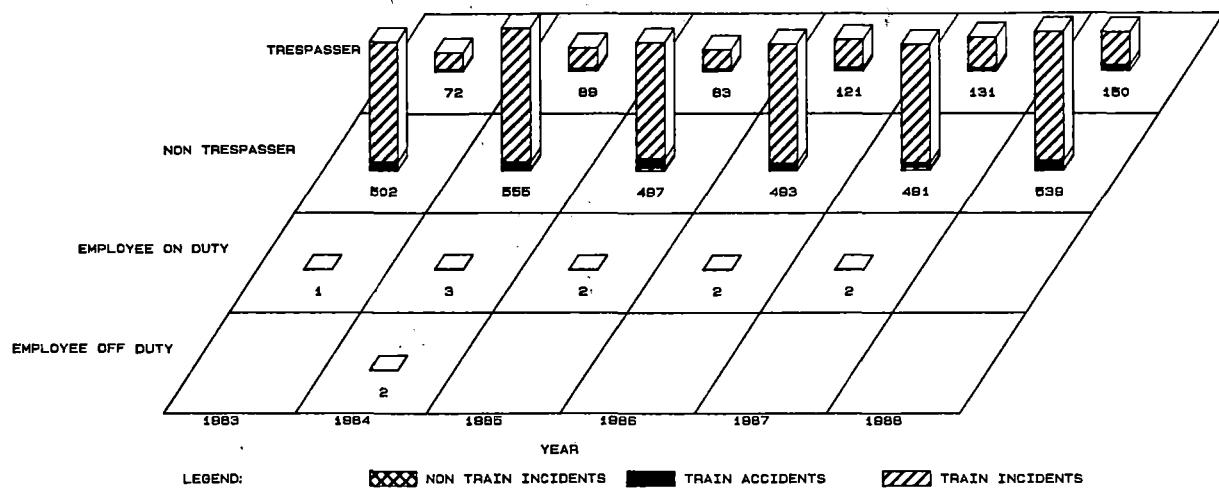
**TABLE 16. TOTAL ACCIDENTS/INCIDENTS BY OCCURRENCE**

Type Of Accident/Incident	Accidents/Incidents.....		
	Total	Fatal	Nonfatal
<b>TRAIN ACCIDENTS *</b>			
Collisions.....	315	7	39
Derailements.....	2,054	---	71
Rail-highway crossing.....	197	43	74
Miscellaneous.....	485	6	27
<b>Total.....</b>	<b>3,051</b>	<b>56</b>	<b>211</b>
<b>TRAIN INCIDENTS</b>			
Coupling and uncoupling locomotives or cars.....	217	---	217
Coupling/uncoupling air/steam hose, safety chains.....	40	1	39
Operating or on locomotives.....	769	---	769
Operating rail motorcars.....	19	---	19
Operating hand brakes.....	68	---	68
Operating switches or derails.....	19	1	18
Contacting fixed objects while on locos or cars.....	92	1	91
Getting on or off cars or locomotives.....	880	14	866
Collisions, derailments, etc. (<= \$4,901).....	103	4	99
Rail-highway crossing accidents/incidents.....	2,193	508	1,685
Struck by/ran into loco/car(not at rr-hwy x-ing).....	813	389	424
Servicing or maintenance of equipment.....	74	1	73
Maintenance of way and structures.....	81	2	79
Freight, baggage, express or mail.....	20	3	17
Windows, doors, etc., on on-track equipment.....	68	---	68
Passenger car doors.....	8	---	8
Stumbling, slipping, falling, caught, N.O.C.....	281	3	278
Flying or falling objects, burns, etc., N.O.C.....	186	---	186
Operation of on-track work equipment.....	78	1	77
Assault.....	64	---	64
Other occurrences.....	392	12	380
<b>Total.....</b>	<b>6,465</b>	<b>940</b>	<b>5,525</b>
<b>NONTRAIN INCIDENTS</b>			
Coupling and uncoupling locomotives or cars.....	504	---	504
Coupling/uncoupling air/steam hose, safety chains.....	283	---	283
Operating or on locomotives.....	524	---	524
Operating rail motorcars.....	25	---	25
Operating hand brakes.....	378	---	378
Operating switches or derails.....	1,021	1	1,020
Contacting fixed objects while on locos or cars.....	22	---	22
Getting on or off cars or locomotives.....	1,045	---	1,045
Collisions, derailments, etc. (<= \$4,901).....	---	---	---
Rail-highway crossing accidents/incidents.....	65	5	60
Struck by/ran into loco/car(not at rr-hwy x-ing).....	28	5	23
Servicing or maintenance of equipment.....	4,528	1	4,527
Maintenance of way and structures.....	5,913	4	5,909
Freight, baggage, express or mail.....	102	---	102
Windows, doors, etc., on on-track equipment.....	325	---	325
Passenger car doors.....	24	---	24
Stumbling, slipping, falling, caught, N.O.C.....	2,086	7	2,079
Flying or falling objects, burns, etc., N.O.C.....	530	4	526
Operation of on-track work equipment.....	70	---	70
Assault.....	192	2	190
Other occurrences.....	2,213	22	2,191
<b>Total.....</b>	<b>19,878</b>	<b>51</b>	<b>19,827</b>
<b>Grand total.....</b>	<b>29,394</b>	<b>1,047</b>	<b>25,563</b>

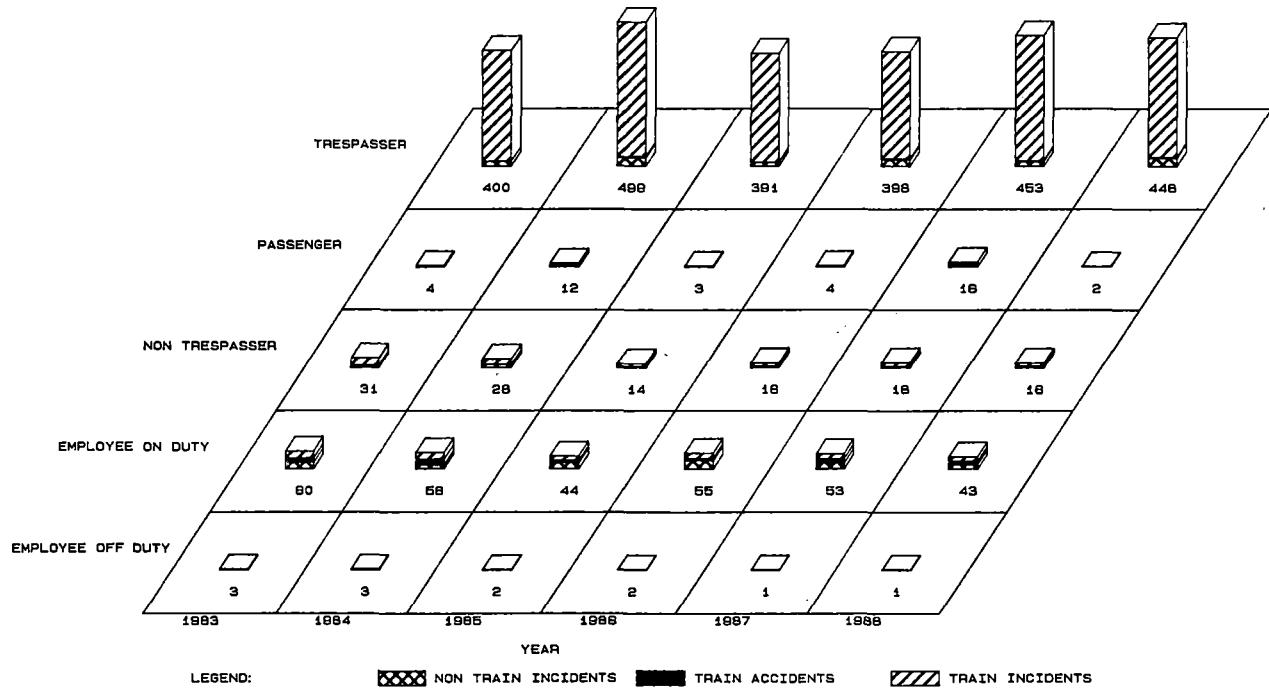
NOTE: Train accidents do not require a casualty to be reportable.  
See definition in Appendix A.

The total number of rail-highway accidents in the TRAIN ACCIDENT category only includes those that exceed the monetary threshold for reporting. Those in the TRAIN INCIDENT and NONTRAIN INCIDENT categories only include those accidents/incidents that resulted in reportable casualties.

For more information concerning rail-highway crossing accidents/incidents, refer to the "RAIL-HIGHWAY CROSSING AND INVENTORY BULLETIN."



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



**FIGURE 21. FATALITIES NOT AT RAIL-HIGHWAY CROSSINGS**

**TABLE 17. TRAIN ACCIDENTS BY MONTH**

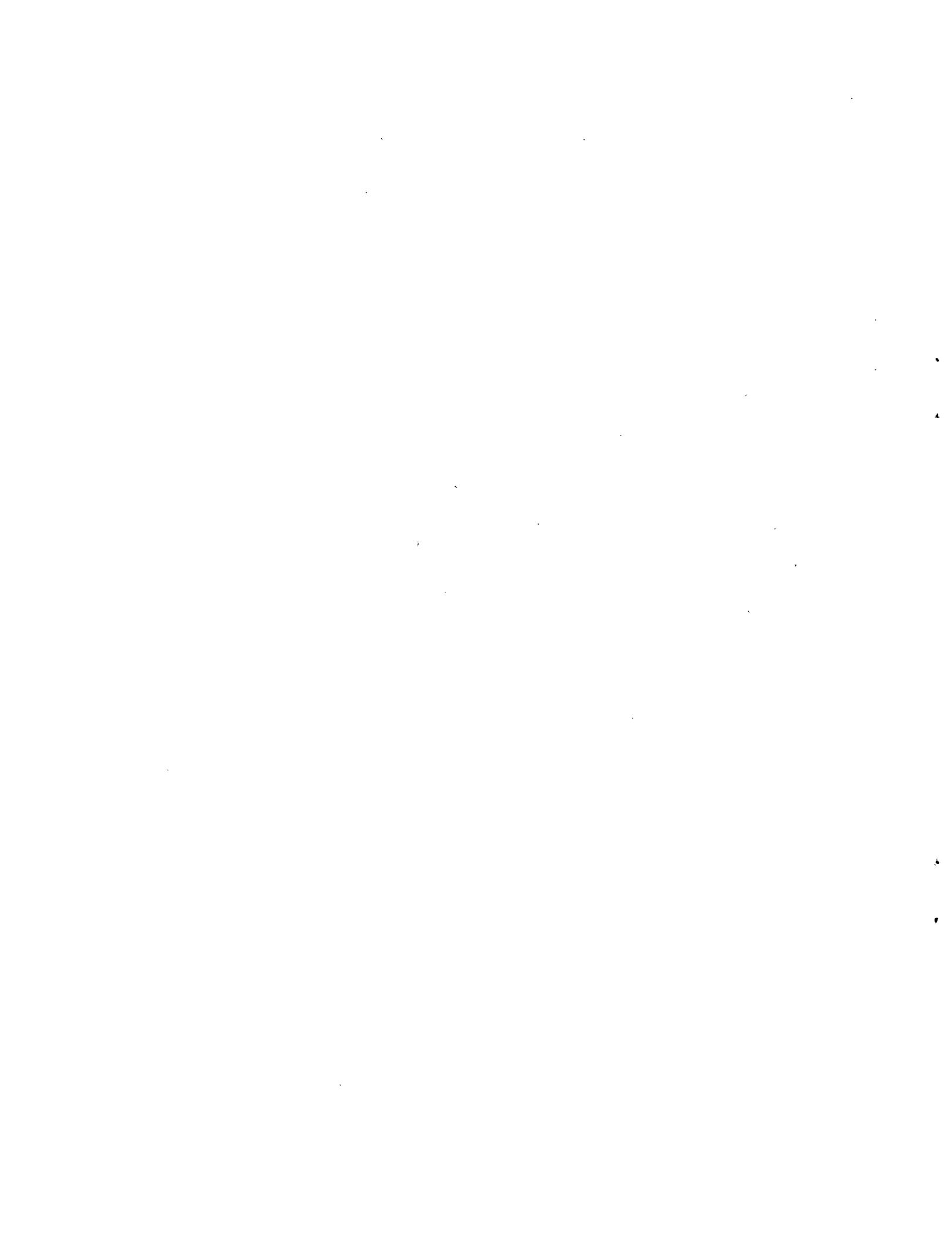
Month	Accs	Accs Per MTM	Total Damage	Damage Per MTM	Train Miles			Total
					Locomotive	Motor	Yard Switching	
January	284	5.83	23,671,471	\$486,206.94	37,426,111	2,798,358	8,461,302	48,685,771
February	249	5.09	15,035,313	\$307,363.76	37,666,980	2,807,455	8,462,573	48,917,008
March	222	4.22	9,880,081	\$187,830.67	40,477,346	2,956,636	9,166,615	52,600,597
April	257	5.07	14,555,002	\$287,148.87	39,104,031	2,870,033	8,713,561	50,687,625
May	232	4.55	12,654,053	\$247,914.52	39,310,448	2,914,154	8,817,196	51,041,798
June	285	5.71	19,813,399	\$396,855.33	38,165,836	2,928,410	8,831,782	49,926,028
July	267	5.30	15,570,333	\$309,033.28	38,785,873	2,916,568	8,681,773	50,584,214
August	268	5.12	24,347,961	\$465,170.63	40,228,406	3,005,389	9,108,063	52,341,858
September	234	4.64	11,538,598	\$228,586.67	38,849,257	2,903,879	8,725,102	50,478,238
October	266	5.01	11,864,494	\$223,478.89	41,053,981	2,936,340	9,099,947	53,090,268
November	249	4.95	18,573,885	\$369,438.40	38,728,662	2,903,295	8,643,687	50,275,644
December	238	4.68	13,606,043	\$267,283.04	39,355,436	2,936,076	8,613,868	50,905,380
Total...	3,051	5.01	191,110,633	\$315,638.55	469,132,367	34,876,593	105,325,469	609,334,429

NOTE: "MTM" = Million train miles

**TABLE 18. TRAIN ACCIDENTS BY TYPE AND MONTH**

Type of Accident	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Derailed	178	173	147	175	170	191	182	182	164	173	171	148	2,054
Head on collision	6	1	2	1	4	1	2	---	1	2	2	2	24
Rear end collision	7	1	---	5	1	2	5	6	6	7	1	1	42
Side collision	24	16	18	24	13	20	22	15	12	13	13	20	210
Raking collision	5	4	2	1	---	4	2	3	5	2	2	2	32
Broken train collision	1	---	---	---	1	---	2	---	2	---	1	1	7
Rail-hwy crossing	14	12	12	19	12	17	17	21	16	19	17	21	197
RR grade crossing	---	---	---	---	---	---	---	---	---	---	---	---	---
Obstruction	9	6	2	5	4	3	4	3	1	5	5	5	52
Explosion-detonation	---	---	---	---	---	---	---	---	---	---	---	---	---
Fire or violent rupture	4	3	7	5	3	6	7	3	2	6	4	3	53
Other	36	33	32	22	24	41	24	35	25	39	34	35	380
Total	284	249	222	257	232	285	267	268	234	266	249	238	3,051

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### 3. ACCIDENTS: DETAILS OF 1988 OCCURRENCES

**TABLE 19. 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	32	4,064,750		---	29	3	---
Track geometry defects	384	22,663,707	1	375	8	4	---
Rail and joint bar defects	257	23,262,412	1	252			---
Frogs, switches and track appliances	244	5,610,148	14	218	12	12	---
Other way and structure	21	390,344		1	20	20	---
Signal and communication failures	14	2,300,520	4	5	5	5	---
Subtotal.....	952	58,291,881	20	880	52	52	---
<b>MECHANICAL AND ELECTRICAL FAILURES</b>							
<b>*LOCOMOTIVE FAILURE*</b>							
Brakes	1	27,775		---	1		---
Body	1	22,504		---	1		---
Coupler and draft system	---	---		---			---
Truck components	2	205,100		2			---
Axles and journal bearings	3	229,260		3			---
Wheels	3	32,550		3			---
Locomotives	18	832,636		3	15	15	---
Doors		---		---			---
General mechanical and electrical failures	1	38,000		---	1		---
Subtotal (Locomotives)..	29	1,387,825		13	16	16	---
<b>*CAR FAILURE*</b>							
Brakes	68	4,325,231	3	52	13		---
Trailer or container on flat car	7	281,105		2			---
Body	32	1,832,566	1	29	2	2	---
Coupler and draft system	69	3,218,442	2	57	10	2	---
Truck components	99	6,743,649		97			---
Axles and journal bearings	95	13,672,330		93	2	2	---
Wheels	92	13,512,368		90			---
Doors	6	135,061	1	5			---
General mechanical and electrical failures	15	1,382,568		4	11	11	---
Subtotal (cars).....	483	45,103,320	7	429	47	47	---
<b>TOTAL EQUIPMENT FAILURES....</b>							
	512	46,491,145	7	442	63	63	---
<b>TRAIN OPERATION - HUMAN FACTORS</b>							
Brakes, use of	184	9,863,700	53	72	59		---
Employee physical condition	3	951,450	2		1		---
Flagging, fixed, hand and radio signals	39	9,231,801	21	7	11		---
Other rules and instructions	265	10,471,871	122	63	80		---
Speed	82	7,125,635	15	38	29		---
Switches, use of	153	3,624,882	25	101	27		---
Miscellaneous	305	11,671,396	19	228	58		---
Subtotal.....	1,031	52,946,735	257	509	265	265	---
<b>MISCELLANEOUS FACTORS</b>							
Collision with highway user at crossing site	197	11,541,231		---	---		197
Emergency brake application to avoid accident	6	1,099,753		6			---
Vandalism	59	3,436,046	5	41	13		---
Interference with rr operation, not vandals	12	314,867		7			---
Load shifted	12	1,474,912	2	9	1		---
Load fell from car	8	827,338		5	3		---
Overloaded car	6	153,546		5	1		---
Improperly loaded car	6	149,760	1	5			---
Oversized load, misrouted	2	43,200		1	1		---
Object on or fouling track	24	1,061,562	1	7	16		---
Equipment on or fouling track	12	1,083,433	4	3	5		---
Train/contain tiedown exp impr applied	2	58,000			2		---
Overload/improper loaded container etc.	1	12,000		1			---
Interaction of lateral/vertical forces	74	3,932,665		73	1		---
Failure to control car spd with hand brk	---	---		---			---
Snow, ice, or mud on track	10	520,272	1	8	1		---
Other acts of God	13	2,597,562		11	2		---
Fire, not due to vandalism	27	1,792,594		1	26		---
Hump retarder failed to slow car	43	787,020	14	7	22		---
Switch fouled by lading chains, etc.	3	27,916		3			---
Other causes	39	2,467,195	3	30	6		---
Subtotal.....	556	33,380,872	31	223	105	105	197
<b>GRAND TOTAL.....</b>							
	3,051	191,110,633	315	2,054	485		197

**TABLE 20. TRAIN ACCIDENTS RESULTING FROM HUMAN FACTORS  
BY SPECIFIC CAUSES**

Cause Of Accident	Total	Accidents	Damage	Collisions	Derailments	Other	Rail Hwy Crossing
<b>BRAKES, USE OF</b>							
500 Automatic brake, improper use	9	427,200		2	7	---	---
501 Dynamic brake, improper use	7	270,539		1	6	---	---
502 Failure to secure engine (R.R. emp.)	15	404,930		4	5	6	---
503 Failure to secure hnd brk (R.R. emp)	43	948,630		16	7	20	---
504 Failure to apply sufficient hand brake	41	3,077,587		18	8	15	---
505 Failure to apply hnd brk on car (emp.)	22	499,184		8	3	11	---
506 Fail. to secure eng/car (Non R.R. emp)	3	44,880		1	---	2	---
507 Independent (eng.) brake, improper use	23	941,364		1	18	4	---
508 Fail. to control spd,hnd brk (R.R.emp)	5	124,750		1	3	1	---
509 Other causes involving use of brakes	16	3,124,636		1	15	---	---
<b>SUBTOTAL.....</b>	<b>184</b>	<b>9,863,700</b>		<b>53</b>	<b>72</b>	<b>59</b>	<b>---</b>
<b>EMPLOYEE PHYSICAL CONDITION</b>							
510 Impairment due to alcohol or drugs	2	920,200		2	---	---	---
515 Employee physical condition, other	1	31,250		---	---	1	---
<b>SUBTOTAL.....</b>	<b>3</b>	<b>951,450</b>		<b>2</b>	<b>---</b>	<b>1</b>	<b>---</b>
<b>FLAGGING, FIXED, HAND AND RADIO SIGNALS</b>							
519 Fixed signal improperly displayed	1	33,000		---	---	1	---
52A Block signal, failure to comply	7	1,643,896		4	2	1	---
52B Interlocking signal, failure to comply	1	120,052		1	---	---	---
52F Automatic train control device cut out	1	3,000,520		1	---	---	---
520 Fixed signal, failure to comply	6	3,857,192		5	---	1	---
521 Flagging, improper or failure to flag	1	9,500		---	---	1	---
523 Hand signal, failure to comply	1	5,300		---	---	1	---
525 Hand signal, failure to give/receive	1	49,161		1	---	---	---
526 Radio communication, failure to comply	6	143,950		2	1	3	---
527 Radio communication, improper	5	136,090		2	1	2	---
528 Radio comm., failure to give/receive	9	233,140		5	3	1	---
<b>SUBTOTAL.....</b>	<b>39</b>	<b>9,231,801</b>		<b>21</b>	<b>7</b>	<b>11</b>	<b>---</b>
<b>OTHER RULES AND INSTRUCTIONS</b>							
530 Car(s) shoved out & left out of clear	10	119,825		5	1	4	---
531 Cars left foul	31	453,235		15	2	14	---
532 Derail, failure to apply or remove	11	117,200		---	11	---	---
533 Failure to stop train in clear	42	1,037,792		30	2	10	---
535 Instruction to trn/yard crew improper	22	575,190		12	4	6	---
536 Mtr car/on-trk eqp rules,fail to comply	18	401,140		4	1	13	---
537 Equip move without authority (RR emp)	1	62,000		1	---	---	---
538 Shoving move, missing man at lead	62	938,783		28	18	16	---
539 Shoving movement, fail to control	33	749,485		15	10	8	---
540 Skate, failure to remove or place	2	110,770		1	1	---	---
541 Special op. instr., failure to comply	18	1,581,278		6	9	3	---
542 Trn ord/timetable auth, fail to comply	5	4,131,988		2	1	2	---
543 Trn ord(radio)err in prep/trans/deliv	1	10,000		---	---	1	---
544 Trn ord(written)err in preparation,etc	1	43,000		---	---	1	---
549 Rules and instructions, other	8	146,185		3	3	2	---
<b>SUBTOTAL.....</b>	<b>265</b>	<b>10,477,871</b>		<b>122</b>	<b>63</b>	<b>80</b>	<b>---</b>

**TABLE 20. (CONTINUED)**

Cause Of Accident	Total		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
<b>SPEED</b>						
550 Coupling speed excessive	32	908,624	5	7	20	---
553 Switch movement, excessive speed	11	334,989	1	3	7	---
554 Trn inside yrd limit, excess speed	16	825,633	4	10	2	---
555 Trn out yrd limit,clear blk,excess spd	12	4,579,586	---	12	---	---
559 Other Causes involving excessive speed	11	476,803	5	6	---	---
<b>SUBTOTAL.....</b>	<b>82</b>	<b>7,125,635</b>	<b>15</b>	<b>38</b>	<b>29</b>	<b>---</b>
<b>SWITCHES, USE OF</b>						
560 Spring switch not clear before reverse	4	102,072	---	3	1	---
561 Switch improperly lined	88	2,150,676	23	45	20	---
562 Switch not latched or locked	12	282,152	---	11	1	---
563 Switch previously run through	33	623,551	---	30	3	---
569 Use of switches, other	16	466,431	2	12	2	---
<b>SUBTOTAL.....</b>	<b>153</b>	<b>3,624,882</b>	<b>25</b>	<b>101</b>	<b>27</b>	<b>---</b>
<b>MISCELLANEOUS</b>						
570 Buffing or slack action excessive	157	7,160,014	2	143	12	---
571 Failure to couple	9	114,200	2	1	6	---
572 Lateral drawbar force on curve excess	57	1,755,919	---	51	6	---
573 Moving car,loading ramp not positioned	---	10,800	---	---	---	---
574 Passed couplers	21	220,482	---	15	6	---
575 Retarder, improper manual operation	14	179,860	---	3	11	---
576 Retarder yard skate improperly applied	6	91,950	3	1	2	---
599 Other train operation/human factors	41	2,138,171	12	14	15	---
<b>SUBTOTAL.....</b>	<b>305</b>	<b>11,671,396</b>	<b>19</b>	<b>228</b>	<b>58</b>	<b>---</b>
<b>GRAND TOTAL.....</b>	<b>1,031</b>	<b>52,946,735</b>	<b>257</b>	<b>509</b>	<b>265</b>	<b>---</b>

**TABLE 21. TRAIN ACCIDENTS RESULTING FROM MECHANICAL AND ELECTRICAL FAILURES BY SPECIFIC CAUSE**

Cause Of Accident	Total				Rail Hwy	Crossing
	Accidents	Damage	Collisions	Derailments	Other	
<b>BRAKES</b>						
400 Air hose uncoupled or burst	17 <sup>6b</sup>	1,311,231	---	17	---	---
404 Other brake component failure, etc.	12 <sup>6b</sup>	145,150	---	1	---	---
405 Brk valve malf. (undesired emergency)	8 <sup>6b</sup>	399,680	---	7	1	---
405L Brk valve malf - loco (emergency appl)	1 <sup>6b</sup>	27,775	---	1	---	---
406 Brake valve malfunction/stuck brake/etc	8 <sup>6b</sup>	267,800	---	3	5	---
407 Rigging down or dragging	23 <sup>6b</sup>	1,227,530	---	19	4	---
408 Hand brake/gear broken or defective	6 <sup>6b</sup>	488,250	2	2	2	---
409 Hand brk linkage/connections failure	2 <sup>6b</sup>	10,000	---	1	1	---
410 Other brake failure(not on locomotive)	3 <sup>6b</sup>	475,590	1	2	---	---
SUBTOTAL.....	69	4,353,006	3	53	13	---
<b>TRAILER OR CONTAINER ON FLAT CAR</b>						
411 Broken or defective tiedown equipment	3 <sup>6b</sup>	234,660	---	1	2	---
412 Broken or defective container	1 <sup>6b</sup>	5,300	---	---	1	---
413 Broken or defective trailer	1 <sup>6b</sup>	18,895	---	---	1	---
419 Oth trailer/container on flat car fail	2 <sup>6b</sup>	22,250	---	1	1	---
SUBTOTAL.....	7	281,105	---	2	5	---
<b>BODY</b>						
421 Center sill broken or bent	11 <sup>6b</sup>	435,009	---	9	2	---
422 Draft sill broken or bent	2 <sup>6b</sup>	130,693	---	2	---	---
423 Center plate broken or defective	4 <sup>6b</sup>	396,000	---	4	---	---
424 Center plate disengaged from truck	9 <sup>6b</sup>	468,594	---	9	---	---
425 Center pin broken or missing	2 <sup>6b</sup>	250,970	---	2	---	---
426L Center plate attachment defect. - loco	1 <sup>6b</sup>	22,504	---	1	---	---
427 Side sill broken	2 <sup>6b</sup>	115,075	1	1	---	---
429 Other causes due to body (not loco)	2 <sup>6b</sup>	36,225	---	2	---	---
SUBTOTAL.....	33	1,855,070	1	30	2	---
<b>COUPLER AND DRAFT SYSTEM</b>						
430 Knuckle broken or defective	11 <sup>6b</sup>	408,214	---	9	2	---
431 Coupler mismatch, high/low	15 <sup>6b</sup>	211,423	1	9	5	---
432 Coupler drawhead broken or defective	5 <sup>6b</sup>	186,828	---	5	---	---
433 Coupler retainer pin/cross key missing	9 <sup>6b</sup>	482,498	1	8	---	---
434 Draft gear/mechanism broken/defective	9 <sup>6b</sup>	1,050,440	---	9	---	---
435 Coupler carrier broken or defective	3 <sup>6b</sup>	98,461	---	2	1	---
436 Coupler shank broken or defective	3 <sup>6b</sup>	32,250	---	2	1	---
439 Other coupler and draft system causes	14 <sup>6b</sup>	748,328	---	13	1	---
SUBTOTAL.....	69	3,218,442	2	57	10	---
<b>TRUCK COMPONENTS</b>						
440 Side bearing clearance improper	32 <sup>6b</sup>	2,403,999	---	32	---	---
441 Side bearing(s) broken	4 <sup>6b</sup>	117,000	---	4	---	---
442 Side bearing(s) missing	5 <sup>6b</sup>	327,059	---	5	---	---
443 Truck bolster broken	5 <sup>6b</sup>	97,359	---	3	2	---
444 Side frame broken	1 <sup>6b</sup>	5,600	---	1	---	---
445 Truck (stiff/improper lateral)	38 <sup>6b</sup>	1,946,551	---	38	---	---
445L Truck (stiff/improper lateral) - loco	1 <sup>6b</sup>	165,100	---	1	---	---
446 Defective snubbing	2 <sup>6b</sup>	411,082	---	2	---	---
449 Other truck component causes	12 <sup>6b</sup>	1,434,999	---	12	---	---
449L Other truck component causes - loco	1 <sup>6b</sup>	40,000	---	1	---	---
SUBTOTAL.....	101	6,948,749	---	99	2	---

**TABLE 21. (CONTINUED)**

Cause Of Accident	Total	Accidents	Damage	Collisions	Derailements	Other	Rail Hwy Crossing
<b>AXLES AND JOURNAL BEARINGS</b>							
450 Broken or bent between wheel seats	6	1,446,850	---	---	6	---	---
450L Broken/bent between wheel seats-loco	3	229,260	---	3	---	---	---
451 Journal (plain) failure - overheating	24	3,370,727	---	24	---	---	---
452 Journal (R. B.) failure - overheat	64	8,846,253	---	62	2	---	---
459 Axles and journal bearings (other)	1	8,500	---	1	---	---	---
SUBTOTAL.....	98	13,901,590	---	96	2	---	---
<b>WHEELS</b>							
460 Broken flange	5	885,020	---	5	---	---	---
461 Broken rim	19	4,501,378	---	19	---	---	---
462 Broken plate	15	4,681,731	---	15	---	---	---
463 Broken hub	2	752,159	---	2	---	---	---
464 Worn flange	26	716,668	---	24	2	---	---
464L Worn flange - locomotive	2	26,750	---	2	---	---	---
465 Worn thread	1	58,000	---	1	---	---	---
466 Damaged flange or tread, flat	5	138,860	---	5	---	---	---
467 Loose wheel	8	1,024,974	---	8	---	---	---
468 Thermal crack, flange or tread	2	110,258	---	2	---	---	---
469 Other causes involving wheels-not loco	9	643,320	---	9	---	---	---
469L Other causes involving wheel - loco	1	5,800	---	1	---	---	---
SUBTOTAL.....	95	13,544,918	---	93	2	---	---
<b>LOCOMOTIVES</b>							
470L Running gear failure - locomotive	1	28,296	---	1	---	---	---
471L Traction motor failure - locomotive	1	26,170	---	1	---	---	---
472L Crank case/air box explosion - loco	1	80,000	---	---	1	---	---
473L Oil fire - locomotive	2	56,345	---	---	2	---	---
474L Electrically caused fire - locomotive	6	386,000	---	---	6	---	---
475L Current collector system - loco	1	18,000	---	---	1	---	---
479L Other causes involving locomotives	6	237,825	---	1	5	---	---
SUBTOTAL.....	18	832,636	---	3	15	---	---
<b>DOORS</b>							
483 Box car door, other than plug, open	1	7,700	---	1	---	---	---
485 Bottom outlet car door open	1	34,000	---	1	---	---	---
486 Bottom outlet car door attach defect.	3	85,436	---	3	---	---	---
489 Other causes involving doors	1	7,925	1	---	---	---	---
SUBTOTAL.....	6	135,061	1	5	---	---	---
<b>GENERAL MECHANICAL AND ELECTRICAL FAILURES</b>							
499 General mech/elect failures-not loco	15	1,382,568	---	4	11	---	---
499L General mech/elect failures - loco	1	38,000	---	---	1	---	---
SUBTOTAL.....	16	1,420,568	---	4	12	---	---
<b>GRAND TOTAL.....</b>	<b>512</b>	<b>46,491,145</b>	<b>7</b>	<b>442</b>	<b>63</b>	<b>---</b>	<b>---</b>

**TABLE 22. TRAIN ACCIDENTS RESULTING FROM DEFECTS IN TRACK, ROADBED,  
AND STRUCTURES**

Cause Of Accident	Total	Accidents	Damage	Collisions	Derailments	Other	Rail Hwy Crossing
<b>ROADBED DEFECTS</b>							
101 Roadbed settled or soft	19	458,747		---	18	1	---
102 Washout/rain/slide/ice,etc. dmrg to trk	9	3,160,385		---	7	2	---
109 Other roadbed defects	4	445,618		---	4	---	---
<b>SUBTOTAL.....</b>	<b>32</b>	<b>4,064,750</b>		---	<b>29</b>	<b>3</b>	---
<b>TRACK GEOMETRY DEFECTS</b>							
110 Wide gage (defect/missing crossties)	164	4,149,335		1	159	4	---
111 Wide gage (def/missing rail fasteners)	20	703,479		---	20	---	---
112 Wide gage (involving gage rods)	3	25,385		---	3	---	---
113 Wide gage due to worn rail	12	314,199		---	12	---	---
114 Track alignment irregular	13	577,358		---	13	---	---
115 Track alignment irregular (buckled)	63	10,671,170		---	63	---	---
116 Track profile improper	3	865,162		---	3	---	---
117 Superelevation incorrect	9	417,475		---	9	---	---
118 Superelevation runoff improper	1	11,200		---	1	---	---
119 Cross level irregular at joints	47	2,596,621		---	45	2	---
120 Cross level irregular not at joints	27	1,101,584		---	26	1	---
129 Other track geometry defects	22	1,230,739		---	21	1	---
<b>SUBTOTAL.....</b>	<b>384</b>	<b>22,663,707</b>		<b>1</b>	<b>375</b>	<b>8</b>	---
<b>RAIL AND JOINT BAR DEFECTS</b>							
130 Bolt hole crack or break	17	2,136,221		---	17	---	---
131 Broken base of rail	45	2,891,900		---	43	2	---
132 Broken weld, field	4	467,447		---	4	---	---
133 Broken weld, plant	2	1,126,410		---	2	---	---
134 Detail fracture fm shelling/head check	10	1,341,259		---	10	---	---
135 Engine burn fracture	1	357,000		---	1	---	---
136 Head/web sep.(outside joint bar limit)	22	1,320,774		---	22	---	---
137 Head/web sep.(within joint bar limits)	11	914,632		---	11	---	---
138 Horizontal split head	3	78,324		---	2	1	---
139 Piped rail	1	12,000		---	1	---	---
140 Rail defect with joint bar repair	1	13,200		---	1	---	---
141 Transverse/compound fissure	55	4,421,785		1	54	---	---
142 Vertical split head	28	2,106,636		---	27	1	---
143 Worn rail	8	353,680		---	8	---	---
144 Mismatched rail-head contour	5	33,663		---	5	---	---
145 Joint bar broken, compromise	3	322,068		---	3	---	---
146 Joint bar broken, insulated	2	97,110		---	2	---	---
147 Joint bar broken, noninsulated	8	375,118		---	8	---	---
148 Joint bolts, broken or missing	2	87,070		---	2	---	---
149 Other rail and joint bar defects	29	4,806,115		---	29	---	---
<b>SUBTOTAL.....</b>	<b>257</b>	<b>23,262,412</b>		<b>1</b>	<b>252</b>	<b>4</b>	---

