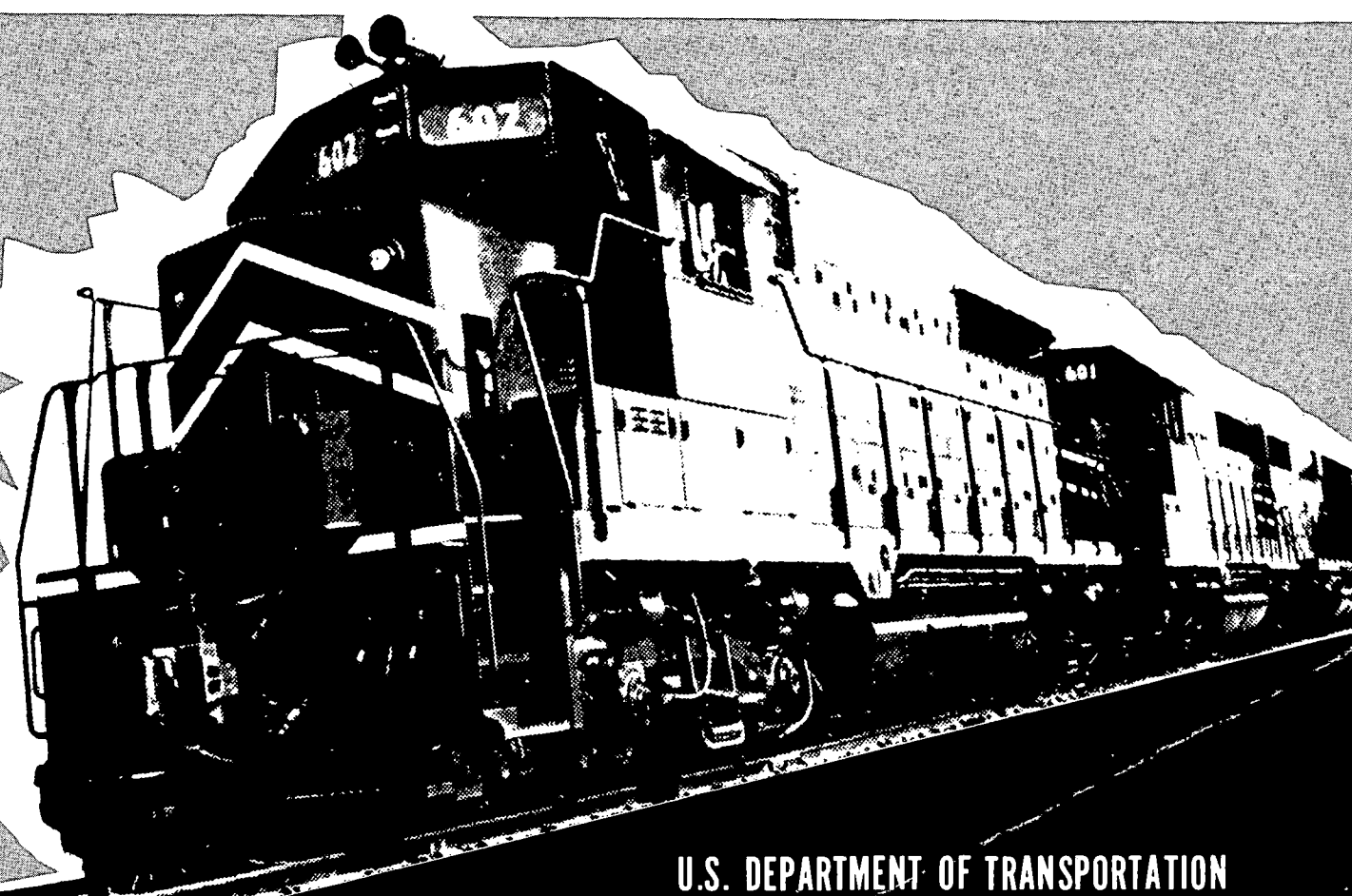


# ACCIDENT/INCIDENT BULLETIN

No. 148

Calendar Year 1979



U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION  
OFFICE OF SAFETY



JULY 1980

# NOTICE

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DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION  
WASHINGTON, D.C. 20590

ERRATA

Please be advised that the following tables in Accident/Incident Bulletin No. 148 for calendar year 1979 contain minor discrepancies:

Table R4, page 47  
Table R1, page 59  
Table R3, page 61  
Table R14, page 79  
Table S13, page 84  
Table S14, page 85  
Table S15, page 86

Attached are replacement pages for these tables.

In addition, paragraph 2 on page 22 should begin "There were 883 fatalities at grade crossings..."

October 10, 1980

TABLE R4. TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS,  
BY RAILROAD, 1979 (\*\*\*) REVISED (\*\*\*)

Railroad	Consists Carrying	Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
CLASS I RAILROADS							
Alabama Great Southern Railroad Co.....	1	109	9	---	---	---	7,500
Amtrak.....	---	---	---	---	---	---	---
Atchison, Topeka And Santa Fe Rwy Co.....	47	2,673	182	49	7	1,000	2,607,065
Baltimore And Ohio Railroad Co.....	58	4,138	291	80	13	1,014	3,297,465
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Boston And Maine Corporation.....	6	427	12	1	---	---	376,521
Burlington Northern Incorporated.....	22	1,366	63	25	6	---	1,326,092
Central Of Georgia Railroad Company.....	---	---	---	---	---	---	---
Chesapeake And Ohio Railway Company.....	27	1,846	174	28	4	1,970	935,590
Chicago And Northwestern Transportation Co..	18	1,341	32	25	6	53	1,214,266
Chicago, Milw, St. Paul And Pacific RR Co...	1	49	7	2	---	---	100
Chicago, Rock Island And Pacific Railroad...	34	2,453	110	29	5	212	1,039,161
Cincinnati, New Orleans And Tx Pacific Co...	3	291	10	2	1	200	1,131,000
Clinchfield Railroad Company.....	5	449	20	2	---	---	78,523
Colorado And Southern Railway Co.....	1	74	5	---	---	---	138,000
Consolidated Rail Corporation.....	69	5,271	264	112	14	1,171	2,129,718
Delaware And Hudson Railway.....	6	577	15	5	1	---	84,600
Denver And Rio Grande Western RR Co.....	1	72	1	---	---	---	99,089
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	---
Duluth, Missabe And Iron Range Rwy Co.....	1	63	1	---	---	---	36
Elgin, Joliet And Eastern Railway Co.....	1	25	3	3	---	---	4,375
Florida East Coast Railway Co.....	2	42	15	3	---	---	110,728
Forth Worth And Denver Railroad Co.....	5	367	9	5	---	---	576,365
Grand Truck Western Railroad Co.....	---	---	---	---	---	---	---
Illinois Central Gulf Railroad Co.....	103	6,031	598	156	18	696	2,880,562
Kansas City Southern Railway Co.....	15	1,402	59	10	---	---	1,991,300
Long Island Railroad Company.....	---	---	---	---	---	---	---
Louisiana And Arkansas Rwy Company.....	6	497	20	1	---	---	183,600
Louisville And Nashville Railroad Co.....	68	5,201	419	86	31	5,075	3,572,523
Missouri Pacific Railroad Co.....	67	5,289	613	84	17	329	2,551,860
Missouri-Kansas-Texas Railroad Co.....	15	1,245	42	13	---	600	835,600
Norfolk And Western Railway Co.....	17	1,254	48	13	2	1,900	272,892
Pittsburg And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Seaboard Coast Line Railroad Co.....	59	4,953	386	49	11	50	2,147,549
Sooline Railroad Company.....	45	3,190	162	15	---	---	561,375
Southern Pacific Transportation Co.....	90	6,113	362	102	10	700	6,241,409
Southern Railway Company.....	20	1,133	55	26	1	200	677,550
St. Louis Southwestern Railway Co.....	4	189	5	2	---	---	430,800
St. Louis-San Francisco Railway Co.....	35	2,236	97	26	5	---	1,374,825
Union Pacific Railroad Co.....	21	1,705	93	14	8	125	2,007,378
Western Maryland Railway Co.....	4	311	8	2	---	---	64,825
Western Pacific Railroad Co.....	7	391	15	9	---	---	501,640
TOTAL CLASS I RAILROADS.....	884	62,773	4,205	979	160	15,295	41,451,882
CLASS II RAILROADS							
Autotrain Corporation.....	---	---	---	---	---	---	---
Bangor And Aroostook Railroad Co.....	---	---	---	---	---	---	---
Canadian Pacific Lines In Maine.....	1	92	5	---	---	---	837
Central Vermont Railway Inc.....	4	296	7	1	---	26	212,496
Chicago And Illinois Midland Rwy Co.....	---	---	---	---	---	---	---
Chicago South Shore And South Bend RR.....	---	---	---	---	---	---	---
Detroit And Toledo Shore Line Railroad.....	2	162	2	---	---	---	9,800
Duluth, Winnipeg And Pacific Rwy Co.....	1	94	1	1	---	---	1,750
Georgia Railroad Lessee Organization.....	---	---	---	---	---	---	---
Georgia Southern And Florida Railway.....	---	---	---	---	---	---	---
Green Bay And Western Railroad.....	---	---	---	---	---	---	---
Illinois Terminal Railroad.....	3	152	18	4	---	---	44,825
Lake Superior And Ishpeming Railroad Co....	1	10	1	1	---	---	5,000
Maine Central Railroad Company.....	10	455	29	15	1	2	109,090
Michigan Interstate Railroad (Ann Arbor)....	---	---	---	---	---	---	---
Norfolk Southern Railway Company.....	---	---	---	---	---	---	---
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---
Richmond, Fredericksburg And Potomac RR Co..	6	352	12	1	---	---	34,155
Texas, Mexican Railway Company.....	---	---	---	---	---	---	---
Toledo, Peoria And Western Railroad Co.....	1	95	2	---	---	---	45,000
TOTAL CLASS II RAILROADS.....	29	1,708	77	23	1	28	462,953
RECAPITULATION (INCLUDES CLASS III RAILROADS)							
CLASS I RAILROADS.....	884	62,773	4,205	979	160	15,295	41,451,882
CLASS II RAILROADS.....	29	1,708	77	23	1	28	462,953
CLASS III RAILROADS.....	44	2,604	411	58	4	1,470	742,684
TOTAL ALL RAILROADS.....	957	67,085	4,693	1,060	165	16,793	42,657,519



TABLE R1. SUMMARY OF OPERATIONAL MILES, 1979 (\*\*\*) REVISED (\*\*\*)

RAILROAD	Locomotive Train Miles	Motor Train Miles	Yard Switching Train Miles	Total Train Miles
CLASS I RAILROADS				
Alabama Great Southern Railroad Co.....	2,574,254	---	728,225	3,302,479
Amtrak.....	27,415,316	4,327,578	549,684	32,292,578
Atchison, Topeka And Santa Fe Rwy Co.....	49,547,722	---	8,902,044	58,449,766
Baltimore And Ohio Railroad Co.....	13,686,704	227,653	7,595,220	21,509,577
Bessemer And Lake Erie Railroad Co.....	862,445	---	248,520	1,110,965
Boston And Maine Corporation.....	1,705,048	1,695,448	1,141,100	4,541,596
Burlington Northern Incorporated.....	49,510,693	2,743,680	18,668,104	70,922,477
Central Of Georgia Railroad Company.....	2,572,849	---	1,053,307	3,626,156
Chesapeake And Ohio Railway Company.....	13,429,474	---	5,631,084	19,060,558
Chicago And Northwestern Transportation Co..	12,334,677	2,420,206	6,665,418	21,420,301
Chicago, Milw, St. Paul And Pacific RR Co..	10,517,038	---	4,290,641	14,807,679
Chicago, Rock Island And Pacific Railroad...	7,918,073	---	3,377,513	11,295,586
Cincinnati, New Orleans And Tx Pacific Co..	4,332,116	---	959,041	5,291,157
Clinchfield Railroad Company.....	939,595	---	341,499	1,281,094
Colorado And Southern Railway Co.....	1,875,984	---	146,250	2,022,234
Consolidated Rail Corporation.....	56,158,259	12,442,991	26,815,464	95,416,714
Delaware And Hudson Railway.....	1,989,577	---	393,790	2,383,367
Denver And Rio Grande Western RR Co.....	5,704,729	---	1,396,740	7,101,469
Detroit, Toledo And Ironton RR Co.....	1,196,177	---	581,271	1,777,448
Duluth, Missabe And Iron Range Rwy Co.....	635,810	---	448,025	1,083,835
Elgin, Joliet And Eastern Railway Co.....	799,054	---	2,361,891	3,160,945
Florida East Coast Railway Co.....	2,254,279	---	823,711	3,077,990
Forth Worth And Denver Railroad Co.....	1,926,934	---	412,372	2,339,306
Grand Truck Western Railroad Co.....	3,084,897	---	2,730,630	5,815,527
Illinois Central Gulf Railroad Co.....	17,437,528	1,380,297	7,051,007	25,868,832
Kansas City Southern Railway Co.....	2,271,354	---	1,411,396	3,682,750
Long Island Railroad Company.....	2,041,868	5,440,611	871,664	8,354,143
Louisiana And Arkansas Rwy Company.....	1,103,714	---	589,343	1,693,057
Louisville And Nashville Railroad Co.....	19,117,237	---	8,356,530	27,473,767
Missouri Pacific Railroad Co.....	27,294,983	---	10,710,078	38,005,061
Missouri-Kansas-Texas Railroad Co.....	2,993,729	---	1,557,115	4,550,844
Norfolk And Western Railway Co.....	17,926,457	---	8,986,632	26,913,089
Pittsburg And Lake Erie Railroad Co.....	417,472	---	1,062,618	1,480,090
Seaboard Coast Line Railroad Co.....	21,020,564	---	7,917,666	28,938,230
Sooline Railroad Company.....	4,714,951	---	2,186,666	6,901,617
Southern Pacific Transportation Co.....	34,137,258	---	12,733,068	46,870,326
Southern Railway Company.....	20,995,396	---	6,392,216	27,387,612
St. Louis Southwestern Railway Co.....	5,848,140	---	1,647,047	7,495,187
St. Louis-San Francisco Railway Co.....	9,912,323	---	3,574,833	13,487,156
Union Pacific Railroad Co.....	38,496,416	---	7,061,664	45,558,080
Western Maryland Railway Co.....	1,069,274	---	465,939	1,535,213
Western Pacific Railroad Co.....	3,835,103	---	913,732	4,748,835
TOTAL CLASS I RAILROADS.....	503,605,471	30,678,464	179,750,758	714,034,693
CLASS II RAILROADS				
Autotrain Corporation.....	558,112	---	50,028	608,140
Bangor And Aroostook Railroad Co.....	519,828	---	152,084	671,912
Canadian Pacific Lines In Maine.....	435,502	---	---	435,502
Central Vermont Railway Inc.....	330,933	---	64,190	395,123
Chicago And Illinois Midland Rwy Co.....	70,270	---	76,996	147,266
Chicago South Shore And South Bend RR.....	221,023	1,523,675	---	1,744,698
Detroit And Toledo Shore Line Railroad.....	153,982	---	158,240	312,222
Duluth, Winnipeg And Pacific Rwy Co.....	485,620	---	185,980	671,600
Georgia Railroad Lessee Organization.....	403,746	---	591,682	995,428
Georgia Southern And Florida Railway.....	1,220,309	---	156,184	1,376,493
Green Bay And Western Railroad.....	225,319	---	186,086	411,405
Illinois Terminal Railroad.....	229,219	---	524,162	753,381
Lake Superior And Ishpeming Railroad Co.....	35,229	---	151,692	186,921
Maine Central Railroad Company.....	801,617	---	460,692	1,262,309
Michigan Interstate Railroad (Ann Arbor)....	229,216	---	167,700	396,916
Norfolk Southern Railway Company.....	715,609	---	119,927	835,536
Northwestern Pacific Railroad.....	233,564	---	54,732	288,296
Richmond, Fredericksburg And Potomac RR Co..	1,216,288	---	576,106	1,792,394
Texas, Mexican Railway Company.....	128,296	---	152,336	280,632
Toledo, Peoria And Western Railroad Co.....	496,410	---	128,976	625,386
TOTAL CLASS II RAILROADS.....	8,710,092	1,523,675	3,957,793	14,191,560
RECAPITULATION (INCLUDES CLASS III RAILROADS)				
CLASS I RAILROADS.....	503,605,471	30,678,464	179,750,758	714,034,693
CLASS II RAILROADS.....	8,710,092	1,523,675	3,957,793	14,191,560
CLASS III RAILROADS.....	10,990,049	72,195	24,140,177	35,202,421
TOTAL ALL RAILROADS.....	523,305,612	32,274,334	207,848,728	763,428,674

TABLE R3. CONTINUATION

	.....Other.....					.....Total.....				
	.....Defects.....									
	Human Factors	Equip	Track	Other	Total	Damages (\$)	Accidents	Acc/Mil Train Miles	Damages (\$)	
CLASS I RAILROADS										
EASTERN DISTRICT										
National Railroad Passenger Corp. (Amtrak).....	5	21	3	30	59	1,573,750	143	4.4	9,782,228	
Baltimore and Ohio Railroad.....	1	4	---	13	18	753,250	406	18.8	11,235,975	
Bessemer and Lake Erie Railroad....	---	---	---	---	---	---	6	5.4	93,610	
Boston and Maine Corp.....	---	6	---	3	9	113,258	47	10.3	998,918	
Chesapeake and Ohio Railway.....	---	5	2	10	17	463,900	298	15.6	7,406,765	
Consolidated Rail Corp.....	20	25	13	90	148	2,944,247	1,381	14.4	28,673,275	
Delaware and Hudson Railway.....	---	---	---	---	---	---	47	19.7	2,044,061	
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	24	13.5	1,747,925	
Elgin, Joliet and Eastern Railway..	1	---	---	2	3	46,710	59	18.6	552,854	
Grand Trunk Western Railroad.....	1	---	---	3	4	133,744	66	11.3	1,216,224	
Long Island Railroad.....	---	1	1	1	3	35,815	10	1.1	215,015	
Norfolk and Western Railway.....	1	2	---	17	20	520,569	160	5.9	5,477,891	
Pittsburg and Lake Erie Railroad...	---	---	---	---	---	---	57	38.5	822,280	
Western Maryland Railway.....	---	2	---	---	2	12,550	36	23.4	513,905	
SUBTOTAL, EASTERN DISTRICT:.....	29	66	19	169	283	6,597,793	2,740	12.1	70,780,926	
SOUTHERN DISTRICT										
Alabama Great Southern Railroad....	---	---	---	3	3	14,400	14	4.2	179,775	
Central of Georgia Railroad.....	2	2	---	3	7	90,700	44	12.1	639,475	
Cinn., N.O. & Texas Pacific Railway.....	1	---	1	2	4	332,000	23	4.3	3,047,511	
Clinchfield Railroad.....	---	---	---	---	---	---	40	31.2	2,784,060	
Florida East Coast Railway.....	---	---	---	1	1	7,346	14	4.5	2,908,685	
Illinois Central Gulf Railroad.....	4	12	1	29	46	564,736	529	20.4	18,604,757	
Louisville and Nashville Railroad..	5	7	1	14	27	387,777	453	16.4	13,129,469	
Seaboard Coast Line Railroad.....	23	5	3	19	50	1,981,309	374	12.9	11,187,475	
Southern Railway.....	6	5	---	13	24	797,425	277	10.1	7,944,384	
SUBTOTAL, SOUTHERN DISTRICT:.....	41	31	6	84	162	4,175,693	1,768	14.0	60,425,591	
WESTERN DISTRICT										
Atchison, Topeka and Santa Fe Railway.....	18	16	---	17	51	760,130	360	6.1	13,406,100	
Burlington Northern Inc.....	12	21	2	46	81	743,983	881	12.4	32,550,249	
Chicago and Northwestern Trans. Company.....	7	6	---	10	23	169,931	645	30.1	15,672,130	
Chicago, Milw., St. Paul & Pacific Railroad.....	6	2	1	5	14	279,662	394	26.6	12,142,125	
Chicago, Rock Island & Pacific Railroad.....	4	2	---	7	13	191,193	505	44.7	9,549,195	
Colorado and Southern Railway.....	---	3	---	1	4	45,500	56	27.6	2,541,010	
Denver and Rio Grande Western Railroad.....	1	---	---	1	2	19,591	11	1.5	551,370	
Duluth, Missabe and Iron Range Railway.....	---	---	---	---	---	---	12	11.0	192,543	
Fort Worth and Denver Railway.....	1	---	---	4	5	61,600	50	21.3	2,214,309	
Kansas City Southern Railway.....	1	---	---	1	2	18,000	90	24.4	4,500,901	
Louisiana and Arkansas Railway.....	---	2	---	5	7	80,962	54	31.8	1,570,318	
Missouri-Kansas-Texas Railroad.....	1	1	---	8	10	134,244	117	25.7	3,277,540	
Missouri Pacific Railroad.....	4	4	---	8	16	570,823	298	7.8	10,047,373	
St. Louis-San Francisco Railway....	11	5	2	20	38	1,422,081	265	19.6	11,272,765	
St. Louis Southwestern Railway.....	---	4	---	4	8	93,104	92	12.2	2,957,164	
Soo Line Railroad.....	6	3	---	14	23	177,628	153	22.1	4,865,858	
Southern Pacific Trans. Company....	16	16	---	31	63	1,586,699	683	14.5	22,211,608	
Union Pacific Railroad.....	---	4	---	9	13	142,847	370	8.1	19,189,780	
Western Pacific Railroad.....	2	4	---	5	11	104,862	75	15.7	1,954,974	
SUBTOTAL, WESTERN DISTRICT:.....	90	93	5	196	384	6,602,840	5,111	14.1	170,667,312	
CLASS II & III RAILROADS										
SUBTOTAL, CLASS II & III:.....	10	8	2	31	51	980,837	699	14.1	12,033,380	
RECAPITULATION ALL DISTRICTS										
Class I RAILROADS.....	156	183	28	419	786	17,376,326	9,071	12.6	301,873,829	
Class II & III Railroads.....	9	8	2	28	47	980,837	669	15.3	12,033,380	
TOTAL FOR ALL RAILROADS.....	165	191	30	447	833	18,357,163	9,740	12.8	313,907,209	

NOTE: The count listed for individual railroads represents involvement in an accident. For accidents involving more than one railroad, each railroad is charged one count, resulting in an overstating of accidents in a district. The recapitulation gives the actual number of accidents.

TABLE R14. SUMMARY OF EMPLOYEE ON DUTY NONFATAL INJURIES, BY RAILROAD, 1979 (\*\*\* REVISED \*\*\*)