TABLE 22. (CONTINUED)

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
<b>FROGS, SWITCHES AND TRACK APPLIANCES</b>						
160 Guard rail loose/broken/etc.	3	70,100	---	3	---	---
161 Switch damaged/out of adjustment	54	864,144	---	51	3	---
162 Switch stand failure (hand oper.)	2	24,050	---	2	---	---
163 Switch connecting/oper. rod fail.	4	48,544	---	4	---	---
164 Stock rail worn/broken/disconnect	3	77,557	---	3	---	---
165 Switch point worn or broken	114	3,094,333	---	110	4	---
166 Switch rod worn/bent/broken/etc.	4	44,264	---	4	---	---
167 Frog, rigid, worn or broken	5	112,100	---	5	---	---
168 Frog, spring, worn or broken	1	84,000	---	1	---	---
169 Frog, self guarded, worn/broken	1	17,248	---	1	---	---
173 Retarder worn/broken/malfunction	12	207,907	2	6	4	---
174 Spring/power switch mech. malfunction	9	173,136	3	6	---	---
175 Retarder yard skate defective	5	67,485	5	---	---	---
176 Switch out of adjust.(insuf rail anch)	5	245,132	1	3	1	---
179 Other frog/switches/track appl. causes	22	480,148	3	19	---	---
<b>SUBTOTAL.....</b>	<b>244</b>	<b>5,610,148</b>	<b>14</b>	<b>218</b>	<b>12</b>	<b>---</b>
<b>OTHER WAY AND STRUCTURES</b>						
181 Flangeway clogged	1	44,950	---	1	---	---
189 Other way and structure causes	20	345,394	---	---	20	---
<b>SUBTOTAL.....</b>	<b>21</b>	<b>390,344</b>	<b>---</b>	<b>1</b>	<b>20</b>	<b>---</b>
<b>SIGNAL AND COMMUNICATION FAILURES</b>						
200 Fix sig. improperly displayed (defect)	1	86,500	---	1	---	---
201 Radio communication equipment failure	4	83,677	---	2	2	---
203 Block signal displayed false proceed	2	2,017,350	2	---	---	---
209 Signal & communication failure N.O.C.	7	112,993	2	2	3	---
<b>SUBTOTAL.....</b>	<b>14</b>	<b>2,300,520</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>---</b>
<b>GRAND TOTAL.....</b>	<b>952</b>	<b>58,291,881</b>	<b>20</b>	<b>880</b>	<b>52</b>	<b>---</b>

**TABLE 23. TRAIN ACCIDENTS RESULTING FROM MISCELLANEOUS CAUSES BY SPECIFIC CAUSE**

Cause Of Accident	Total Accidents	Damage	Collisions	Derailments	Other	Rail Hwy Crossing
<b>MISC CAUSES NOT OTHERWISE LISTED</b>						
700 Collision with hwy user at grade xing	197	11,561,231	---	---	---	197
701 Emergency brk appl to avoid accident	6	1,099,753	---	6	---	---
702 Vandalism	59	3,436,046	5	41	13	---
703 Interference with RR oper.-not vandals	12	314,867	---	7	5	---
704 Load shifted	12	1,474,912	2	9	1	---
705 Load fell from car	8	827,338	---	5	3	---
706 Overloaded car	6	153,566	---	5	1	---
707 Improperly loaded car	6	149,760	1	5	---	---
708 Oversized load, misrouted	2	43,200	---	1	1	---
709 Object on or fouling track	24	1,061,562	1	7	16	---
710 Equipment on or fouling track	12	1,083,433	4	3	5	---
711 Trail/contain tiedown eqp-impr applied	2	58,000	---	---	2	---
712 Overload/improper loaded container etc	1	12,000	---	1	---	---
713 Interaction of lateral/vertical forces	74	3,932,665	---	73	1	---
715 Snow, ice, or mud on track	10	520,272	1	8	1	---
716 Other acts of God	13	2,597,562	---	11	2	---
717 Fire, other than vandalism, involving	27	1,792,594	---	1	26	---
718 Hump retarder failed to sufficiently s	43	787,020	14	7	22	---
719 Objects such as lading chains or strap	3	27,916	---	3	---	---
799 Other miscellaneous causes	39	2,467,195	3	30	6	---
SUBTOTAL.....	556	33,380,872	31	223	105	197
GRAND TOTAL.....	556	33,380,872	31	223	105	197

**TABLE 24. DAMAGES TO RAIL EQUIPMENT IN TRAIN ACCIDENTS BY CONSIST TYPE**

Type of consist	...Collisions...	Number	Damage	...Derailments...	Number	Damage	....Other.....	Number	Damage	.Rail-Hwy X-ing..	Number	Damage	.....Total.....	Number	Damage
Freight train...	150	11,233,970	1,475	98,056,638	124	3,807,992	131	5,307,354	1,880	118,405,954					
Passenger train..	15	4,147,278	26	4,439,912	61	6,154,492	45	3,496,420	147	18,238,102					
Mixed train.....	--	--	2	15,268	--	--	--	--	--	2	15,268				
Work train.....	3	271,600	12	654,256	3	59,500	---	---	---	18	985,356				
Single car.....	53	628,304	22	200,211	70	947,628	6	99,200	151	1,875,343					
Cut of cars.....	102	2,183,677	88	1,456,880	79	979,920	1	964,661	270	5,585,138					
Yard/switching...	203	2,482,798	436	6,257,026	181	2,939,618	2	12,200	822	11,691,642					
Light loco(s)....	44	460,792	20	350,552	24	323,687	7	93,948	95	1,228,979					
Unknown.....	--	--	--	--	--	--	--	--	--	--	--				
Total.....	570	21,408,419	2,081	111,430,743	542	15,212,837	192	9,973,783	3,385	158,025,782					

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.

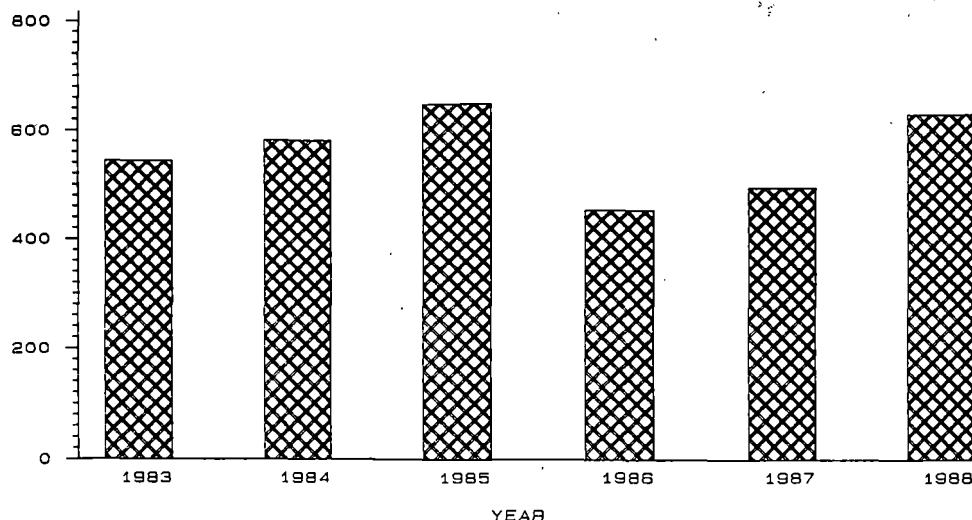
**TABLE 25. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS**

Type Of Accident	Consists Carrying	In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat	People Evacuated	Damage To Equipment
Derailment	349	25,445	2,689	507	65	15,009	31,033,923
Head on collision	5	232	17	2	2	1,000	1,146,400
Rear end collision	12	406	58	6	2	---	421,407
Side collision	54	2,287	442	39	1	---	1,859,823
Raking collision	5	205	17	2	---	---	85,550
Broken train collision	1	45	11	---	---	---	16,540
Rail-hwy crossing	25	2,030	188	6	---	100	911,970
RR grade crossing	---	---	---	---	---	---	---
Obstruction	---	---	---	---	---	---	---
Explosion-detonation	---	---	---	---	---	---	---
Fire or violent rupture	6	537	97	2	2	35	191,618
Other	40	1,634	322	66	2	20	1,238,956
Total	497	32,821	3,841	630	74	16,164	36,906,187

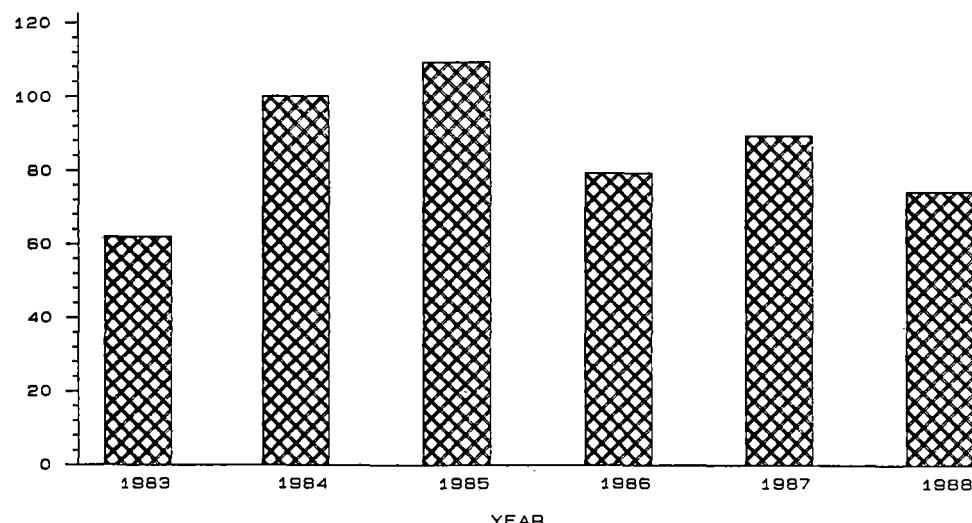
**TABLE 26. TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS**

Year	Total Number Of Accidents	Accidents In Which A Hazmat Car Was Damaged Or Derailed	Accidents In Which There Was A Release Of Hazardous Materials	Accident Which Resulted In Evacuation
1983	422	240	52	16
1984	436	237	54	17
1985	415	245	54	22
1986	364	185	51	32
1987	351	186	50	28
1988	475	237	44	32

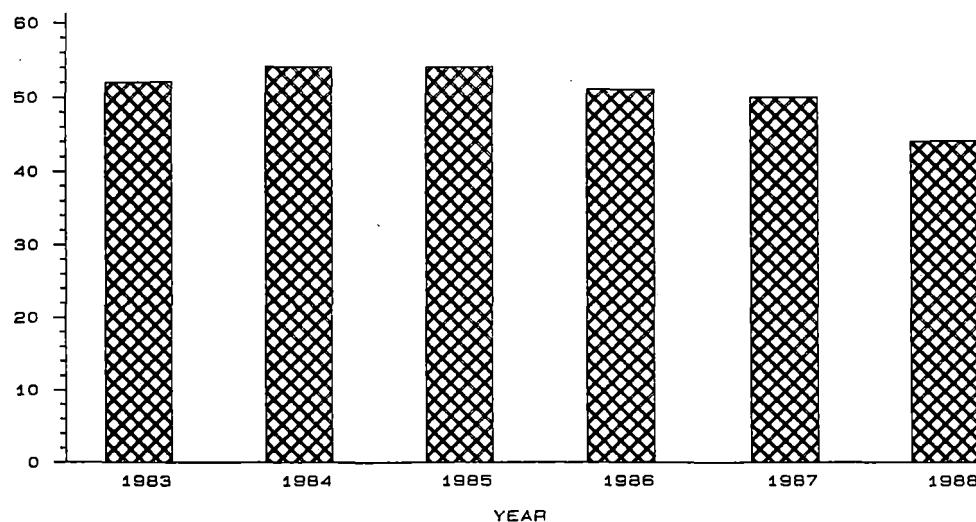
NOTE: An accident may appear in more than one column. For example, an accident that resulted in a release would also be included in the count of accidents that resulted in a hazardous materials car being damaged or destroyed.



**FIGURE 22. TOTAL NUMBER OF HAZARDOUS MATERIAL CARS DAMAGED**



**FIGURE 23. TOTAL NUMBER OF CARS RELEASING HAZARDOUS MATERIALS BY YEAR**



**FIGURE 23A. TOTAL NUMBER OF ACCIDENTS IN WHICH THERE WAS A RELEASE OF HAZARDOUS MATERIALS**

**TABLE 27. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS BY CAUSE**

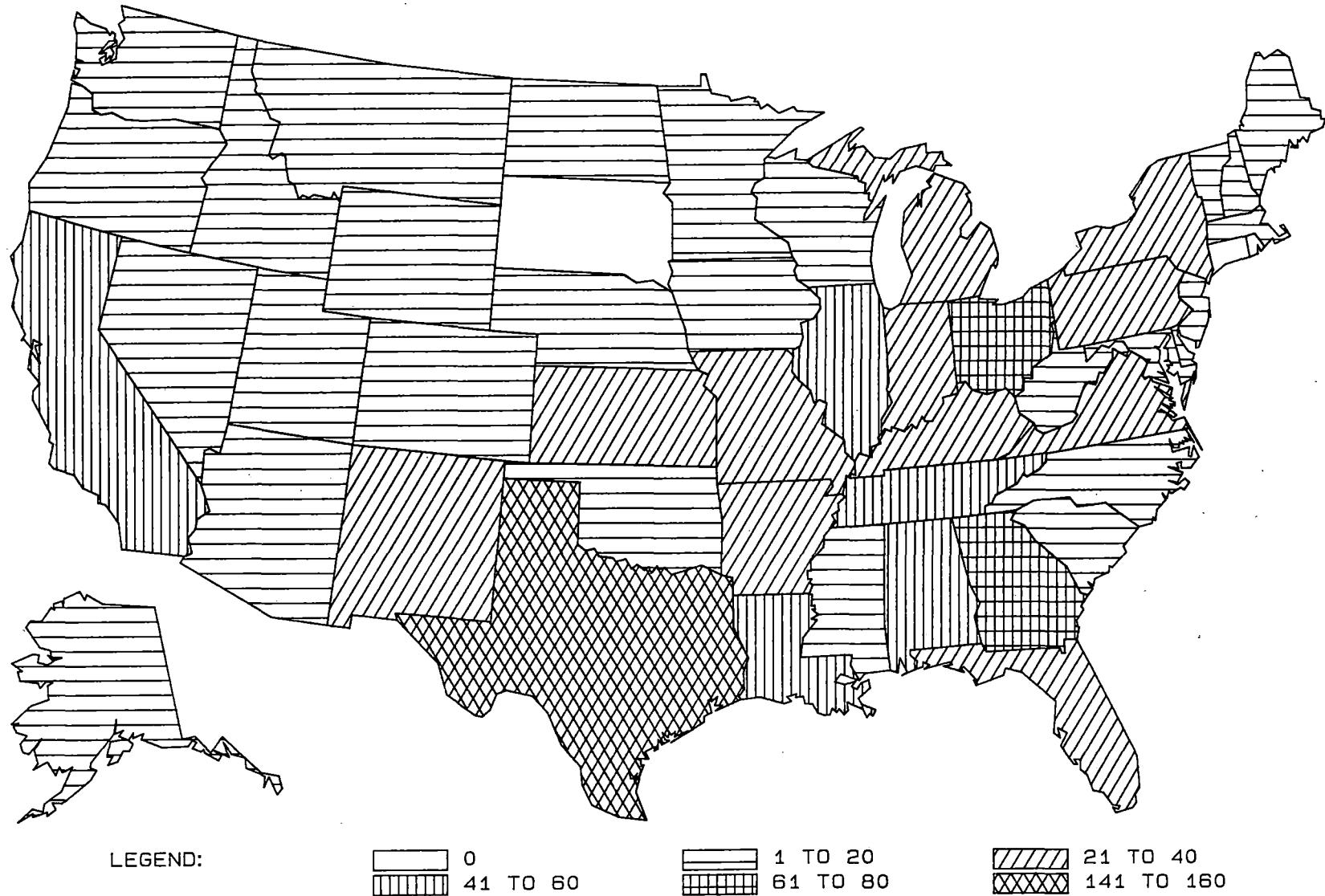
Cause	Consists Carrying	Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
<b>TRACK, ROADBED AND STRUCTURES</b>							
Roadbed defects	8	380	41	19	1	450	1,805,098
Track geometry defects	61	3,537	497	104	9	6,375	3,149,108
Rail and joint bar defects	43	3,055	486	99	14	617	4,151,783
Frogs, switches and track appliances	47	2,838	254	35	2	110	818,795
Other way and structure	---	---	---	---	---	---	---
Signal and communication failures	6	273	17	5	---	---	48,350
Subtotal.....	165	10,083	1,295	262	26	7,552	9,973,134
<b>MECHANICAL AND ELECTRICAL FAILURES</b>							
Brakes	17	1,200	189	29	4	22	909,110
Trailer or container on flat car	1	33	9	---	---	---	155,000
Body	2	127	6	4	---	---	73,700
Coupler and draft system	14	1,035	89	19	---	---	835,175
Truck components	23	1,639	242	38	1	400	1,368,105
Axles and journal bearings	20	1,597	140	27	2	---	3,858,623
Wheels	10	810	52	7	2	20	508,158
Locomotives	4	325	93	2	---	---	84,370
Doors	---	---	---	---	---	---	---
General mechanical and electrical failures	---	---	---	---	---	---	---
Subtotal.....	91	6,766	820	126	9	442	7,797,241
<b>TRAIN OPERATION - HUMAN FACTORS</b>							
Brakes, use of	32	1,878	183	52	9	620	3,996,884
Employee physical condition	3	145	10	---	---	---	39,250
Flagging, fixed, hand and radio signals	7	557	60	5	---	---	1,071,262
Other rules and instructions	45	1,736	441	43	5	1,200	1,821,182
Speed	18	1,264	110	19	8	4,650	3,790,225
Switches, use of	24	1,359	137	31	4	20	661,713
Miscellaneous	42	4,127	375	27	---	15	1,814,120
Subtotal.....	171	11,066	1,316	177	26	6,505	13,194,636
<b>MISCELLANEOUS FACTORS</b>							
Collision with highway user at crossing site	25	2,030	188	6	---	100	911,970
Emergency brake application to avoid accident	3	415	13	3	2	---	497,053
Vandalism	4	128	14	2	1	400	49,390
Interference with rr operation, not vandals	---	---	---	---	---	---	---
Load shifted	1	149	1	1	---	---	1,287,600
Load fell from car	1	85	2	---	---	---	200,000
Overloaded car	---	---	---	---	---	---	---
Improperly loaded car	---	---	---	---	---	---	---
Oversized load, misrouted	---	---	---	---	---	---	---
Object on or fouling track	---	---	---	---	---	---	---
Equipment on or fouling track	---	---	---	---	---	---	---
Train/contain tiedown eqp impr applied	---	---	---	---	---	---	---
Overload/improper loaded container etc.	---	---	---	---	---	---	---
Interaction of lateral/vertical forces	12	1,086	83	12	3	1,000	502,625
Failure to control car spd with hand brk	---	---	---	---	---	---	---
Snow, ice, or mud on track	---	---	---	---	---	---	---
Other acts of God	2	131	5	5	1	100	1,050,650
Fire, not due to vandalism	3	216	7	2	2	35	117,773
Hump retarder failed to slow car	10	106	16	14	---	---	133,615
Switch fouled by lading chains, etc.	---	---	---	---	---	---	---
Other causes	9	560	81	20	4	30	1,190,500
Subtotal.....	70	4,906	410	65	13	1,665	5,941,176
<b>GRAND TOTAL.....</b>	<b>497</b>	<b>32,821</b>	<b>3,841</b>	<b>630</b>	<b>74</b>	<b>16,164</b>	<b>36,906,187</b>

**TABLE 28. 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.....	16	882	87	18	2	420	1,460,600
Alaska.....	—	—	—	—	—	—	—
Arizona.....	12	766	207	49	5	200	2,439,169
Arkansas.....	7	472	26	13	4	22	440,600
California.....	22	1,389	126	37	3	4,720	1,536,862
Colorado.....	3	300	29	—	—	—	37,600
Connecticut.....	—	—	—	—	—	—	—
Delaware.....	1	66	2	2	—	—	5,700
Dist of Columbia.....	—	—	—	—	—	—	—
Florida.....	9	625	199	20	1	450	1,343,335
Georgia.....	14	988	122	25	7	650	2,992,200
Idaho.....	6	509	46	—	—	—	225,983
Illinois.....	78	4,918	436	45	6	1,020	1,816,433
Indiana.....	12	672	28	9	—	—	220,460
Iowa.....	10	738	25	5	2	1,000	695,640
Kansas.....	8	597	32	5	—	—	304,000
Kentucky.....	6	544	62	14	4	4,030	1,232,620
Louisiana.....	28	1,460	424	76	2	15	779,334
Maine.....	7	234	16	9	—	—	1,008,500
Maryland.....	1	110	5	5	—	—	5,000
Massachusetts.....	3	209	12	—	—	—	133,500
Michigan.....	9	521	54	14	—	600	383,625
Minnesota.....	14	819	61	16	5	1,750	1,363,609
Mississippi.....	5	251	41	12	—	200	941,970
Missouri.....	19	1,573	125	19	1	—	959,880
Montana.....	6	397	22	5	1	—	542,660
Nebraska.....	5	228	34	7	1	—	531,800
Nevada.....	2	136	2	2	—	—	159,850
New Hampshire.....	—	—	—	—	—	—	—
New Jersey.....	1	37	1	1	—	—	12,500
New Mexico.....	6	449	56	6	1	250	320,565
New York.....	9	702	249	17	3	7	279,500
North Carolina.....	9	679	42	6	1	—	339,100
North Dakota.....	—	—	—	—	—	—	—
Ohio.....	14	1,391	348	25	5	30	1,840,417
Oklahoma.....	11	563	35	9	—	—	434,455
Oregon.....	8	393	16	6	—	—	178,795
Pennsylvania.....	11	806	48	20	1	100	936,575
Rhode Island.....	—	—	—	—	—	—	—
South Carolina.....	6	571	39	12	6	150	841,860
South Dakota.....	—	—	—	—	—	—	—
Tennessee.....	8	575	24	5	—	100	1,426,000
Texas.....	63	3,813	481	76	9	165	4,523,808
Utah.....	1	2	1	1	—	—	1,500
Vermont.....	3	240	9	3	1	125	283,500
Virginia.....	13	1,075	56	6	—	10	579,125
Washington.....	5	309	21	5	2	—	556,553
West Virginia.....	4	186	32	1	—	—	23,470
Wisconsin.....	16	1,247	67	10	—	350	1,798,884
Wyoming.....	6	379	93	14	—	—	968,650
Unknown.....	—	—	—	—	—	—	—
<b>TOTAL.....</b>	<b>497</b>	<b>32,821</b>	<b>3,841</b>	<b>630</b>	<b>74</b>	<b>16,164</b>	<b>36,906,187</b>

**TABLE 29. TRAIN ACCIDENTS INVOLVING HAZARDOUS MATERIALS BY RAILROAD**

Railroad	Consists Carrying	In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat	People Evacuated	Damage To Equipment
<b>CLASS I RAILROADS</b>							
Amtrak (National RR Passenger Corp)	---	---	---	---	---	---	---
Atchison, Topeka And Santa Fe Rwy Co.	41	2,760	312	67	7	4,985	3,886,267
Springfield Terminal Railway Company	11	527	31	7	---	375,500	
Burlington Northern Incorporated	41	2,592	293	40	10	22	3,868,752
Chicago And North Western	1	144	10	1	---	100	308,000
Consolidated Rail Corporation	25	1,637	307	53	6	130	1,923,712
CSX Transportation	66	5,639	428	78	14	6,020	9,431,617
Delaware And Hudson Railway	2	180	4	---	---	---	19,750
Denver And Rio Grande Western RR Co.	---	---	---	---	---	---	
Elgin, Joliet And Eastern Railway Co.	4	390	56	5	---	---	176,000
Florida East Coast Railway Co.	3	212	146	5	---	---	34,728
Grand Trunk Western Railroad Co.	4	233	17	6	---	---	163,200
Illinois Central Railroad Co.	9	827	179	26	2	35	562,900
Kansas City Southern Railway Co.	3	161	12	7	1	---	213,400
Louisiana And Arkansas Rwy Company	3	137	10	8	---	---	257,159
Missouri-Kansas-Texas Railroad Co.	6	259	17	5	---	---	163,250
Norfolk Southern Corporation	46	3,391	460	28	5	150	1,871,285
Soo Line Railroad Company	36	2,476	140	23	3	2,000	2,639,820
Southern Pacific Transportation Co.	26	1,716	161	32	2	220	954,745
St. Louis Southwestern Railway Co.	2	164	4	1	---	---	20,500
Union Pacific Railroad Co.	78	4,885	634	113	11	130	5,156,166
Total Class I Railroads.....	407	28,330	3,221	505	61	13,792	32,026,551
<b>CLASS II RAILROADS</b>							
Bangor And Aroostook Railroad Co.	---	---	---	---	---	---	---
Bessemer And Lake Erie Railroad Co.	---	---	---	---	---	---	---
Canadian Pacific Lines In Maine	1	92	2	2	---	---	950,000
Central Vermont Railway Inc.	1	64	4	3	1	125	100,000
Chicago And Illinois Midland Rwy Co.	---	---	---	---	---	---	---
Chicago South Shore And South Bend RR	---	---	---	---	---	---	---
Duluth, Missabe And Iron Range Rwy Co.	---	---	---	---	---	---	---
Duluth, Winnipeg And Pacific Rwy Co.	---	---	---	---	---	---	---
Green Bay And Western Railroad	---	---	---	---	---	---	---
Ann Arbor Railroad (formerly MIRR)	---	---	---	---	---	---	---
Monongahela Railway	---	---	---	---	---	---	---
Northwestern Pacific Railroad	---	---	---	---	---	---	---
Oklahoma, Kansas Texas Railroad	---	---	---	---	---	---	---
Pittsburg And Lake Erie Railroad Co.	---	---	---	---	---	---	---
Richmond, Fredericksburg And Potomac	2	229	3	2	---	---	11,750
Texas And Northern Railway Company	---	---	---	---	---	---	---
Texas, Mexican Railway Company	---	---	---	---	---	---	---
Total Class II Railroads.....	4	385	9	7	1	125	1,061,750
<b>RECAPITULATION (INCLUDES CLASS III RAILROADS)</b>							
Class I Railroads	407	28,330	3,221	505	61	13,792	32,026,551
Class II Railroads	4	385	9	7	1	125	1,061,750
Class III Railroads	86	4,106	611	118	12	2,247	3,817,886
Total All Railroads.....	497	32,821	3,841	630	74	16,164	36,906,187



Note:

Any unintentional release of hazardous material that occurred in connection with its transport by rail is reportable to the Materials Transportation Bureau. This includes packaging failures to inner containers, such as steel drums, boxes, cylinders, etc., where the material did not escape from the railroad car.

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

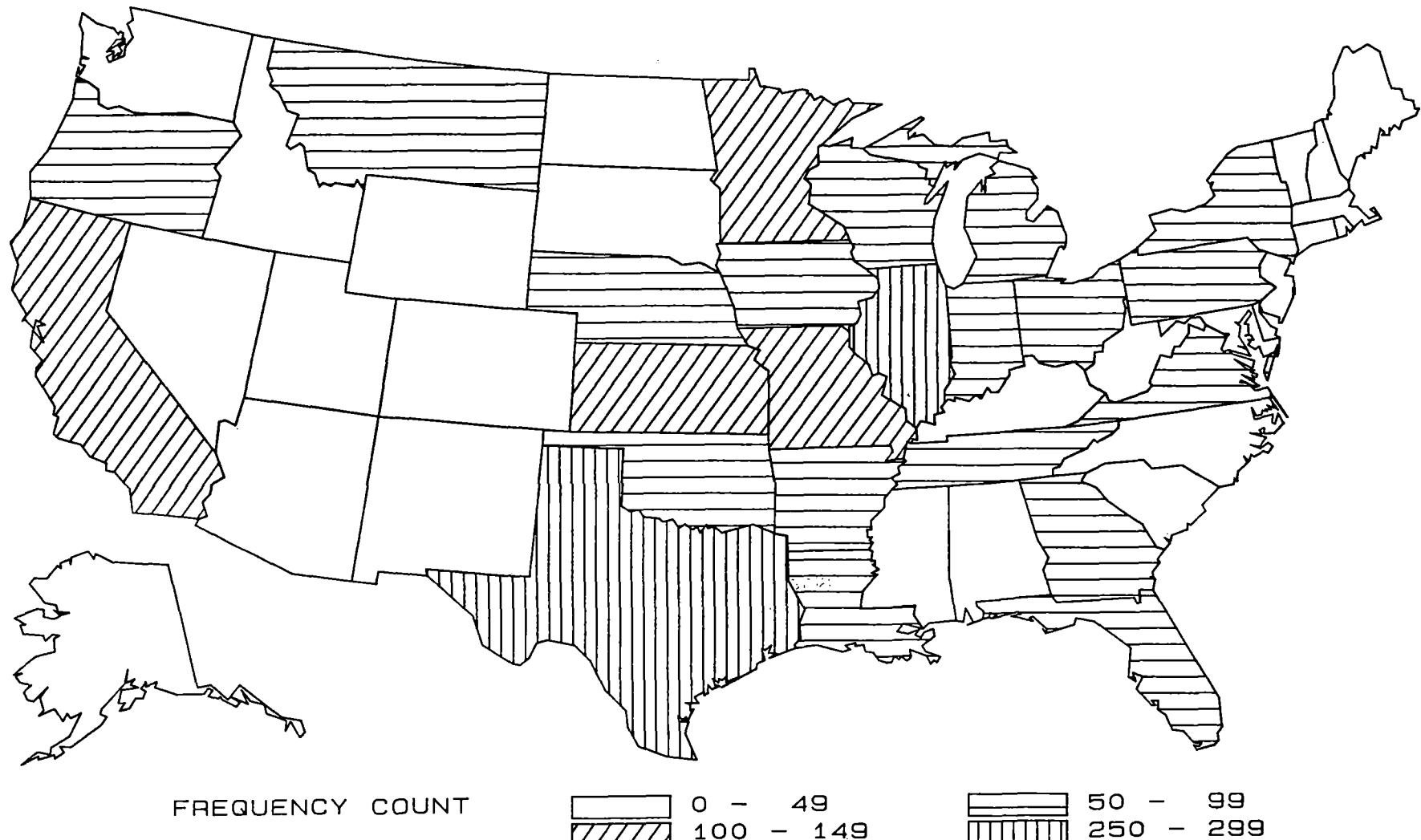
## 5. ACCIDENTS AND CASUALTIES BY STATE

TABLE 30. 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.....	2	42,600	26	2,560,972	7	192,147	9	326,300	44	3,122,019
Alaska.....	---	---	1	14,717	---	---	---	---	1	14,717
Arizona.....	3	1,238,775	17	2,830,065	4	110,955	2	80,550	26	4,260,345
Arkansas.....	4	47,524	64	2,502,123	10	166,300	7	448,551	85	3,164,498
California.....	12	2,463,545	82	4,550,127	15	816,007	11	208,408	120	8,038,087
Colorado.....	6	135,800	31	2,015,882	6	131,990	2	524,607	43	2,808,279
Connecticut.....	3	221,191	2	221,000	10	162,089	2	46,200	17	650,480
Delaware.....	1	28,250	3	90,325	2	40,622	---	---	6	159,197
Dist of Columbia.....	---	---	2	50,200	2	24,205	---	---	4	74,405
Florida.....	11	744,160	22	3,216,234	7	82,495	14	289,826	54	4,332,715
Georgia.....	12	225,539	56	5,423,635	12	514,150	5	148,500	85	6,311,824
Idaho.....	3	73,433	31	3,359,913	---	---	2	26,000	36	3,459,346
Illinois.....	43	1,069,128	191	5,328,807	40	716,266	19	1,398,702	293	8,512,903
Indiana.....	8	123,621	42	1,210,970	11	205,782	7	82,012	68	1,622,385
Iowa.....	12	834,423	71	5,290,224	8	81,670	6	621,525	97	6,827,842
Kansas.....	7	78,200	82	4,441,465	11	514,708	8	74,338	108	5,108,711
Kentucky.....	5	267,500	31	2,645,720	2	44,740	4	165,020	42	3,122,980
Louisiana.....	7	104,125	39	1,024,037	22	804,388	5	61,300	73	1,993,850
Maine.....	3	95,900	10	1,260,148	3	24,000	---	---	16	1,380,048
Maryland.....	5	490,930	18	902,391	3	261,575	---	---	26	1,654,896
Massachusetts.....	4	67,280	11	1,134,250	5	313,000	---	---	20	1,494,530
Michigan.....	2	275,975	45	3,607,890	29	442,278	4	132,975	80	4,459,118
Minnesota.....	13	262,871	102	8,159,465	10	181,514	4	104,749	129	8,708,599
Mississippi.....	1	17,122	28	1,593,803	4	94,590	3	689,015	36	2,394,530
Missouri.....	12	325,551	99	6,193,631	14	261,723	4	74,458	129	6,855,363
Montana.....	3	232,000	45	5,888,589	10	141,786	---	---	58	6,262,375
Nebraska.....	4	828,476	60	7,232,964	29	1,129,731	5	555,689	98	9,746,860
Nevada.....	---	---	8	647,483	3	59,020	---	---	11	706,503
New Hampshire.....	1	48,000	2	35,000	---	---	---	---	3	83,000
New Jersey.....	4	264,500	16	593,161	22	965,890	4	310,400	46	2,153,951
New Mexico.....	2	648,200	15	1,640,044	3	151,800	---	---	20	2,440,044
New York.....	7	3,207,958	46	2,730,503	26	1,112,617	3	2,777,771	82	9,828,849
North Carolina.....	5	169,050	12	857,750	8	309,650	9	351,328	34	1,687,778
North Dakota.....	2	19,000	16	2,502,407	3	69,000	2	26,157	23	2,616,564
Ohio.....	9	1,090,792	63	5,431,640	19	342,584	7	152,806	98	7,017,822
Oklahoma.....	7	272,920	32	2,199,085	8	128,570	6	77,650	53	2,678,225
Oregon.....	8	152,878	52	2,243,873	7	155,704	---	---	67	2,552,455
Pennsylvania.....	6	2,389,955	72	4,077,344	10	3,899,579	8	151,980	96	10,518,858
Rhode Island.....	---	---	---	---	---	---	---	---	---	---
South Carolina.....	3	102,900	15	1,603,498	2	22,641	3	62,000	23	1,791,039
South Dakota.....	---	---	17	852,917	---	---	---	---	17	852,917
Tennessee.....	6	157,550	53	3,848,230	24	661,175	3	100,700	86	4,767,655
Texas.....	31	2,383,506	189	9,845,232	33	871,057	16	1,200,458	269	14,300,253
Utah.....	9	90,116	21	645,244	5	60,275	3	63,412	38	859,047
Vermont.....	---	---	7	1,018,475	1	17,500	---	---	8	1,035,975
Virginia.....	8	182,900	57	4,270,986	3	48,464	5	137,375	73	4,639,725
Washington.....	3	170,125	27	1,653,467	13	301,786	1	7,700	44	2,133,078
West Virginia.....	7	1,235,700	35	1,932,228	3	86,284	1	8,848	46	3,263,060
Wisconsin.....	8	217,415	52	3,657,281	9	81,830	3	53,921	72	4,010,447
Wyoming.....	5	168,044	36	4,374,892	7	109,550	---	---	48	4,652,486
Unknown.....	---	---	---	---	---	---	---	---	---	---
TOTAL.....	315	23,245,428	2,054	139,410,287	485	16,913,687	197	11,541,231	3,051	191,110,633

**TABLE 31. TRAIN ACCIDENTS BY STATE AND CAUSE**

State	.....Track.....	Number	Damage	.....Equipment.....	Number	Damage	..Human Factors...	Number	Damage	.Miscellaneous...	Number	Damage	.....Total.....	Number	Damage
Alabama.....	15	1,014,968	6	314,850	9	1,175,326	14	616,875	44	3,122,019					
Alaska.....	--	--	--	--	--	--	1	14,717	1	14,717					
Arizona.....	7	374,885	8	937,231	5	2,305,224	6	643,005	26	4,260,345					
Arkansas.....	29	557,105	13	927,013	27	1,015,279	16	665,101	85	3,164,498					
California.....	36	5,175,999	17	483,474	41	1,670,301	26	703,313	120	8,038,087					
Colorado.....	13	722,389	8	859,618	16	540,115	6	686,157	43	2,808,279					
Connecticut.....	8	459,763	3	44,318	3	88,199	3	58,200	17	650,480					
Delaware.....	2	40,622	2	83,900	2	34,675	--	--	6	159,197					
Dist of Columbia.....	--	--	1	18,000	1	38,200	2	18,205	4	74,405					
Florida.....	17	2,942,183	2	151,495	18	880,111	17	358,926	54	4,332,715					
Georgia.....	15	527,600	18	1,372,395	34	3,218,229	18	1,193,600	85	6,311,824					
Idaho.....	12	976,635	7	1,957,297	13	481,914	4	45,500	36	3,459,346					
Illinois.....	82	2,321,736	37	830,607	116	2,941,338	58	2,419,222	293	8,512,903					
Indiana.....	14	370,805	10	341,285	26	605,697	18	304,598	68	1,622,385					
Iowa.....	37	2,588,826	14	1,511,589	33	1,933,845	13	793,582	97	6,827,842					
Kansas.....	37	1,552,802	11	1,754,492	39	1,169,809	21	631,608	108	5,108,711					
Kentucky.....	19	1,071,470	4	523,300	12	1,289,590	7	238,620	42	3,122,980					
Louisiana.....	29	895,886	4	68,600	29	661,281	11	368,083	73	1,993,850					
Maine.....	7	263,910	1	976,800	5	112,400	3	26,938	16	1,380,048					
Maryland.....	8	555,906	4	69,000	10	591,530	4	438,460	26	1,654,896					
Massachusetts.....	5	287,680	4	927,450	5	44,250	6	235,150	20	1,494,530					
Michigan.....	27	1,407,181	10	760,855	30	1,036,219	13	1,254,863	80	4,459,118					
Minnesota.....	60	4,068,773	26	3,214,031	21	596,823	22	828,972	129	8,708,599					
Mississippi.....	20	1,203,783	3	88,659	5	70,714	8	1,031,374	36	2,394,530					
Missouri.....	44	2,997,390	27	2,096,505	42	1,176,744	16	584,724	129	6,855,363					
Montana.....	16	3,990,203	11	1,112,887	26	989,005	5	170,280	58	6,262,375					
Nebraska.....	30	3,783,995	19	3,191,096	37	1,993,620	12	778,149	98	9,746,860					
Nevada.....	--	--	4	504,603	4	41,350	3	160,550	11	706,503					
New Hampshire.....	2	35,000	--	--	1	48,000	--	--	3	83,000					
New Jersey.....	10	154,299	9	362,695	9	583,497	18	1,033,460	46	2,133,951					
New Mexico.....	9	782,245	4	446,000	6	736,899	1	474,900	20	2,440,044					
New York.....	20	696,750	20	1,220,638	32	3,857,708	10	4,053,753	82	9,828,849					
North Carolina.....	5	295,950	5	456,200	12	529,950	12	405,678	34	1,687,778					
North Dakota.....	7	1,068,126	6	1,395,150	7	119,631	3	53,657	23	2,616,564					
Ohio.....	23	2,483,950	23	1,941,426	35	1,556,540	17	1,055,906	98	7,017,822					
Oklahoma.....	16	1,102,326	10	721,786	16	717,813	11	136,300	53	2,678,225					
Oregon.....	19	445,813	16	1,545,264	21	379,493	11	181,885	67	2,552,455					
Pennsylvania.....	40	890,204	11	910,049	27	6,462,368	18	2,256,237	96	10,518,858					
Rhode Island.....	--	--	--	--	--	--	--	--	--	--					
South Carolina.....	3	205,450	3	356,624	12	1,149,324	5	79,641	23	1,791,039					
South Dakota.....	9	420,431	3	267,323	5	165,163	--	--	17	852,917					
Tennessee.....	22	1,424,940	8	1,653,100	39	922,715	17	1,766,900	86	4,767,655					
Texas.....	80	2,747,613	46	3,403,084	103	4,461,865	40	3,687,691	269	14,300,253					
Utah.....	9	424,024	9	217,520	15	141,616	5	75,887	38	859,047					
Vermont.....	4	629,700	3	393,775	--	--	1	12,500	8	1,035,975					
Virginia.....	20	405,437	18	3,246,542	20	406,611	15	581,135	73	4,639,725					
Washington.....	14	526,584	5	126,975	13	475,688	12	1,003,831	64	2,133,078					
West Virginia.....	20	754,908	9	559,370	9	1,311,600	8	637,182	66	3,263,060					
Wisconsin.....	18	967,767	18	1,046,375	24	1,819,307	12	176,998	72	4,010,447					
Wyoming.....	13	1,677,869	12	2,094,899	16	419,159	7	460,559	48	4,652,486					
Unknown.....	--	--	--	--	--	--	--	--	--	--					
TOTAL.....	952	58,291,881	512	46,491,145	1,031	52,946,735	556	33,380,872	3,051	191,110,633					



**FIGURE 25. TRAIN ACCIDENTS BY STATE**

**TABLE 32. TRAIN ACCIDENTS BY STATE AND MONTH**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Alabama.....	1	1	---	---	4	3	4	7	6	6	4	8	44
Alaska.....	—	—	—	—	1	—	—	—	—	—	—	—	—
Arizona.....	3	5	4	1	—	2	—	5	—	2	1	3	26
Arkansas.....	9	11	6	10	5	5	8	7	5	4	5	10	85
California.....	18	10	7	10	9	10	12	5	12	8	9	10	120
Colorado.....	4	5	1	2	3	3	2	5	5	6	5	2	43
Connecticut.....	5	—	2	—	1	2	1	—	2	1	3	—	17
Delaware.....	1	—	—	1	—	2	—	1	—	1	—	—	6
District of Columbia.....	2	—	—	—	—	—	—	—	1	1	—	—	4
Florida.....	3	4	2	6	1	4	4	4	7	2	7	10	54
Georgia.....	7	8	5	5	6	5	2	12	7	3	9	8	85
Idaho.....	—	2	4	4	5	3	2	5	3	2	5	1	36
Illinois.....	22	26	29	33	17	25	26	27	18	23	26	21	293
Indiana.....	6	4	9	9	5	6	8	4	6	4	5	2	68
Iowa.....	8	11	5	10	7	5	11	6	8	9	10	7	97
Kansas.....	9	12	10	5	12	17	8	7	7	4	9	8	108
Kentucky.....	4	1	2	1	3	3	4	3	7	3	3	1	42
Louisiana.....	3	4	3	5	7	7	4	6	10	11	12	1	73
Maine.....	2	2	—	1	1	2	2	—	1	2	2	1	16
Maryland.....	1	4	1	1	3	2	1	2	3	3	1	2	26
Massachusetts.....	3	—	1	3	2	1	2	4	5	5	8	5	20
Michigan.....	8	5	5	—	12	10	5	4	4	13	14	8	80
Minnesota.....	13	11	12	12	4	15	16	8	7	11	4	8	129
Mississippi.....	2	3	3	1	3	2	2	2	2	2	3	4	36
Missouri.....	10	17	14	9	4	14	13	15	8	9	9	7	129
Montana.....	3	2	2	6	6	7	7	8	4	5	4	7	58
Nebraska.....	6	10	7	11	12	12	8	8	5	7	5	7	98
Nevada.....	1	1	1	2	2	1	—	—	1	—	1	1	11
New Hampshire.....	1	—	1	—	—	—	—	—	—	1	—	—	3
New Jersey.....	3	3	5	6	5	4	4	4	4	2	3	3	46
New Mexico.....	1	4	—	2	—	4	2	2	1	1	2	1	20
New York.....	11	3	10	6	6	5	5	9	5	7	7	8	82
North Carolina.....	7	1	2	3	2	2	2	2	1	5	3	4	34
North Dakota.....	5	3	1	3	—	1	1	—	2	1	3	3	23
Ohio.....	8	6	9	4	10	7	13	9	7	14	5	6	98
Oklahoma.....	3	5	5	6	2	6	2	4	6	6	4	4	53
Oregon.....	5	—	4	6	7	9	4	5	1	9	5	12	67
Pennsylvania.....	11	9	7	9	7	9	11	2	6	10	5	10	96
Rhode Island.....	—	—	—	—	—	—	—	—	—	—	—	—	—
South Carolina.....	3	1	3	2	2	1	2	1	—	6	1	1	23
South Dakota.....	2	1	1	2	2	4	2	—	1	2	—	—	17
Tennessee.....	14	7	4	6	1	10	8	8	6	8	8	6	86
Texas.....	23	13	18	18	28	23	27	30	26	24	20	19	269
Utah.....	2	2	1	4	2	3	6	3	2	5	3	5	38
Vermont.....	1	—	—	2	2	1	—	—	—	—	2	—	8
Virginia.....	6	11	3	8	7	4	6	10	5	7	4	2	73
Washington.....	4	6	4	4	2	6	1	5	3	6	3	3	44
West Virginia.....	5	8	2	2	2	2	1	9	5	3	3	3	46
Wisconsin.....	5	5	2	7	7	10	9	11	5	3	4	4	72
Wyoming.....	10	2	5	9	3	4	4	3	—	3	4	1	48
Unknown.....	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL.....	284	249	222	257	232	285	267	268	234	266	249	238	3,051

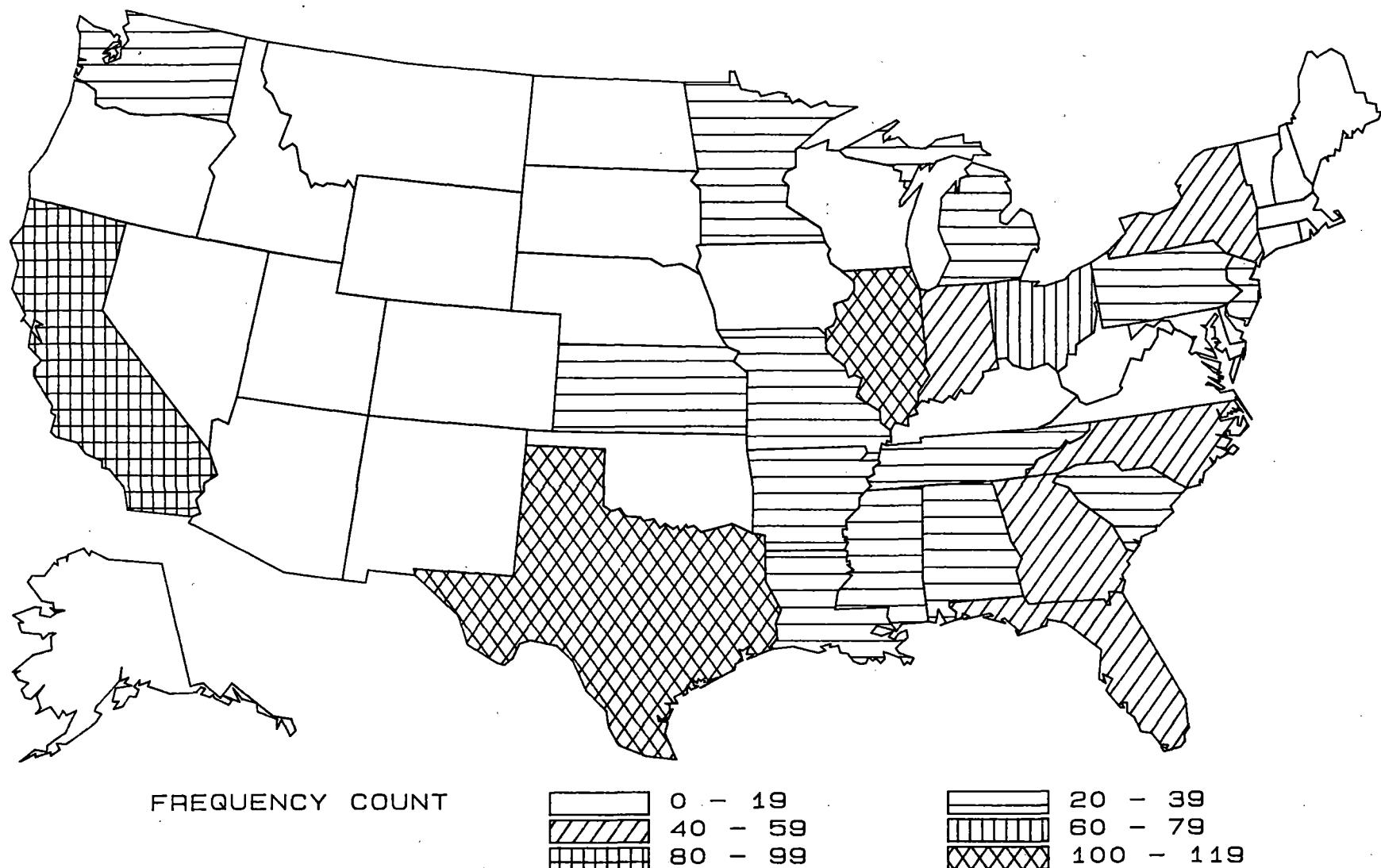
**TABLE 33. CASUALTIES BY STATE AND CLASS OF ACCIDENT/INCIDENT**

State	Train Accidents...			Train Incidents...			Nontrain Incidents...			Total....			
	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness	
Alabama.....	2	9	---	30	195	---	1	318	4	33	522	4	
Alaska.....	---	---	---	1	3	---	48	---	1	1	51	---	
Arizona.....	4	5	---	15	32	---	90	3	19	127	3	7	
Arkansas.....	2	9	---	25	128	---	3	324	7	30	461	1	
California.....	7	17	---	79	307	5	5	954	32	91	1,278	37	
Colorado.....	1	21	---	10	98	---	268	1	11	387	1	1	
Connecticut.....	---	4	---	5	31	1	190	13	5	225	14	1	
Delaware.....	---	---	---	4	15	---	80	1	4	95	---	1	
Dist. of Columbia.....	---	---	---	---	12	---	89	---	---	101	---	---	
Florida.....	3	15	50	172	---	---	332	---	53	519	---	---	
Georgia.....	1	13	41	209	---	---	529	4	42	751	4	2	
Idaho.....	---	6	14	46	---	---	145	2	14	197	2	2	
Illinois.....	10	48	97	420	---	4	1,407	25	111	1,875	25	25	
Indiana.....	3	5	46	224	1	1	479	10	50	708	11	11	
Iowa.....	2	15	11	120	---	1	511	25	14	646	25	25	
Kansas.....	2	6	21	105	---	1	401	5	24	512	5	5	
Kentucky.....	---	111	9	111	---	1	555	3	10	777	3	3	
Louisiana.....	3	5	19	211	---	---	287	2	22	503	22	22	
Maine.....	---	---	1	16	---	---	75	2	1	91	2	2	
Maryland.....	---	5	10	67	2	---	249	1	10	321	3	3	
Massachusetts.....	---	---	11	55	---	---	308	1	11	363	1	1	
Michigan.....	1	11	31	170	---	5	531	6	37	712	6	6	
Minnesota.....	---	8	20	163	1	1	501	11	21	672	12	12	
Mississippi.....	1	9	23	124	---	---	131	1	24	264	1	1	
Missouri.....	1	13	32	173	---	3	568	11	36	754	11	11	
Montana.....	1	27	5	49	---	---	190	1	6	266	1	1	
Nebraska.....	4	39	9	123	3	---	664	26	13	826	29	29	
Nevada.....	1	---	3	15	1	---	64	2	3	80	3	3	
New Hampshire.....	---	---	2	---	---	---	13	1	---	15	1	1	
New Jersey.....	5	36	29	168	---	3	923	26	37	1,127	26	26	
New Mexico.....	---	5	12	36	1	---	102	1	12	143	2	2	
New York.....	1	20	2	62	251	8	6	1,993	49	49	2,264	59	59
North Carolina.....	---	14	39	150	1	1	233	4	40	397	5	5	
North Dakota.....	---	1	8	47	---	---	105	1	8	153	1	1	
Ohio.....	2	11	57	316	6	1	864	9	60	1,191	15	15	
Oklahoma.....	1	3	17	136	---	---	220	4	18	359	4	4	
Oregon.....	1	---	12	96	2	1	200	7	13	297	9	9	
Pennsylvania.....	5	78	25	198	13	3	1,191	41	33	1,467	54	54	
Rhode Island.....	---	---	1	---	---	9	---	---	10	---	---	---	
South Carolina.....	2	6	18	95	1	---	181	1	20	282	2	2	
South Dakota.....	---	1	---	17	---	---	55	1	---	73	1	1	
Tennessee.....	---	2	23	91	---	1	371	8	24	464	8	8	
Texas.....	4	20	1	105	580	7	1	955	18	110	1,555	26	26
Utah.....	1	2	7	41	---	1	140	---	9	183	---	---	
Vermont.....	---	---	1	6	---	---	32	---	1	38	---	---	
Virginia.....	2	7	10	174	---	2	571	3	14	752	3	3	
Washington.....	---	4	23	168	3	3	381	8	26	553	11	11	
West Virginia.....	---	2	3	50	---	2	376	1	5	428	1	1	
Wisconsin.....	1	3	16	154	1	2	331	6	19	488	7	7	
Wyoming.....	---	1	4	62	1	1	219	---	5	282	1	1	
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	
<b>TOTAL.....</b>	<b>72</b>	<b>619</b>	<b>3</b>	<b>1,073</b>	<b>6,233</b>	<b>58</b>	<b>54</b>	<b>19,753</b>	<b>388</b>	<b>1,199</b>	<b>26,605</b>	<b>449</b>	

**TABLE 34. TRAIN ACCIDENT AND TRAIN INCIDENT FATALITIES TO TRESPASSERS  
AND NON-TRESPASSERS BY STATE**

State	Trespassers				Non-trespassers				Total			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	---	11	---	11	3	18	---	21	3	29	---	32
Alaska.....	---	---	---	---	1	---	1	1	1	---	1	1
Arizona.....	9	1	10	10	1	7	1	9	1	16	2	19
Arkansas.....	1	5	---	6	4	17	---	21	5	22	---	27
California.....	3	56	6	65	1	16	3	20	4	72	9	85
Colorado.....	4	1	5	10	---	5	---	5	---	9	1	10
Connecticut.....	4	---	4	12	---	1	---	1	---	5	---	5
Delaware.....	3	---	3	9	---	1	---	1	---	4	---	4
Dist. of Columbia.....	---	---	---	---	---	---	---	---	---	---	---	---
Florida.....	2	32	1	35	---	16	---	16	2	48	1	51
Georgia.....	18	---	18	36	2	19	---	21	2	37	---	39
Idaho.....	1	2	---	3	4	7	---	11	5	9	---	14
Illinois.....	3	41	9	53	1	46	6	53	4	87	15	106
Indiana.....	1	15	---	16	3	28	1	32	4	43	1	48
Iowa.....	5	1	6	12	---	4	1	5	---	9	2	11
Kansas.....	5	---	5	10	5	12	1	18	5	17	1	23
Kentucky.....	1	5	---	6	---	3	---	3	---	8	---	9
Louisiana.....	12	2	14	---	7	1	8	---	19	3	22	---
Maine.....	---	---	---	---	---	---	---	---	---	---	---	---
Maryland.....	7	---	7	---	2	---	2	---	9	---	9	---
Massachusetts.....	1	9	---	10	---	1	---	1	1	10	---	11
Michigan.....	3	5	---	8	2	22	---	24	5	27	---	32
Minnesota.....	2	7	---	9	2	9	---	11	4	16	---	20
Mississippi.....	4	2	6	12	1	11	5	17	1	15	7	23
Missouri.....	5	6	---	11	---	22	---	22	5	28	---	33
Montana.....	---	---	---	---	1	4	---	5	1	4	---	5
Nebraska.....	2	---	2	4	1	9	---	10	1	11	---	12
Nevada.....	3	---	3	---	---	---	---	---	3	---	3	---
New Hampshire.....	---	---	---	---	---	---	---	---	---	---	---	---
New Jersey.....	25	7	32	64	---	1	---	1	---	26	7	33
New Mexico.....	6	2	8	16	---	4	---	4	---	10	2	12
New York.....	2	29	2	33	---	6	---	6	2	35	2	39
North Carolina...	1	24	1	26	2	11	---	13	3	35	1	39
North Dakota.....	1	---	1	2	4	3	---	7	4	4	---	8
Ohio.....	1	19	1	21	3	34	---	37	4	53	1	58
Oklahoma.....	3	---	3	6	4	9	2	15	4	12	2	18
Oregon.....	9	---	9	18	---	3	---	3	---	12	---	12
Pennsylvania.....	3	16	---	19	---	5	---	5	3	21	---	24
Rhode Island.....	---	---	---	---	---	---	---	---	---	---	---	---
South Carolina...	14	1	15	30	5	---	5	5	---	19	1	20
South Dakota.....	---	---	---	---	---	---	---	---	---	---	---	---
Tennessee.....	1	2	2	5	1	14	2	17	2	16	4	22
Texas.....	3	42	---	45	3	54	6	63	6	96	6	108
Utah.....	3	---	3	6	---	5	---	5	---	8	---	8
Vermont.....	1	---	1	2	---	---	---	---	---	1	---	1
Virginia.....	2	6	---	8	---	4	---	4	2	10	---	12
Washington.....	1	14	---	15	---	8	---	8	1	22	---	23
West Virginia.....	3	---	3	6	2	7	2	11	2	11	3	13
Wisconsin.....	4	2	6	12	2	7	2	11	2	11	4	17
Wyoming.....	1	---	1	2	---	2	---	2	---	3	---	3
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	37	492	41	570	50	463	31	544	87	955	72	1,114

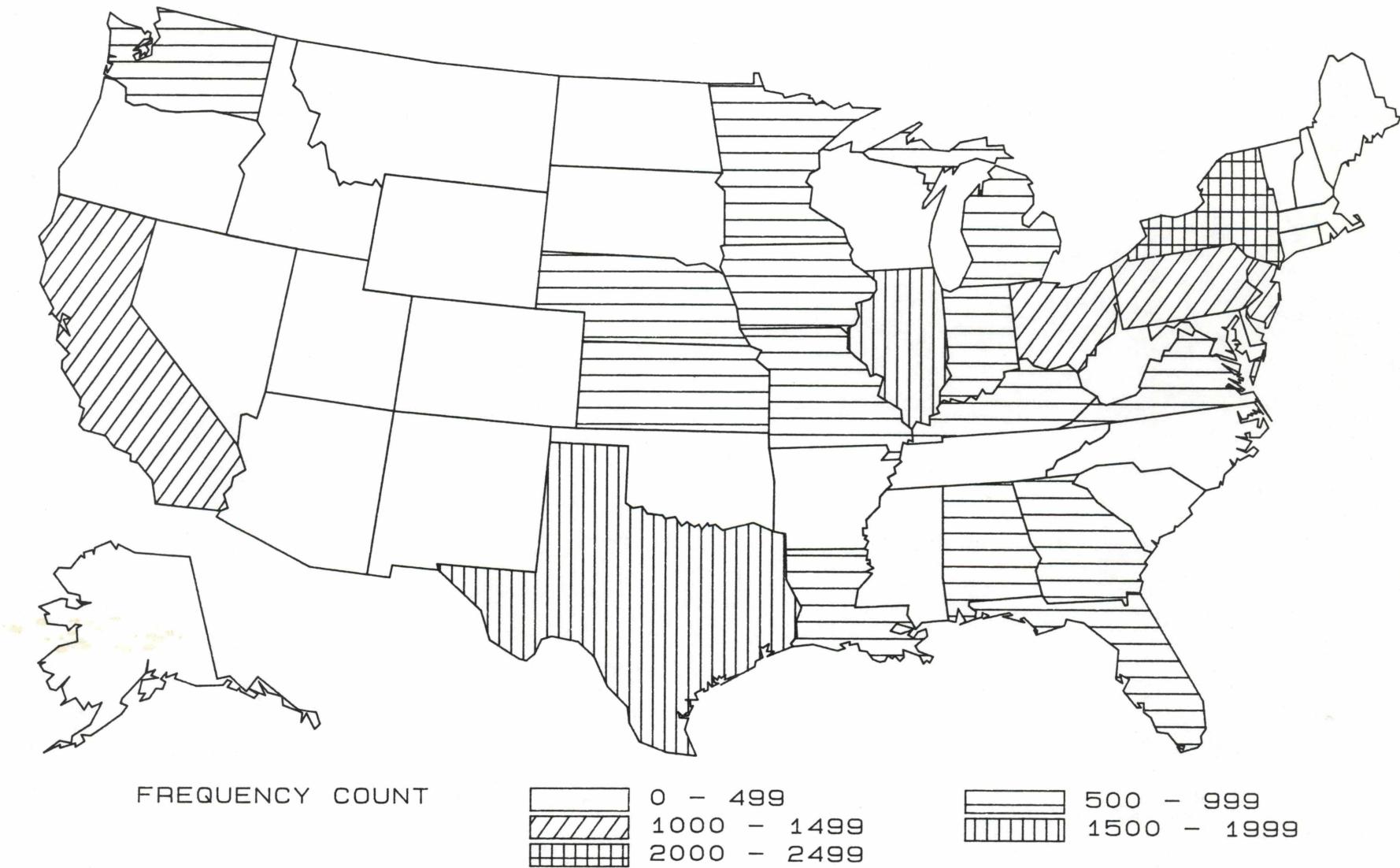
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**FIGURE 26. FATALITIES BY STATE**

**TABLE 35. TRAIN ACCIDENT AND TRAIN INCIDENT INJURIES TO TRESPASSERS  
AND NON-TRESPASSERS BY STATE**

State	Trespassers.....				Non-trespassers.....				Total.....			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	---	16	2	18	9	88	1	98	9	104	3	116
Alaska.....	---	---	---	---	---	---	---	---	---	---	---	---
Arizona.....	1	6	1	8	---	---	1	1	1	6	2	9
Arkansas.....	1	9	---	10	15	44	1	60	16	53	1	70
California.....	2	50	7	59	5	36	28	69	7	86	35	128
Colorado.....	---	5	2	7	2	13	3	18	2	18	5	25
Connecticut.....	1	6	---	7	---	5	---	5	1	11	---	12
Delaware.....	---	1	---	1	---	3	1	4	---	4	1	5
Dist of Columbia.....	---	---	---	---	---	---	---	---	---	---	---	---
Florida.....	3	56	---	59	7	44	---	51	10	100	---	110
Georgia.....	2	24	---	26	3	57	---	60	5	81	---	86
Idaho.....	---	2	---	2	2	7	---	9	2	9	---	11
Illinois.....	5	58	21	84	10	88	31	129	15	146	52	213
Indiana.....	4	38	5	47	6	78	2	86	10	116	7	133
Iowa.....	---	12	1	13	6	44	4	54	6	56	5	67
Kansas.....	---	2	---	2	1	33	11	45	1	35	11	47
Kentucky.....	2	8	---	10	26	30	108	164	28	38	108	174
Louisiana.....	1	16	---	17	9	73	43	125	10	89	43	142
Maine.....	---	---	---	---	2	---	2	---	2	2	---	2
Maryland.....	---	2	---	2	1	6	2	9	1	8	2	11
Massachusetts.....	3	13	4	20	---	3	2	5	3	16	6	25
Michigan.....	2	9	3	14	1	72	4	77	3	81	7	91
Minnesota.....	2	13	---	15	6	40	8	54	8	53	8	69
Mississippi.....	---	6	4	10	6	31	43	80	6	37	47	90
Missouri.....	1	17	---	18	3	51	3	57	4	68	3	75
Montana.....	---	7	---	7	---	11	---	11	---	18	---	18
Nebraska.....	1	5	---	6	6	18	---	24	7	23	---	30
Nevada.....	1	---	---	1	---	---	---	---	1	---	---	1
New Hampshire.....	---	---	---	---	---	---	---	---	---	---	---	---
New Jersey.....	5	16	2	23	1	22	7	30	6	38	9	53
New Mexico.....	2	6	2	10	---	4	4	8	2	10	6	18
New York.....	2	32	1	35	---	15	1	16	2	47	2	51
North Carolina.....	3	30	---	33	7	56	1	64	10	86	1	97
North Dakota.....	1	3	---	4	2	10	1	13	3	13	1	17
Ohio.....	6	33	2	41	13	118	9	140	19	151	11	181
Oklahoma.....	3	5	---	8	8	51	18	77	11	56	18	85
Oregon.....	---	13	---	13	1	9	1	11	1	22	1	24
Pennsylvania.....	4	18	2	24	3	17	4	24	7	35	6	48
Rhode Island.....	---	1	---	1	---	---	---	---	1	---	---	1
South Carolina.....	1	25	---	26	2	34	---	36	3	59	---	62
South Dakota.....	---	---	---	---	---	6	5	11	---	6	5	11
Tennessee.....	---	8	---	8	4	30	10	44	4	38	10	52
Texas.....	6	78	2	86	20	172	31	223	26	250	33	309
Utah.....	---	3	---	3	1	4	1	6	1	7	1	9
Vermont.....	1	---	---	1	---	1	---	1	1	1	---	2
Virginia.....	2	18	---	20	3	44	1	48	5	62	1	68
Washington.....	1	14	---	15	---	12	1	13	1	26	1	28
West Virginia.....	2	11	---	13	---	15	---	15	2	26	---	28
Wisconsin.....	---	8	---	8	5	57	19	81	5	65	19	89
Wyoming.....	---	1	---	1	---	2	---	2	---	3	---	3
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
<b>TOTAL.....</b>	<b>71</b>	<b>704</b>	<b>61</b>	<b>836</b>	<b>194</b>	<b>1,556</b>	<b>410</b>	<b>2,160</b>	<b>265</b>	<b>2,260</b>	<b>471</b>	<b>2,996</b>



**FIGURE 27. INJURIES BY STATE**

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

**TABLE 36. SUMMARY OF TRAIN-MILES OPERATED**

Railroad	Locomotive Train Miles	Motor Train Miles	Yard Train Miles	Switching Train Miles	Total Train Miles
<b>CLASS I RAILROADS</b>					
Amtrak (National RR Passenger Corp)	28,847,618	3,255,739	2,868,816	34,972,173	
Atchison, Topeka And Santa Fe Rwy Co.	45,443,638	---	4,233,756	49,677,394	
Springfield Terminal Railway Company	1,081,713	---	103,434	1,185,147	
Burlington Northern Incorporated	72,279,993	2,982,193	13,491,784	88,753,970	
Chicago And North Western	13,921,894	---	3,613,742	17,535,636	
Consolidated Rail Corporation	37,350,835	---	12,354,240	49,705,075	
CSX Transportation	56,140,395	---	14,558,789	70,699,184	
Delaware And Hudson Railway	1,464,337	---	89,501	1,553,838	
Denver And Rio Grande Western RR Co.	5,885,291	---	690,502	6,575,793	
Elgin, Joliet And Eastern Railway Co.	438,425	---	1,376,489	1,814,914	
Florida East Coast Railway Co.	2,606,970	---	735,852	3,342,822	
Grand Trunk Western Railroad Co.	3,494,173	---	1,900,488	5,394,661	
Illinois Central Railroad Co.	6,042,754	---	2,463,401	8,506,155	
Kansas City Southern Railway Co.	9,486,513	---	1,225,209	10,711,722	
Louisiana And Arkansas Rwy Company	3,897,652	---	824,399	4,722,051	
Missouri-Kansas-Texas Railroad Co.	3,208,921	---	905,296	4,114,217	
Norfolk Southern Corporation	37,806,172	---	12,823,860	50,630,032	
Soo Line Railroad Company	6,985,981	---	2,187,738	9,173,719	
Southern Pacific Transportation Co.	29,059,642	---	6,472,229	35,531,871	
St. Louis Southwestern Railway Co.	7,502,605	---	649,681	8,152,286	
Union Pacific Railroad Co.	63,093,653	---	7,015,374	70,109,027	
Total Class I Railroads.....	436,039,175	6,237,932	90,584,580	532,861,687	
<b>CLASS II RAILROADS</b>					
Bangor And Aroostook Railroad Co.	356,738	---	71,086	427,824	
Bessemer And Lake Erie Railroad Co.	406,872	---	28,244	435,116	
Canadian Pacific Lines In Maine	344,468	---	---	344,468	
Central Vermont Railway Inc.	226,288	---	44,558	270,846	
Chicago And Illinois Midland Rwy Co.	80,573	---	36,086	116,659	
Chicago South Shore And South Bend RR	140,989	618,019	---	759,008	
Duluth, Missabe And Iron Range Rwy Co.	420,963	---	117,831	538,794	
Duluth, Winnipeg And Pacific Rwy Co.	421,905	---	144,400	566,305	
Green Bay And Western Railroad	167,835	---	108,399	276,234	
Ann Arbor Railroad (formerly MIRR)	---	---	32,262	32,262	
Monogahela Railway	357,309	---	---	357,309	
Northwestern Pacific Railroad	99,760	---	---	99,760	
Oklahoma, Kansas Texas Railroad	433,086	---	75,223	508,309	
Pittsburg And Lake Erie Railroad Co.	132,311	---	123,244	255,555	
Richmond, Fredericksburg And Potomac	1,434,647	---	544,265	1,978,912	
Texas And Northern Railway Company	22,698	---	26,065	48,763	
Texas, Mexican Railway Company	129,268	---	111,422	240,690	
Total Class II Railroads.....	5,175,710	618,019	1,463,085	7,256,814	
<b>RECAPITULATION (INCLUDES CLASS III RAILROADS)</b>					
Class I Railroads	436,039,175	6,237,932	90,584,580	532,861,687	
Class II Railroads	5,175,710	618,019	1,463,085	7,256,814	
Class III Railroads	27,917,482	28,020,642	13,277,804	69,215,928	
Total All Railroads.....	469,132,367	34,876,593	105,325,469	609,334,429	