Railroad	Total Cases	---Cases Involving Lost And/Or Restricted Workdays---					Other Cases
		Total Cases	Lost Cases	WD Cases	Restr Wd Cases	Lost Workdays	
CLASS I RAILROADS							
Alabama Great Southern Railroad Co.....	64	41	33	8	382	93	23
Amtrak.....	2,272	1,769	1,694	75	16,777	608	503
Atchison, Topeka And Santa Fe Rwy Co.....	2,185	1,386	1,241	145	15,800	2,034	799
Baltimore And Ohio Railroad Co.....	1,782	1,206	1,027	179	13,326	1,620	576
Bessemer And Lake Erie Railroad Co.....	222	117	99	18	1,667	77	105
Boston And Maine Corporation.....	299	183	170	13	3,084	153	116
Burlington Northern Incorporated.....	5,863	4,102	3,887	215	33,391	2,133	1,761
Central Of Georgia Railroad Company.....	179	87	66	21	764	178	92
Chesapeake And Ohio Railway Company.....	2,017	1,612	1,140	472	12,917	2,889	405
Chicago And Northwestern Transportation Co..	2,143	1,247	848	399	12,880	3,488	896
Chicago, Milw, St. Paul And Pacific RR Co...	1,614	1,324	1,297	27	15,069	186	290
Chicago, Rock Island And Pacific Railroad...	1,074	774	767	7	11,922	46	300
Cincinnati, New Orleans And Tx Pacific Co...	97	48	36	12	633	116	49
Clinchfield Railroad Company.....	109	63	63	---	756	---	46
Colorado And Southern Railway Co.....	173	127	119	8	980	35	46
Consolidated Rail Corporation.....	9,905	6,540	6,125	415	98,207	3,002	3,365
Delaware And Hudson Railway.....	141	128	127	1	2,278	1	13
Denver And Rio Grande Western RR Co.....	230	163	161	2	2,513	31	67
Detroit, Toledo And Ironton RR Co.....	393	190	190	---	2,237	---	203
Duluth, Missabe And Iron Range Rwy Co.....	159	100	92	8	960	70	59
Elgin, Joliet And Eastern Railway Co.....	381	174	174	---	3,293	25	207
Florida East Coast Railway Co.....	32	26	7	19	123	413	6
Forth Worth And Denver Railroad Co.....	154	99	93	6	975	33	55
Grand Truck Western Railroad Co.....	539	336	277	59	5,205	1,171	203
Illinois Central Gulf Railroad Co.....	2,896	1,697	1,181	516	19,591	9,088	1,199
Kansas City Southern Railway Co.....	360	299	299	---	3,994	---	61
Long Island Railroad Company.....	1,105	992	992	---	12,001	---	113
Louisiana And Arkansas Rwy Company.....	172	145	145	---	2,081	---	27
Louisville And Nashville Railroad Co.....	2,056	1,495	1,454	41	17,904	403	561
Missouri Pacific Railroad Co.....	1,981	1,453	1,375	78	26,208	886	528
Missouri-Kansas-Texas Railroad Co.....	405	273	270	3	2,627	149	132
Norfolk And Western Railway Co.....	2,872	1,412	1,195	217	22,202	1,796	1,460
Pittsburg And Lake Erie Railroad Co.....	313	129	119	10	3,520	162	184
Seaboard Coast Line Railroad Co.....	1,946	1,528	1,455	73	19,090	878	418
Sooline Railroad Company.....	822	663	620	43	7,404	854	159
Southern Pacific Transportation Co.....	4,155	2,575	2,396	179	40,664	2,194	1,580
Southern Railway Company.....	1,578	786	503	283	7,234	2,196	792
St. Louis Southwestern Railway Co.....	508	303	288	15	4,386	130	205
St. Louis-San Francisco Railway Co.....	883	442	422	20	5,634	263	441
Union Pacific Railroad Co.....	4,218	2,637	2,134	503	22,709	3,489	1,581
Western Maryland Railway Co.....	124	78	70	8	1,126	79	46
Western Pacific Railroad Co.....	360	265	265	---	4,283	---	95
TOTAL CLASS I RAILROADS.....	58,781	39,014	34,916	4,098	478,797	40,969	19,767
CLASS II RAILROADS							
Autotrain Corporation.....	201	36	36	---	210	---	165
Bangor And Aroostook Railroad Co.....	68	48	47	1	451	2	20
Canadian Pacific Lines In Maine.....	49	34	20	14	904	34	15
Central Vermont Railway Inc.....	21	7	7	---	71	4	14
Chicago And Illinois Midland Rwy Co.....	86	65	63	2	634	4	21
Chicago South Shore And South Bend RR.....	42	23	23	---	96	---	19
Detroit And Toledo Shore Line Railroad.....	105	36	36	---	409	---	69
Duluth, Winnipeg And Pacific Rwy Co.....	30	14	14	---	116	10	16
Georgia Railroad Lessee Organization.....	81	76	76	---	358	---	5
Georgia Southern And Florida Railway.....	70	42	27	15	452	138	28
Green Bay And Western Railroad.....	84	53	53	---	865	---	31
Illinois Terminal Railroad.....	150	136	136	---	1,541	---	14
Lake Superior And Ishpeming Railroad Co.....	37	37	37	---	186	---	---
Maine Central Railroad Company.....	220	165	152	13	1,394	102	55
Michigan Interstate Railroad (Ann Arbor)....	35	30	30	---	160	---	5
Norfolk Southern Railway Company.....	46	26	23	3	342	18	20
Northwestern Pacific Railroad.....	48	25	25	---	325	60	23
Richmond, Frederickburg And Potomac RR Co...	202	109	109	---	1,988	---	93
Texas, Mexican Railway Company.....	150	68	67	1	1,139	45	82
Toledo, Peoria And Western Railroad Co.....	81	67	61	6	625	37	14
TOTAL CLASS II RAILROADS.....	1,806	1,097	1,042	55	12,266	454	709
RECAPITULATION (INCLUDES CLASS III RAILROADS)							
CLASS I RAILROADS.....	58,781	39,014	34,916	4,098	478,797	40,969	19,767
CLASS II RAILROADS.....	1,806	1,097	1,042	55	12,266	454	709
CLASS III RAILROADS.....	4,523	2,698	2,512	186	31,713	2,118	1,825
TOTAL ALL RAILROADS.....	65,110	42,809	38,470	4,339	522,776	43,541	22,301

TABLE S13. FATALITIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979 (\*\*\*) REVISED (\*\*\*)

Type Of Accident/Incident	Total A/I W. Cas	Fatal A/I	Total Killed	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
TRAIN ACCIDENTS								
Class I Railroads.....	385	16	23	20	2	22	---	1
Class II Railroads.....	9	---	---	---	---	---	---	---
Class III Railroads.....	15	---	---	---	---	---	---	---
Total All Railroads.....	409	16	23	20	2	22	---	1
TRAIN INCIDENTS								
Class I Railroads.....	10,362	427	433	28	10	38	---	381
Class II Railroads.....	464	9	9	1	---	1	---	8
Class III Railroads.....	764	10	11	1	---	1	---	9
Total All Railroads.....	11,590	446	453	30	10	40	---	398
NONTRAIN INCIDENTS								
Class I Railroads.....	51,663	62	64	1	25	26	1	22
Class II Railroads.....	1,542	3	3	---	2	2	---	---
Class III Railroads.....	3,886	3	3	---	2	2	---	---
Total All Railroads.....	57,091	68	70	1	29	30	1	22
RAIL-HIGHWAY CROSSING (Excluded from above categories)								
Class I Railroads.....	3,620	698	852	5	4	9	---	91
Class II Railroads.....	74	16	19	---	---	---	---	4
Class III Railroads.....	138	11	12	---	---	---	---	---
Total All Railroads.....	3,832	725	883	5	4	9	---	95
GRAND TOTAL								
Class I Railroads.....	66,030	1,203	1,372	54	41	95	1	495
Class II Railroads.....	2,089	28	31	1	2	3	---	12
Class III Railroads.....	4,803	24	26	1	2	3	---	9
Total All Railroads.....	72,922	1,255	1,429	56	45	101	6	516

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

TABLE S14. INJURIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979 (\*\*\* REVISED \*\*\*)

Type Of Accident/Incident	Total A/I W. Cas	Injury A/I	Total Injured	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers		
TRAIN ACCIDENTS										
Class I Railroads.....	385	358	1,042	497	124	621	10	402	5	4
Class II Railroads.....	9	9	10	8	2	10	---	---	---	---
Class III Railroads.....	15	15	20	15	5	20	---	---	---	---
Total All Railroads.....	409	382	1,072	520	131	651	10	402	5	4
TRAIN INCIDENTS										
Class I Railroads.....	10,362	9,766	9,957	8,016	1,185	9,201	17	168	88	483
Class II Railroads.....	464	453	454	236	83	319	2	128	---	5
Class III Railroads.....	764	736	750	615	95	710	1	9	10	20
Total All Railroads.....	11,590	10,955	11,161	8,867	1,363	10,230	20	305	98	508
NONTRAIN INCIDENTS										
Class I Railroads.....	51,663	50,081	50,272	10,689	38,102	48,791	780	239	386	76
Class II Railroads.....	1,542	1,520	1,533	295	1,178	1,473	10	48	2	---
Class III Railroads.....	3,886	3,838	3,841	1,104	2,678	3,782	21	3	34	1
Total All Railroads.....	57,091	55,439	55,646	12,088	41,958	54,046	811	290	422	77
RAIL-HIGHWAY CROSSING (Excluded from above categories)										
Class I Railroads.....	3,620	2,921	4,113	137	31	168	4	---	3,742	199
Class II Railroads.....	74	58	83	4	---	4	---	---	78	1
Class III Railroads.....	138	127	180	8	3	11	---	2	151	16
Total All Railroads.....	3,832	3,106	4,376	149	34	183	4	2	3,971	216
GRAND TOTAL										
Class I Railroads.....	66,030	63,126	65,384	19,339	39,442	58,781	811	809	4,221	762
Class II Railroads.....	2,089	2,040	2,080	543	1,263	1,806	12	176	80	6
Class III Railroads.....	4,803	4,716	4,791	1,742	2,781	4,523	22	14	195	37
Total All Railroads.....	72,922	69,882	72,255	21,624	43,486	65,110	845	999	4,496	805

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

TABLE S15. ILLNESSES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979 (\*\*\*) REVISED (\*\*\*)

Type Of Accident/Incident	Total A/I W. Cas	Illness A/I	Total Illness	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
TRAIN ACCIDENTS								
Class I Railroads.....	385	11	24	16	---	16	---	8
Class II Railroads.....	9	---	---	---	---	---	---	---
Class III Railroads.....	15	---	---	---	---	---	---	---
Total All Railroads.....	409	11	24	16	---	16	---	8
TRAIN INCIDENTS								
Class I Railroads.....	10,362	169	194	177	15	192	---	1
Class II Railroads.....	464	2	2	2	---	2	---	---
Class III Railroads.....	764	18	18	16	2	18	---	---
Total All Railroads.....	11,590	189	214	195	17	212	---	1
NONTRAIN INCIDENTS								
Class I Railroads.....	51,663	1,520	1,565	232	1,289	1,521	26	1
Class II Railroads.....	1,542	19	21	2	19	21	---	---
Class III Railroads.....	3,886	45	45	13	31	44	1	---
Total All Railroads.....	57,091	1,584	1,631	247	1,339	1,586	27	1
RAIL-HIGHWAY CROSSING (Excluded from above categories)								
Class I Railroads.....	3,620	1	2	---	---	---	---	2
Class II Railroads.....	74	---	---	---	---	---	---	---
Class III Railroads.....	138	---	---	---	---	---	---	---
Total All Railroads.....	3,832	1	2	---	---	---	---	2
GRAND TOTAL								
Class I Railroads.....	66,030	1,701	1,785	425	1,304	1,729	26	2
Class II Railroads.....	2,089	21	23	4	19	23	---	---
Class III Railroads.....	4,803	63	63	29	33	62	1	---
Total All Railroads.....	72,922	1,785	1,871	458	1,356	1,814	27	2

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

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION  
Washington, D.C. 20590

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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
INTRODUCTION.....	1
KEY WORD INDEX.....	3
1.0 HISTORICAL TRENDS, 1976 THROUGH 1979.....	5
1.1 Operations.....	7
1.2 Train Accidents.....	8
1.3 Train and Non-train Incidents.....	10
1.4 Casualties.....	14
2.0 OVERVIEW OF 1979 DATA.....	19
3.0 ACCIDENTS: DETAIL OF 1979 OCCURRENCES.....	31
4.0 ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS.....	41
5.0 ACCIDENTS AND CASUALTIES BY STATE.....	49
6.0 ACCIDENTS AND CASUALTIES BY RAILROAD.....	57
7.0 CASUALTIES: EMPLOYEE, TRESPASSER, NONTRESPASSER.....	81
7.1 Summary of Casualties.....	83
7.2 Employee Casualties.....	91
7.3 Casualties in Train Accidents.....	99
7.4 Casualties in Train Incidents.....	104
7.5 Casualties in Non-train Incidents.....	113

APPENDIX A. Reporting Forms

APPENDIX B. Reportability Requirements and Definitions



## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1.0 HISTORICAL TRENDS, 1976 THROUGH 1979	
H1. Railroad Operational Profile, 1976-1979.....	7
H3. Train Accidents by Cause, 1976-1979.....	9
H2. Railroad Accidents/Incidents, 1976-1979.....	11
H6. Train Accidents and Reportable Damage by Train-miles, 1976-1979.....	12
H7. Train Accidents and Reportable Damage by Type.....	12
H8. Train Accidents and Reportable Damage by Cause.....	13
H4. Casualties by Accident/Incident, 1976-1979.....	14
H5. Casualties, 1979 by Types of Persons.....	15
2.0 OVERVIEW OF 1979 DATA	
S2. Train Accidents by Month, 1979.....	24
S44. Train Accidents and Reportable Damages by Speed...	24
S40A. Train Accidents by Type and Month.....	25
S45. Train Accidents and Reportable Damages by Track Class.....	26
S40B. Reportable Damage in Train Accidents by Type and Cause.....	27
S11. Accident/Incident Fatalities by Type of Person....	28
S12. Accident/Incident Nonfatal Casualties by Type of Person.....	29
3.0 ACCIDENTS: DETAIL OF 1979 OCCURRENCES	
S41. Train Accidents and Damage by Principal Causes and Subcauses.....	33
S5. Train Accidents Resulting from Operating Practices by Specific Causes.....	34