**TABLE 37. 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>																				
Amtrak (National RR Passenger Corp)	10	---	---	---	10	1,137,420	8	4	7	1	20	3,939,653								
Atchison, Topeka And Santa Fe Rwy Co.	19	1	1	2	23	3,638,845	35	32	51	2	120	8,268,523								
Springfield Terminal Railway Company	6	---	1	---	7	178,180	1	2	15	6	24	979,548								
Burlington Northern Incorporated	12	---	2	4	18	676,029	51	55	116	36	258	19,887,051								
Chicago And North Western	24	1	---	---	25	707,935	24	18	50	15	107	3,692,969								
Consolidated Rail Corporation	13	---	---	3	16	2,681,011	42	33	37	8	120	5,694,518								
CSX Transportation	41	1	1	4	47	2,563,744	67	54	95	36	252	24,169,919								
Delaware And Hudson Railway	1	---	---	---	1	85,000	1	---	3	2	6	380,250								
Denver And Rio Grande Western RR Co.	2	---	---	---	2	37,700	3	1	3	1	8	399,582								
Elgin, Joliet And Eastern Railway Co.	3	---	---	1	4	61,800	3	3	8	1	15	344,768								
Florida East Coast Railway Co.	---	---	1	---	1	30,310	1	---	2	---	3	50,292								
Grand Trunk Western Railroad Co.	---	---	---	---	---	---	8	5	9	5	27	2,826,285								
Illinois Central Railroad Co.	1	---	---	---	1	17,122	6	1	7	3	17	660,612								
Kansas City Southern Railway Co.	3	---	---	---	3	38,819	3	2	5	---	10	699,219								
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	1	---	5	---	6	306,122								
Missouri-Kansas-Texas Railroad Co.	8	1	---	1	10	338,064	13	2	19	1	35	675,306								
Norfolk Southern Corporation	24	---	1	1	26	1,310,300	25	24	38	14	101	5,989,254								
Soo Line Railroad Company	14	1	4	3	22	452,501	18	21	50	9	98	8,660,564								
Southern Pacific Transportation Co.	8	1	---	---	9	826,425	13	25	58	15	111	6,203,065								
St. Louis Southwestern Railway Co.	---	---	---	---	---	---	6	8	19	8	41	1,774,197								
Union Pacific Railroad Co.	55	1	2	5	63	3,077,709	125	97	161	35	398	25,837,019								
Total Class I Railroads.....	244	7	13	24	288	17,838,914	454	387	738	198	1,777	121,438,716								
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>																				
Class I Railroads	221	7	13	22	263	17,838,914	432	375	688	190	1,685	121,438,716								
Class II Railroads	1	---	---	1	2	79,000	5	10	19	2	36	5,231,682								
Class III Railroads	35	---	7	8	50	5,327,514	72	57	173	31	333	14,739,889								
Total All Railroads....	257	7	20	31	315	23,245,428	509	442	880	223	2,054	139,410,287								

**TABLE 37. (CONTINUED)**

Railroad	Human	Equip	Track	Other	Total	Damages	Accs.	Rate*	Total	Damages	
<b>CLASS I RAILROADS</b>											
Amtrak (National RR Passenger Corp)	5	5	9	49	68	5,732,324	98	2.80	10,809,397		
Atchison, Topeka And Santa Fe Rwy Co.	5	3	2	14	24	1,406,000	167	3.36	13,313,368		
Springfield Terminal Railway Company	3	1	—	2	6	114,000	37	31.09	1,271,728		
Burlington Northern Incorporated	56	6	2	45	109	2,342,911	385	4.33	22,905,991		
Chicago And North Western	8	3	—	6	17	564,078	149	8.49	4,964,982		
Consolidated Rail Corporation	20	5	—	20	45	1,082,084	181	3.64	9,457,613		
CSX Transportation	18	3	2	41	64	1,708,452	363	5.13	28,422,115		
Delaware And Hudson Railway	—	—	—	—	—	—	7	4.51	465,250		
Denver And Rio Grande Western RR Co.	—	—	—	—	—	—	10	1.51	437,282		
Elgin, Joliet And Eastern Railway Co.	2	—	—	—	2	60,107	21	11.60	466,675		
Florida East Coast Railway Co.	—	1	—	4	5	46,862	9	2.69	127,464		
Grand Trunk Western Railroad Co.	21	1	8	—	30	446,208	57	10.57	3,272,493		
Illinois Central Railroad Co.	6	—	8	9	23	1,062,030	41	4.81	1,739,764		
Kansas City Southern Railway Co.	3	—	—	—	3	43,773	16	1.49	781,811		
Louisiana And Arkansas Rwy Company	5	—	—	—	5	45,672	11	2.33	351,794		
Missouri-Kansas-Texas Railroad Co.	1	—	—	—	2	33,500	48	11.67	1,046,870		
Norfolk Southern Corporation	20	10	—	32	62	1,500,688	189	3.73	8,800,242		
Soo Line Railroad Company	3	1	—	5	9	386,180	129	14.06	9,499,245		
Southern Pacific Transportation Co.	20	9	1	30	60	2,193,255	180	5.06	9,222,745		
St. Louis Southwestern Railway Co.	1	—	—	—	10	11	184,605	52	6.38	1,958,802	
Union Pacific Railroad Co.	48	8	6	32	94	2,785,854	555	7.91	31,700,582		
<b>Total Class I Railroads.....</b>	<b>245</b>	<b>56</b>	<b>38</b>	<b>301</b>	<b>640</b>	<b>21,738,583</b>	<b>2,705</b>	<b>5.07</b>	<b>161,016,213</b>	<i>63,442</i>	
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>											
Class I Railroads	234	54	37	265	590	21,738,583	2,538	4.76	161,016,213	<i>63,321</i>	
Class II Railroads	2	—	—	—	2	22,389	40	5.50	3,333,071	<i>83,321</i>	
Class III Railroads	29	9	15	37	90	6,693,946	473	6.83	26,761,349	<i>54,578</i>	
<b>Total All Railroads.....</b>	<b>265</b>	<b>63</b>	<b>52</b>	<b>302</b>	<b>682</b>	<b>28,454,918</b>	<b>3,051</b>	<b>5.00</b>	<b>191,110,633</b>		

\* Accident rate per million train miles.

The reporting rules require that when multiple railroads are involved in an accident, each railroad must prepare a report that describes the extent of their involvement. An example of this would be when a train of one railroad derails on track maintained by another railroad. In all other tables these situations appear as a single count. In this table, when an accident involves Class 1 railroads, a count is made against each railroad involved. This duplication does not appear in the total for Class 1 railroads shown in the recapitulation.

**TABLE 38. FATALITIES BY RAILROAD AND TYPE OF ACCIDENT/INCIDENT**

Railroad	Train Accident.....						Train Incident.....					
	Eod	Enod	Psgn	Nont	Tres	Total	Eod	Enod	Psgn	Nont	Tres	Total
<b>CLASS I RAILROADS</b>												
Amtrak (National RR Passenger Corp)	1	1	---	---	13	14	---	---	4	76	80	
Atchison, Topeka And Santa Fe Rwy Co.	1	---	---	---	1	1	---	37	26	63		
Springfield Terminal Railway Company	---	---	---	7	1	9	1	---	2	2	3	
Burlington Northern Incorporated	1	---	---	---	---	---	---	71	49	121		
Chicago And North Western	---	---	---	---	---	---	---	8	21	29		
Consolidated Rail Corporation	5	---	---	3	8	1	---	40	46	87		
CSX Transportation	1	---	2	---	3	5	---	73	50	128		
Delaware And Hudson Railway	---	---	---	---	---	---	---	---	1	1		
Denver And Rio Grande Western RR Co.	---	---	---	---	---	---	---	2	1	3		
Elgin, Joliet And Eastern Railway Co.	---	---	---	---	---	---	---	2	---	2		
Florida East Coast Railway Co.	---	---	---	---	---	---	---	4	15	19		
Grand Trunk Western Railroad Co.	---	---	---	---	---	---	---	10	2	12		
Illinois Central Railroad Co.	---	---	---	---	---	---	---	9	9	18		
Kansas City Southern Railway Co.	---	---	---	---	---	---	---	2	1	3		
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	---	1	---	1		
Missouri-Kansas-Texas Railroad Co.	---	---	---	---	---	---	---	3	4	7		
Norfolk Southern Corporation	1	---	6	---	7	2	---	87	66	155		
Soo Line Railroad Company	---	---	---	---	---	---	---	12	4	16		
Southern Pacific Transportation Co.	---	---	13	2	15	---	---	24	60	84		
St. Louis Southwestern Railway Co.	---	---	---	---	---	---	---	20	5	25		
Union Pacific Railroad Co.	---	---	4	1	5	2	---	69	47	118		
Total Class I Railroads.....	9	1	---	32	20	62	12	---	478	485	975	
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	9	1	---	32	20	62	12	---	478	485	975	
Class II Railroads	---	---	---	---	---	---	---	2	3	5		
Class III Railroads	3	---	2	5	10	4	---	2	30	57	93	
Total All Railroads....	12	1	---	34	25	72	16	---	510	545	1,073	

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

**TABLE 38. (CONTINUED)**

Railroad	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
<b>CLASS I RAILROADS</b>												
Amtrak (National RR Passenger Corp)	---	---	---	5	5	---	1	---	4	94	99	
Atchison, Topeka And Santa Fe Rwy Co.	1	---	---	1	2	2	---	37	27	66		
Springfield Terminal Railway Company	---	---	---	---	1	---	---	---	2	3		
Burlington Northern Incorporated	4	---	---	1	5	10	6	---	79	55	140	
Chicago And North Western	---	---	---	1	1	---	---	9	21	30		
Consolidated Rail Corporation	---	---	---	1	6	7	6	---	41	55	102	
CSX Transportation	---	---	---	4	4	6	6	---	79	50	135	
Delaware And Hudson Railway	---	---	---	---	---	---	---	---	1	1		
Denver And Rio Grande Western RR Co.	---	---	---	---	---	---	---	2	1	3		
Elgin, Joliet And Eastern Railway Co.	---	---	---	---	---	---	---	2	---	2		
Florida East Coast Railway Co.	---	---	---	---	---	---	---	4	15	19		
Grand Trunk Western Railroad Co.	---	---	---	---	---	---	---	10	2	12		
Illinois Central Railroad Co.	---	---	---	---	---	---	---	9	9	18		
Kansas City Southern Railway Co.	---	---	---	---	---	---	---	2	1	3		
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	---	1	---	1		
Missouri-Kansas-Texas Railroad Co.	---	---	---	1	1	---	---	3	5	8		
Norfolk Southern Corporation	3	---	---	2	5	6	---	93	68	167		
Soo Line Railroad Company	1	---	---	---	1	1	---	12	4	16		
Southern Pacific Transportation Co.	---	---	---	---	---	---	---	37	62	100		
St. Louis Southwestern Railway Co.	---	---	---	---	---	---	---	20	5	25		
Union Pacific Railroad Co.	2	---	---	6	8	4	---	73	54	131		
Total Class I Railroads.....	11	---	---	7	26	44	32	1	517	531	1,081	
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	11	---	---	7	26	44	32	1	517	531	1,081	
Class II Railroads	1	---	---	1	1	1	1	2	3	6		
Class III Railroads	3	---	---	4	2	9	10	2	36	64	112	
Total All Railroads.....	15	---	---	11	28	54	43	1	555	598	1,199	

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

**TABLE 39. 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>												
Amtrak (National RR Passenger Corp)	69	11	14	---	7	101	232	13	32	4	56	337
Atchison, Topeka And Santa Fe Rwy Co.	15	---	---	---	---	15	140	---	102	30	272	
Springfield Terminal Railway Company	---	---	---	---	---	---	16	---	8	5	29	
Burlington Northern Incorporated	42	---	---	5	---	47	502	---	215	56	773	
Chicago And North Western	11	---	---	2	1	14	47	---	2	75	23	147
Consolidated Rail Corporation	30	---	---	---	1	31	260	2	126	99	487	
CSX Transportation	41	---	---	127	1	169	386	---	298	105	789	
Delaware And Hudson Railway	---	---	---	---	---	3	---	---	---	1	4	
Denver And Rio Grande Western RR Co.	---	---	---	---	---	23	---	---	4	1	28	
Elgin, Joliet And Eastern Railway Co.	1	---	---	---	---	1	16	---	6	---	22	
Florida East Coast Railway Co.	---	---	---	---	1	1	1	---	4	34	39	
Grand Trunk Western Railroad Co.	4	---	---	---	4	45	45	---	24	1	70	
Illinois Central Railroad Co.	3	---	---	1	---	4	67	---	90	6	163	
Kansas City Southern Railway Co.	1	---	---	---	1	18	---	---	23	2	43	
Louisiana And Arkansas Rwy Company	---	---	---	---	---	17	---	---	25	1	43	
Missouri-Kansas-Texas Railroad Co.	---	---	---	---	---	27	---	---	24	2	53	
Norfolk Southern Corporation	24	---	---	9	1	34	213	2	2	327	124	668
Soo Line Railroad Company	12	---	---	2	---	14	99	---	43	22	164	
Southern Pacific Transportation Co.	14	---	---	2	1	17	163	---	1	86	73	323
St. Louis Southwestern Railway Co.	---	---	---	3	1	4	26	---	24	8	58	
Union Pacific Railroad Co.	33	---	---	9	3	45	464	2	242	86	794	
Total Class I Railroads.....	300	11	14	160	17	502	2,765	19	37	1,750	735	5,306
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	300	11	14	160	17	502	2,765	19	37	1,750	735	5,306
Class II Railroads	1	---	---	---	---	1	71	---	3	23	3	100
Class III Railroads	32	1	77	5	4	119	533	---	53	222	77	885
Total All Railroads.....	333	12	91	165	21	622	3,369	19	93	1,995	815	6,291

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

**TABLE 39. (CONTINUED)**

Railroad	Nontrain Incident.....						Total.....					
	Eod	Enod	Psgr	Nont	Tres	Total	Eod	Enod	Psgr	Nont	Tres	Total
<b>CLASS I RAILROADS</b>												
Amtrak (National RR Passenger Corp)	1,201	37	21	35	5	1,299	1,502	61	67	39	68	1,737
Atchison, Topeka And Santa Fe Rwy Co.	1,014	14	—	3	7	1,038	1,169	14	—	105	37	1,325
Springfield Terminal Railway Company	114	5	—	2	—	121	130	5	—	10	5	150
Burlington Northern Incorporated	2,241	35	3	19	5	2,303	2,785	35	3	239	61	3,123
Chicago And North Western	588	13	5	24	5	635	646	13	7	101	29	796
Consolidated Rail Corporation	1,712	97	—	25	7	1,841	2,002	99	—	151	107	2,359
CSX Transportation	2,502	50	3	21	3	2,579	2,929	50	3	446	109	3,537
Delaware And Hudson Railway	36	—	—	1	—	37	39	—	—	1	1	41
Denver And Rio Grande Western RR Co.	53	1	—	—	—	54	76	1	—	4	1	82
Elgin, Joliet And Eastern Railway Co.	74	1	—	1	1	77	91	1	—	7	1	100
Florida East Coast Railway Co.	11	—	—	—	—	11	12	—	—	4	35	51
Grand Trunk Western Railroad Co.	215	—	—	3	—	218	264	—	—	27	1	292
Illinois Central Railroad Co.	270	—	—	4	—	274	340	—	—	95	6	441
Kansas City Southern Railway Co.	78	—	—	—	—	78	97	—	—	23	2	122
Louisiana And Arkansas Rwy Company	34	—	—	1	—	35	51	—	—	26	1	78
Missouri-Kansas-Texas Railroad Co.	69	—	—	11	1	81	96	—	—	35	3	134
Norfolk Southern Corporation	1,425	46	2	133	11	1,617	1,662	48	4	469	136	2,319
Soo Line Railroad Company	381	6	—	—	—	387	492	6	—	45	22	565
Southern Pacific Transportation Co.	689	7	5	7	5	713	866	7	6	95	79	1,053
St. Louis Southwestern Railway Co.	88	1	—	—	—	89	114	1	—	27	9	151
Union Pacific Railroad Co.	1,898	28	—	24	13	1,963	2,395	30	—	275	102	2,802
Total Class I Railroads.....	14,693	341	39	314	63	15,450	17,758	371	90	2,224	815	21,258
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	14,693	341	39	314	63	15,450	17,758	371	90	2,224	815	21,258
Class II Railroads	409	1	7	19	1	437	481	1	10	42	4	538
Class III Railroads	3,769	54	107	304	20	4,254	4,334	55	237	531	101	5,258
Total All Railroads.....	18,871	396	153	637	84	20,141	22,573	427	337	2,797	920	27,054

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

**TABLE 40. 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>												
Amtrak (National RR Passenger Corp.)	---	2	---	---	---	2	20	17	14	6	7	64
Atchison, Topeka And Santa Fe Rwy Co.	1	5	---	---	---	6	16	42	22	6	23	109
Springfield Terminal Railway Company	---	1	---	---	---	1	5	7	5	---	5	20
Burlington Northern Incorporated	1	3	3	2	---	9	22	64	49	16	28	179
Chicago And North Western	---	1	---	---	---	1	22	21	8	2	14	47
Consolidated Rail Corporation	---	4	2	1	---	7	15	52	37	12	24	140
CSX Transportation	---	5	4	1	---	10	34	68	63	24	41	230
Delaware And Hudson Railway	---	---	---	---	---	3	1	1	1	1	1	6
Denver And Rio Grande Western RR Co.	---	---	---	---	---	2	1	4	1	---	---	8
Elgin, Joliet And Eastern Railway Co.	---	1	---	---	---	1	---	---	3	1	---	4
Florida East Coast Railway Co.	---	---	---	---	---	3	---	---	1	1	---	4
Grand Trunk Western Railroad Co.	---	1	---	---	---	1	2	5	4	3	3	17
Illinois Central Railroad Co.	---	1	---	---	---	1	1	11	10	---	4	26
Kansas City Southern Railway Co.	---	---	---	---	---	---	---	2	1	1	2	5
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	1	1	1	1	1	2
Missouri-Kansas-Texas Railroad Co.	---	---	---	---	---	2	3	4	2	4	4	15
Norfolk Southern Corporation	---	5	3	1	---	9	22	37	30	10	32	131
Soo Line Railroad Company	---	1	---	---	---	1	7	17	12	8	6	50
Southern Pacific Transportation Co.	---	2	1	---	---	3	9	19	21	8	11	68
St. Louis Southwestern Railway Co.	---	---	---	---	---	2	2	3	2	3	3	12
Union Pacific Railroad Co.	---	4	---	---	---	4	29	63	28	17	31	168
Total Class I Railroads.....	2	33	16	5	---	56	196	431	317	122	239	1,305
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	2	33	16	5	---	56	196	431	317	122	239	1,305
Class II Railroads	---	2	---	---	---	2	4	11	6	3	8	32
Class III Railroads	---	9	4	---	---	13	38	80	54	34	43	249
Total All Railroads.....	2	44	20	5	---	71	238	522	377	159	290	1,586

**TABLE 40. (CONTINUED)**

Railroad	Other Injuries.....										Total	Total
	Sprain/ Bruise	Strain	Cut	Elec. Burn	Other Burns	Disloc- tion	Object In Eye	Other	Total			
<b>CLASS I RAILROADS</b>												
Amtrak (National RR Passenger Corp)	364	564	179	7	28	6	63	220	1,431	1,497		
Atchison, Topeka And Santa Fe Rwy Co.	184	540	126	5	12	7	79	79	1,032	1,147		
Springfield Terminal Railway Company	16	52	21	1	2	—	7	9	108	129		
Burlington Northern Incorporated	434	1,412	320	—	33	13	152	167	2,531	2,719		
Chicago And North Western	77	353	46	—	8	1	39	44	568	616		
Consolidated Rail Corporation	350	782	258	4	34	7	153	160	1,748	1,895		
CSX Transportation	479	1,449	280	9	42	17	174	230	2,680	2,920		
Delaware And Hudson Railway	3	21	6	—	—	—	2	1	33	39		
Denver And Rio Grande Western RR Co.	11	40	7	—	1	—	5	6	68	76		
Elgin, Joliet And Eastern Railway Co.	15	39	13	—	2	—	8	8	85	90		
Florida East Coast Railway Co.	—	2	6	—	—	—	—	—	8	12		
Grand Trunk Western Railroad Co.	52	133	38	—	5	—	11	7	246	264		
Illinois Central Railroad Co.	69	161	38	1	2	3	19	19	312	339		
Kansas City Southern Railway Co.	14	47	10	—	3	2	8	6	90	95		
Louisiana And Arkansas Rwy Company	15	21	2	—	—	3	4	3	48	50		
Missouri-Kansas-Texas Railroad Co.	12	37	10	—	—	—	14	8	81	96		
Norfolk Southern Corporation	303	766	236	1	21	9	61	108	1,505	1,645		
Soo Line Railroad Company	68	241	54	—	5	5	19	37	429	480		
Southern Pacific Transportation Co.	136	390	139	4	11	8	54	29	771	842		
St. Louis Southwestern Railway Co.	24	40	21	—	4	—	8	4	101	113		
Union Pacific Railroad Co.	343	1,258	242	1	32	15	114	171	2,176	2,348		
Total Class I Railroads.....	2,969	8,348	2,052	33	245	96	992	1,316	16,051	17,412		
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>												
Class I Railroads	2,969	8,348	2,052	33	245	96	992	1,316	16,051	17,412		
Class II Railroads	77	203	64	2	8	2	36	52	444	478		
Class III Railroads	777	1,818	560	49	71	30	357	323	3,985	4,247		
Total All Railroads....	3,823	10,369	2,676	84	324	128	1,385	1,691	20,480	22,137		

**TABLE 41. CASUALTIES IN TRAIN ACCIDENTS BY RAILROAD**

Railroad	Collisions..		Derailments.		Other....		Total.....		Train Miles
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Rate*
<b>CLASS I RAILROADS</b>									
Amtrak (National RR Passenger Corp)	---	22	---	34	14	45	14	101	3.28
Atchison, Topeka And Santa Fe Rwy Co.	1	4	---	5	6	1	15	0.32	49,677,394
Springfield Terminal Railway Company	---	---	---	22	9	23	9	47	0.00
Burlington Northern Incorporated	---	2	---	2	4	---	4	14	1,185,147
Chicago And North Western	---	8	---	10	3	14	8	31	88,753,970
Consolidated Rail Corporation	5	7	---	129	2	27	3	169	0.78
CSX Transportation	1	13	---	129	2	27	3	169	2.43
Delaware And Hudson Railway	---	---	---	---	---	---	---	---	70,699,184
Denver And Rio Grande Western RR Co.	---	---	---	---	---	---	---	---	1,553,838
Elgin, Joliet And Eastern Railway Co.	---	1	---	---	---	---	1	0.00	6,575,793
Florida East Coast Railway Co.	---	---	---	---	1	---	1	0.55	1,814,914
Grand Trunk Western Railroad Co.	---	---	---	3	1	---	4	0.29	3,342,822
Illinois Central Railroad Co.	---	---	---	---	4	---	4	0.74	5,394,661
Kansas City Southern Railway Co.	---	---	---	1	---	---	1	0.47	8,506,155
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	1	0.09	10,711,722
Missouri-Kansas-Texas Railroad Co.	---	---	---	---	---	---	---	0.00	4,722,051
Norfolk Southern Corporation	---	6	---	5	7	23	7	34	0.80
Soo Line Railroad Company	---	2	---	5	7	---	14	1.52	50,630,032
Southern Pacific Transportation Co.	---	5	---	1	15	11	15	17	9,173,719
St. Louis Southwestern Railway Co.	---	---	---	---	4	---	4	0.90	35,531,871
Union Pacific Railroad Co.	---	13	---	17	5	15	5	45	8,152,286
Total Class I Railroads.....	7	83	---	234	55	185	62	502	0.71
									70,109,027
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>									
Class I Railroads	7	83	---	234	55	185	62	502	1.05
Class II Railroads	---	1	---	---	---	---	1	0.13	532,861,687
Class III Railroads	4	64	---	3	6	52	10	119	7,256,814
Total All Railroads....	11	148	---	237	61	237	72	622	1.86
									69,215,928
									609,334,429

NOTE: Injured columns include nonfatal occupational illnesses.  
Rate is frequency per 1,000,000 train miles.

**TABLE 42. CASUALTIES TO EMPLOYEES ON DUTY BY JOB CATEGORY AND RAILROAD**

Railroad	I. Exec Office Staff			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>									
Amtrak (National RR Passenger Corp)	---	118	1	---	284	3	---	415	---
Atchison, Topeka And Santa Fe Rwy Co.	1	40	1	---	409	6	---	276	3
Springfield Terminal Railway Company	---	4	---	---	33	1	---	30	---
Burlington Northern Incorporated	---	61	2	5	784	21	---	613	29
Chicago And North Western	---	19	2	---	139	15	---	169	5
Consolidated Rail Corporation	---	159	7	1	572	40	---	417	9
CSX Transportation	---	89	---	---	822	8	1	769	---
Delaware And Hudson Railway	---	2	---	---	11	---	---	12	---
Denver And Rio Grande Western RR Co.	---	3	---	---	26	---	---	9	---
Elgin, Joliet And Eastern Railway Co.	---	12	---	---	22	---	---	18	---
Florida East Coast Railway Co.	---	1	---	---	4	---	---	4	---
Grand Trunk Western Railroad Co.	---	12	---	---	47	---	---	97	---
Illinois Central Railroad Co.	---	4	---	---	94	---	---	82	---
Kansas City Southern Railway Co.	---	---	---	---	30	---	---	38	1
Louisiana And Arkansas Rwy Company	---	---	---	---	19	1	---	5	---
Missouri-Kansas-Texas Railroad Co.	---	1	---	---	41	---	---	16	---
Norfolk Southern Corporation	---	59	2	5	514	7	---	459	3
Soo Line Railroad Company	---	9	---	---	171	11	---	64	---
Southern Pacific Transportation Co.	---	92	---	---	219	3	---	172	7
St. Louis Southwestern Railway Co.	---	7	---	---	27	---	---	25	1
Union Pacific Railroad Co.	---	121	1	2	696	10	---	423	7
Total Class I Railroads.....	1	813	16	13	4,964	126	1	4,113	65
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>									
Class I Railroads	1	813	16	13	4,964	126	1	4,113	65
Class II Railroads	1	18	---	---	179	2	---	148	1
Class III Railroads	---	280	11	4	1,375	31	2	1,144	15
Total All Railroads.....	2	1,111	27	17	6,518	159	3	5,405	81

**TABLE 42. (CONTINUED)**

Railroad	V. Transportation Not train, engine			VI Transportation Train and Engine		
	Killed	Injured	Illness	Killed	Injured	Illness
<b>CLASS I RAILROADS</b>						
Amtrak (National RR Passenger Corp)	424	28	1	256	—	—
Atchison, Topeka And Santa Fe Rwy Co.	5	—	—	417	12	—
Springfield Terminal Railway Company	4	—	—	58	—	—
Burlington Northern Incorporated	33	1	1	1,228	13	7
Chicago And North Western	13	1	—	276	—	—
Consolidated Rail Corporation	62	1	5	685	50	—
CSX Transportation	35	—	5	1,205	1	—
Delaware And Hudson Railway	—	—	—	14	—	—
Denver And Rio Grande Western RR Co.	2	—	—	36	—	—
Elgin, Joliet And Eastern Railway Co.	3	—	—	35	1	—
Florida East Coast Railway Co.	1	—	—	2	—	—
Grand Trunk Western Railroad Co.	9	—	—	99	—	—
Illinois Central Railroad Co.	3	—	—	156	1	—
Kansas City Southern Railway Co.	—	—	—	27	1	—
Louisiana And Arkansas Rwy Company	—	—	—	26	—	—
Missouri-Kansas-Texas Railroad Co.	1	—	—	37	—	—
Norfolk Southern Corporation	28	—	1	585	5	—
Soo Line Railroad Company	11	—	—	225	1	—
Southern Pacific Transportation Co.	7	—	1	352	14	—
St. Louis Southwestern Railway Co.	—	—	—	56	—	—
Union Pacific Railroad Co.	26	—	2	1,082	29	—
Total Class I Railroads.....	667	4	17	6,855	135	—
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>						
Class I Railroads	667	4	17	6,855	135	—
Class II Railroads	—	7	—	126	—	—
Class III Railroads	—	107	1	4	1,341	29
Total All Railroads.....	—	781	5	21	8,322	164

**TABLE 43. CASUALTY RATES FOR EMPLOYEES ON DUTY  
BY RAILROAD**

Railroad	Fatalities #	Fatalities Rate	Injuries #	Injuries Rate	Illnesses #	Illnesses Rate	...Total... #	...Total... Rate	Employee Manhours
Amtrak (National RR Passenger Corp.)	---	0.00	1,497	6.70	5	0.02	1,502	6.72	44,694,197
Atchison, Topeka And Santa Fe Rwy Co.	2	0.01	1,147	6.31	22	0.12	1,171	6.44	36,363,306
Springfield Terminal Railway Company	1	0.07	129	9.08	1	0.07	131	9.22	2,842,943
Burlington Northern Incorporated	6	0.02	2,719	8.75	66	0.21	2,791	8.99	62,118,888
Chicago And North Western	---	0.00	616	6.82	30	0.33	646	7.15	18,073,083
Consolidated Rail Corporation	6	0.02	1,895	6.39	107	0.36	2,008	6.77	59,306,035
CSX Transportation	6	0.01	2,920	6.75	9	0.02	2,935	6.79	86,514,184
Delaware And Hudson Railway	---	0.00	39	4.39	---	0.00	39	4.39	1,777,488
Denver And Rio Grande Western RR Co.	---	0.00	76	3.46	---	0.00	76	3.46	4,396,426
Elgin, Joliet And Eastern Railway Co.	---	0.00	90	6.94	1	0.08	91	7.02	2,591,476
Florida East Coast Railway Co.	---	0.00	12	1.02	---	0.00	12	1.02	2,355,066
Grand Trunk Western Railroad Co.	---	0.00	264	6.29	---	0.00	264	6.29	8,388,866
Illinois Central Railroad Co.	---	0.00	339	7.68	1	0.02	340	7.71	8,823,812
Kansas City Southern Railway Co.	---	0.00	95	8.65	2	0.18	97	8.83	2,195,955
Louisiana And Arkansas Rwy Company	---	0.00	50	5.05	1	0.10	51	5.15	1,980,660
Missouri-Kansas-Texas Railroad Co.	---	0.00	96	4.66	---	0.00	96	4.66	4,124,430
Norfolk Southern Corporation	6	0.02	1,645	5.72	17	0.06	1,668	5.80	57,524,078
Soo Line Railroad Company	---	0.00	480	7.97	12	0.20	492	8.17	12,048,153
Southern Pacific Transportation Co.	1	0.01	842	4.23	24	0.12	867	4.35	39,855,021
St. Louis Southwestern Railway Co.	---	0.00	113	4.11	1	0.04	114	4.15	5,494,637
Union Pacific Railroad Co.	4	0.01	2,348	7.87	47	0.16	2,399	8.04	59,656,461
Total Class I Railroads.....	32	0.01	17,412	6.68	346	0.13	17,790	6.83	521,125,165
Class I Railroads	32	0.01	17,412	6.68	346	0.13	17,790	6.83	521,125,165
Class II Railroads	1	0.02	478	9.71	3	0.06	482	9.79	9,843,406
Class III Railroads	10	0.03	4,247	11.01	87	0.23	4,344	11.27	77,116,991
Total All Railroads.....	43	0.01	22,137	7.28	436	0.14	22,616	7.44	608,085,562

"Rate" is the frequency per 200,000 manhours

**TABLE 44. SUMMARY OF NONFATAL INJURIES TO EMPLOYEES ON DUTY BY RAILROAD**

Railroad	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>CLASS I RAILROADS</b>								
Amtrak (National RR Passenger Corp)	1,497	1,114	1,040	74	9,226	895	383	
Atchison, Topeka And Santa Fe Rwy Co.	1,147	788	604	184	10,127	3,635	359	
Springfield Terminal Railway Company	129	88	56	32	809	292	41	
Burlington Northern Incorporated	2,719	1,964	1,679	285	21,766	3,055	755	
Chicago And North Western	616	471	451	20	11,707	218	145	
Consolidated Rail Corporation	1,895	1,507	1,222	85	33,969	1,545	588	
CSX Transportation	2,920	2,352	2,321	31	34,694	335	568	
Delaware And Hudson Railway	39	25	24	1	516	51	14	
Denver And Rio Grande Western RR Co.	76	62	55	7	1,569	386	14	
Elgin Joliet And Eastern Railway Co.	90	21	20	1	179	5	69	
Florida East Coast Railway Co.	12	9	4	5	14	234	3	
Grand Trunk Western Railroad Co.	264	186	154	32	4,140	352	78	
Illinois Central Railroad Co.	339	226	226	---	5,001	---	113	
Kansas City Southern Railway Co.	95	69	69	---	2,251	9	26	
Louisiana And Arkansas Rwy Company	50	44	44	---	1,313	---	6	
Missouri-Kansas-Texas Railroad Co.	96	67	62	5	1,621	124	29	
Norfolk Southern Corporation	1,645	1,190	1,033	157	15,819	1,358	455	
Soo Line Railroad Company	480	362	343	19	6,334	597	118	
Southern Pacific Transportation Co.	842	614	500	114	11,203	1,731	228	
St. Louis Southwestern Railway Co.	113	72	63	9	1,299	58	41	
Union Pacific Railroad Co.	2,348	1,716	1,225	491	16,048	5,481	632	
Total Class I Railroads.....	17,412	12,747	11,195	1,552	189,505	20,359	4,665	
<b>CLASS II RAILROADS</b>								
Bangor And Aroostock Railroad Co.	28	23	23	---	364	---	5	
Bessemer And Lake Erie Railroad Co.	11	5	5	---	97	---	6	
Canadian Pacific Lines In Maine	2	2	2	---	38	---	---	
Central Vermont Railway Inc.	24	13	13	---	69	2	11	
Chicago And Illinois Midland Rwy Co.	26	14	14	---	197	---	12	
Chicago South Shore And South Bend RR	38	25	25	---	546	---	13	
Duluth, Missabe And Iron Range Rwy Co.	69	39	18	21	270	381	30	
Duluth, Winnipeg And Pacific Rwy Co.	6	5	3	2	40	15	1	
Green Bay And Western Railroad	5	5	5	---	103	---	---	
Ann Arbor Railroad (formerly MIRR)	---	---	---	---	---	---	---	
Monongahela Railway	29	23	23	---	1,006	---	6	
Northwestern Pacific Railroad	1	1	1	---	53	---	---	
Oklahoma, Kansas Texas Railroad	13	6	6	---	207	---	7	
Pittsburg And Lake Erie Railroad Co.	89	30	29	1	982	10	59	
Richmond, Fredericksburg And Potomac	62	55	52	3	418	31	7	
Texas And Northern Railway Company	1	1	1	---	1	---	10	
Texas, Mexican Railway Company	74	54	54	---	1,263	---	20	
Total Class II Railroads.....	478	301	273	28	5,653	449	177	
<b>RECAPITULATION (INCLUDES CLASS III RAILROADS)</b>								
Class I Railroads	17,412	12,747	11,195	1,552	189,505	20,359	4,665	
Class II Railroads	478	301	273	28	5,653	449	177	
Class III Railroads	4,247	3,104	2,812	292	48,791	5,301	1,143	
Total All Railroads.....	22,137	16,152	14,280	1,872	243,949	26,109	5,985	