## LIST OF TABLES (Continued)

<u>Table</u>		<u>Page</u>
S6.	Train Accidents Resulting from Mechanical and Electrical Failures by Specific Cause.....	36
S7.	Train Accidents Resulting from Track, Roadbed and Structures by Specific Cause.....	38
S8.	Train Accidents Resulting from Miscellaneous Causes by Specific Cause.....	40
S43.	Damage to Rail Equipment in Train Accidents by Consist (Train) Type.....	40
4.0 ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIAL		
S10.	Train Accidents Involving Hazardous Materials.....	44
S10A.	Train Accidents Involving Hazardous Materials, by Cause.....	45
S9.	Train Accidents Involving Hazardous Materials, by State.....	46
R4.	Train Accidents Involving Hazardous Materials, by Railroad.....	47
5.0 ACCIDENTS AND CASUALTIES BY STATE		
S3A.	Train Accidents by State and Type.....	51
S3B.	Train Accidents by State and Cause.....	52
S4.	Train Accidents by State and Month.....	53
S18.	Casualties by State and Class of Accident/ Incident.....	54
S16.	Train Accident/Train Incident Fatalities to Trespassers and Nontrespassers by State.....	55
S17.	Train Accident/Train Incident Injuries to Trespassers and Nontrespassers by State.....	56

## LIST OF TABLES (Continued)

<u>Table</u>		<u>Page</u>
6.0 ACCIDENTS AND CASUALTIES BY RAILROAD		
R1.	Summary of Train Miles Operated.....	59
R3.	Train Accidents by RR, Type, Cause.....	60
R7.	Fatalities in Accidents, Incidents, and Non- train Incidents, by Railroad.....	62
R8.	Nonfatal Casualties by Railroad.....	64
R12.	Injuries to Employees on Duty by Type of Injury by RR.....	66
R5.	Casualties in Accidents, by RR.....	68
R13.	Casualties in Train Incidents by Occurrence and RR.....	69
R6.	Casualties in Nontrain Incidents by RR.....	71
R9.	Fatalities to Employees on Duty by Type and RR....	73
R10.	Injuries to Employees on Duty by Type and RR.....	75
R11.	Illnesses to Employees on Duty by Type and RR.....	77
R14.	Summary of Employee on Duty Nonfatal Injuries.....	79
7.0 CASUALTIES: EMPLOYEE, TRESPASSER, NONTRESPASSER		
7.1 <u>Summary of Casualties</u>		
S13.	Fatalities in Train Accidents, Train Incidents, and Nontrain Incidents by Type of Person.....	84
S14.	Injuries as above.....	85
S15.	Illnesses as above.....	86
S23.	Nature of Injuries in Train Accidents, Train Incidents and Nontrain Incidents.....	87
S24.	Nature of Injuries by Type of Person.....	89

## LIST OF TABLES (Concluded)

<u>Table</u>	<u>Page</u>
7.2 <u>Employee Casualties</u>	
S27. Accident/Incident Casualties to Employees On Duty.....	92
S25. Accident/Incident Casualties by Type of Employee..	93
S20. Summary of Employee Fatalities by Job Groups.....	95
S21. Summary of Employee Injuries by Job Groups.....	96
S21A. Summary of Employee Nonfatal Injuries.....	97
S22. Summary of Employee On Duty Illnesses.....	98
7.3 <u>Casualties in Train Accidents</u>	
S34. Fatalities Resulting from Miscellaneous Causes....	99
S35. Nonfatal Casualties as above.....	99
S28. Fatalities Resulting from Operating Practices.....	100
S29. Nonfatal Casualties as above.....	101
S31. Nonfatal Casualties Resulting from Mechanical/ Electrical Failures.....	102
S33. Nonfatal Casualties Resulting from Track, Roadbed and Structures.....	103
7.4 <u>Casualties in Train Incidents</u>	
S36. Fatalities in Train Incidents by Specific Cause and Type of Person.....	104
S37. Injuries as above.....	106
S38. Illnesses as above.....	111
7.5 <u>Casualties in Nontrain Incidents</u>	
S39A. Fatalities in Nontrain Incidents by Specific Occurrence and Type of Person.....	113
S39B. Injuries as above.....	115
S39C. Illnesses as above.....	120

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Railroad Train Miles, 1976-1979.....	7
2	Revenue Ton Miles, 1976-1979.....	8
3	Cause of Accidents, 1976-1979.....	9
4	Cause of Derailments, 1976-1979.....	9
5	Cause of Collisions, 1976-1979.....	10
6	Cause of other Accidents, 1976-1979.....	10
7	Railroad Accidents/Incidents, 1976-1979.....	11
8	Casualties in Train Accidents, 1976-1979.....	16
9	Casualties in Train Incidents, 1976-1979.....	16
10	Casualties in Non-train Incidents, 1976-1979.	17
11	Causes of Accidents by Type of Track and Speed of Consist.....	21
12	Damage by Speed vs. Cause of Accident.....	21
13	Fatalities at Grade Crossings by Type of Person, 1975-1979.....	22
14A	Fatalities by Type of Person, 1979.....	23
14B	Injuries by Type of Person, 1979.....	23
15	Fatalities Not at Grade Crossings, 1975-1979.	23
16	Damage in Accidents by Track Class and Cause.	25
17	Cause of Accident by Track Class.....	26
18	Cause of Accident by Accident Type.....	27
19	Total Number of Hazardous Material Cars Damaged, 1975-1979.....	43
20	Total Number of Releases of Hazardous Material by Year, 1975-1979.....	43

LIST OF FIGURES (Concluded)

<u>Figure</u>		<u>Page</u>
21	Fatalities in 1979, Grade Crossings and Other.....	83
22	Injuries in 1979, Grade Crossings and Other..	83
23	Non-fatal Casualties to Employees on Duty....	91
24A	Fatalties by Type of Employee.....	91
24B	Injuries by Type of Employee.....	91

## INTRODUCTION

In accordance with 49 CFR 225, all railroads are required to file monthly accident/incident reports with the Office of Safety, Federal Railroad Administration (FRA). This Bulletin covers all accidents/incidents within the United States, including those which occurred on portions of Canadian railroads within U.S. territory. All tables contain data from all U.S. railroads, unless titles indicate otherwise.

The reporting forms and guide used to complete accident/incident reports are reviewed every two years. At the same time the damage threshold, used to determine which accidents must be reported, is adjusted to take into account the effects of inflation on train accident costs. In 1975 and 1976, a report was required for any accident resulting in more than \$1750 in damage to railroad on-track equipment, signals, track, track structures, and roadbed. For 1977 and 1978, the reporting threshold was increased to \$2300, and in 1979, the reporting threshold was further increased to \$2900.

The biennial adjustment of the dollar threshold makes the comparison of year-to-year data difficult, since the changes in the threshold do not track the rate of inflation. For example, a part of the increase in the number of reported accidents from 1977 to 1978 can be attributed to the unchanged reporting threshold.

In the same fashion, the number of accidents reported in 1979 has decreased from 1978 partially because the 26% increase in the reporting threshold greatly exceeded the rate of inflation. Beginning in 1981, the threshold will be adjusted annually.

All tables in this bulletin show unadjusted data. However, to give a more accurate picture of accident trends, the graphic displays use an arbitrary \$2600 threshold for 1978 data.

In 1977, new and more specific accident/incident cause and occurrence codes were added to the reporting instructions, and some existing codes were redefined. While totals for major code groupings have not been significantly affected by these changes, care should be used in making comparisons of individual codes used prior to 1977 with those used in 1977 and later years.

Due to major revisions in reporting requirements effective January 1, 1975, data collected prior to that date is not comparable to information in this bulletin. Further, data collected during 1975 may be understated, because railroad personnel making accident reports were unfamiliar with the new reporting procedures.

Illnesses reported in this bulletin are all job-related in that they result from an employee performing a task or being in a location required by his job. The heading "Non-fatal Casualties" indicates that both injuries and illnesses are included. Otherwise, non-fatal illnesses are shown separately.

Some tables which appeared in last year's bulletin have been deleted this year. Copies of these tables can be obtained on written request to the Office of Safety.

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



## KEY WORD INDEX

<u>Subject</u>	<u>Page</u>
fatalities	
to employees.....	28,62,92,95
to others.....	28,62,84
at grade crossings.....	28,84,104
by state.....	55
by railroad.....	62
injuries	
to employees.....	29,64,93,96,97
by type of injury.....	87,89
to others.....	85,87,89
at grade crossings.....	85,106
by state.....	54
by railroad.....	64,75,79
illnesses	
to employees.....	98,120
to others.....	29,86,111,120
by state.....	54
by railroad.....	77
hazardous materials	
train accidents involving.....	44
number of cars of.....	43
number of cars releasing.....	43
accidents by state.....	46
accidents by railroad.....	47
reported damage	
in train accidents.....	27
in hazardous material accidents.....	44
by state.....	51
by railroad.....	60
by speed of consist.....	24

KEY WORD INDEX (Concluded)

<u>Subject</u>	<u>Page</u>
train accidents	
by speed of consist.....	24, 34
by state.....	53
by track class.....	26
by railroad.....	60

## 1.0 HISTORICAL TRENDS, 1976-1979

## 1.0 HISTORICAL TRENDS

### 1.1 Operations

Total train miles increased significantly in 1979 after two years of virtual stability. Yard switching miles, however, continued to decline.

TABLE H1. RAILROAD OPERATIONAL PROFILE, 1976-1979

Year	Man Hours a (000,000)	Motor Train Miles b (000)	Yard Switching Miles c (000)	Locomotive Miles d (000)	Total Train Miles (b+c+d) (000)
1976	1,046	65,989	217,363	491,411	774,763
1977	1,053	32,419	218,544	499,079	750,042
1978	1,056	32,279	214,498	505,187	751,964
1979	1,077	32,274	207,849	523,306	763,429

## RAILROAD OPERATIONAL PROFILE

(MILLIONS OF MILES)

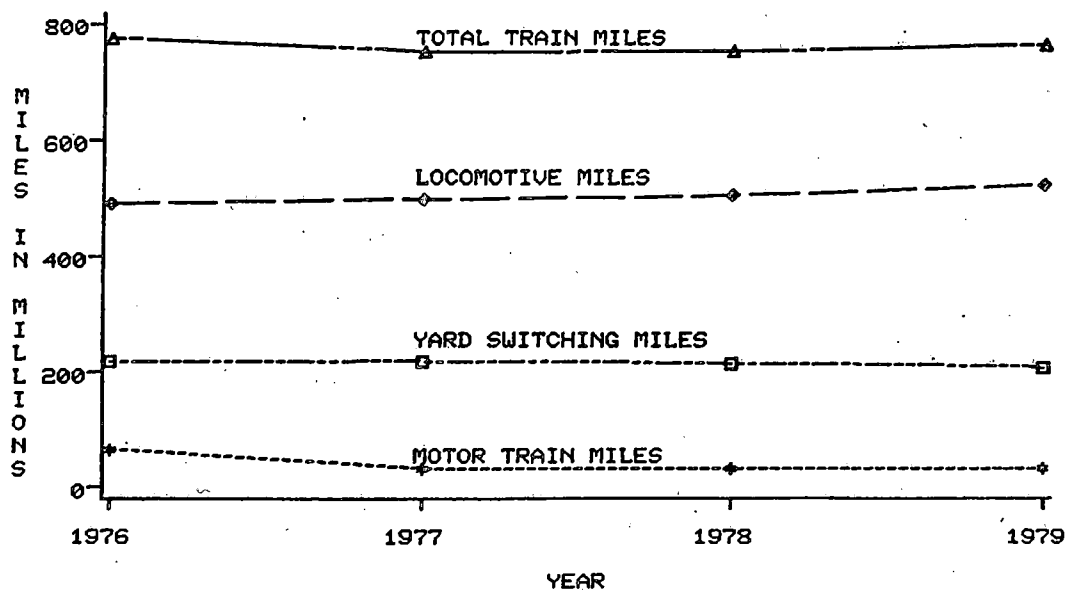


Fig. 1

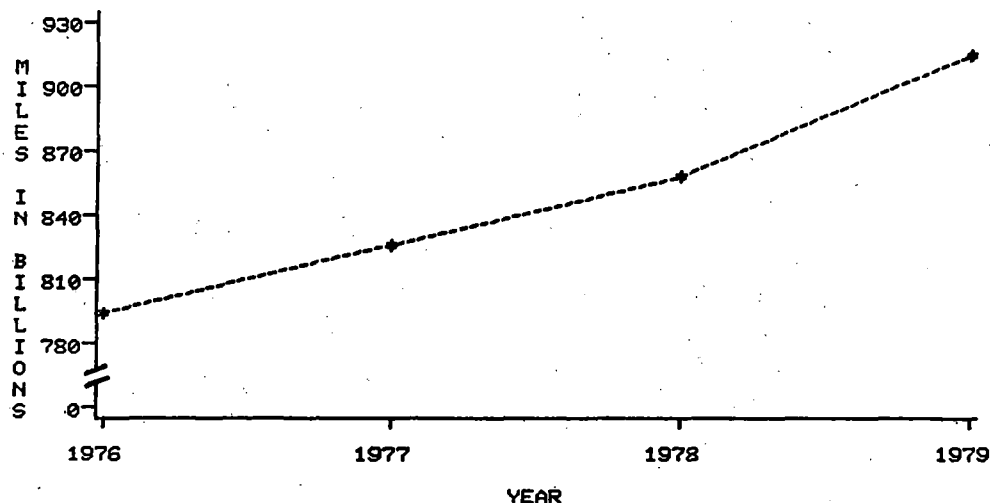
Revenue ton-miles, however, increased to a record level of more than 913 billion, 6.5% above the 1978 level. This increase, larger than the increase in total train miles, reflects a trend to heavier cars and a longer length of haul.