**TABLE 45. SUMMARY OF EMPLOYEE ON DUTY CASUALTIES BY REPORTABILITY CRITERIA AND RAILROAD**

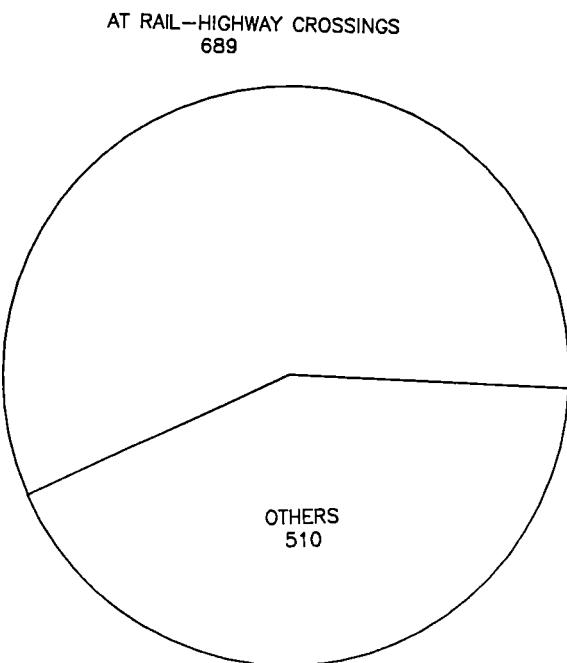
Railroad	Total Cases	Fatalities	Total Injuries	Injuries Reported For Following Reasons.	Days Away From Work	Restricted Activity	Medical Treatment	Occupational Illness
<b>CLASS I RAILROADS</b>								
Amtrak (National RR Passenger Corp)	1,502	---	1,497	1,040	74	162	221	5
Atchison, Topeka And Santa Fe Rwy Co.	1,171	2	1,147	604	184	139	220	22
Springfield Terminal Railway Company	131	1	129	56	32	11	30	1
Burlington Northern Incorporated	2,791	6	2,719	1,679	285	196	559	66
Chicago And North Western	646	---	616	451	20	83	62	30
Consolidated Rail Corporation	2,008	6	1,895	1,222	85	240	348	107
CSX Transportation	2,935	6	2,920	2,321	31	229	339	9
Delaware And Hudson Railway	39	---	39	24	1	---	14	---
Denver And Rio Grande Western RR Co.	76	---	76	55	7	---	14	---
Elgin, Joliet And Eastern Railway Co.	91	---	90	20	1	---	69	1
Florida East Coast Railway Co.	12	---	12	4	5	---	3	---
Grand Trunk Western Railroad Co.	264	---	264	154	32	---	78	---
Illinois Central Railroad Co.	340	---	339	226	---	---	113	1
Kansas City Southern Railway Co.	97	---	95	69	---	---	26	2
Louisiana And Arkansas Rwy Company	51	---	50	44	---	---	6	1
Missouri-Kansas-Texas Railroad Co.	96	---	96	62	5	16	13	---
Norfolk Southern Corporation	1,668	6	1,645	1,033	157	20	435	17
Soo Line Railroad Company	492	---	480	343	19	35	83	12
Southern Pacific Transportation Co.	867	1	842	500	114	---	228	24
St. Louis Southwestern Railway Co.	114	---	113	63	9	---	41	1
Union Pacific Railroad Co.	2,399	4	2,348	1,225	491	262	370	47
Total Class I Railroads.....	17,790	32	17,412	11,195	1,552	1,393	3,272	346
<b>RECAPITULATION</b>								
Class I Railroads	17,790	32	17,412	11,195	1,552	1,393	3,272	346
Class II Railroads	482	1	478	273	28	118	59	3
Class III Railroads	4,344	10	4,247	2,812	292	200	943	87
Total All Railroads.....	22,616	43	22,137	14,280	1,872	1,711	4,274	436

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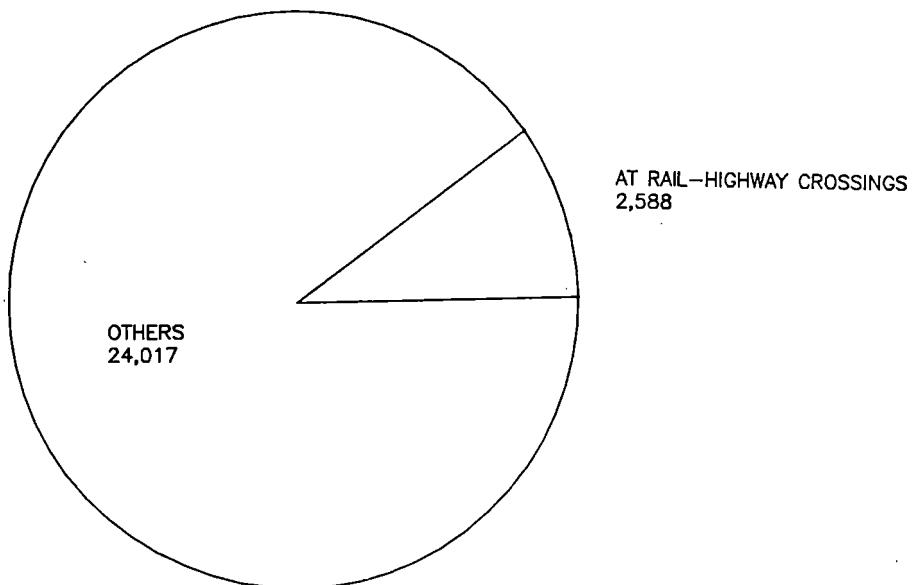


## **7. CASUALTIES: EMPLOYEES, TRESPASSERS, NONTRESPASSERS AND OTHERS**

### **SUMMARY OF CASUALTIES**



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



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

**TABLE 46. FATALITIES BY TYPE OF ACCIDENT/INCIDENT, TYPE OF RAILROAD,  
AND TYPE OF PERSON**

Type Of Accident/Incident	Total A/I	W. Cas A/I	Fatal A/I	Total Killed	Employees Trainmen	On Duty Other	Total	Emp. Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>TRAIN ACCIDENTS</b>											
Class I Railroads.....	133	8	11	6	3	3	9	1	---	---	1
Class II Railroads.....	1	---	---	---	---	---	---	---	---	---	---
Class III Railroads.....	16	5	7	3	---	---	3	---	---	2	2
Total All Railroads.....	150	13	18	9	3	3	12	1	---	2	3
<b>TRAIN INCIDENTS</b>											
Class I Railroads.....	3,493	378	390	8	4	12	---	---	8	370	370
Class II Railroads.....	87	3	3	3	---	---	---	---	---	3	3
Class III Railroads.....	692	51	52	1	3	4	---	2	2	44	44
Total All Railroads.....	4,272	432	445	9	7	16	---	2	10	417	417
<b>NONTRAIN INCIDENTS</b>											
Class I Railroads.....	15,131	38	39	3	8	11	---	---	2	26	26
Class II Railroads.....	432	1	1	---	1	1	---	---	---	---	---
Class III Railroads.....	4,250	7	7	3	3	3	---	2	2	2	2
Total All Railroads.....	19,813	46	47	3	12	15	---	---	4	28	28
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>											
Class I Railroads.....	2,137	516	641	---	---	---	---	---	507	134	134
Class II Railroads.....	15	2	2	---	---	---	---	---	2	---	---
Class III Railroads.....	223	38	46	---	---	---	---	---	30	16	16
Total All Railroads.....	2,375	556	689	---	---	---	---	---	539	150	150
<b>GRAND TOTAL</b>											
Class I Railroads.....	20,894	940	1,081	17	15	32	1	---	517	531	531
Class II Railroads.....	535	6	6	---	1	1	---	---	2	3	3
Class III Railroads.....	5,181	101	112	4	6	10	---	2	36	64	64
Total All Railroads.....	26,610	1,047	1,199	21	22	43	1	2	555	598	598

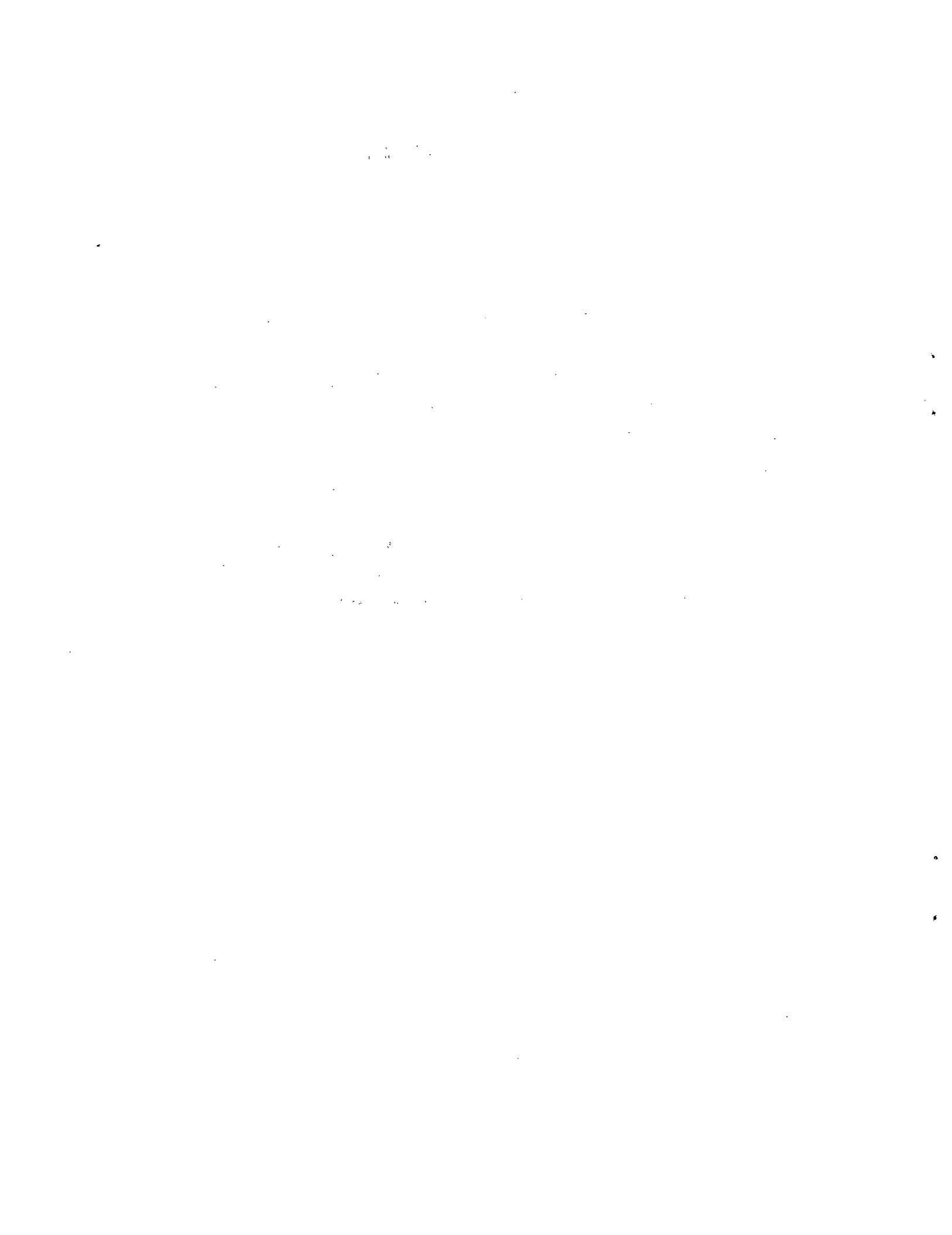
NOTE: Column 1 is the count of accidents/incidents resulting in at least one reportable casualty.

**TABLE 47. 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 Trainmen Other	On Duty...	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>TRAIN ACCIDENTS</b>									
Class I Railroads.....	133	123	381	173	66	239	11	11	117
Class II Railroads.....	1	1	1	—	1	1	—	—	—
Class III Railroads.....	16	11	86	20	3	23	1	61	1
Total All Railroads.....	150	135	468	193	70	263	12	72	118
<b>TRAIN INCIDENTS</b>									
Class I Railroads.....	3,493	3,075	3,160	2,223	417	2,640	16	37	39
Class II Railroads.....	87	84	84	51	20	71	—	3	7
Class III Railroads.....	692	632	635	437	80	517	—	53	16
Total All Railroads.....	4,272	3,791	3,879	2,711	517	3,228	16	93	49
<b>NONTRAIN INCIDENTS</b>									
Class I Railroads.....	15,131	14,795	15,066	4,335	10,061	14,396	333	39	240
Class II Railroads.....	432	428	433	75	331	406	1	7	18
Class III Railroads.....	4,250	4,164	4,171	871	2,820	3,691	53	107	300
Total All Railroads.....	19,813	19,387	19,670	5,281	13,212	18,493	387	153	558
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>									
Class I Railroads.....	2,137	1,620	2,293	124	13	137	—	3	1,827
Class II Railroads.....	15	13	17	—	—	—	—	—	17
Class III Railroads.....	223	185	278	13	3	16	—	16	214
Total All Railroads.....	2,375	1,818	2,588	137	16	153	—	19	358
<b>GRAND TOTAL</b>									
Class I Railroads.....	20,894	19,613	20,900	6,855	10,557	17,412	360	90	2,223
Class II Railroads.....	535	526	535	126	352	478	1	10	42
Class III Railroads.....	5,181	4,992	5,170	1,341	2,906	4,247	54	237	531
Total All Railroads.....	26,610	25,131	26,605	8,322	13,815	22,137	415	337	920

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

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**TABLE 48. 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 Trainmen Other	On Duty...	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>TRAIN ACCIDENTS</b>									
Class I Railroads.....	133	2	3	3	---	3	---	---	---
Class II Railroads.....	1	---	---	---	---	---	---	---	---
Class III Railroads.....	16	---	---	---	---	---	---	---	---
Total All Railroads.....	150	2	3	3	---	3	---	---	---
<b>TRAIN INCIDENTS</b>									
Class I Railroads.....	3,493	40	48	43	2	45	3	---	---
Class II Railroads.....	87	---	---	---	---	---	---	---	---
Class III Railroads.....	692	9	9	9	---	9	---	---	---
Total All Railroads.....	4,272	49	57	52	2	54	3	---	---
<b>NONTRAIN INCIDENTS</b>									
Class I Railroads.....	15,131	298	306	88	209	297	8	---	1
Class II Railroads.....	432	3	3	---	3	3	---	---	---
Class III Railroads.....	4,250	79	79	20	58	78	1	---	---
Total All Railroads.....	19,813	380	388	108	270	378	9	---	1
<b>RAIL-HIGHWAY CROSSING (Excluded from above categories)</b>									
Class I Railroads.....	2,137	1	1	1	---	1	---	---	---
Class II Railroads.....	15	---	---	---	---	---	---	---	---
Class III Railroads.....	223	---	---	---	---	---	---	---	---
Total All Railroads.....	2,375	1	1	1	---	1	---	---	---
<b>GRAND TOTAL</b>									
Class I Railroads.....	20,894	341	358	135	211	346	11	---	1
Class II Railroads.....	535	3	3	---	3	3	---	---	---
Class III Railroads.....	5,181	88	88	29	58	87	1	---	---
Total All Railroads.....	26,610	432	449	164	272	436	12	---	1

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

**TABLE 49. NATURE OF INJURIES BY TYPE OF ACCIDENT/INCIDENT**

Type of Accident/Incident	Amputations.....						Fractures.....					
	Arm/ Hand	Finger	Leg/ Foot	Toe	Other Part	Total	Arm/ Hand	Finger	Leg/ Foot	Toe	Other Part	Total
<b>TRAIN ACCIDENTS</b>												
Collisions	---	---	1	---	---	1	---	1	1	---	5	7
Derailments	---	---	1	---	---	1	1	2	---	8	11	
Rail-highway x-ing	---	---	---	---	---	2	1	6	---	13	22	
Miscellaneous	---	---	---	---	---	2	4	---	3	7		
Total.....	---	---	2	---	---	2	13	---	29	47		
<b>TRAIN INCIDENTS</b>												
Coupling and uncoupling locomotives or	1	---	3	---	---	4	5	3	6	---	5	19
Coupling/uncoupling air/steam hose, saf	---	---	3	---	---	3	1	2	---	3	1	
Operating or on locomotives.....	---	1	---	---	---	1	3	2	1	---	16	22
Operating rail motorcars.....	---	---	---	---	---	---	---	1	1	---	1	
Operating hand brakes.....	---	---	---	---	---	2	1	2	---	3	8	
Operating switches or derails.....	---	---	---	---	---	---	1	1	---	---	1	
Contacting fixed objects while on loco	---	---	---	---	---	1	1	3	1	3	9	
Getting on or off cars or locomotives.	2	1	22	6	---	31	15	9	28	3	18	73
Collisions, derailments, etc. (<= \$4,9	---	---	3	---	---	3	2	---	1	---	6	9
Rail-highway crossing accidents/incide	3	---	4	---	1	8	42	1	84	1	170	298
Struck by/ran into loco/car(not at rr-	10	4	80	6	---	100	22	1	42	1	35	101
Servicing or maintenance of equipment.	---	---	---	---	---	1	1	2	1	4	1	9
Maintenance of way and structures.....	---	---	1	---	---	1	1	2	6	2	2	13
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	2	---	---	2	
Windows, doors, etc., on on-track equi	2	---	---	---	---	2	1	7	---	---	---	8
Passenger car doors.....	1	---	---	---	---	1	---	---	---	---	---	---
Stumbling, slipping, falling, caught,	---	---	7	---	---	7	7	5	4	2	8	26
Flying or falling objects, burns, etc.	---	---	---	---	---	---	1	2	---	---	3	
Operation of on-track work equipment..	---	---	1	---	---	1	3	2	2	---	3	10
Assault.....	---	---	1	---	---	1	2	1	1	---	2	6
Other occurrences.....	3	---	3	---	---	6	6	3	3	1	11	24
Total.....	19	9	128	12	1	169	114	44	187	15	283	643
<b>NONTRAIN INCIDENTS</b>												
Coupling and uncoupling locomotives or	---	---	---	1	---	1	3	14	7	6	3	33
Coupling/uncoupling air/steam hose, saf	---	1	1	---	---	2	9	5	3	2	1	20
Operating or on locomotives.....	---	---	---	---	---	---	3	12	2	2	2	21
Operating rail motorcars.....	---	---	---	---	---	---	2	1	---	---	3	
Operating hand brakes.....	---	---	---	---	---	---	3	7	2	1	3	16
Operating switches or derails.....	---	---	---	---	---	5	8	3	7	8	31	
Contacting fixed objects while on loco	---	---	---	---	---	---	1	1	---	---	1	
Getting on or off cars or locomotives.	2	---	---	---	---	2	18	7	45	2	18	90
Collisions, derailments, etc. (<= \$4,9	---	---	---	---	---	---	2	---	---	7	9	
Rail-highway crossing accidents/incide	---	---	---	---	---	2	---	---	---	1	4	
Struck by/ran into loco/car(not at rr-	---	2	---	---	---	2	---	1	2	1	4	
Servicing or maintenance of equipment.	15	---	1	---	---	16	47	148	53	43	51	342
Maintenance of way and structures....	19	2	1	---	---	22	62	224	148	65	54	555
Freight, baggage, express or mail....	---	---	---	---	---	---	---	1	---	1	1	
Windows, doors, etc., on on-track equi	1	---	---	---	---	1	4	22	---	4	1	31
Passenger car doors.....	---	---	---	---	---	---	1	1	---	---	2	
Stumbling, slipping, falling, caught,	2	1	---	---	---	3	68	21	92	9	51	261
Flying or falling objects, burns, etc.	1	---	---	---	---	1	2	9	6	3	20	
Operation of on-track work equipment..	---	---	1	---	---	1	1	3	---	1	5	
Assault.....	---	---	---	---	---	3	2	1	1	7	14	
Other occurrences.....	4	3	---	---	---	7	15	20	24	11	41	111
Total.....	1	44	9	4	---	58	244	495	395	162	252	1,548
Grand Total.....	20	53	139	16	1	229	361	541	595	177	564	2,238

**TABLE 49. (CONTINUED)**

Type of Accident/Incident	Other Injuries										Total Injured
	Bruise	Sprain/ Strain	Cut	Elec. Burn	Other Burns	Disloc-	Object Cation	In Eye	Other	Total	
<b>TRAIN ACCIDENTS</b>											
Collisions	27	65	13	---	---	---	1	34	140	148	
Derailments	54	39	5	2	1	---	123	224	236		
Rail-highway x-ing	43	33	19	2	1	---	31	129	151		
Miscellaneous	16	36	2	---	5	2	22	77	84		
<b>Total.....</b>	<b>140</b>	<b>173</b>	<b>39</b>	<b>---</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>210</b>	<b>570</b>	<b>619</b>	
<b>TRAIN INCIDENTS</b>											
Coupling and uncoupling locomotives or	51	106	17	---	2	3	8	7	194	217	
Coupling/uncoupling air/steam hose, saf	12	13	3	---	1	4	2	35	35	39	
Operating or on locomotives.....	117	230	58	4	7	3	249	70	738	761	
Operating rail motorcars.....	7	4	3	---	---	1	1	3	19	20	
Operating hand brakes.....	12	33	10	---	---	1	1	3	60	68	
Operating switches or derails.....	3	4	5	---	1	---	4	---	17	18	
Contacting fixed objects while on loco	39	20	18	---	---	---	---	6	83	92	
Getting on or off cars or locomotives.	171	486	68	1	1	10	2	24	763	867	
Collisions, derailments, etc. (<= \$4,9	43	44	3	---	1	1	---	11	103	115	
Rail-highway crossing accidents/incide	517	184	540	---	2	4	2	799	2,048	2,354	
Struck by/ran into loco/car(not at rr-	60	20	74	---	2	---	85	241	442		
Servicing or maintenance of equipment.	15	37	9	---	---	---	1	2	64	73	
Maintenance of way and structures....	36	13	9	---	1	2	5	66	80		
Freight, baggage, express or mail....	2	10	1	---	---	1	3	17	19		
Windows, doors, etc., on on-track equi	20	20	17	---	1	---	---	58	68		
Passenger car doors.....	4	1	2	---	---	---	---	7	8		
Stumbling, slipping, falling, caught,	87	97	42	---	3	3	3	11	246	279	
Flying or falling objects, burns, etc.	10	1	9	1	13	---	119	23	176	179	
Operation of on-track work equipment..	16	33	16	---	---	---	5	70	81		
Assault.....	12	9	22	---	---	---	11	5	59	66	
Other occurrences.....	97	177	43	1	3	4	6	26	357	387	
<b>Total.....</b>	<b>1,331</b>	<b>1,542</b>	<b>969</b>	<b>7</b>	<b>33</b>	<b>35</b>	<b>414</b>	<b>1,090</b>	<b>5,421</b>	<b>6,233</b>	
<b>NONTRAIN INCIDENTS</b>											
Coupling and uncoupling locomotives or	91	317	31	---	1	1	8	19	468	502	
Coupling/uncoupling air/steam hose, saf	63	116	46	2	---	---	15	16	258	280	
Operating or on locomotives.....	101	192	49	5	6	1	83	45	482	503	
Operating rail motorcars.....	6	16	2	---	---	---	---	---	22	25	
Operating hand brakes.....	61	260	24	---	---	2	3	8	358	374	
Operating switches or derails.....	89	842	19	1	---	5	4	25	985	1,016	
Contacting fixed objects while on loco	6	3	9	1	---	---	1	1	21	22	
Getting on or off cars or locomotives.	209	616	70	4	1	7	1	45	953	1,045	
Collisions, derailments, etc. (<= \$4,9	—	—	—	—	—	—	—	—	—	—	
Rail-highway crossing accidents/incide	16	4	18	---	---	---	---	36	74	83	
Struck by/ran into loco/car(not at rr-	1	6	6	---	---	---	5	18	24		
Servicing or maintenance of equipment.	684	1,915	693	31	163	22	339	276	4,123	4,481	
Maintenance of way and structures....	847	2,562	997	30	94	30	240	498	5,298	5,873	
Freight, baggage, express or mail....	18	63	9	---	---	---	2	13	105	106	
Windows, doors, etc., on on-track equi	78	142	61	2	---	---	2	16	293	325	
Passenger car doors.....	8	6	3	---	---	---	5	22	22	24	
Stumbling, slipping, falling, caught,	465	1,090	197	1	1	29	2	84	1,850	2,094	
Flying or falling objects, burns, etc.	62	8	39	18	23	---	260	79	469	490	
Operation of on-track work equipment..	9	39	9	---	---	---	1	5	63	69	
Assault.....	55	42	46	---	---	2	5	23	174	188	
Other occurrences.....	377	937	243	2	13	19	27	493	2,111	2,229	
<b>Total.....</b>	<b>3,153</b>	<b>9,176</b>	<b>2,571</b>	<b>97</b>	<b>302</b>	<b>118</b>	<b>993</b>	<b>1,692</b>	<b>18,147</b>	<b>19,753</b>	
<b>Grand Total.....</b>	<b>4,663</b>	<b>10,891</b>	<b>3,579</b>	<b>104</b>	<b>340</b>	<b>155</b>	<b>1,408</b>	<b>2,992</b>	<b>24,138</b>	<b>26,605</b>	

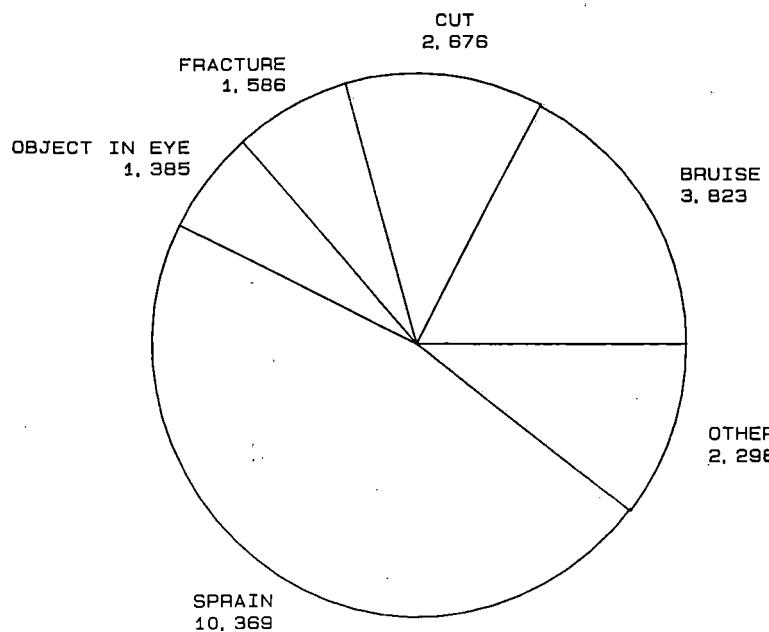
**TABLE 50. NATURE OF INJURIES BY TYPE OF PERSON**

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	3	5	2	---	1	11
Firemen and Helpers	---	---	---	---	---	---	9	9	12	4	12	46
Conductors and Foremen	---	1	3	---	---	4	9	9	16	7	26	94
Brakemen and Helpers	1	1	2	1	---	5	21	24	16	7	26	94
Total.....	1	2	6	1	---	10	33	38	30	11	39	151
<b>FREIGHT SERVICE:</b>												
Engineers and Motormen	---	---	1	---	---	1	8	4	9	1	13	35
Firemen and Helpers	---	---	---	---	---	---	3	3	---	1	1	4
Conductors and Foremen	---	1	2	1	---	4	9	15	18	4	27	73
Brakemen and Helpers	---	4	5	---	---	9	20	28	35	9	28	120
Total.....	---	5	8	1	---	14	37	50	62	14	69	232
<b>PASSENGER SERVICE:</b>												
Engineers and Motormen	---	---	---	---	---	---	1	1	3	---	2	7
Firemen and Helpers	---	---	---	---	---	---	6	7	9	1	1	1
Conductors and Foremen	---	1	---	---	---	1	6	7	9	1	3	26
Baggagemen	---	---	---	---	---	---	---	---	---	---	---	---
Brakemen and Helpers	---	---	---	---	---	---	1	1	1	1	2	5
Total.....	---	1	---	---	---	1	8	9	12	2	8	39
<b>HOSTLERS</b>												
	---	---	---	---	---	---	1	2	2	---	---	5
<b>--SUMMARY--</b>												
Total employees on duty	2	44	20	5	---	71	238	522	377	159	290	1,586
Employees not on duty	---	1	---	---	---	1	9	5	16	3	11	44
Passengers	---	---	1	---	---	1	11	4	18	4	16	53
Nontrespassers	1	4	8	---	---	13	64	9	103	8	176	360
Trespassers	17	4	110	11	1	143	39	1	81	3	71	195
Grand total	20	53	139	16	1	229	361	541	595	177	564	2,238

**TABLE 50. (CONTINUED)**

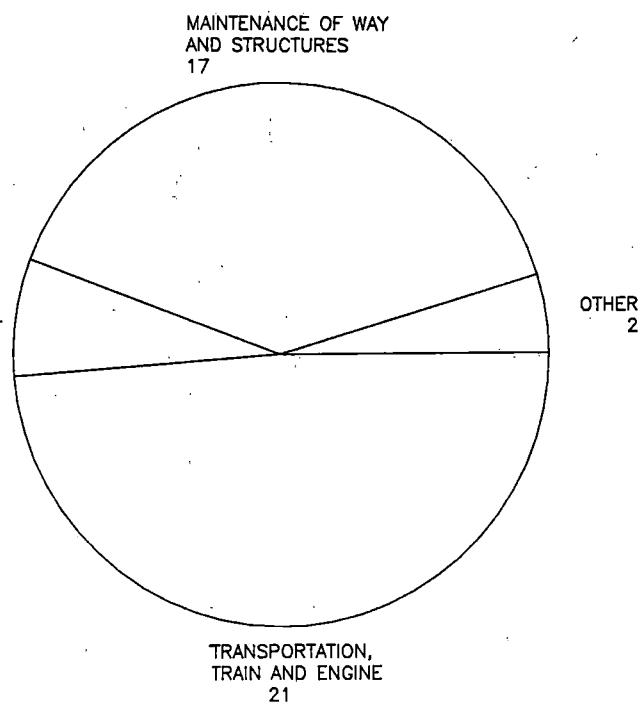
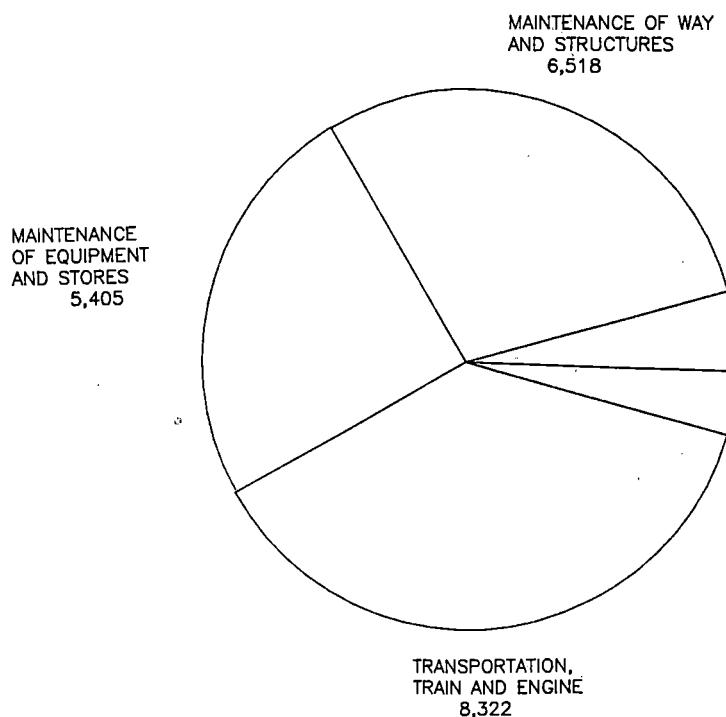
Type Person	Bruise	Sprain/ Strain	Cut	Elec. Burn	Other Burns	Disloca- tion	Object In Eye	Other	Total	Total Injured
<b>EMPLOYEES ON DUTY</b>										
<b>YARD SERVICE:</b>										
Engineers and Motormen	53	189	33	---	2	---	69	25	371	383
Firemen and Helpers	1	12	---	---	---	---	3	1	17	17
Conductors and Foremen	123	399	45	---	6	3	65	39	680	730
Brakemen and Helpers	327	967	132	2	12	13	154	82	1,689	1,788
<b>Total.....</b>	<b>504</b>	<b>1,567</b>	<b>210</b>	<b>2</b>	<b>20</b>	<b>16</b>	<b>291</b>	<b>147</b>	<b>2,757</b>	<b>2,918</b>
<b>FREIGHT SERVICE:</b>										
Engineers and Motormen	134	383	69	4	8	4	98	75	775	811
Firemen and Helpers	4	19	2	---	3	---	3	4	35	39
Conductors and Foremen	241	607	101	2	7	6	74	76	1,114	1,191
Brakemen and Helpers	440	1,239	173	---	9	19	169	152	2,201	2,330
<b>Total.....</b>	<b>819</b>	<b>2,248</b>	<b>345</b>	<b>6</b>	<b>27</b>	<b>29</b>	<b>344</b>	<b>307</b>	<b>4,125</b>	<b>4,371</b>
<b>PASSENGER SERVICE:</b>										
Engineers and Motormen	36	85	19	2	1	---	29	33	205	212
Firemen and Helpers	4	14	1	---	---	---	5	2	26	27
Conductors and Foremen	106	238	49	5	---	1	41	36	476	503
Baggagemen	---	---	---	---	---	---	---	---	---	---
Brakemen and Helpers	17	37	11	---	1	---	9	9	84	89
<b>Total.....</b>	<b>163</b>	<b>374</b>	<b>80</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>84</b>	<b>80</b>	<b>791</b>	<b>831</b>
<b>HOSTLERS</b>										
	22	58	10	---	2	1	9	3	105	110
										110
<b>--SUMMARY--</b>										
Total employees on duty	3,823	10,369	2,676	84	324	128	1,385	1,691	20,480	22,137
Employees not on duty	67	136	45	---	4	11	12	95	370	415
Passengers	70	83	50	4	2	3	1	70	283	337
Nontrespassers	588	278	621	2	7	9	10	908	2,423	2,796
Trespassers	121	25	187	14	3	4	---	228	582	920
<b>Grand total</b>	<b>4,669</b>	<b>10,891</b>	<b>3,579</b>	<b>104</b>	<b>340</b>	<b>155</b>	<b>1,408</b>	<b>2,992</b>	<b>24,138</b>	<b>26,605</b>

## EMPLOYEE CASUALTIES



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

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



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

**TABLE 51. EMPLOYEE ON DUTY CASUALTIES BY TYPE OF CASUALTY**

Type/Location Of Casualty	Total Cases	Cases With Total Cases	Days Away Lost Day Cases	From Work Restricted Cases	Or Days Of Days Away From Work	Days Of Restriction	Other Cases
<b>I N J U R I E S</b>							
Bruise - Contusion--Arm or hand.	660	670	400	70	5,913	601	190
Fingers....	378	187	147	40	1,350	391	191
Leg or foot.	1,241	965	854	111	11,850	1,075	276
Toes.....	96	64	53	11	628	57	32
Torso.....	998	818	750	68	13,946	960	180
Other parts.	450	358	323	35	4,669	250	92
Sprain - Strain--	713	556	460	96	7,061	1,279	157
Arm or hand.	122	82	70	12	732	138	40
Fingers....	13	10	7	3	120	18	3
Leg or foot.	2,500	2,186	1,974	212	32,161	3,131	314
Toes.....	6,168	5,259	4,701	558	81,776	8,422	909
Torso.....	853	699	652	47	12,004	670	154
Cut or Laceration--	501	199	145	54	2,503	688	302
Arm or hand.	871	346	244	102	3,043	1,082	525
Fingers....	353	194	170	24	2,211	349	159
Leg or foot.	19	11	10	1	93	16	8
Head or Face	834	324	302	22	3,381	229	510
Torso.....	50	37	36	1	538	20	13
Other parts.	48	27	25	2	254	8	21
Electrical burn or shock.....	84	67	67	---	1,095	36	17
Other burns.....	324	161	136	25	1,334	251	163
Dislocation.....	128	108	97	11	2,634	313	20
Fracture--	238	213	173	40	5,062	1,228	25
Arm or hand.	522	346	229	117	4,256	1,977	176
Fingers....	377	362	344	18	12,762	907	15
Leg or foot.	159	119	99	20	1,882	396	40
Toes.....	61	42	41	1	1,237	6	19
Head or Face	213	192	177	15	6,454	373	21
Torso.....	16	15	11	4	416	93	1
Other parts.	2	2	1	1	99	6	---
Amputation--	44	38	33	5	1,147	122	6
Arm or hand.	20	19	19	---	2,259	---	1
Fingers....	5	5	5	---	189	1	---
Leg or foot.	---	---	---	---	---	---	---
Toes.....	---	---	---	---	---	---	---
Other parts.	1,385	618	557	61	2,475	144	767
Hernia.....	135	131	127	4	4,404	118	4
Concussion.....	51	44	41	3	1,250	25	7
Nervous shock.....	18	17	17	---	266	---	1
Internal injuries.....	49	43	42	1	1,927	51	6
Loss of eye.....	---	---	---	---	---	---	---
Puncture type wound.....	344	167	141	26	1,540	174	177
Dental related injuries.....	94	17	17	---	100	5	77
Skin reaction (one-time exposure	142	57	50	7	353	33	85
Not otherwise classified.....	858	577	533	44	6,575	466	281
Total nonfatal injuries.....	22,137	16,152	14,280	1,872	243,949	26,109	5,985
<b>I L L N E S S E S</b>							
Skin diseases or disorders.....	82	21	21	---	138	---	61
Dust diseases of the lungs.....	6	1	---	1	---	1	5
Respiratory conditions.....	104	70	70	---	966	---	34
Poisoning.....	11	9	9	---	36	---	2
Disorders due to physical agents	94	51	45	6	181	13	43
Disorders due to repeated trauma	51	23	21	2	519	37	28
All other occupational illnesses	88	61	53	8	1,112	169	27
Total nonfatal illnesses....	436	236	219	17	2,952	220	200
<b>-----F A T A L I T I E S-----</b>							
Fatal injuries.....	40						
Fatal illnesses....	3						
Total fatalities..	43						

**TABLE 52. EMPLOYEE ON DUTY CASUALTIES BY JOB CATEGORY**

	Killed	Injured	Illness	Total
<b>EXECUTIVES, OFFICIALS, AND STAFF ASSISTANTS</b>				
Executives and general officers.....	1	7	---	8
Corporate staff managers.....	---	6	---	6
Regional and division officers, assistants and staff assistants.....	---	16	---	16
Transportation officers/managers.....	1	32	---	33
Subtotal.....	2	61	---	63
<b>PROFESSIONAL AND ADMINISTRATIVE</b>				
Professional.....	---	30	1	31
Subprofessionals.....	---	17	---	17
Auditors, traveling auditors or accountants.....	---	5	---	5
General and administrative supervisors.....	---	37	---	37
Sales and traffic representatives and agents.....	---	28	---	28
Freight and other claim agents and investigators.....	---	9	---	9
Supervising and chief claim agents.....	---	2	---	2
Lieutenants and sergeants of police.....	---	31	---	31
Police officers, watchmen and guards (except crossing & bridge).....	---	248	6	254
Inspectors, (except MDW & MOE), other investigators, examiners, etc.....	---	11	---	11
Buyers, and sales agents.....	---	14	1	15
Clerical technicians and clerical specialists.....	---	36	2	38
Office machine and data equipment operators.....	---	31	---	31
Secretaries, stenographers, and typists.....	---	38	1	39
General and other clerks (except yard clerk and crew dispatcher).....	---	302	10	312
Telephone and switchboard operators.....	---	3	---	3
Building and office attendants.....	---	65	6	71
Messengers and office persons.....	---	14	---	14
Motor vehicle operators.....	---	129	---	129
Subtotal.....	---	1,050	27	1,077
<b>MAINTENANCE OF WAY AND STRUCTURES</b>				
Maintenance of way and structures (miscellaneous).....	---	1	---	1
Supervisors, maintenance of way, structures, communication & signals.....	---	86	1	87
Maintenance of way, structures, comm. & signals, & scale inspectors.....	4	82	3	89
Bridge and building gang foreman.....	---	99	3	102
Bridge and building carpenters.....	1	310	10	321
Bridge and building ironworkers.....	---	82	---	82
Bridge and building painters.....	---	36	2	38
Masons, bricklayers, plasterers, and plumbers.....	---	217	7	224
Bridge and building helpers and apprentices.....	---	139	3	142
Bridge and building gang and bridge and building dept laborers.....	---	98	2	100
Track gang foremen (extra gang work train laborers).....	---	155	3	158
Gang or section foreman.....	2	476	13	491
Extra gang laborers.....	2	606	10	618
Section laborers.....	5	2,258	51	2,314
Machine operators.....	2	1,072	27	1,101
Gang foremen, communications and signals.....	---	39	3	42
Signalmen and signal maintainers.....	1	494	11	506
Linemen and groundmen and communications craftsman.....	---	201	9	210
Assistant signalmen and assistant signal maintainers.....	---	30	---	30
Signal helpers and signal maintainer helpers.....	---	26	---	24
Camp car cooks.....	---	13	1	14
Subtotal.....	17	6,518	159	6,694
<b>MAINTENANCE OF EQUIPMENT AND STORES</b>				
Supervisors and general foremen, maintenance of equipment.....	1	62	2	65
Supervisors and general foremen, materials and stores.....	---	12	---	12
Equipment, shop, electrical inspectors.....	---	43	---	43
Materials and supplies inspectors.....	---	3	---	3
Storekeeper.....	---	39	1	40
Gang foremen, maintenance of equipment.....	---	144	1	145
Blacksmiths.....	---	35	---	35
Boilermakers.....	---	85	---	85
Carmen (freight).....	1	1,473	21	1,495
Carmen (other).....	---	607	5	612
Electrical workers (A).....	---	542	18	560
Electrical workers (B).....	---	21	---	21
Electrical workers (C).....	---	9	---	9
Machinists.....	---	1,084	22	1,106
Sheet metal workers.....	---	227	2	229
Skilled trades, helpers, maintenance of equipment and stores.....	---	202	2	204
Apprentices, maintenance of equipment and stores.....	---	28	---	28
Coach cleaners.....	---	212	3	215
Laborers: shops, enginehouses and power plants.....	1	445	3	449
Gang foremen, materials and stores.....	---	5	---	5
Equipment operators and general laborers, materials and stores.....	---	116	1	117
Stationary engineers.....	---	8	---	8
Stationary firemen.....	---	3	---	3
Subtotal.....	3	5,405	81	5,489

**TABLE 52. (CONTINUED)**

	Killed	Injured	Illness	Total
<b>TRANSPORTATION, OTHER THAN TRAIN AND ENGINE</b>				
Transportation supervisor and chief train dispatcher.....	2	14	3	14
Train dispatchers.....	3	3	3	3
Station, freight and passenger agents.....	23	23	23	23
Chief operators and wire chiefs.....	1	1	1	1
Clerk operators, towerman, train directors.....	64	2	66	66
Station masters & assts, supervising bag. agents, bag. agents, etc. ....	12	12	12	12
Baggage, parcel room and station attendants.....	86	86	86	86
General & asst gnrl foremen, stations, warehouses, grain elev., docks.....	5	5	5	5
Gang foremen, stations, warehouses, grain elevators and docks.....	5	5	5	5
Grain elevator, and dock laborers.....	59	59	59	59
Station, and warehouse laborers.....	43	43	43	43
Truckers (station, warehouse and platforms).....	29	29	29	29
Food and lodging manager, supervisors.....	31	31	31	31
Transportation and dining-service inspectors.....	1	1	1	1
Waiters and kitchen helpers (restaurant and dining car).....	31	31	31	31
Chefs and cooks (restaurant and dining car).....	38	38	38	38
Marine officers and workers and shore workers.....	2	2	2	2
Train attendants.....	211	1	212	212
Bridge operators and helpers.....	3	3	3	3
Yards clerks.....	72	72	72	72
Crew dispatchers.....	10	10	10	10
Yardmasters and assistant yardmasters.....	38	2	40	40
Subtotal.....	781	5	786	786
<b>TRANSPORTATION, TRAIN AND ENGINE</b>				
Transportation, train and engine (miscellaneous).....	1	1	1	1
Switchtenders.....	55	1	56	56
Car retarder operators and ground service employees.....	2	1	3	3
Outside hostlers.....	87	1	88	88
Outside hostler helpers.....	23	23	23	23
Inside hostler.....	34	34	34	34
Road passenger conductors.....	310	4	314	314
Assistant road passenger conductors and ticket collectors.....	193	3	196	196
Road freight conductors (through freight).....	1	687	11	699
Road freight conductors (local and way freight).....	4	504	13	521
Road Passenger brakemen and flagmen.....	89	89	89	89
Road freight brakemen and flagmen (through freight).....	4	1,348	19	1,371
Road freight brakemen and flagmen (local and way freight).....	3	982	23	1,008
Yard conductors and yard foremen.....	2	730	14	746
Yard brakemen and yard helpers.....	1	1,788	32	1,821
Road passenger engineers and motormen.....	2	212	8	222
Road freight engineers (through freight).....	2	536	14	552
Road freight engineers (local and way freight).....	2	275	10	287
Yard engineers.....	---	383	9	392
Road passenger firemen and helpers.....	---	27	---	27
Road freight firemen and helpers (through freight).....	---	24	---	24
Road freight firemen and helpers (local and way freight).....	---	15	1	16
Yard firemen and helpers.....	---	17	---	17
Subtotal.....	21	8,322	164	8,507
Total.....	43	22,137	436	22,616

**TABLE 53. EMPLOYEE ON DUTY FATALITIES BY JOB CATEGORY**

Type of accident/incident	I*	II	III	IV	V	VI	Total
<b>TRAIN ACCIDENTS</b>							
Collisions	1	---	---	---	---	9	10
Derailements	---	---	---	---	---	---	---
Rail-highway x-ing	---	---	2	---	---	---	2
Miscellaneous	---	---	---	---	---	---	---
Total.....	1	---	2	---	---	9	12
<b>TRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains.	---	---	---	---	---	1	1
Operating or on locomotives.....	---	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	---
Operating switches or derails.....	---	---	---	---	---	1	1
Contacting fixed objects while on locos or cars.....	---	---	---	---	---	1	1
Getting on or off cars or locomotives.....	---	1	1	---	---	3	5
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	3	3	3
Struck by/ran into loco/car(not at rr-hwy x-ing).....	---	---	---	---	3	3	3
Servicing or maintenance of equipment.....	---	---	1	---	---	1	1
Maintenance of way and structures.....	---	2	---	---	---	2	2
Freight, baggage, express or mail.....	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	---
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	---	---	---	---
Operation of on-track work equipment.....	---	1	---	---	---	1	1
Assault.....	---	---	---	---	---	---	---
Other occurrences.....	---	---	1	---	---	1	1
Total.....	---	---	4	3	---	9	16
<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.....	---	---	---	---	---	1	1
Operating switches or derails.....	---	---	---	---	---	1	1
Contacting fixed objects while on locos or cars.....	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	---
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	1	1	1
Struck by/ran into loco/car(not at rr-hwy x-ing).....	---	---	---	---	1	1	1
Servicing or maintenance of equipment.....	---	---	1	---	---	1	1
Maintenance of way and structures.....	---	---	4	---	---	4	4
Freight, baggage, express or mail.....	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	---
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	---	---	---	---
Operation of on-track work equipment.....	---	---	---	---	---	---	---
Assault.....	1	---	---	---	---	1	1
Other occurrences.....	---	---	6	---	---	1	7
Total.....	1	---	11	---	---	3	15
Grand total.....	2	---	17	3	---	21	43

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 (train and engine)

**TABLE 54. EMPLOYEE ON DUTY INJURIES BY JOB CATEGORY**

Type accident/incident	I*	II	III	IV	V	VI	Total
<b>TRAIN ACCIDENTS</b>							
Collisions	---	---	4	5	15	74	98
Derailements	1	---	6	1	27	79	112
Rail-highway x-ing	1	1	2	1	4	58	67
Miscellaneous	---	---	6	2	5	40	53
Total.....	2	1	16	9	51	251	330
<b>TRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	1	---	1	1	---	214	217
Coupling/uncoupling air/steam hose, safety chains.	---	---	---	3	---	35	38
Operating or on locomotives.....	3	3	2	8	4	740	760
Operating rail motorcars.....	---	---	12	1	---	7	20
Operating hand brakes.....	---	---	1	2	2	63	68
Operating switches or derails.....	---	---	1	1	---	16	18
Contacting fixed objects while on locos or cars..	1	---	---	6	81	88	
Getting on or off cars or locomotives.....	2	2	7	13	3	750	777
Collisions, derailments, etc. (< \$4,901)	---	2	12	2	1	79	96
Rail-highway crossing accidents/incidents.....	---	1	6	---	---	79	86
Struck by/ran into loco/car(not at rr-hwy x-ing)	---	2	5	3	3	32	45
Servicing or maintenance of equipment.....	---	1	8	59	2	3	73
Maintenance of way and structures.....	---	---	77	2	---	---	79
Freight, baggage, express or mail.....	---	---	---	1	7	7	15
Windows, doors, etc., on on-track equipment.....	---	---	7	1	11	43	62
Passenger car doors.....	---	---	9	---	1	1	2
Stumbling, slipping, falling, caught, N.O.C.	6	9	5	85	119	119	224
Flying or falling objects, burns, etc., N.O.C.	1	3	2	6	157	157	169
Operation of on-track work equipment.....	2	65	3	2	6	78	78
Assault.....	5	1	---	1	52	52	59
Other occurrences.....	3	4	8	19	306	306	340
Total.....	7	28	221	115	153	2,790	3,314
<b>NONTRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	1	1	---	25	5	470	502
Coupling/uncoupling air/steam hose, safety chains.	---	1	3	37	2	236	279
Operating or on locomotives.....	2	---	5	33	1	460	501
Operating rail motorcars.....	---	1	17	---	7	---	25
Operating hand brakes.....	2	---	2	21	2	347	374
Operating switches or derails.....	---	2	31	32	11	940	1,016
Contacting fixed objects while on locos or cars..	---	1	---	3	1	14	19
Getting on or off cars or locomotives.....	6	18	13	116	21	757	931
Collisions, derailments, etc. (< \$4,901)	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	4	1	2	4	11
Struck by/ran into loco/car(not at rr-hwy x-ing)	---	---	4	1	2	4	11
Servicing or maintenance of equipment.....	---	59	249	3,986	49	87	4,430
Maintenance of way and structures.....	5	82	5,219	364	31	44	5,745
Freight, baggage, express or mail.....	---	7	2	10	73	11	103
Windows, doors, etc., on on-track equipment.....	---	17	40	111	13	129	310
Passenger car doors.....	---	---	---	1	1	3	5
Stumbling, slipping, falling, caught, N.O.C.	11	188	207	268	128	837	1,639
Flying or falling objects, burns, etc., N.O.C.	---	42	19	38	31	302	432
Operation of on-track work equipment.....	---	1	61	3	---	2	67
Assault.....	1	88	3	10	8	58	168
Other occurrences.....	24	513	406	222	198	573	1,936
Total.....	52	1,021	6,281	5,281	577	5,281	18,493
Grand total.....	61	1,050	6,518	5,405	781	8,322	22,137

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 (train and engine)

**TABLE 55. 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	98	86	84	2	3,097	28	12	
Derailements	112	94	90	4	1,760	38	18	
Rail-highway x-ing	67	62	62	---	1,319	10	5	
Miscellaneous	53	49	48	1	1,000	5	4	
Total.....	330	291	284	7	7,176	81	39	
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	217	187	172	15	3,840	238	30	
Coupling/uncoupling air/steam hose, safety chains.	38	32	31	1	615	18	6	
Operating or on locomotives.....	760	574	544	30	7,214	342	186	
Operating rail motorcars.....	20	17	15	2	191	25	3	
Operating hand brakes.....	68	57	50	7	1,091	124	11	
Operating switches or derails.....	18	12	10	2	353	38	6	
Contacting fixed objects while on locos or cars..	88	79	72	7	1,475	126	9	
Getting on or off cars or locomotives.....	777	705	643	62	11,653	876	72	
Collisions, derailments, etc. (<= \$4,901).....	96	86	81	5	1,824	69	10	
Rail-highway crossing accidents/incidents.....	86	71	67	4	1,604	52	15	
Struck by/ran into loco/car(not at rr-hwy x-ing).....	45	37	37	---	1,845	10	8	
Servicing or maintenance of equipment.....	73	59	51	8	1,257	144	14	
Maintenance of way and structures.....	79	54	45	9	984	137	25	
Freight, baggage, express or mail.....	15	11	11	---	93	3	4	
Windows, doors, etc., on on-track equipment.....	62	45	44	1	610	94	17	
Passenger car doors.....	2	2	2	---	14	---	---	
Stumbling, slipping, falling, caught, N.O.C.....	224	191	182	9	3,043	190	33	
Flying or falling objects, burns, etc., N.O.C.....	169	94	86	8	621	42	75	
Operation of on-track work equipment.....	78	59	52	7	1,212	87	19	
Assault.....	59	48	44	4	603	49	11	
Other occurrences.....	340	295	278	17	4,924	246	45	
Total.....	3,314	2,715	2,517	198	45,066	2,910	599	
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	502	431	393	38	6,239	629	71	
Coupling/uncoupling air/steam hose, safety chains.	279	217	190	27	2,522	316	62	
Operating or on locomotives.....	501	397	374	23	5,930	307	104	
Operating rail motorcars.....	25	20	19	1	194	6	5	
Operating hand brakes.....	374	305	279	26	5,041	283	69	
Operating switches or derails.....	1,016	898	803	95	14,569	1,435	118	
Contacting fixed objects while on locos or cars..	19	13	11	2	109	58	6	
Getting on or off cars or locomotives.....	931	813	752	61	13,734	983	118	
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	---	---	---	
Rail-highway crossing accidents/incidents.....	11	7	7	---	262	---	4	
Servicing or maintenance of equipment.....	4,430	2,859	2,423	436	37,430	6,305	1,571	
Maintenance of way and structures.....	5,745	3,702	3,039	663	52,728	8,241	2,043	
Freight, baggage, express or mail.....	103	90	85	5	827	70	13	
Windows, doors, etc., on on-track equipment.....	310	219	183	36	2,682	575	91	
Passenger car doors.....	5	5	5	---	100	---	---	
Stumbling, slipping, falling, caught, N.O.C.....	1,639	1,582	1,257	125	23,947	1,995	257	
Flying or falling objects, burns, etc., N.O.C.....	432	238	228	10	1,742	65	194	
Operation of on-track work equipment.....	67	49	42	7	744	106	18	
Assault.....	168	145	139	6	2,083	87	23	
Other occurrences.....	1,936	1,356	1,250	106	20,824	1,657	580	
Total.....	18,493	13,146	11,479	1,667	191,707	23,118	5,347	
Grand total.....	22,137	16,152	14,280	1,872	243,949	26,109	5,985	

**TABLE 56. EMPLOYEE ON DUTY ILLNESSES BY JOB CATEGORY**

Type accident/incident	I*	II	III	IV	V	VI	Total
<b>TRAIN ACCIDENTS</b>							
Collisions	---	---	---	---	---	1	1
Derailements	---	---	---	---	---	1	1
Rail-highway x-ing	---	---	---	---	---	2	2
Miscellaneous	---	---	---	---	---	3	3
<b>Total.....</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>3</b>	<b>3</b>
<b>TRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	1	1
Coupling/uncoupling air/steam hose, safety chains.	---	---	---	---	---	---	---
Operating or on locomotives.....	---	---	---	---	34	34	
Operating rail motorcars.....	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	---
Operating switches or derails.....	---	---	---	---	---	---	---
Contacting fixed objects while on locos or cars..	---	---	---	---	---	2	2
Getting on or off cars or locomotives.....	---	---	---	---	---	2	2
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	1	1	
Rail-highway crossing accidents/incidents.....	---	---	---	---	1	1	
Struck by/ran into loco/car(not at rr-hwy x-ing).....	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	---	---	---	---	---	---
Maintenance of way and structures.....	---	---	---	---	---	---	---
Freight, baggage, express or mail.....	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	10	10	
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	---	1	1	
Operation of on-track work equipment.....	---	1	---	---	---	---	---
Assault.....	---	---	---	---	---	---	---
Other occurrences.....	---	---	---	1	4	5	
<b>Total.....</b>	<b>---</b>	<b>1</b>	<b>---</b>	<b>1</b>	<b>53</b>	<b>55</b>	
<b>NONTRAIN INCIDENTS</b>							
Coupling and uncoupling locomotives or cars.....	---	---	---	---	3	3	
Coupling/uncoupling air/steam hose, safety chains.	---	---	---	---	3	3	
Operating or on locomotives.....	---	---	2	---	26	28	
Operating rail motorcars.....	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	1	3	4	
Operating switches or derails.....	---	---	1	---	3	4	
Contacting fixed objects while on locos or cars..	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	3	3	
Collisions, derailments, etc. (<= \$4,901).....	---	---	---	---	---	---	---
Rail-highway crossing accidents/incidents.....	---	---	---	---	---	---	---
Struck by/ran into loco/car(not at rr-hwy x-ing).....	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	4	64	---	1	69	
Maintenance of way and structures.....	---	107	3	---	2	112	
Freight, baggage, express or mail.....	---	---	---	---	---	---	---
Windows, doors, etc., on on-track equipment.....	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	10	1	1	1	40	53
Flying or falling objects, burns, etc., N.O.C.....	---	---	1	---	---	1	1
Operation of on-track work equipment.....	---	3	---	---	---	---	3
Assault.....	---	14	45	10	2	23	94
Other occurrences.....	---	27	158	81	4	108	378
<b>Grand total.....</b>	<b>---</b>	<b>27</b>	<b>159</b>	<b>81</b>	<b>5</b>	<b>164</b>	<b>436</b>

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 (train and engine)

**TABLE 57. SUMMARY OF NONFATAL EMPLOYEE ON DUTY INJURIES DUE TO ASSAULT**

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>									
Amtrak (National RR Passenger Corp)	---	---	---	---	3	28	31		
Atchison, Topeka And Santa Fe Rwy Co.	---	---	---	---	2		2		
Springfield Terminal Railway Company	---	---	---	---	---	---	---		
Burlington Northern Incorporated	1	2	---	---	---	1	4		
Chicago And North Western	---	---	1	---	3	4	8		
Consolidated Rail Corporation	7	---	---	2	1	12	22		
CSX Transportation	8	4	---	---	3	2	17		
Delaware And Hudson Railway	---	---	---	---	---	---	---		
Denver And Rio Grande Western RR Co.	---	---	---	---	---	---	---		
Elgin, Joliet And Eastern Railway Co.	---	---	---	---	---	---	---		
Florida East Coast Railway Co.	---	---	---	---	---	---	---		
Grand Trunk Western Railroad Co.	1	---	---	---	---	---	1		
Illinois Central Railroad Co.	2	---	---	---	---	---	2		
Kansas City Southern Railway Co.	---	---	---	---	---	---	---		
Louisiana And Arkansas Rwy Company	---	---	---	---	---	---	---		
Missouri-Kansas-Texas Railroad Co.	---	---	---	---	---	1	1		
Norfolk Southern Corporation	2	1	---	1	---	---	4		
Soo Line Railroad Company	---	---	---	---	---	---	---		
Southern Pacific Transportation Co.	8	1	1	---	---	5	15		
St. Louis Southwestern Railway Co.	---	---	---	---	---	1	1		
Union Pacific Railroad Co.	4	1	---	---	4	6	15		
Total Class I Railroads.....	33	9	2	3	14	62	123		
<b>RECAPITULATION (INCLUDES CLASS II AND III RAILROADS)</b>									
Class I Railroads	33	9	2	3	14	62	123		
Class II Railroads	1	---	---	---	---	2	3		
Class III Railroads	6	---	1	---	7	87	101		
Total All Railroads.....	40	9	3	3	21	151	227		

## CASUALTIES IN TRAIN ACCIDENTS

**TABLE 58. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MISCELLANEOUS FACTORS**

Cause	Total Killed	Employees On Duty..	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other				
<b>MISC CAUSES NOT OTHERWISE LISTED</b>							
700 Collision with hwy user at grade xing	54	---	---	---	---	32	22
702 Vandalism	3	---	1	1	---	---	2
703 Interference with RR oper.-not vandals	1	---	---	---	---	1	---
704 Object on or fouling track	1	---	---	---	---	---	1
710 Equipment on or fouling track	2	1	1	2	---	---	---
717 Fire, other than vandalism, involving	1	---	---	---	1	---	---
SUBTOTAL.....	62	1	2	3	1	33	25
GRAND TOTAL.....	62	1	2	3	1	33	25

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 59. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MISCELLANEOUS FACTORS**

Cause	Total Injured	Employees On Duty..	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other				
<b>MISC CAUSES NOT OTHERWISE LISTED</b>							
700 Collision with hwy user at grade xing	151	58	9	67	---	19	47
702 Vandalism	8	8	---	8	---	---	---
703 Interference with RR oper.-not vandals	1	1	---	1	---	---	---
704 Load shifted	2	---	2	2	---	---	---
709 Object on or fouling track	22	8	---	8	---	13	1
710 Equipment on or fouling track	5	3	1	4	---	1	---
713 Interaction of lateral/vertical forces	3	3	---	3	---	---	---
715 Snow, ice, or mud on track	7	7	---	7	---	---	---
716 Other acts of God	7	5	---	5	---	2	---
717 Fire, other than vandalism, involving	12	1	---	1	11	---	---
718 Hump retarder failed to sufficiently s	1	1	---	1	---	---	---
799 Other miscellaneous causes	5	4	1	5	---	---	---
SUBTOTAL.....	224	99	13	112	11	32	50
GRAND TOTAL.....	224	99	13	112	11	32	50

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 60. FATALITIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY HUMAN FACTORS**

Cause	Total Killed	Employees On Duty...	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen Other					
<b>FLAGGING, FIXED, HAND AND RADIO SIGNALS</b>							
52F Automatic train control device cut out	1	1	---	1	---	---	---
520 Fixed signal, failure to comply	4	4	---	4	---	---	---
SUBTOTAL.....	5	5	---	5	---	---	---
<b>OTHER RULES AND INSTRUCTIONS</b>							
535 Instruction to trn/yard crew improper	2	1	---	1	---	---	1
542 Trn ord/timetable auth, fail to comply	2	2	---	2	---	---	---
SUBTOTAL.....	4	3	---	3	---	---	1
GRAND TOTAL.....	9	8	---	8	---	---	1

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 61. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY HUMAN FACTORS**

Cause	Total Injured	Employees Trainmen	On Duty Other	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>BRAKES, USE OF</b>							
501 Dynamic brake, improper use	3	3	---	3	---	---	---
502 Failure to secure engine (R.R. emp.)	1	1	---	1	---	---	---
503 Failure to secure hnd brk (R.R. emp)	2	1	1	2	---	---	---
504 Failure to apply sufficient hand brake	13	6	---	6	---	7	---
505 Failure to apply hnd brk on car (emp.)	1	1	---	1	---	---	---
507 Independent (eng.) brake, improper use	3	3	---	3	---	---	---
<b>SUBTOTAL.....</b>	<b>23</b>	<b>15</b>	<b>1</b>	<b>16</b>	<b>---</b>	<b>7</b>	<b>---</b>
<b>EMPLOYEE PHYSICAL CONDITION</b>							
510 Impairment due to alcohol or drugs	2	2	---	2	---	---	---
<b>SUBTOTAL.....</b>	<b>2</b>	<b>2</b>	<b>---</b>	<b>2</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>FLAGGING, FIXED, HAND AND RADIO SIGNALS</b>							
52A Block signal, failure to comply	46	9	14	23	1	22	---
52F Automatic train control device cut out	3	2	1	3	---	---	---
520 Fixed signal, failure to comply	11	11	---	11	---	---	---
527 Radio communication, improper	4	3	1	4	---	---	---
<b>SUBTOTAL.....</b>	<b>64</b>	<b>25</b>	<b>16</b>	<b>41</b>	<b>1</b>	<b>22</b>	<b>---</b>
<b>OTHER RULES AND INSTRUCTIONS</b>							
531 Cars left foul	1	1	---	1	---	---	---
533 Failure to stop train in clear	4	3	---	3	---	1	---
535 Instruction to trn/yard crew improper	2	1	---	1	---	1	---
536 Mtr car/on-trk eqp rules, fail to comply	5	---	5	5	---	---	---
537 Equip move Without authority (RR emp)	1	---	1	1	---	---	---
538 Shoving move, missing man at lead	19	1	---	1	---	18	---
539 Shoving movement, fail to control	13	9	4	13	---	---	---
540 Skate, failure to remove or place	1	1	---	1	---	---	---
541 Special op. instr., failure to comply	5	2	3	5	---	---	---
542 Trn ord/timetable auth, fail to comply	16	7	4	11	---	5	---
544 Trn ord(written)err in preparation,etc	2	2	---	2	---	---	---
549 Rules and instructions, other	4	4	---	4	---	---	---
<b>SUBTOTAL.....</b>	<b>73</b>	<b>31</b>	<b>17</b>	<b>48</b>	<b>---</b>	<b>23</b>	<b>2</b>
<b>SPEED</b>							
555 Trn out yrd limit,clear blk,excess spd	110	---	---	---	---	---	110
559 Other Causes involving excessive speed	13	11	1	12	---	1	---
<b>SUBTOTAL.....</b>	<b>123</b>	<b>11</b>	<b>1</b>	<b>12</b>	<b>---</b>	<b>111</b>	<b>---</b>
<b>SWITCHES, USE OF</b>							
561 Switch improperly lined	9	8	---	8	---	1	---
563 Switch previously run through	1	---	1	1	---	---	---
<b>SUBTOTAL.....</b>	<b>10</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>---</b>	<b>1</b>	<b>---</b>
<b>MISCELLANEOUS</b>							
570 Buffing or slack action excessive	6	4	2	6	---	---	---
571 Failure to couple	2	2	---	2	---	---	---
572 Lateral drawbar force on curve excess	14	1	13	14	---	---	---
599 Other train operation/human factors	8	8	---	8	---	---	---
<b>SUBTOTAL.....</b>	<b>30</b>	<b>15</b>	<b>15</b>	<b>30</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>GRAND TOTAL.....</b>	<b>325</b>	<b>107</b>	<b>51</b>	<b>158</b>	<b>1</b>	<b>53</b>	<b>113</b>

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 62. FATALITIES IN ACCIDENTS RESULTING FROM MECHANICAL/ELECTRICAL FAILURES**

There were no fatalities reported in connection with train accidents caused by mechanical or electrical failures.