Revenue Ton-Miles, 1976-1979  
(Ton-Miles in Millions)

1976	794,059
1977	826,292
1978	858,105
1979	913,669

# REVENUE TON MILES

(TON MILES IN BILLIONS)



SOURCE: ASSOCIATION OF AMERICAN RAILROADS

Fig. 2

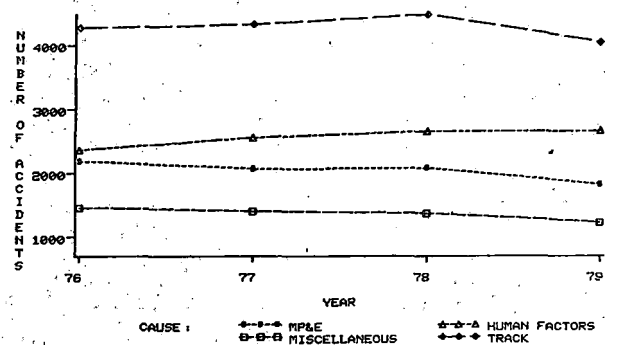
## 1.2 Train Accidents

After a period of steady increase, train accidents in 1979 declined despite an increase in both man-hours worked and train-miles operated. The increase in the damage threshold from \$2300 to \$2900 accounted in part for this decline. However, even after adjusting the threshold to \$2600 in 1978, the number of accidents still shows a reduction.

Table H3. Train Accidents by Cause, 1976-1979

Year	Total Accidents	Human Factors	Maint. Procedures & Equipment	Track Defects	Misc. Other
1976	10,248	2,360	2,174	4,260	1,454
1977	10,362	2,559	2,064	4,337	1,402
1978	11,277	2,845	2,170	4,797	1,465
1979	9,740	2,660	1,815	4,050	1,215

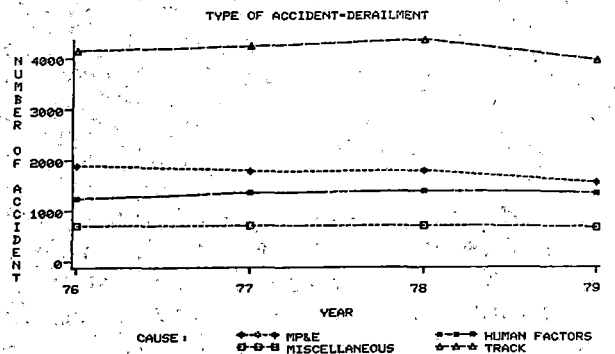
### CAUSE OF ACCIDENT VS. YEAR



ADJUSTED THRESHOLD FOR 1978 OF \$2,800

Fig. 3

### CAUSE OF ACCIDENT VS. YEAR

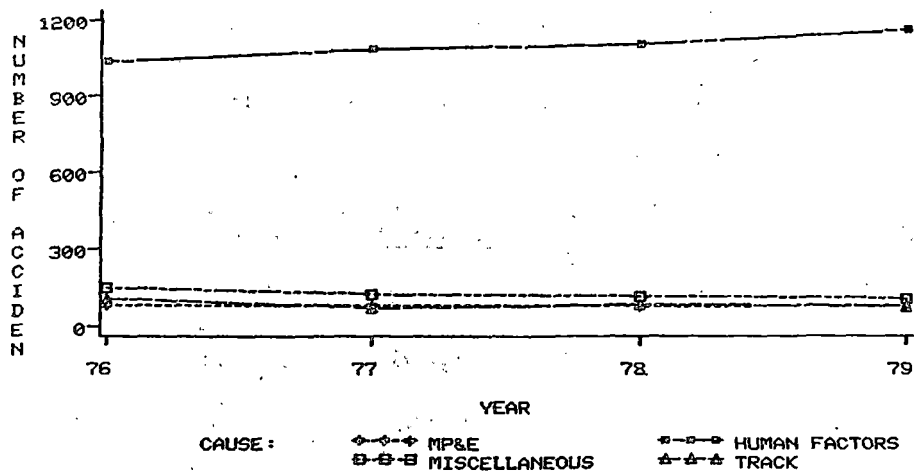


ADJUSTED THRESHOLD FOR 1978 OF \$2,800

Fig. 4

# CAUSE OF ACCIDENT VS. YEAR

TYPE OF ACCIDENT-COLLISION

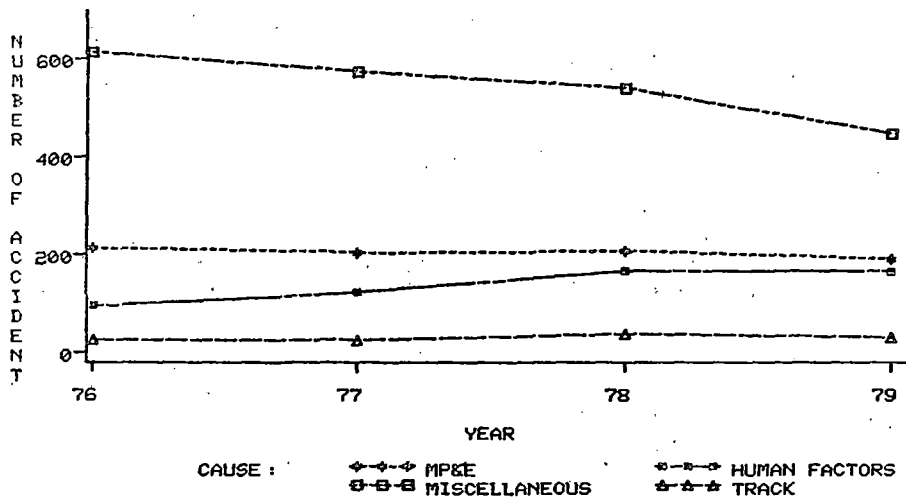


ADJUSTED THRESHOLD FOR 1978 OF \$2,800

Fig. 5

# CAUSE OF ACCIDENT VS. YEAR

TYPE OF ACCIDENT-OTHER



ADJUSTED THRESHOLD FOR 1978 OF \$2,800

Fig. 6

## 1.3 Train and Non-train Incidents

Despite the decline in accidents, incidents (which involve injury or illness, without regard to damage to property) have continued to increase.

TABLE H2. Railroad Accidents, Incidents, 1976-1979

<u>Year</u>	<u>Train Accidents</u>	<u>Train Incidents</u>	<u>Nontrain Incidents</u>	<u>Total</u>
1976	10,248	12,303	50,532	73,083
1977	10,362	14,611	51,601	76,574
1978	11,277	14,918	55,391	81,586
1979	9,740	15,159	57,213	82,112

## RAILROAD ACCIDENTS/INCIDENTS

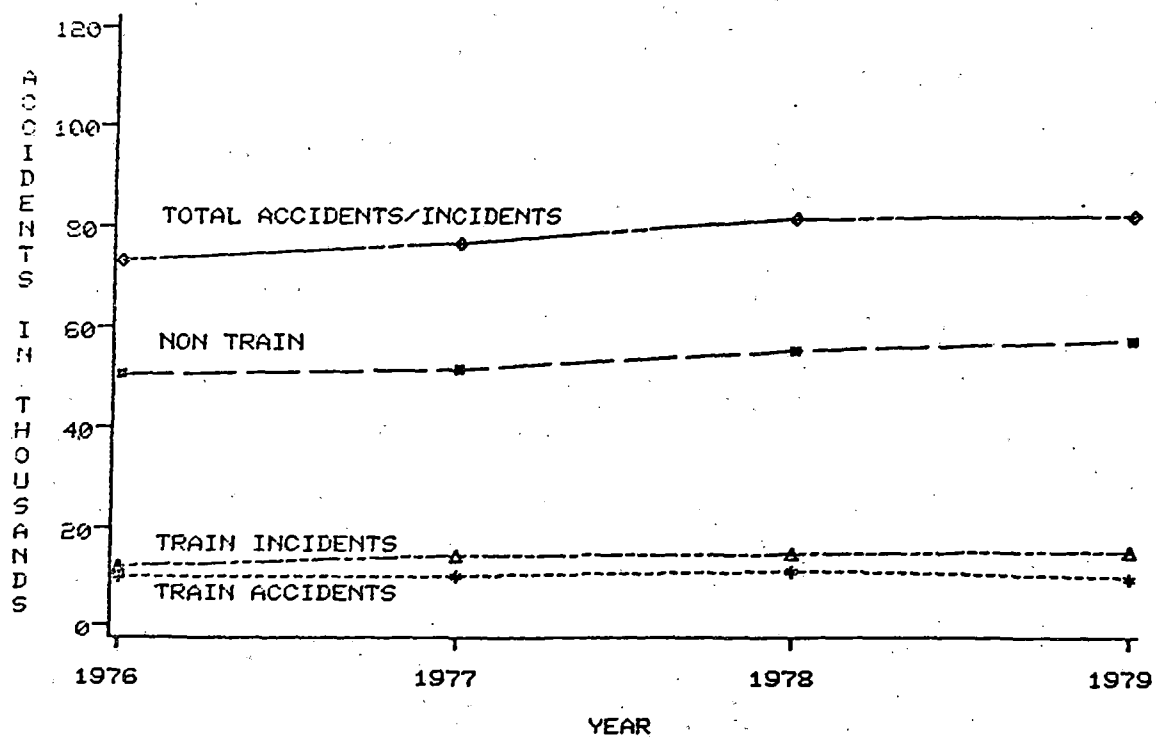


Fig. 7



TABLE H6. Train Accidents and Reportable Damage by  
Train Miles, 1976-1979

<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>
1976	10,248	266,990,697	22,150	292,980	13.23
1977	10,362	279,450,336	26,969	372,579	13.82
1978	11,277	304,951,427	27,033	405,540	15.00
1979	9,740	313,907,209	32,229	411,181	12.76

TABLE H7. Train Accidents and Reportable Damage  
By Type, 1976-1979

<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>
COLLISIONS					
1976	1,370	24,749,012	18,065	31,944	1.77
1977	1,363	34,101,836	25,020	45,467	1.82
1978	1,476	33,630,565	22,772	44,724	1.96
1979	1,425	41,919,343	29,417	54,909	1.87
DERAILMENTS					
1976	7,934	184,273,761	23,226	237,845	10.24
1977	8,073	223,123,541	27,638	297,481	10.76
1978	8,763	250,266,525	28,551	332,819	11.66
1979	7,482	253,630,703	33,899	332,225	9.80
OTHER					
1976	944	17,967,924	19,034	23,191	1.22
1977	926	22,224,959	24,001	29,632	1.23
1978	1,038	21,054,337	20,278	27,990	1.38
1979	833	18,357,163	22,037	24,059	1.09

TABLE H8. Train Accidents and Reportable Damage  
By Cause, 1976-1979

<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>
OPERATING PRACTICES					
1976	2,360	31,939,411	13,534	41,225	3.05
1977	2,559	65,679,391	25,666	87,568	3.41
1978	2,845	56,007,609	19,675	74,514	3.79
1979	2,660	80,125,870	30,122	105,014	3.49
EQUIPMENT FAILURES					
1976	2,174	68,572,507	31,542	88,508	2.81
1977	2,064	70,662,940	34,236	94,212	2.75
1978	2,170	79,266,281	36,528	105,458	2.89
1979	1,815	76,768,530	42,297	100,614	2.38
TRACK DEFECTS					
1976	4,260	85,537,356	20,079	110,404	5.50
1977	4,337	96,377,004	22,222	128,495	5.78
1978	4,797	117,145,701	24,412	155,853	6.38
1979	4,050	110,582,493	27,304	144,931	5.31
OTHER					
1976	1,454	40,941,423	28,158	52,844	1.88
1977	1,402	46,731,001	33,332	62,304	1.87
1978	1,465	52,531,836	35,851	69,890	1.95
1979	1,215	46,430,316	38,214	60,852	1.59

## 1.4 Casualties

Casualties in train accidents have shown a decline as the number of accidents has dropped. However, casualties in train incidents and non-train incidents have increased slightly. Casualties per million train miles have also decreased despite an increase in train miles operated.

TABLE H4. Casualties by Accident/Incident, 1976-1979

<u>Class of Acc/Inc by Year</u>	<u>Total Fatal</u>	<u>Total Non Fatal</u>	<u>Total Casualties</u>	<u>Total Accidents</u>	<u>Casualties per Million Train Miles</u>
Train Accidents					
1976	152	1,279	1,431	10,248	1.85
1977	108	985	1,093	10,362	1.46
1978	139	1,911*	2,050	11,277	2.73
1979	100	1,275	1,375	9,740	1.80
Train Incidents					
1976	1,259	12,648	13,907	12,368	17.94
1977	1,340	14,876	16,216	14,611	21.62
1978	1,427	15,014	16,441	14,918	21.86
1979	1,245	15,414	16,659	15,159	21.83
Non-Train Incidents					
1976	219	51,404	51,623	50,535	66.63
1977	82	52,006	52,088	51,601	69.45
1978	80	55,620	55,700	55,391	74.07
1979	84	57,437	57,521	57,213	75.39
All Accidents					
1976	1,630	65,331	66,961	73,151	86.43
1977	1,530	67,867	69,397	76,574	92.52
1978	1,646	72,545	74,191	81,856	98.66
1979	1,429	74,126	75,555	82,112	99.02

\* Included is an ICG railroad commuter train on January 26, 1978 which resulted in 558 non-fatal casualties.

TABLE H5  
CASUALTIES, 1979  
MATRIX FOR TYPES OF PERSONS

Type of Person	Train Accidents <sup>1</sup>			Train Incidents <sup>1</sup>			Nontrain Incidents <sup>1</sup>			Rail-Highway Crossing			Total		
	K	I	NFI	K	I	NFI	K	I	NFI	K	I	NFI	K	I	NFI
Employee on Duty	22	651	16	40	10,230	212	30	54,046	1,586	9	183	0	101	65,110	1,814
Employee Not on Duty	0	10	0	0	20	-	1	811	27	0	4	-	1	845	27
Passenger on Train	0	402	0	5	305	1	1	290	1	-	2	-	6	999	2
Nontrespasser	0	2	8	6	92	-	11	391	17	779	3,971	2	796	4,456	-
Trespasser	1	4	0	398	508	-	22	77	-	95	216	-	516	805	-
Contractor Employee <sup>2</sup>	0	3	0	4	6	1	5	31	-	-	0	-	9	40	1
Total	23	1,072	24	453	11,161	214	70	55,646	1,631	883	4,376	2	1,429	72,255	1,844

<sup>1</sup> After subtracting rail-highway crossing casualties.

<sup>2</sup> Contracting employees have been treated as "nontrespassers" in other Tables.

K: Killed  
I: Injured  
NFI: Nonfatal illness

# CASUALTIES IN TRAIN ACCIDENTS

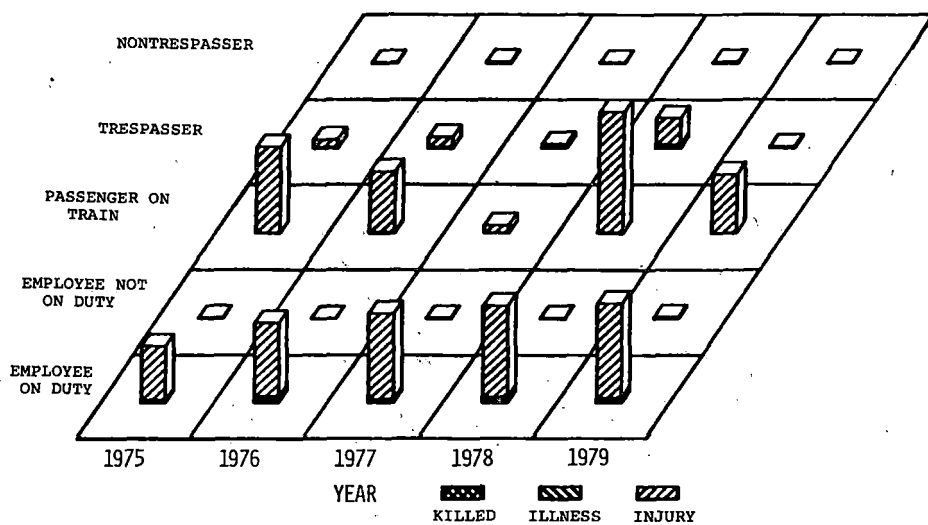


Fig. 8

# CASUALTIES IN TRAIN INCIDENTS

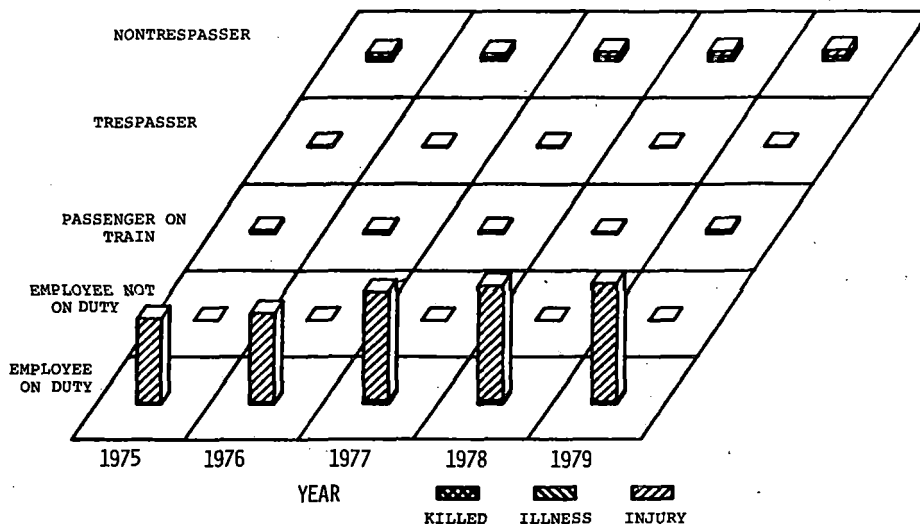


Fig. 9

# CASUALTIES IN NONTRAIN INCIDENTS

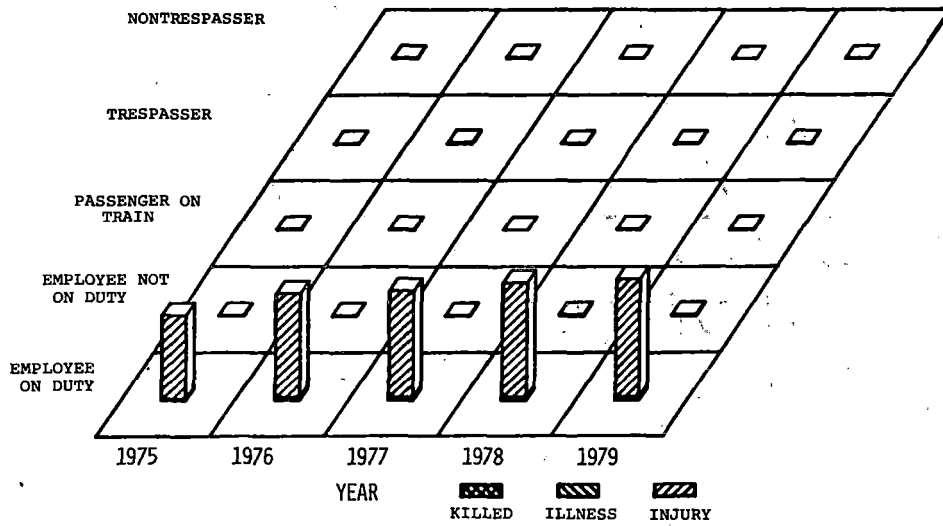


Fig. 10

## 2.0 OVERVIEW OF 1979 DATA

## 2.0 OVERVIEW OF 1979 DATA

This section shows, in summary form, the causes and locations of railroad accidents, incidents, and casualties in 1979. As Figure 11 shows, most train accidents occurred at low train speeds.

### SPEED VS. CAUSE OF ACCIDENT

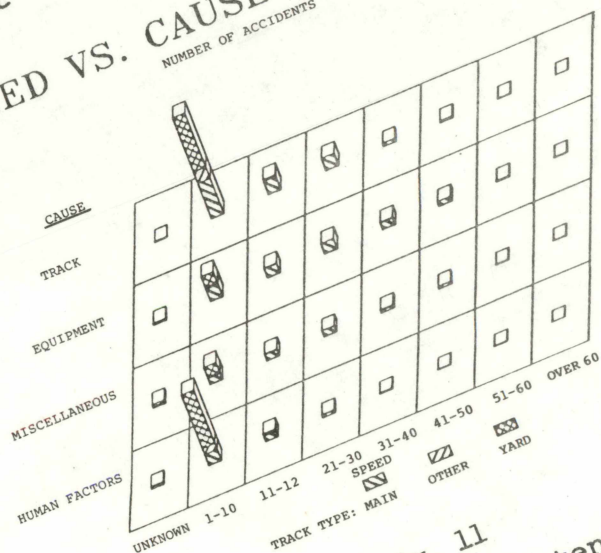


Fig. 11

However, accidents at higher speeds tend to be more expensive. As can be seen from Figure 12, damage cost is more evenly spread through the various speed ranges.

### DAMAGES BY SPEED VS. CAUSE

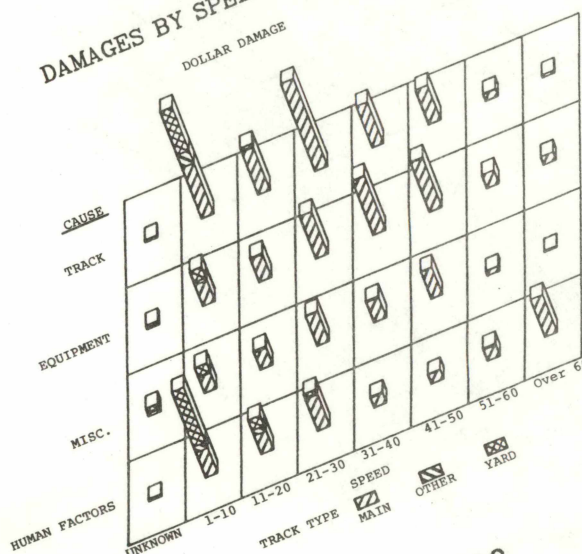


Fig. 12



The great majority of train accidents in 1979 occurred on FRA Class I track (largely yard and lightly-used branch lines). However, FRA Class III and Class IV tracks (main lines and major branch lines, with maximum freight train speed limits of 40 and 60 mph) together accounted for just over half the damage cost.

There were 872 fatalities at grade crossings in 1979. Although this represents a significant decline from previous years, grade crossing accidents remain the principle cause of railroad fatalities. More than 61% of the 1429 fatalities in 1979 occurred at grade crossings. Almost all of these were to "nontrespassers".

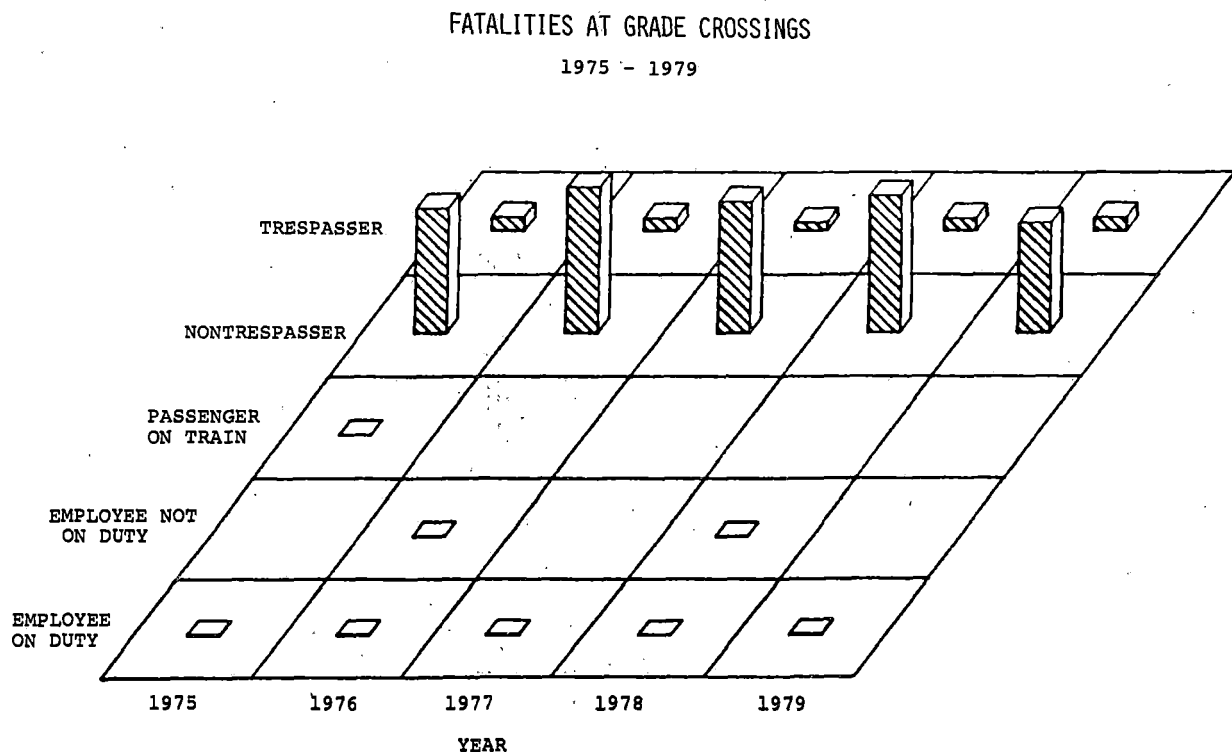


Fig. 13

Trespassers accounted for 36% of all railroad-related fatalities. (Some trespasser fatalities are included in the total for grade crossings.) There were only 101 fatalities to railroad employees, about 7% of the total.