**TABLE 63. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS CAUSED BY MECHANICAL/ELECTRICAL FAILURES**

Cause	Total Injured	...Employees Trainmen	On Duty... Other	Total	Emp On Duty	Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>BRAKES</b>									
400 Air hose uncoupled or burst	4	4	---	4	---	---	---	---	---
SUBTOTAL.....	4	4	---	4	---	---	---	---	---
<b>COUPLER AND DRAFT SYSTEM</b>									
439 Other coupler and draft system causes	1	1	---	1	---	---	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---	---	---
<b>TRUCK COMPONENTS</b>									
440 Side bearing clearance improper	1	1	---	1	---	---	---	---	---
445 Truck (stiff/improper lateral)	3	2	---	2	---	---	---	1	---
449 Other truck component causes	1	1	---	1	---	---	---	---	---
SUBTOTAL.....	5	4	---	4	---	---	---	1	---
<b>AXLES AND JOURNAL BEARINGS</b>									
451 Journal (plain) failure - overheating	2	2	---	2	---	---	---	---	---
452 Journal (R. B.) failure - overheat	1	---	---	1	---	1	---	---	---
SUBTOTAL.....	3	2	---	2	---	1	---	---	---
<b>WHEELS</b>									
464 Worn flange	3	3	---	3	---	---	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---	---	---
<b>LOCOMOTIVES</b>									
474L Electrically caused fire - locomotive	5	5	---	5	---	---	---	---	---
479L Other causes involving locomotives	4	4	---	4	---	---	---	---	---
SUBTOTAL.....	9	9	---	9	---	---	---	---	---
<b>GENERAL MECHANICAL AND ELECTRICAL FAILURES</b>									
499 General mech/elect failures-not loco	1	---	1	1	---	---	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---	---	---
GRAND TOTAL.....	26	23	1	24	---	1	---	1	---

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 64. FATALITIES RESULTING FROM TRAIN ACCIDENTS  
CAUSED BY DEFECTS IN TRACK, ROADBED AND STRUCTURES**

Cause	Total Killed	Employees On Duty...	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other				
<b>SIGNAL AND COMMUNICATION FAILURES</b>							
203 Block signal displayed false proceed	1	---	1	1	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---
GRAND TOTAL.....	1	---	1	1	---	---	---

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

**TABLE 65. NONFATAL CASUALTIES RESULTING FROM TRAIN ACCIDENTS  
CAUSED BY DEFECTS IN TRACK, ROADBED AND STRUCTURES**

Cause	Total Injured	Employees On Duty...	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other				
<b>ROADBED DEFECTS</b>							
102 Washout/rain-slide/ice,etc. dmg to trk	5	3	---	3	---	---	2
SUBTOTAL.....	5	3	---	3	---	---	2
<b>TRACK GEOMETRY DEFECTS</b>							
110 Wide gage (defect/missing crossties)	1	1	---	1	---	---	---
111 Wide gage (def/missing rail fasteners)	2	2	---	2	---	---	---
115 Track alignment irregular (buckled)	26	9	12	21	---	5	---
SUBTOTAL.....	29	12	12	24	---	5	---
<b>RAIL AND JOINT BAR DEFECTS</b>							
130 Bolt hole crack or break	1	1	---	1	---	---	---
131 Broken base of rail	2	2	---	2	---	---	---
132 Broken weld, field	1	1	---	1	---	---	---
133 Broken weld, plant	1	1	---	1	---	---	---
136 Head/web sep.(outside joint bar limit)	2	1	---	1	---	---	1
141 Transverse/compound fissure	2	---	2	2	---	---	---
149 Other rail and joint bar defects	4	4	---	4	---	---	---
SUBTOTAL.....	13	10	2	12	---	---	1
<b>FROGS, SWITCHES AND TRACK APPLIANCES</b>							
161 Switch damaged/out of adjustment	1	1	---	1	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---
<b>OTHER WAY AND STRUCTURES</b>							
181 Flangeway clogged	1	1	---	1	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---
<b>SIGNAL AND COMMUNICATION FAILURES</b>							
203 Block signal displayed false proceed	3	3	---	3	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---
GRAND TOTAL.....	52	30	14	44	---	5	2

NOTE: Includes illnesses resulting from accident, if any.  
Contractor employees are included with nontrespassers.

## CASUALTIES IN TRAIN INCIDENTS

**TABLE 66. FATALITIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE  
AND TYPE OF PERSON**

Occurrence	Total Killed	Employees	Trainmen	On Duty..	Total	Emp Not On Duty	Passen- gers	Nonpas- sengers	Tres- passers
<b>COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.</b>									
059T Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp mov	1	1	---	---	1	---	---	---	---
SUBTOTAL.....	1	1	---	---	1	---	---	---	---
<b>OPERATING SWITCHES OR DERAILS</b>									
304T Struck by moving on-track equipment	1	1	---	---	1	---	---	---	---
SUBTOTAL.....	1	1	---	---	1	---	---	---	---
<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	---	---	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	---	---	1	---	---	---	2
507T Falling, slipping, tripping, not elsewhere classified - eqp moving	7	1	---	---	1	---	---	---	6
511T Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp mov	3	1	2	3	3	---	---	---	---
513T Jumping from equipment - equipment moving	2	---	---	---	2	---	1	---	1
SUBTOTAL.....	15	3	2	5	5	---	1	---	9
<b>COLLISIONS, DERAILMENTS, ETC.(&lt;= \$4,901)</b>									
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	4	---	---	---	---	---	---	---	4
SUBTOTAL.....	4	---	---	---	---	---	---	---	4
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>									
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	598	---	---	---	---	---	---	474	124
610T Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp mov	30	---	---	---	---	---	---	26	4
SUBTOTAL.....	628	---	---	---	---	---	---	500	128
<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	127	---	---	---	---	---	---	3	124
702T Crossing track at private rail-highway crossing - equipment moving	3	1	---	1	---	---	---	---	2
703T Crossing track not at a crossing - equipment moving	30	1	---	1	---	---	---	3	26
704T While on public thoroughfare - equipment moving	2	---	---	---	---	---	---	1	1
705T On bridges or trestles - equipment moving	21	---	---	---	---	---	---	---	21
706T Sitting or lying on track or near track, not in clear - eqp moving	157	---	---	---	---	---	---	1	156
707T While working on or along track - equipment moving	4	1	---	1	---	---	---	1	2
708T Passing over, through, or under cars - equipment moving	25	---	---	---	---	---	---	---	25
709T Struck by or ran into loco/car (not at hwy x-ing), misc-eqp mov	31	---	---	---	---	---	---	1	30
SUBTOTAL.....	400	3	---	3	---	---	---	10	387

**TABLE 66. (CONTINUED)**

Occurrence	Total Killed	Employees Trainmen	On Duty... Other	Total	Emp On Duty	Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>									
803T Striking or being struck by eqp, structures, or material-eqp mov	1	---	1	1	---	---	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---	---	---
<b>MAINTENANCE OF WAY AND STRUCTURES</b>									
853T Striking or being struck by eqp, structures, or material-eqp mov	2	---	2	2	---	---	---	---	---
SUBTOTAL.....	2	---	2	2	---	---	---	---	---
<b>FREIGHT, BAGGAGE, EXPRESS OR MAIL</b>									
902T Struck or caught by shifted lading-eqp moving	3	---	---	---	---	---	---	---	3
904T Other acc/inc involving freight, baggage, express, or mail - eqp mov	1	---	---	---	---	---	---	---	1
SUBTOTAL.....	4	---	---	---	---	---	---	---	4
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>									
938T While on locomotive or car-equipment moving	3	---	---	---	---	---	---	---	3
SUBTOTAL.....	3	---	---	---	---	---	---	---	3
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>									
953T Derailment that does not satisfy monetary threshold	1	---	1	1	---	---	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---	---	---
<b>OTHER OCCURRENCES</b>									
972T Sudden movement of car, not otherwise classified	1	---	1	1	---	---	---	---	---
989T Other accidents/incidents-equipment moving	11	---	---	---	---	1	---	---	10
SUBTOTAL.....	12	---	1	1	---	1	---	---	10
<b>GRAND TOTAL.....</b>	<b>1,073</b>	<b>9</b>	<b>7</b>	<b>16</b>	<b>---</b>	<b>2</b>	<b>510</b>	<b>545</b>	

NOTE: Contractor employees are included with nontrespassers

**TABLE 67. INJURIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Injured	Employees On Duty...			Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other	Total				
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>								
001T Adjusting coupler, equipment moving unexpectedly	12	12	---	12	---	---	---	---
002T Adjusting coupler - equipment moving	12	12	---	12	---	---	---	---
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	1	1	---	1	---	---	---	---
005T Use of uncoupling lever - equipment moving	61	61	---	61	---	---	---	---
006T Use of uncoupling lever - equipment moving unexpectedly	2	2	---	2	---	---	---	---
007T Striking parts of body against equipment - equipment moving	26	26	---	26	---	---	---	---
008T Stumbled, slipped, fell, etc. on foreign obj/irreg surface-eqp moving	51	49	2	51	---	---	---	---
009T Other acc/inc while coupling/uncoupling cars or locos - equip moving	51	50	1	51	---	---	---	---
<b>SUBTOTAL.....</b>	<b>217</b>	<b>214</b>	<b>3</b>	<b>217</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<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	4	1	5	---	---	---	---
053T Coupling air hose,sth by hose due to sudden release of air - eqp mov	1	1	---	1	---	---	---	---
054T Stumbled,slipped,fell, or stepped on foreign obj, etc., eqp moving	10	8	2	10	---	---	---	---
055T Defective equipment - equipment moving	2	2	---	2	---	---	---	---
057T Opening or closing angle cocks - equipment moving	1	1	---	1	---	---	---	---
059T Oth A/I while coupl/uncoupl air/steam hose or turn ang1 cock-eqp mov	20	19	---	19	---	---	1	---
<b>SUBTOTAL.....</b>	<b>39</b>	<b>35</b>	<b>3</b>	<b>38</b>	<b>---</b>	<b>---</b>	<b>1</b>	<b>---</b>
<b>OPERATING OR ON LOCOMOTIVES</b>								
101T Burn or electrical shock - equipment moving	6	5	1	6	---	---	---	---
102T Striking parts of body against equipment, moving about loco-eqp mov	59	57	2	59	---	---	---	---
103T Struck by tools or other objects falling - equipment moving	13	12	1	13	---	---	---	---
104T Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp moving	47	46	1	47	---	---	---	---
106T Unexpected movement of locomotive, other than slack action	75	70	5	75	---	---	---	---
107T Slack action in locomotive	56	54	2	56	---	---	---	---
108T Striking parts of body against equipment due to sudden stop of loco	60	58	2	60	---	---	---	---
109T Inhalation of or contact with fumes or gases - equipment moving	33	32	1	33	---	---	---	---
110T Defective locomotive seat - equipment moving	28	27	1	28	---	---	---	---
111T Adjusting locomotive seat - equipment moving	9	9	---	9	---	---	---	---
112T Foreign object in eye - equipment moving	256	253	2	255	1	---	---	---
119T Other accidents/incidents while operating locomotives - eqp moving	119	117	2	119	---	---	---	---
<b>SUBTOTAL.....</b>	<b>761</b>	<b>740</b>	<b>20</b>	<b>760</b>	<b>1</b>	<b>---</b>	<b>---</b>	<b>---</b>

**TABLE 67. (CONTINUED)**

Occurrence	Total Injured	...Employees Trainmen	On Duty.. Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>OPERATING RAIL MOTORCARS</b>								
151T Striking parts of body against equipment - equipment moving	4	1	3	4	---	---	---	---
152T Struck by tools or other objects falling - equipment moving	1	---	1	1	---	---	---	---
153T Stumbled, slipped, fell or stepped on foreign obj, etc., - eqp mov	2	---	2	2	---	---	---	---
154T Unexpected movement of rail motorcar	5	2	3	5	---	---	---	---
159T Other accidents/incidents while operating rail motorcars - eqp mov	8	4	4	8	---	---	---	---
<b>SUBTOTAL.....</b>	<b>20</b>	<b>7</b>	<b>13</b>	<b>20</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>OPERATING HAND BRAKES</b>								
200T Manipulating hand brakes, no defects, equipment moving	24	22	2	24	---	---	---	---
201T Defective equipment - equipment moving	6	6	---	6	---	---	---	---
203T Striking body due to movement of equipment	8	8	---	8	---	---	---	---
204T Losing hold, slipping or falling due to coupling impact	6	6	---	6	---	---	---	---
205T Caught between parts of equipment or lading - equipment moving	2	1	1	2	---	---	---	---
206T Brake chains or bolts, breaking or giving way - equipment moving	1	1	---	1	---	---	---	---
207T Losing hold, slipping, or falling - equipment moving	4	4	---	4	---	---	---	---
209T Other accidents/incidents while operating hand brakes - eqp moving	17	15	2	17	---	---	---	---
<b>SUBTOTAL.....</b>	<b>68</b>	<b>63</b>	<b>5</b>	<b>68</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>OPERATING SWITCHES OR DERAILS</b>								
304T Struck by moving on-track equipment	5	5	---	5	---	---	---	---
309T Other acc/inc while operating switches/derails - equipment moving	13	11	2	13	---	---	---	---
<b>SUBTOTAL.....</b>	<b>18</b>	<b>16</b>	<b>2</b>	<b>18</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS</b>								
401T Persons on top locos/cars contacting fixed objects - equipment mov	6	6	---	6	---	---	---	---
402T Persons on side/end of locos/cars contacting fixed objects - eqp mov	54	53	1	54	---	---	---	---
409T Persons on loco/car coming in contact with fixed obj(other)-eqp mov	32	22	6	28	---	---	4	---
<b>SUBTOTAL.....</b>	<b>92</b>	<b>81</b>	<b>7</b>	<b>88</b>	<b>---</b>	<b>---</b>	<b>4</b>	<b>---</b>
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>								
501T Slip/fell due to lost/missed hold of grabiron,handhold,etc.-eqp mov	51	46	1	47	---	1	1	2
502T Slip/fell due to losing/missing footing on step,stirrup,etc.-eqp mov	104	97	5	102	---	---	---	2
503T Stepping or tripping on parts of track in place - equipment moving	31	30	---	30	---	---	---	1
504T Stepping or tripping on foreign material or irreg surface - eqp mov	186	183	3	186	---	---	---	---
505T Slipping on ice or snow on ground - equipment moving	23	23	---	23	---	---	---	---
506T Slipping on ice/snow on cars or locomotives - equipment moving	3	2	---	2	---	1	---	---
507T Falling, slipping, tripping, not elsewhere classified - eqp moving	112	81	5	86	---	3	---	23
508T Slipping/falling while boarding/alighting fm passenger eqp (moving)	21	6	3	9	---	6	1	5
510T Striking body or falling due to sudden movement of equipment	29	23	1	24	---	5	---	---
511T Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp mov	40	35	1	36	---	1	1	3
513T Jumping from equipment - equipment moving	60	35	3	38	---	14	---	8
514T Defective equipment - equipment moving	21	19	2	21	---	2	---	---
519T Other acc/inc while getting on or off cars or locos - equipment mov	186	170	3	173	---	2	1	10
<b>SUBTOTAL.....</b>	<b>867</b>	<b>750</b>	<b>27</b>	<b>777</b>	<b>---</b>	<b>32</b>	<b>4</b>	<b>54</b>

**TABLE 67. (CONTINUED)**

Occurrence	Total Injured	Employees Trainmen	Other	Total.. Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COLLISIONS, DERAILMENTS, ETC.(&lt;= \$4,901)</b>								
601T Casualty resulting fm a collision which did not satisfy \$ threshold	41	28	6	34	---	1	4	2
602T Casualty resulting fm a derailment which did not satisfy \$ threshold	40	35	5	40	---	---	---	---
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	34	16	6	22	---	---	3	9
SUBTOTAL.....	115	79	17	96	---	1	7	11
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>								
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	2,208	67	7	74	---	---	1,816	318
610T Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp mov	146	12	---	12	---	---	117	17
SUBTOTAL.....	2,354	79	7	86	---	---	1,933	335
<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	106	16	1	17	---	---	6	83
702T Crossing track at private rail-highway crossing - equipment moving	7	1	---	1	1	---	1	4
703T Crossing track not at a crossing - equipment moving	61	2	1	3	---	---	4	54
704T While on public thoroughfare - equipment moving	4	---	2	2	---	---	2	2
705T On bridges or trestles - equipment moving	27	1	---	1	---	---	2	24
706T Sitting or lying on track or near track, not in clear - eqp moving	120	---	---	---	---	---	1	119
707T While working on or along track - equipment moving	21	12	7	19	---	---	1	1
708T Passing over, through, or under cars - equipment moving	55	---	---	---	---	---	2	53
709T Struck by or ran into loco/car (not at hwy x-ing), misc-eqp mov	41	---	2	2	---	---	6	33
SUBTOTAL.....	442	32	13	45	1	---	23	373
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>								
803T Striking or being struck by eqp, structures, or material-eqp mov	27	1	26	27	---	---	---	---
815T Moving equipment for repairs	25	1	24	25	---	---	---	---
825T Other acc/inc while servicing or maintaining eqp-eqp moving	21	1	20	21	---	---	---	---
SUBTOTAL.....	73	3	70	73	---	---	---	---
<b>MAINTENANCE OF WAY AND STRUCTURES</b>								
853T Striking or being struck by eqp, structures, or material-eqp mov	49	---	48	48	1	---	---	---
899T Other acc/incs while maintaining way and structures ~ eqp moving	31	---	31	31	---	---	---	---
SUBTOTAL.....	80	---	79	79	1	---	---	---
<b>FREIGHT, BAGGAGE, EXPRESS OR MAIL</b>								
901T Handling freight, baggage, express or mail-eqp moving	8	4	4	8	---	---	---	---
902T Struck or caught by shifted lading-eqp moving	3	1	---	1	---	---	---	2
903T Tripping over, or struck by falling baggage in passenger car-eqp mov	1	---	---	---	---	1	---	---
904T Other acc/inc involving freight, baggage, express, or mail - eqp mov	7	2	4	6	---	---	---	1
SUBTOTAL.....	19	7	8	15	---	1	---	3

**TABLE 67. (CONTINUED)**

Occurrence	Total Injured	Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<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	---	---	---	---
910T Closing or opening plug type car doors, defective equipment-eqp mov	2	---	2	2	---	---	---	---
912T Closing or opening coach trap doors-equipment moving	5	2	3	5	---	---	---	---
913T Interior doors-equipment moving	10	3	5	8	---	2	---	---
914T Opening or closing locomotive doors-equipment moving	22	22	---	22	---	2	---	---
915T Opening or closing locomotive windows-equipment moving	5	3	2	5	---	---	---	---
918T Opening and closing other windows-equipment moving	2	2	---	2	---	---	---	---
919T Other accidents/incidents involving windows or doors-eqp mov	19	11	4	15	2	2	---	---
SUBTOTAL.....	68	43	19	62	2	4	---	---
<b>PASSENGER CAR DOORS</b>								
920T Caught by side doors while entering coach-equipment moving	1	---	1	1	---	---	---	---
921T Caught by side doors while exiting coach-equipment moving	2	1	---	1	---	1	---	---
923T Dragged by train while caught in side doors, exiting coach	2	---	---	---	---	2	---	---
924T Struck by side doors while entering coach-equipment moving	1	---	---	---	---	1	---	---
926T Striking side door while entering coach-equipment moving	2	---	---	---	---	2	---	---
SUBTOTAL.....	8	1	1	2	---	6	---	---
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>								
930T Stumbling/slipping, etc. on snow or ice - equipment moving	12	10	2	12	---	---	---	---
931T Stumbling/slipping, etc. on foreign mat./irregular surface-eqp mov	39	31	7	38	---	---	---	1
932T Stumbling/slipping, etc. on parts of track in place-equipment moving	8	4	4	8	---	---	---	---
934T Slip/fall, etc. between loco/car and other cars and struct-eqp mov	12	3	1	4	---	1	---	7
935T From bridges of trestles-equipment moving	4	1	2	3	---	---	---	1
936T From structures other than bridges or trestles-equipment moving	1	---	1	1	---	---	---	---
937T Into depressions - equipment moving	6	5	1	6	---	---	---	---
938T While on locomotive or car-equipment moving	166	50	79	129	5	22	4	6
939T Other, stumbling, slipping, falling, caught, etc. - equipment moving	31	15	8	23	1	3	3	3
SUBTOTAL.....	279	119	105	224	6	24	7	18
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>								
940T Foreign object in eye-equipment moving	120	115	4	119	1	---	---	---
941T Struck by flying or falling object (except assaults)-eqp mov	21	12	4	16	---	4	1	---
942T Electrical flash, shock, or burn-equipment moving	2	---	---	---	---	1	---	1
943T Fire or explosion of fuses or torpedoes-equipment moving	7	7	---	7	---	---	---	---
945T Burned by hot or corrosive substances-equipment moving	14	12	2	14	---	---	---	---
946T Inhalation of or contact with fumes or gases-equipment moving	11	9	1	10	---	1	---	---
947T Electrical inj from contact with catenary, 3rd rail, etc., equipment moving	1	1	---	1	---	---	---	---
949T Other A/I resulting from flying/falling objs, burns, etc. - eqp mov	3	1	1	2	---	---	1	---
SUBTOTAL.....	179	157	12	169	1	6	2	1

**TABLE 67. (CONTINUED)**

Occurrence	Total Injured	Employees On Duty...			Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other	Total				
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>								
950T Collision with train or car	3	1	2	3	---	---	---	---
951T Collision with other on-track work equipment	14	---	14	14	---	---	---	---
952T Jumping from equipment in anticipation of a collision	15	1	14	15	---	---	---	---
953T Derailment that does not satisfy monetary threshold	17	1	15	16	---	---	1	---
954T Getting on/off on-track work equipment - equipment moving	6	3	2	5	---	---	1	1
959T Other A/I involving on-track work equipment - equipment moving	26	---	25	25	---	---	1	---
SUBTOTAL.....	81	6	72	78	---	---	2	1
<b>ASSAULT</b>								
96AT Shot while on moving on-track equipment	4	4	---	4	---	---	---	---
96CT Struck by other propelled object while on locomotive - equip moving	30	30	---	30	---	---	---	---
96DT Struck by other propelled object while on car - equip moving	3	3	---	3	---	---	---	---
96ET Struck by other propelled object while on caboose - equip moving	6	6	---	6	---	---	---	---
96GT Other unprovoked assaults to persons on moving on-track equipment	19	8	4	12	---	6	---	1
96JT Shot while on moving on-track equipment	1	1	---	1	---	---	---	---
96LT Other assaults connected with the protection of RR property - eqp moving	2	---	2	2	---	---	---	---
96MT All other assaults involving moving on-track equipment	1	---	1	1	---	---	---	---
SUBTOTAL.....	66	52	7	59	---	6	---	1
<b>OTHER OCCURRENCES</b>								
970T Performing rerailing or other clearing operations-equipment moving	1	---	1	1	---	---	---	---
971T Loco or car coming against car placed for loading or unloading	4	4	---	4	---	---	---	---
972T Sudden movement of car, not otherwise classified	35	14	13	27	3	5	---	---
974T Slack action in caboose	98	94	2	96	---	2	---	---
975T Slack action, other	68	66	2	68	---	---	---	---
976T Emergency or severe application of air brakes due to def eqp	4	4	---	4	---	---	---	---
977T Emergency or severe application of air brakes not due to def eqp	15	14	---	14	---	1	---	---
986T Unexpected move of caboose, not slack action (include emergency & severe brking)	11	10	1	11	---	---	---	---
988T Other accidents/incidents while in caboose, equipment moving	43	43	---	43	---	---	---	---
989T Other accidents/incidents-equipment moving	108	57	15	72	1	7	10	18
SUBTOTAL.....	387	306	34	340	4	13	12	18
<b>GRAND TOTAL.....</b>	<b>6,233</b>	<b>2,790</b>	<b>524</b>	<b>3,314</b>	<b>16</b>	<b>93</b>	<b>1,995</b>	<b>815</b>

NOTE: Contractor employees are included with nontrespassers

**TABLE 68. ILLNESS IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Illness	Employees On Duty...	Trainmen	Other	Total	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	30	30	---	---	30	---	---	---	---
119T Other accidents/incidents while operating locomotives - eqp moving	4	4	---	---	4	---	---	---	---
SUBTOTAL.....	34	34	---	---	34	---	---	---	---
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>									
507T Falling, slipping, tripping, not elsewhere classified - eqp moving	1	1	---	---	1	---	---	---	---
519T Other acc/inc while getting on or off cars or locos - equipment mov	1	1	---	---	1	---	---	---	---
SUBTOTAL.....	2	2	---	---	2	---	---	---	---
<b>COLLISIONS, DERAILMENTS, ETC.(&lt;= \$4,901)</b>									
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	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>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>									
943T Fire or explosion of fusees or torpedoes-equipment moving	1	1	---	---	1	---	---	---	---
944T Other fire or explosion-equipment moving	1	1	---	---	1	---	---	---	---
946T Inhalation of or contact with fumes or gases-equipment moving	9	8	---	---	8	1	---	---	---
SUBTOTAL.....	11	10	---	---	10	1	---	---	---
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>									
959T Other A/I involving on-track work equipment - equipment moving	2	---	1	1	1	---	---	---	---
SUBTOTAL.....	2	---	1	1	1	---	---	---	---
<b>OTHER OCCURRENCES</b>									
987T Caboose fire, equipment moving	1	1	---	---	1	---	---	---	---
989T Other accidents/incidents-equipment moving	5	3	1	4	1	---	---	---	---
SUBTOTAL.....	6	4	1	5	1	---	---	---	---
<b>GRAND TOTAL.....</b>	<b>58</b>	<b>53</b>	<b>2</b>	<b>55</b>	<b>3</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>

NOTE: Contractor employees are included with nontrespassers

## CASUALTIES IN NON-TRAIN INCIDENTS

**TABLE 69. FATALITIES IN NON-TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Killed	Employees Trainmen	On Duty... Other	Total	Emp On Duty	Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>OPERATING SWITCHES OR DERAILS</b>									
306 Lining switches, no defects	1	1	---	1	---	---	---	---	---
SUBTOTAL.....	1	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	6	---	---	---	---	---	---	6	---
610 Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp std	1	---	---	---	---	---	---	1	---
SUBTOTAL.....	7	---	---	---	---	---	---	7	---
<b>STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)</b>									
701 Standing, walking or running on or along track - equipment standing	3	1	---	1	---	---	---	2	4
703 Crossing track not at a crossing - equipment standing	1	---	---	---	---	---	---	1	1
709 Struck by or ran into loco/car (not at hwy x-ing), misc-eqp std	1	---	---	---	---	---	---	1	1
SUBTOTAL.....	5	1	---	1	---	---	---	4	4
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>									
803 Striking or being struck by eqp, structures, or material-eqp std	1	---	1	1	---	---	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---	---	---
<b>MAINTENANCE OF WAY AND STRUCTURES</b>									
860 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	1	1	---	---	---	---	---
899 Other accs/incs while maintaining way and structures - eqp standing	3	---	3	3	---	---	---	---	---
SUBTOTAL.....	4	---	4	4	---	---	---	---	---
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>									
935 From bridges or trestles	4	---	---	---	---	---	---	---	4
936 From structures other than bridges or trestles	1	---	---	---	---	---	---	1	1
938 While on locomotive or car-equipment standing	1	---	---	---	---	---	---	1	1
939 Other, stumbling, slipping, falling, caught, etc.	1	---	---	---	---	---	---	1	1
SUBTOTAL.....	7	---	---	---	---	---	---	1	6
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>									
947 Electrical injury due to contact with catenary, pantograph or 3rd rail	4	---	---	---	---	---	---	---	4
SUBTOTAL.....	4	---	---	---	---	---	---	---	4
<b>ASSAULT</b>									
968 Shooting incidents not involving persons on on-track equipment	1	---	1	1	---	---	---	---	---
96N Injuries sustained by ther perpetrator of an assault	1	---	---	---	---	---	---	1	1
SUBTOTAL.....	2	---	1	1	---	---	---	1	1
<b>OTHER OCCURRENCES</b>									
970 Performing rerailing or other clearing operations	1	---	---	---	---	---	---	1	1
978 Motor vehicle acc/inc (other than rail-highway grade crossing)	11	1	6	7	---	---	---	1	3
989 Other accidents/incidents	11	---	---	---	---	---	---	1	10
SUBTOTAL.....	23	1	6	7	---	---	---	3	13
GRAND TOTAL.....	54	3	12	15	---	---	---	11	28

NOTE: Contractor employees are included with nontrespassers

**TABLE 70. INJURIES IN NON-TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Injured	Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>								
002 Adjusting coupler - equipment standing	201	191	10	201	---	---	---	---
003 Crossing over, under or between on-track equipment, equipment standing	15	13	2	15	---	---	---	---
004 Adjusting coupler, part of coupler fell striking person-eqp standing	28	28	---	28	---	---	---	---
005 Use of uncoupling lever - equipment standing	64	58	6	64	---	---	---	---
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	71	68	3	71	---	---	---	---
009 Other acc/inc while coupling/uncoupling cars or locos - equip std	90	82	8	90	---	---	---	---
<b>SUBTOTAL.....</b>	<b>502</b>	<b>470</b>	<b>32</b>	<b>502</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<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	22	19	3	22	---	---	---	---
053 Coupling air hose,stk by hose due to sudden release of air - eqp std	24	20	4	24	---	---	---	---
054 Stumbled, slipped, fell, or stepped on foreign obj, etc., eqp standing	52	42	9	51	1	---	---	---
055 Defective equipment - equipment standing	9	6	3	9	---	---	---	---
057 Opening or closing angle cocks - equipment standing	45	41	4	45	---	---	---	---
059 Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp std	122	102	20	122	---	---	---	---
<b>SUBTOTAL.....</b>	<b>280</b>	<b>236</b>	<b>43</b>	<b>279</b>	<b>1</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>OPERATING OR ON LOCOMOTIVES</b>								
101 Burn or electrical shock - equipment standing	10	7	3	10	---	---	---	---
102 Striking parts of body against equipment, moving about loco-eqp std	55	50	5	55	---	---	---	---
103 Struck by tools or other objects falling - equipment standing	18	10	8	18	---	---	---	---
104 Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp std	115	110	5	115	---	---	---	---
105 Checking, oiling, servicing locomotive, etc. - equipment standing	33	22	11	33	---	---	---	---
109 Inhalation of or contact with fumes or gases - equipment standing	26	25	1	26	---	---	---	---
110 Defective locomotive seat - equipment standing	36	34	1	35	1	---	---	---
111 Adjusting locomotive seat - equipment standing	32	30	2	32	---	---	---	---
112 Foreign object in eye - equipment standing	86	86	---	86	---	---	---	---
119 Other accidents/incidents while operating locomotives - eqp standing	92	86	5	91	1	---	---	---
<b>SUBTOTAL.....</b>	<b>503</b>	<b>460</b>	<b>41</b>	<b>501</b>	<b>2</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>OPERATING RAIL MOTORCARS</b>								
151 Striking parts of body against equipment - equipment standing	2	---	2	2	---	---	---	---
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	4	2	2	4	---	---	---	---
155 Placing or removing rail motorcar on or off rail	12	---	12	12	---	---	---	---
159 Other accidents/incidents while operating rail motorcars - eqp std	6	5	1	6	---	---	---	---
<b>SUBTOTAL.....</b>	<b>25</b>	<b>7</b>	<b>18</b>	<b>25</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>

**TABLE 70. (CONTINUED)**

Occurrence	Total Injured	Employees Trainmen	Other	On Duty...	Total	Emp Not On Duty	Passen- gers	Nonres- passers	Tres- passers
<b>OPERATING HAND BRAKES</b>									
200 Manipulating hand brakes, no defects, equipment standing	208	190	18	208	---	---	---	---	---
201 Defective equipment - equipment standing	39	36	3	39	---	---	---	---	---
202 Paul slipping or accidentally knocked out of ratchet - eqp standing	2	2	---	2	---	---	---	---	---
203 Striking body not due to movement of equipment	17	17	---	17	---	---	---	---	---
205 Caught between parts of equipment or lading - equipment standing	8	8	---	8	---	---	---	---	---
206 Brake chains or bolts, breaking or giving way - equipment standing	7	7	---	7	---	---	---	---	---
207 Losing hold, slipping, or falling - equipment standing	39	38	1	39	---	---	---	---	---
208 Caught hand or fingers in spinning brake wheel - equipment standing	11	10	1	11	---	---	---	---	---
209 Other accidents/incidents while operating hand brakes - eqp standing	43	39	4	43	---	---	---	---	---
SUBTOTAL.....	374	347	27	374	---	---	---	---	---
<b>OPERATING SWITCHES OR DERAILS</b>									
301 Slipped, tripped or fell due to ice or snow	34	34	---	34	---	---	---	---	---
302 Slipped, tripped or fell not due to ice or snow	44	43	1	44	---	---	---	---	---
303 Parts of body struck or caught by mechanism of switch	46	40	6	46	---	---	---	---	---
305 Lining switches, defective equipment	177	168	9	177	---	---	---	---	---
306 Lining switches, no defects	565	527	38	565	---	---	---	---	---
307 Manipulating derail, no defects	23	17	6	23	---	---	---	---	---
308 Manipulating derail, defective equipment	6	4	2	6	---	---	---	---	---
309 Other acc/inc while operating switches/derails - equipment standing	121	107	14	121	---	---	---	---	---
SUBTOTAL.....	1,016	940	76	1,016	---	---	---	---	---
<b>CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS</b>									
401 Persons on top locos/cars contacting fixed objects - equipment std	3	1	---	1	---	---	1	1	1
402 Persons on side/end of locos/cars contacting fixed objects - eqp std	5	4	1	5	---	---	---	---	---
409 Persons on loco/car coming in contact with fixed obj(other)-eqp std	14	9	4	13	---	---	1	---	---
SUBTOTAL.....	22	14	5	19	---	---	2	1	1
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>									
501 Slip/fall due to lost/missed hold of grabiron,handhold,etc.-eqp std	75	47	26	73	---	1	1	1	---
502 Slip/fall due to losing/missing footing on step,stirrup,etc.-eqp std	162	121	32	153	2	7	---	---	---
503 Stepping or tripping on parts of track in place - equipment standing	40	34	3	37	---	---	3	---	---
504 Stepping or tripping on foreign material or irreg surface - eqp std	248	211	34	245	1	1	1	1	---
505 Slipping on ice or snow on ground - equipment standing	31	24	6	30	1	---	---	---	---
506 Slipping on ice/snow on cars or locomotives - equipment standing	25	22	1	23	1	---	1	1	---
507 Falling, slipping, tripping, not elsewhere classified - eqp std	122	77	30	107	2	7	6	6	---
508 Slipping/falling while boarding/alighting fm passenger eqp(standing)	100	31	8	39	3	51	7	7	---
511 Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp std	26	15	4	19	1	6	---	---	---
513 Jumping from equipment - equipment standing	9	4	1	5	---	2	1	1	1
514 Defective equipment - equipment standing	21	15	4	19	---	2	1	1	---
519 Other acc/inc while getting on or off cars or locos - equipment std	186	156	25	181	1	2	1	1	1
SUBTOTAL.....	1,045	757	174	931	12	79	21	2	2

**TABLE 70. (CONTINUED)**

Occurrence	Total Injured	Employees Trainmen	On Duty... Other	Total	Emp Net On Duty	Passen- gers	Nonres- passers	Tres- passers
<b>RAIL-HIGHWAY CROSSING ACCIDENTS/INCIDENTS</b>								
609 Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp std	81	---	---	---	---	---	76	5
610 Casualty at private rail-hwy X-ing (Not rptd on form 6180-54)-eqp std	2	---	---	---	---	---	2	---
SUBTOTAL.....	83	---	---	---	---	---	78	5
<b>STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT RAIL-HWY X-INGS)</b>								
701 Standing, walking or running on or along track - equipment standing	8	2	5	7	---	---	1	---
703 Crossing track not at a crossing - equipment standing	4	---	1	1	---	---	---	3
708 Passing over, through, or under cars - equipment standing	5	2	---	2	---	---	---	3
709 Struck by or ran into loco/car (not at hwy x-ing), misc-eqp std	7	---	1	1	---	---	1	5
SUBTOTAL.....	24	4	7	11	---	---	2	11
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>								
802 Crossing over, under, or between locos or cars - equipment standing	24	1	23	24	---	---	---	---
803 Striking or being struck by eqp, structures, or material-eqp std	355	10	341	351	2	---	2	---
804 Use of hand tools	474	4	465	469	1	---	4	---
805 Use of portable power tools	116	---	115	115	---	---	1	---
806 Use of welding equipment	72	---	71	71	---	---	1	---
807 Use of oxygen-acetylene, natural gas cutting equipment	76	1	73	74	---	---	2	---
808 Use of grinding equipment	30	---	30	30	---	---	---	---
809 Use of scaffolds, ladders, etc.	73	---	69	69	---	---	4	---
810 Lifting parts to install while making repairs	170	2	167	169	---	---	1	---
811 Use of cranes, hoists, derricks, piledrivers, etc.	79	---	79	79	---	---	---	---
811 Use of lift trucks and other portable material handling eqp	75	---	74	74	---	---	1	---
812 Use of shop machinery not elsewhere classified	83	---	83	83	---	---	---	---
813 Loading and unloading materials	152	6	146	152	---	---	---	---
814 Handling material by hand	558	10	548	558	---	---	---	---
816 Inhalation of or contact with fumes or gases	13	2	11	13	---	---	---	---
817 Foreign object in eye, using eye protection	198	4	194	198	---	---	---	---
818 Foreign object in eye, not using eye protection	77	4	71	75	2	---	---	---
819 Struck by flying or falling object	207	5	202	207	---	---	---	---
820 Electrical flash, shock, or burn	40	---	40	40	---	---	---	---
821 Fire or explosion of fuses or torpedoes	3	---	3	3	---	---	---	---
822 Other fire or explosion	12	---	11	11	---	---	1	---
823 Burned or irritated by hot, corrosive, or toxic substances	67	---	66	66	1	---	---	---
824 Stumbling, slipping, falling, caught, not elsewhere classified	727	18	688	706	21	---	---	---
825 Other acc/inc while servicing or maintaining eqp-eqp std	800	20	773	793	2	---	5	---
SUBTOTAL.....	4,481	87	4,343	4,430	29	---	22	---