In contrast, over 90% of the 74,126 railroad-related injuries were to employees on duty.

FATALITIES BY TYPE OF PERSON 1979

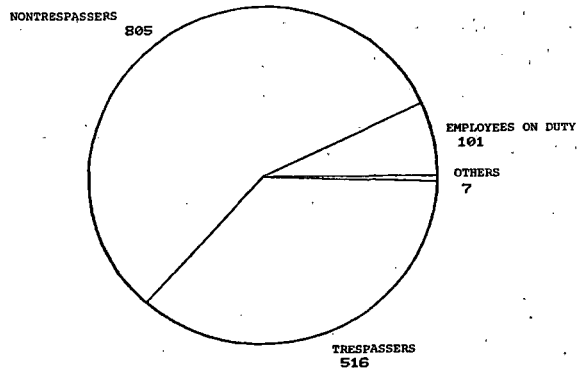


Fig. 14A

INJURIES BY TYPE OF PERSON 1979

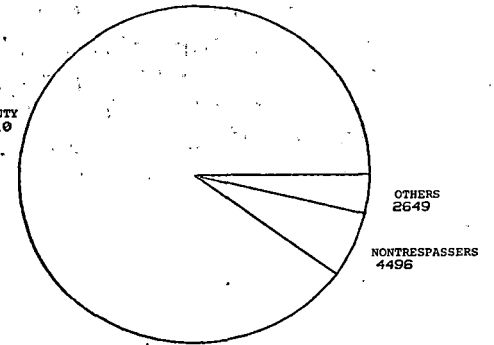


Fig. 14b

FATALITIES NOT AT GRADE CROSSINGS

1975 - 1979

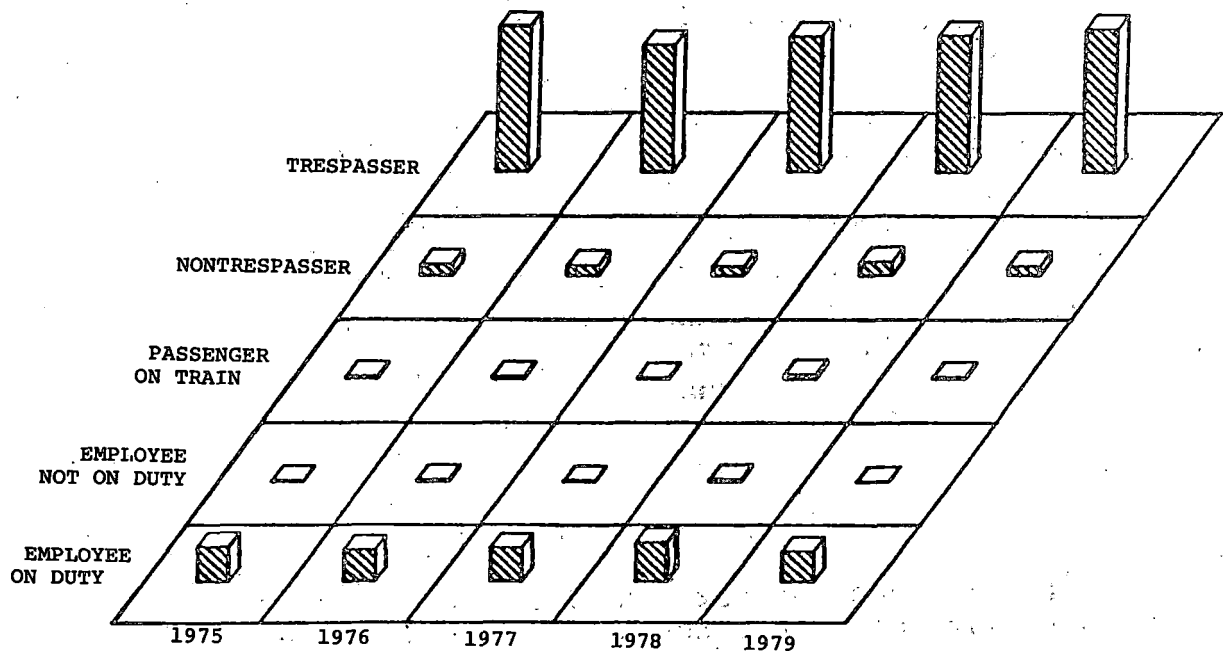


Fig. 15

TABLE S2. TRAIN ACCIDENTS BY MONTH, 1979

Month	Accs		Total Damage	Damage Per MTM	.....Train Miles.....			
	Accs	Per MTM			Locomotive	Motor	Yard Switching	Total
January	911	15.15	39,585,202	\$658,086.22	39,969,164	2,635,792	17,546,978	60,151,934
February	763	13.27	24,009,040	\$417,693.81	38,065,441	2,421,079	16,993,305	57,479,825
March	910	13.73	22,570,053	\$340,428.26	44,957,781	2,728,761	18,612,834	66,299,376
April	875	13.57	25,875,098	\$401,319.86	44,291,331	2,652,373	17,530,803	64,474,507
May	812	12.02	22,194,739	\$328,407.13	46,261,526	2,815,096	18,506,435	67,583,057
June	759	11.75	23,771,040	\$367,961.36	44,463,700	2,745,061	17,393,491	64,602,252
July	867	13.60	29,171,302	\$457,653.66	43,785,308	2,752,860	17,202,848	63,741,016
August	830	12.53	24,945,714	\$376,578.87	46,011,336	2,777,613	17,454,159	66,243,108
September	738	11.96	22,568,789	\$365,830.08	42,798,172	2,641,713	16,252,020	61,691,905
October	725	10.97	29,127,647	\$440,600.33	45,699,814	2,812,064	17,597,569	66,109,447
November	831	13.01	30,265,836	\$473,829.14	44,452,668	2,665,442	16,756,864	63,874,974
December	719	11.75	19,822,749	\$324,022.90	42,549,371	2,626,480	16,001,422	61,177,273
Total...	9,740	12.76	313,907,209	\$411,180.62	523,305,612	32,274,334	207,848,728	763,428,674

NOTE: "MTM" = Million train miles

TABLE S44. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY SPEED OF CONSIST, 1979

CONSIST SPEED	TOTAL ACCIDENTS	TOTAL DAMAGE	EQUIPMENT DAMAGE	TRACK DAMAGE	COLLISIONS	DERAILMENTS	OTHER ACCIDENTS	TRACK CAUSED	EQUIPMENT FAILURE	OPERATING PRACTICES	OTHER CAUSES
ACCIDENTS ON MAIN LINE TRACK											
UNKNOWN	77	2,157,403	1,998,992	158,411	2	24	51	6	32	12	27
1-10	1,955	38,022,249	25,182,705	12,839,544	136	1,736	83	1,048	365	352	190
11-20	984	34,156,273	24,390,596	9,765,677	70	841	73	380	259	161	184
21-30	931	64,449,093	50,901,429	13,547,664	44	783	104	368	305	86	172
31-40	437	42,098,819	34,598,988	7,499,831	23	325	89	100	210	37	90
41-50	283	40,252,396	34,524,114	5,728,282	9	202	72	57	133	16	77
51-60	103	12,087,312	10,206,737	1,880,575	4	64	35	17	46	10	30
61-70	34	11,894,611	10,869,838	1,024,773	2	19	13	2	13	8	11
71-80	14	4,954,755	4,684,900	269,855	1	6	7	1	5	2	6
81-90	1	351,200	325,000	26,200	0	1	0	1	0	0	0
TOTAL	4,819	250,424,111	197,683,299	52,740,812	291	4,001	527	1,980	1,368	684	787
ACCIDENTS ON YARD TRACK											
UNKNOWN	142	2,894,788	2,461,119	433,669	16	44	82	17	19	47	59
1-10	3,865	40,239,815	30,085,093	10,154,722	989	2,719	157	1,639	321	1,635	270
11-20	127	5,104,335	4,642,842	461,493	44	72	11	44	13	55	15
21-30	24	1,265,246	1,161,413	103,833	9	13	2	1	3	15	5
31-40	4	546,100	463,600	82,500	1	3	0	0	1	2	1
41-50	2	131,100	125,000	6,100	0	1	1	0	0	0	2
51-60	2	749,953	639,728	110,225	1	1	0	1	0	1	0
TOTAL	4,166	50,931,337	39,578,795	11,352,542	1,060	2,853	253	1,702	357	1,755	352
ACCIDENTS ON INDUSTRY, SIDING OR UNKNOWN TRACK TYPE											
UNKNOWN	45	530,696	487,350	43,346	5	16	24	2	8	12	23
1-10	623	7,490,935	5,398,932	2,092,003	52	547	24	340	64	177	42
11-20	67	2,813,435	2,449,710	363,725	11	53	3	22	13	23	9
21-30	7	894,248	869,098	25,150	4	3	0	1	1	4	1
31-40	9	503,497	403,957	99,540	2	5	2	2	2	4	1
41-50	3	139,400	120,600	18,800	0	3	0	0	2	1	0
51-60	1	179,550	168,250	11,300	0	1	0	1	0	0	0
TOTAL	755	12,551,761	9,897,897	2,653,864	74	628	53	368	90	221	76
TOTAL	9,740	313,907,209	247,159,991	66,747,218	1,425	7,482	833	4,050	1,815	2,660	1,215

TABLE S40A. NUMBER OF TRAIN ACCIDENTS BY TYPE AND MONTH, 1979

Type of Accident	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Derailment	712	600	723	675	618	571	658	629	549	547	643	557	7,482
Head on collision	6	4	5	7	9	5	14	11	8	12	8	7	96
Rear end collision	27	20	16	11	26	19	20	20	25	16	18	12	230
Side collision	69	79	83	89	84	70	76	93	81	74	74	58	930
Raking collision	13	8	7	8	16	12	12	12	7	16	13	10	134
Broken train collision	4	3	4	1	---	3	4	4	1	4	3	1	32
Rail-hwy crossing	25	10	20	17	20	16	23	15	24	22	28	28	248
RR grade crossing	---	---	---	---	---	---	---	---	1	2	---	---	3
Obstruction	4	3	6	6	---	5	5	2	7	4	5	7	54
Explosion-detonation	---	---	---	1	---	---	---	---	---	---	---	---	1
Fire or violent rupture	23	13	22	23	18	23	21	19	17	10	13	11	213
Other	28	23	24	37	21	35	34	25	18	18	26	28	317
TOTAL.....	911	763	910	875	812	759	867	830	738	725	831	719	9,740