**TABLE 70. (CONTINUED)**

Occurrence	Total Injured	Employees			On Duty... Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
		Trainmen	Other						
<b>MAINTENANCE OF WAY AND STRUCTURES</b>									
852 Crossing over, under, or between locos or cars-eqp std	8	---	8	8	---	---	---	---	---
853 Striking or being struck by eqp, structures, or material-eqp std	384	1	374	375	1	---	8	---	---
854 Use of hand tools	702	1	699	700	---	---	2	---	---
855 Use of portable power tools	217	1	215	216	---	---	1	---	---
856 Use of welding equipment	49	---	49	49	---	---	---	---	---
857 Use of oxygen-acetylene, natural gas cutting equipment	25	---	25	25	---	---	---	---	---
858 Use of grinding equipment	60	---	60	60	---	---	---	---	---
859 Use of scaffolds, ladders, etc.	42	1	37	38	---	---	4	---	---
860 Use of cranes, hoists, derricks, piledrivers, etc.	105	---	103	103	---	---	2	---	---
861 Use of lift trucks and other portable material handling eqp	54	---	54	54	---	---	---	---	---
862 Use of shop machinery not elsewhere classified	19	---	19	19	---	---	---	---	---
863 Loading and unloading materials	430	3	426	429	---	---	1	---	---
864 Handling material by hand	612	6	605	611	---	---	1	---	---
866 Inhalation of or contact with fumes or gases	9	3	5	8	1	---	---	---	---
867 Foreign object in eye, using eye protection	127	22	125	127	---	---	---	---	---
868 Foreign object in eye, not using eye protection	75	5	66	71	3	---	1	---	---
869 Struck by flying of falling object	268	2	266	268	---	---	---	---	---
870 Electrical flash, shock, or burn	35	---	34	34	---	---	1	---	---
871 Fire or explosion of fuses or torpedoes	3	2	1	3	---	---	---	---	---
872 Other fire or explosion	8	---	6	6	2	---	---	---	---
873 Burned or irritated by hot, corrosive or toxic substances	45	3	42	45	---	---	---	---	---
874 Stumbling, slipping, falling, caught, not elsewhere classified	711	7	682	689	18	---	4	---	---
875 Use of maintenance of way equipment not elsewhere classified	139	---	138	138	---	---	1	---	---
876 Inserting or removing ties, switch timbers and tie plates by use of hand tools	217	---	214	214	---	---	3	---	---
877 Insert/remove ties, switch timbers and tie plates using portable power tools	40	---	40	40	---	---	---	---	---
878 Loading/unloading ties, switch timbers, tie plates and fastenings	158	---	155	155	---	---	3	---	---
879 Handling rail by use of power tools	38	---	38	38	---	---	---	---	---
880 Handling rail by use of hand tools	124	1	121	122	---	---	2	---	---
890 Handling/inserting/removing rail anchors (includes being struck by anchors)	123	---	123	123	---	---	---	---	---
891 Handling/inserting/removing track spikes (includes being struck by flying spike)	306	1	303	304	---	---	2	---	---
892 Working on or about sgnl or comm. poles, sgnl masts, sgnl cantilevers or catenary	115	1	113	114	---	---	1	---	---
893 Servicing or repairing MDW equipment at work site	126	2	122	124	1	---	1	---	---
899 Other accs/incs while maintaining way and structures - eqp standing	499	2	433	435	62	---	2	---	---
SUBTOTAL.....	5,873	44	5,701	5,745	88	---	40	---	---
<b>FREIGHT, BAGGAGE, EXPRESS OR MAIL</b>									
901 Handling freight, baggage, express or mail	81	10	71	81	---	---	---	---	---
903 Tripping over, or struck by falling baggage in passenger car-eqp std	1	---	1	1	---	---	---	---	---
904 Other accident/incident involving freight, baggage, express, or mail	24	1	20	21	1	---	2	---	---
SUBTOTAL.....	106	11	92	103	1	---	2	---	---

**TABLE 70. (CONTINUED)**

Occurrence		Total	Injured	Employees	On Duty	Trainmen	Other	Total	Emp	Not	Passen-	Nontres-	Tres-
										On Duty	On Duty	gers	passers
<b>WINDOWS, DOORS, ETC., ON ON-TRACK EQUIPMENT</b>													
907	Opening/closing hopper or gondola hatches, end or bottom doors, eqp standing	46	2	44	46	---	---	---	---	---	---	---	---
908	Clo/ope frt/bag car doors, exc plug type car doors, def eqp-eqp std	14	3	10	13	---	---	---	---	1	---	---	---
909	Clo/ope frt/bag car doors, exc plug type car doors, no def-eqp std	32	4	24	28	---	---	---	---	4	---	---	---
910	Closing or opening plug type car doors, defective equipment-eqp std	17	3	14	17	---	---	---	---	---	---	---	---
911	Closing or opening plug type car doors, no defects-equipment std	32	4	28	32	---	---	---	---	---	---	---	---
912	Closing or opening coach trap doors-equipment standing	19	13	4	17	1	1	1	1	---	---	---	---
913	Interior doors-equipment standing	40	28	10	38	---	2	2	---	---	---	---	---
914	Opening or closing locomotive doors-equipment standing	36	31	5	36	---	---	---	---	---	---	---	---
915	Opening or closing locomotive windows-equipment standing	3	3	---	3	---	---	---	---	---	---	---	---
916	Opening or closing caboose doors-equipment standing	4	4	---	4	---	---	---	---	---	---	---	---
917	Opening or closing caboose windows-equipment standing	4	2	2	4	---	---	---	---	---	---	---	---
918	Opening and closing other windows	3	3	---	3	---	---	---	---	---	---	---	---
919	Other accidents/incidents involving windows or doors	75	29	40	69	1	1	1	1	4	---	---	---
	<b>SUBTOTAL.....</b>	<b>325</b>	<b>129</b>	<b>181</b>	<b>310</b>	<b>2</b>	<b>4</b>	<b>9</b>	<b>---</b>				
<b>PASSENGER CAR DOORS</b>													
920	Caught by side doors while entering coach-equipment standing	2	---	---	---	---	---	---	1	1	1	1	---
921	Caught by side doors while exiting coach-equipment standing	11	1	2	3	---	6	6	2	2	2	2	---
924	Struck by side doors while entering coach-equipment standing	8	2	---	2	---	5	5	1	1	1	1	---
925	Struck by side doors while exiting coach-equipment standing	3	---	---	---	---	3	3	---	---	---	---	---
	<b>SUBTOTAL.....</b>	<b>24</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>---</b>	<b>15</b>	<b>4</b>	<b>---</b>				
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>													
930	Stumbling/slipping, etc. on snow or ice	313	132	124	256	37	2	18	---	---	---	---	---
931	Stumbling/slipping, etc. on foreign material or irregular surface	629	342	247	589	18	1	19	1	19	2	2	2
932	Stumbling/slipping, etc. on parts of track in place	155	84	60	144	4	---	5	5	5	2	2	2
933	Stumbling/slipping, etc. on stairways, ramps or platforms	399	61	115	176	43	17	161	17	161	2	2	2
934	Slip/fall, etc. between loco/car and other cars and struct-eqp std	39	23	7	30	---	6	2	2	2	1	1	1
935	From bridges or trestles	36	8	21	29	1	---	3	3	3	3	3	3
936	From structures other than bridges or trestles	21	6	10	14	1	---	4	4	4	2	2	2
937	Into depressions	89	49	35	84	4	---	1	1	1	1	1	1
938	While on locomotive or car-equipment standing	159	46	64	110	---	13	16	13	16	16	16	16
939	Other, stumbling, slipping, falling, caught, etc.	274	88	119	207	21	4	39	4	39	3	3	3
	<b>SUBTOTAL.....</b>	<b>2,094</b>	<b>837</b>	<b>802</b>	<b>1,639</b>	<b>129</b>	<b>43</b>	<b>268</b>	<b>15</b>				

**TABLE 70. (CONTINUED)**

Occurrence	Total Injured	... Employees Trainmen	Other	On Duty... Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>								
940 Foreign object in eye	272	201	58	259	7	1	5	---
941 Struck by flying or falling object (except assaults)	90	27	46	73	2	---	15	---
942 Electrical flash, shock, or burn	7	3	2	5	---	---	1	1
943 Fire or explosion of fuses or torpedoes	5	4	1	5	---	---	---	---
944 Other fire or explosion	4	---	1	1	2	---	1	---
945 Burned by hot or corrosive substances	20	12	5	17	---	1	2	---
946 Inhalation of or contact with fumes or gases	54	41	9	50	1	---	1	2
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.	28	14	8	22	---	---	5	1
SUBTOTAL.....	490	302	130	432	12	3	30	13
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>								
954 Getting on/off on-track work equipment - equipment standing	34	2	30	32	1	---	1	---
959 Other A/I involving on-track work equipment - equipment standing	35	---	35	35	---	---	---	---
SUBTOTAL.....	69	2	65	67	1	---	1	---
<b>ASSAULT</b>								
96A Shot while on standing on-track equipment	3	2	---	2	1	---	---	---
96B Shooting incidents not involving persons on on-track equipment	4	1	2	3	1	---	---	---
96C Struck by other propelled object while on locomotive - equip standing	10	10	---	10	---	---	---	---
96E Struck by other propelled object while on caboose - equip standing	3	3	---	3	---	---	---	---
96F Struck by other propelled object, not on on-track equipment	4	2	1	3	1	---	---	---
96G All other unprovoked assaults	68	27	28	55	6	1	5	1
96J Shot while on standing on-track equipment	1	1	---	1	---	---	---	---
96K Shooting incidents that did not involve persons on on-track equipment	2	1	---	1	---	1	---	---
96L Other assaults connected with the protection of RR property - eqp standing	29	2	27	29	---	---	---	---
96M All other assaults not involving moving on-track equipment	61	9	51	60	1	---	---	---
96N Injuries sustained by ther perpetrator of an assault	3	---	1	1	1	---	---	1
SUBTOTAL.....	188	58	110	168	11	2	5	2
<b>OTHER OCCURRENCES</b>								
970 Performing rerailing or other clearing operations	30	6	23	29	---	---	1	---
978 Motor vehicle acc/inc (other than rail-highway grade crossing)	674	199	402	601	30	---	28	15
979 Servicing and maintenance of highway vehicles	14	---	14	14	---	---	---	---
980 Horseplay	21	4	13	17	1	2	---	1
981 Animal bites, including snake bites	15	4	10	14	1	---	---	---
982 Insect bites	194	57	127	184	9	1	---	---
983 Incidents occurring in office setting involving clerical, staff, etc., personnel	433	8	412	420	13	---	---	---
984 Contact with poisonous plants	40	1	39	40	---	---	---	---
985 Stepping on nails or other sharp objects	58	17	34	51	4	---	3	---
988 Other accidents/incidents while in caboose, equipment standing	18	18	---	18	---	---	---	---
989 Other accidents/incidents	732	259	289	548	41	4	120	19
SUBTOTAL.....	2,229	573	1,363	1,936	99	7	152	35
<b>GRAND TOTAL.....</b>	<b>19,753</b>	<b>5,281</b>	<b>13,212</b>	<b>18,493</b>	<b>387</b>	<b>153</b>	<b>636</b>	<b>84</b>

NOTE: Contractor employees are included with nontrespassers

**TABLE 71. ILLNESSES IN NON-TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON**

Occurrence	Total Illness	Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Nontres- passers	Tres- passers
<b>COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>								
002 Adjusting coupler - equipment standing	3	3	---	3	---	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---	---
<b>COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.</b>								
059 Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp std	3	3	---	3	---	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---	---
<b>OPERATING OR ON LOCOMOTIVES</b>								
104 Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp std	1	---	1	1	---	---	---	---
109 Inhalation of or contact with fumes or gases - equipment standing	25	24	1	25	---	---	---	---
119 Other accidents/incidents while operating locomotives - eqp standing	2	2	---	2	---	---	---	---
SUBTOTAL.....	28	26	2	28	---	---	---	---
<b>OPERATING HAND BRAKES</b>								
200 Manipulating hand brakes, no defects, equipment standing	3	2	1	3	---	---	---	---
209 Other accidents/incidents while operating hand brakes - eqp standing	1	1	---	1	---	---	---	---
SUBTOTAL.....	4	3	1	4	---	---	---	---
<b>OPERATING SWITCHES OR DERAILS</b>								
306 Lining switches, no défauts	2	1	1	2	---	---	---	---
309 Other acc/inc while operating switches/derails - equipment standing	2	2	---	2	---	---	---	---
SUBTOTAL.....	4	3	1	4	---	---	---	---
<b>GETTING ON OR OFF CARS OR LOCOMOTIVES</b>								
504 Stepping or tripping on foreign material or irreg surface - eqp std	2	2	---	2	---	---	---	---
519 Other acc/inc while getting on or off cars or locos - equipment std	1	1	---	1	---	---	---	---
SUBTOTAL.....	3	3	---	3	---	---	---	---
<b>SERVICING OR MAINTENANCE OF EQUIPMENT</b>								
803 Striking or being struck by eqp, structures, or material-eqp std	2	---	2	2	---	---	---	---
804 Use of hand tools	5	---	4	4	1	---	---	---
805 Use of portable power tools	2	---	2	2	---	---	---	---
806 Use of welding equipment	6	---	6	6	---	---	---	---
808 Use of grinding equipment	1	---	1	1	---	---	---	---
810 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	1	1	---	---	---	---
812 Use of shop machinery not elsewhere classified	1	---	1	1	---	---	---	---
814 Handling material by hand	3	---	3	3	---	---	---	---
816 Inhalation of or contact with fumes or gases	10	---	10	10	---	---	---	---
817 Foreign object in eye, using eye protection	2	---	2	2	---	---	---	---
820 Electrical flash, shock, or burn	2	---	2	2	---	---	---	---
823 Burned or irritated by hot, corrosive, or toxic substances	5	---	5	5	---	---	---	---
824 Stumbling, slipping, falling, caught, not elsewhere classified	3	---	3	3	---	---	---	---
825 Other acc/inc while servicing or maintaining eqp-eqp std	28	1	26	27	1	---	---	---
SUBTOTAL.....	71	1	68	69	2	---	---	---

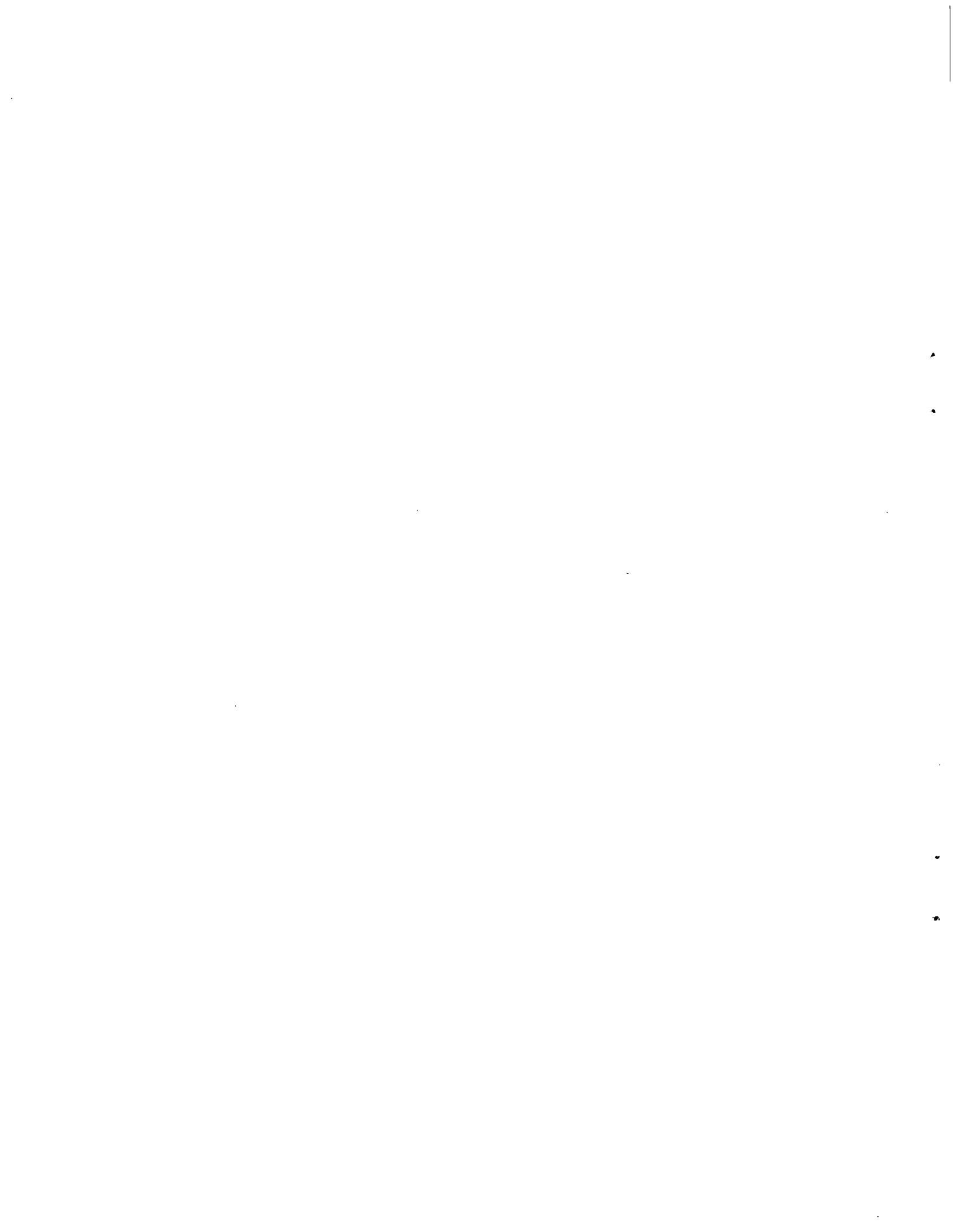
**TABLE 71. (CONTINUED)**

Occurrence	Total	Illness	Employees	On Duty	Total	Emp Not	Passen-	Nontres-	Tres-
			Trainmen	Other		On Duty	gers	passers	passers
<b>MAINTENANCE OF WAY AND STRUCTURES</b>									
853 Striking or being struck by eqp, structures, or material-eqp std	1	---		1	1	---	---	---	---
854 Use of hand tools	8	---		8	8	---	---	---	---
855 Use of portable power tools	2	---		2	2	---	---	---	---
856 Use of welding equipment	4	---		4	4	---	---	---	---
860 Use of cranes, hoists, derricks, piledrivers, etc.	1	---		1	1	---	---	---	---
863 Loading and unloading materials	3	---		3	3	---	---	---	---
864 Handling material by hand	4	---		4	4	---	---	---	---
866 Inhalation of or contact with fumes or gases	12	1	11		12	---	---	---	---
869 Struck by flying of falling object	1	---		1	1	---	---	---	---
870 Electrical flash, shock, or burn	2	---		2	2	---	---	---	---
873 Burned or irritated by hot, corrosive or toxic substances	6	---		6	6	---	---	---	---
875 Use of maintenance of way equipment not elsewhere classified	4	---		4	4	---	---	---	---
876 Inserting or removing ties, switch timbers and tie plates by use of hand tools	3	---		3	3	---	---	---	---
877 Insert/remove ties, switch timbers and tie plates using portable power tools	4	---		4	4	---	---	---	---
880 Handling rail by use of hand tools	1	---		1	1	---	---	---	---
890 Handling/inserting/removing rail anchors (includes being struck by anchors)	3	---		3	3	---	---	---	---
891 Handling/inserting/removing track spikes (includes being struck by flying spike)	3	---		3	3	---	---	---	---
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	48	1	47		48	---	---	---	---
SUBTOTAL.....	112	2	110		112	---	---	---	---
<b>STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED</b>									
931 Stumbling/slipping, etc. on foreign material or irregular surface	1	1	---		1	---	---	---	---
SUBTOTAL.....	1	1	---		1	---	---	---	---
<b>FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.</b>									
942 Electrical flash, shock, or burn	1	1	---		1	---	---	---	---
944 Other fire or explosion	1	---		1	1	---	---	---	---
946 Inhalation of or contact with fumes or gases	46	38	8		46	---	---	---	---
949 Other acc/inc resulting from flying/falling objs, burns, etc.	5	1	4		5	---	---	---	---
SUBTOTAL.....	53	40	13		53	---	---	---	---
<b>OPERATION OF ON-TRACK WORK EQUIPMENT</b>									
959 Other A/I involving on-track work equipment - equipment standing	1	---		1	1	---	---	---	---
SUBTOTAL.....	1	---		1	1	---	---	---	---
<b>ASSAULT</b>									
96L Other assaults connected with the protection of RR property - eqp standing	1	---		1	1	---	---	---	---
96M All other assaults not involving moving on-track equipment	2	---		2	2	---	---	---	---
SUBTOTAL.....	3	---		3	3	---	---	---	---
<b>OTHER OCCURRENCES</b>									
970 Performing rerailing or other clearing operations	1	---		1	1	---	---	---	---
982 Insect bites	1	---		1	1	---	---	---	---
983 Incidents occurring in office setting involving clerical, staff, etc., personnel	15	1	13		14	1	---	---	---
984 Contact with poisonous plants	51	6	42		48	3	---	---	---
989 Other accidents/incidents	34	16	15		31	2	---	1	---
SUBTOTAL.....	102	23	71		94	7	---	1	---
GRAND TOTAL.....	388	108	270		378	9	---	1	---

NOTE: Contractor employees are included with nontrespassers

**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 1988 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 \$5,200 in damages to railroad on-track equipment, signals, track, track structures, and roadbed; and
- (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.** Any 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 based on 1978 dollars.

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

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

Consist. On-track railroad equipment such as a 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.

**Nontrespassers.** 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 employment 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.

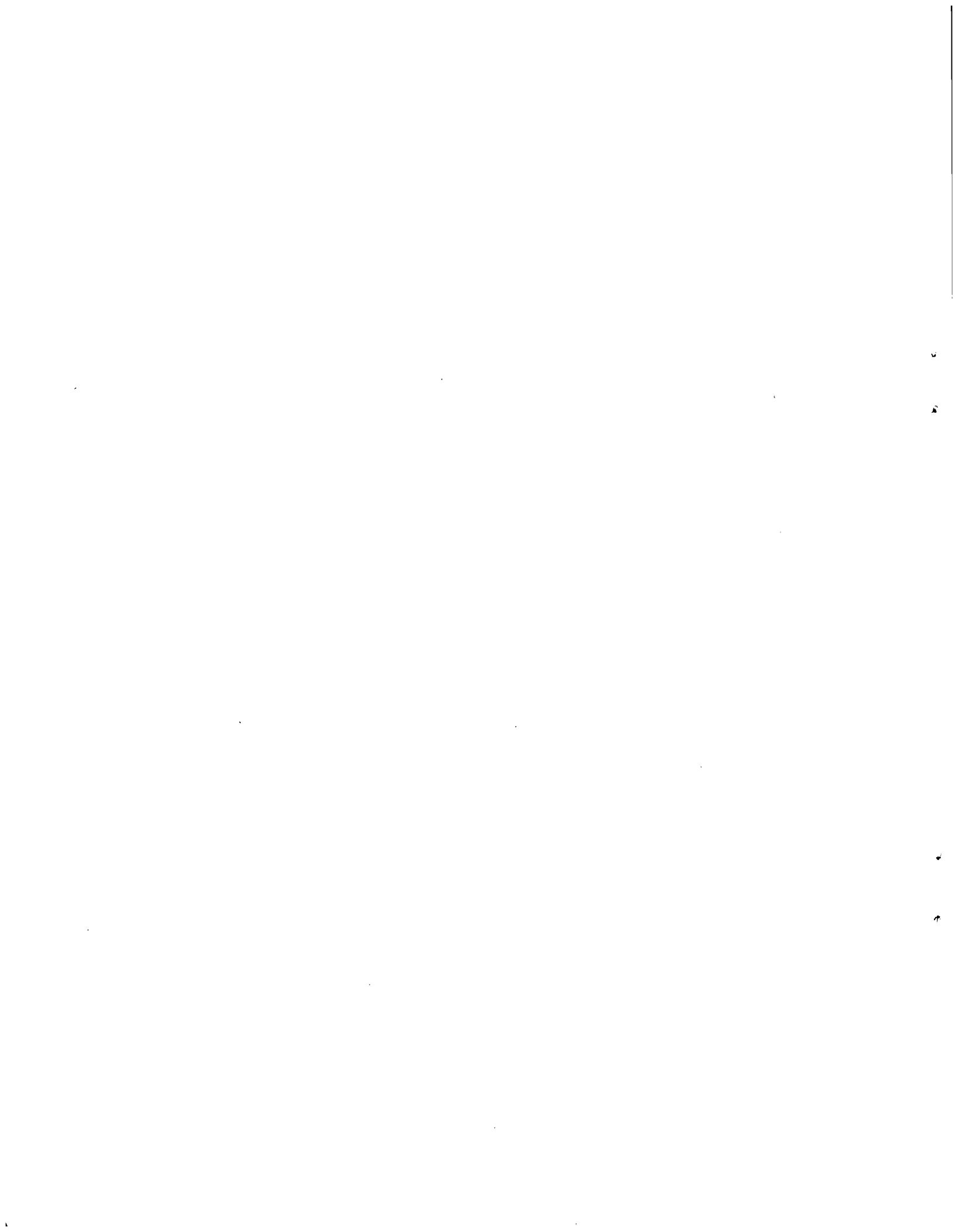
Trainmen. Persons employed as engineers and motormen, firemen and helpers, conductors, brakemen, and flagmen engaged in passenger, freight, yard or work service, and train baggagemen. Prior to 1984 this category did not include hostlers. The Interstate Commerce Commission revised the occupational groupings in 1984 and now includes hostlers in the train and engine category.

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

Trespasser. Any person whose presence on railroad property, used in railroad operation, 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)											
<p><b>6.</b>          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.</p>																	
<p>Subscribed and sworn to before me, a notary public in and for the State and County aforesaid, this _____ day of _____, 19 _____.          (Use an impression seal) _____ (Notary Public) _____ (Signature of affiant)</p>																	
<p><b>7. MILES RUN DURING MONTH</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">A. LOCOMOTIVE TRAIN MILES</th> <th style="width: 25%;">B. MOTOR TRAIN MILES</th> <th style="width: 25%;">C. YARD SWITCHING MILES</th> <th style="width: 25%;">D. TOTAL</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>										A. LOCOMOTIVE TRAIN MILES	B. MOTOR TRAIN MILES	C. YARD SWITCHING MILES	D. TOTAL				
A. LOCOMOTIVE TRAIN MILES	B. MOTOR TRAIN MILES	C. YARD SWITCHING MILES	D. TOTAL														
<p><b>8.</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">A. EMPLOYEE MANHOURS WORKED</th> <th style="width: 33%;">B. PASSENGER MILES OPERATED</th> <th style="width: 33%;">C. NUMBER OF PASSENGERS TRANSPORTED</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>										A. EMPLOYEE MANHOURS WORKED	B. PASSENGER MILES OPERATED	C. NUMBER OF PASSENGERS TRANSPORTED					
A. EMPLOYEE MANHOURS WORKED	B. PASSENGER MILES OPERATED	C. NUMBER OF PASSENGERS TRANSPORTED															
<b>TOTAL TRAIN ACCIDENTS</b>				<b>TOTAL FRA FORMS 6180-55A</b>		<b>TOTAL FRA FORMS 6180-54</b>		<b>TOTAL FRA FORMS 6180-57</b>									
<b>SECTION A—RECAPITULATION OF ALL CASUALTIES INCLUDING HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES</b>						<b>CLASS OF PERSON FOR SECTIONS A AND B</b>	<b>SECTION B—RECAPITULATION OF ALL HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES</b>										
<b>TRAIN ACCIDENTS</b>		<b>TRAIN INCIDENTS</b>		<b>NONTRAIN INCIDENTS</b>			<b>TOTAL</b>		<b>TRAIN ACCIDENTS</b>		<b>TRAIN INCIDENTS</b>		<b>NONTRAIN INCIDENTS</b>		<b>TOTAL</b>		
Kid	Inj	Kid	Inj	Kid	Inj		Kid	Inj	Kid	Inj	Kid	Inj	Kid	Inj	Kid	Inj	
<b>SECTION C—MEMORANDUM—SUBSEQUENT FATALITIES DEVELOPED FROM REPORTED CASUALTIES</b>																	
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.

**DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION**

**RAILROAD INJURY  
AND  
ILLNESS SUMMARY  
(CONTINUATION SHEET)**

**FORM APPROVED**  
**OMB NO. 04R4035**

SHEET        OF

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

—  
9.

**CASUALTIES (Cont.)**

## RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT

1. NAME OF REPORTING RAILROAD		Amtrak	1a. Alphabetic Code	1b. Railroad Accident/Incident No.			
		Autotrain					
2. NAME OF OTHER RAILROAD INVOLVED IN TRAIN ACCIDENT/INCIDENT			2a. Alphabetic Code	2b. Railroad Accident/Incident No.			
3. NAME OF RAILROAD RESPONSIBLE FOR TRACK MAINTENANCE (single entry)			3a. Alphabetic Code	3b. Railroad Accident/Incident No.			
4. U.S. DOT-AAR GRADE CROSSING IDENTIFICATION NUMBER		5. DATE OF ACCIDENT/INCIDENT month      day      year	6. TIME OF ACCIDENT/INCIDENT am <input type="checkbox"/> pm <input type="checkbox"/>				
7. TYPE OF ACCIDENT/INCIDENT (enter number in code box; single entry)		CODE					
1. Derailment	3. Rear end collision	5. Raking collision	7. Rail-Hwy crossing	9. Obstruction			
2. Head on collision	4. Side collision	6. Broken train collision	8. RR grade crossing	10. Explosion-Detonation			
11. Fire or violent rupture    12. Other (specify)							
HAZARDOUS MATERIALS (number of)							
8. CARS CARRYING		9. CARS DAMAGED OR DERAILED	10. CARS WHICH RELEASED HAZ. MAT.	11. PEOPLE EVACUATED (est.)			
LOCATION							
12. DIVISION		13. NEAREST STATION	14. MILEPOST (to nearest tenth)	15. STATE (two letter code)			
ENVIRONMENTAL CONDITIONS							
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			
OPERATIONAL DATA							
19. METHOD (place X in appropriate box(es))		1. Manual block 2. Interlocking 3. Cab signal	4. Automatic block 5. Traffic control 6. Auto. train stop	7. Yard rules 8. Time table 9. Radio	10. Auto. train control 11. Verbal permission 12. Train orders	13. Other (specify)	
20. SPEED (recorded speed, if available) Est. MPH Recorded		21. TRAIN NUMBER		22. TIME TABLE DIRECTION 1. North    2. South    3. East    4. West			
EQUIPMENT					CODE		
23. TRAILING TONS (gross tonnage, excluding power units)		24. TYPE OF EQUIPMENT CONSIST (single entry) 1. Freight train    3. Mixed train 2. Passenger train    4. Work train		5. Single car 6. Cut of cars	7. Yard/switching 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)		CODE	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 b. Manual c. Remote d. Manual e. Remote	Mid Train c. Remote	Rear End d. Manual e. Remote	32. CARS (no. of)	Loaded a. Freight b. Pass. Empty c. Freight d. Pass. e. Caboose	
(1) Total in Train					(1) Total in Equipment Consist		
(2) Total Derailed					(2) Total Derailed		
PROPERTY DAMAGE (estimated cost, including labor, to repair or replace)					CODE		
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)		\$		
ACCIDENT/INCIDENT CAUSE CODE					CODE		
35. PRIMARY CAUSE		CODE	36. CONTRIBUTING CAUSE	CODE	37. If no code available, explain cause.		
CASUALTIES					CODE		
38. NUMBER OF PERSONS INJURED		39. ESTIMATED TOTAL DAYS DISABILITY		40. NUMBER OF FATALITIES			
CREW (no. of)					HOURS ON DUTY		
41. ENGINEERS		42. FIREMEN	43. CONDUCTORS	44. BRAKEMEN	45. ENGINEER Hrs:	46. CONDUCTOR Mins:	
47. TYPED NAME AND TITLE					48. SIGNATURE		
					49. DATE		
50. NARRATIVE DESCRIPTION - Describe the cause, nature and circumstances of accident/incident							

RAIL-HIGHWAY GRADE CROSSING  
ACCIDENT/INCIDENT REPORT

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

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?

Calendar Year			
Jan.	Apr.	July	Oct.
Feb.	May	Aug.	Nov.
Mar.	June	Sept.	Dec.

CORPORATE NAME AND MAIL-  
ING ADDRESS OF REPORTING  
RAILROAD →

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

FORM FRA F6180-46 (7-76)  
PREVIOUS EDITIONS ARE OBSOLETE.

*This report is required by regulation (49 CFR 225). Failure to report can result in the imposition of civil penalties.*

**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)	TERMINA- TIONS 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	OCCUPATIONAL INJURIES								
2	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 (Add Lines 2 through 8)</b>								
10	<b>TOTAL OCCUPATIONAL INJURIES AND ILLNESSES (Add Lines 1 and 9)</b>								
	<b>VII. COMMENTS:</b> _____ _____ _____ _____								
	Report prepared by: _____				Area Code and Phone: _____				
	Title: _____				Date: _____				

ANNUAL RAILROAD REPORT  
OF  
MANHOURS BY STATE

1. REPORTING RAILROAD			ALPHABETIC CODE		2. REPORT YEAR		
<b>ANNUAL MANHOURS</b>							
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	

FORM FRA F 6180-56 (8-74) SUBMIT THIS FORM WITH THE FRA F 6180-55, DECEMBER REPORT.

ACCIDENT/INCIDENT BULLETIN  
SAFETY

Accident/Incident Bulletin, No. 157 Calender Year  
1988, US DOT, FRA Office of Safety, 1989 -12-  
Safety

**U.S. Department  
of Transportation**

**Federal Railroad  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

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