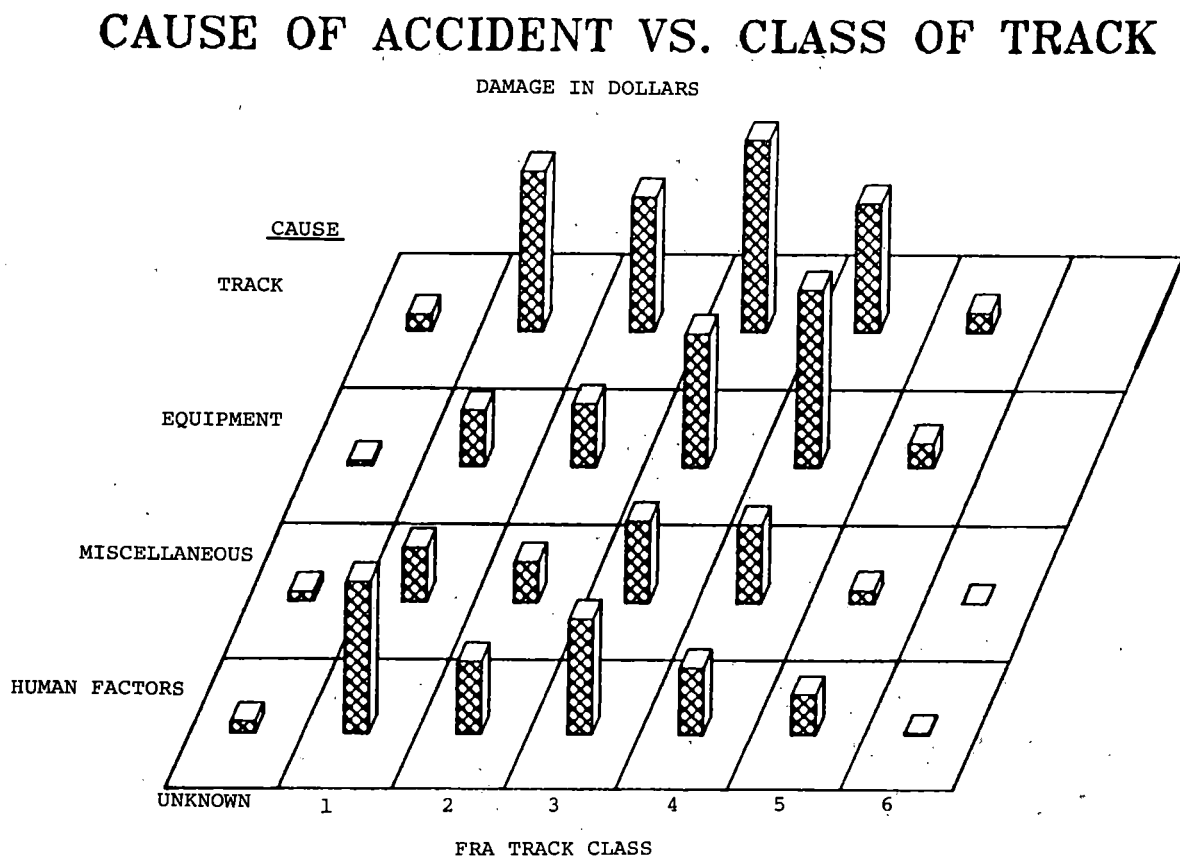


Fig. 16

TABLE S45. TRAIN ACCIDENTS AND REPORTABLE DAMAGES BY FRA TRACK CLASSIFICATION, 1979									
TRACK CLASS	TOTAL ACCIDENTS	TOTAL DAMAGE	EQUIPMENT DAMAGE	TRACK DAMAGE	COLLISIONS	DERAILMENTS	OTHER ACCIDENTS CAUSED	TRACK FAILURE	EQUIPMENT OPERATING PRACTICES
?									
1	456	7,039,387	5,668,028	1,371,359	120	305	31	172	49
2	5,020	71,557,658	52,416,023	19,141,635	912	3,814	294	2,326	526
3	1,739	52,721,301	39,380,381	13,340,920	195	1,426	118	789	321
4	1,442	88,974,757	72,092,888	16,881,869	110	1,163	169	548	446
5	955	76,457,883	62,879,378	13,578,505	75	684	24	197	419
6	124	16,689,631	14,263,193	2,426,438	12	88	1	18	54
TOTAL	9,740	313,907,209	247,159,991	66,747,218	1,425	7,482	833	4,050	1,815
									192
									1,715
									392
									202
									132
									25
									2
									2,660
									43
									453
									237
									246
									207
									27
									2
									1,215

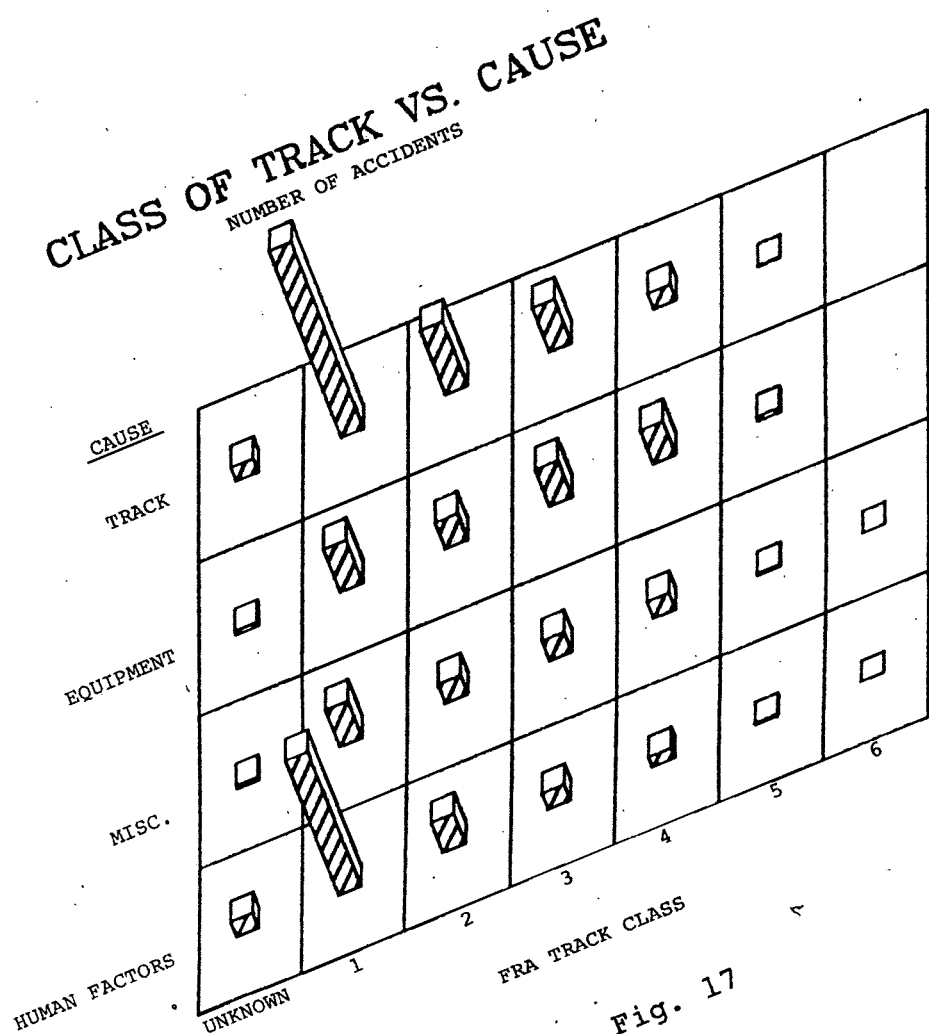


Fig. 17

TABLE S40B. REPORTABLE DAMAGE IN TRAIN ACCIDENTS BY TYPE AND CAUSE, 1979

Type of Accident	...Track Caused...		.Equipment Caused.		...Human Factors...		...Other Causes...		.....Total Damage.....	
	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg	Trk Dmg	Eqp Dmg
Derailment	25,223,542	83,272,639	20,701,649	50,731,961	8,200,355	33,077,431	8,015,322	24,407,804	62,140,868	191,489,835
Head on collision	20,000	141,000	---	12,900	237,952	11,375,138	1,725	554,206	259,677	12,083,244
Rear end collision	10,201	87,965	20,650	205,541	373,388	11,133,554	11,200	262,020	415,439	11,689,080
Side collision	101,325	516,177	31,895	269,290	888,867	10,476,556	75,668	566,968	1,097,755	11,828,991
Raking collision	32,038	241,315	161,049	856,225	135,333	1,412,811	68,900	322,614	397,320	2,832,965
Broken trn collisin	1,794	16,165	104,160	500,322	9,915	333,738	14,500	294,800	130,369	1,145,025
Rail-hwy crossing	---	---	---	---	---	---	1,055,163	6,959,471	1,055,163	6,959,471
RR grade crossing	---	---	---	---	4,510	34,968	---	---	4,510	34,968
Obstruction	200	10,200	---	15,000	4,740	130,329	61,587	437,045	66,527	592,574
Explosion-detonatin	---	---	---	---	---	9,000	---	---	---	9,000
Fire/violent ruptre	---	7,584	6,997	2,239,218	---	35,532	57,136	2,165,638	64,133	4,447,972
Other	314,073	586,275	198,109	713,564	169,355	2,082,398	433,920	664,629	1,115,457	4,046,866
TOTAL.....	25,703,173	84,879,320	21,224,509	55,544,021	10,024,415	70,101,455	9,795,121	36,635,195	66,747,218	247,159,991

## CAUSE OF ACCIDENT VS. TYPE OF ACCIDENT

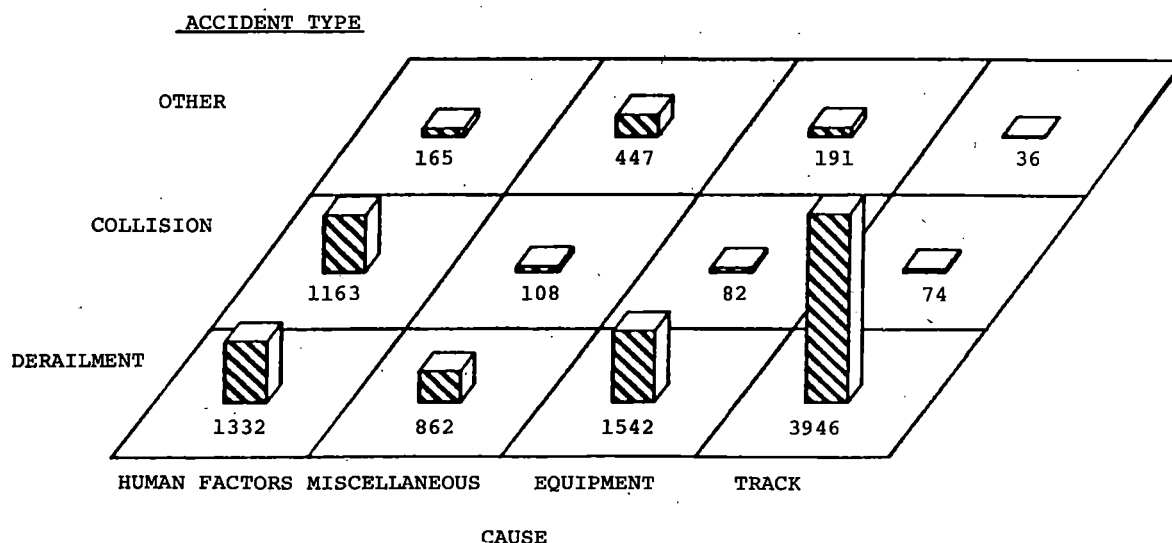


Fig. 18

TABLE S11. ACCIDENT/INCIDENT FATALITIES BY TYPE OF PERSON, 1979

	Total Acci- dents	Fatal Acci- dents	....Employees on duty....			Empl not on duty	Passen- gers	Non tres- passers	Tres- passers	Total Killed
			Trainmen	Other	Total					
TRAIN ACCIDENTS										
Collisions.....	1,425	11	15	---	15	---	---	---	---	15
Derailements.....	7,482	5	5	2	7	---	---	---	1	8
Grade crossing.....	248	57	5	3	8	---	---	61	8	77
Other train accidents.....	585	---	---	---	---	---	---	---	---	---
TOTAL.....	9,740	73	25	5	30	---	---	61	9	100
TRAIN INCIDENTS										
Coupling incidents.....	694	3	3	---	3	---	---	---	---	3
Operating locomotives.....	865	---	---	---	---	---	---	---	---	---
Operating rail motor car.....	326	1	1	---	1	---	---	---	---	1
Operating handbrakes.....	332	2	1	1	2	---	---	---	---	2
Operating switches.....	73	---	---	---	---	---	---	---	---	---
Striking fixed structures.....	275	2	1	---	1	---	---	---	1	2
Getting on or off trains.....	2,830	22	6	---	6	---	4	1	11	22
Highway grade accidents(Public)...	3,385	615	---	1	1	---	---	662	83	746
Struck or run over.....	1,107	429	8	4	12	---	---	48	382	442
Flying or falling objects.....	1,557	---	---	---	---	---	---	---	---	---
Assaults.....	308	1	---	---	---	---	1	---	---	1
Miscellaneous.....	3,407	25	10	5	15	---	---	4	7	26
TOTAL.....	15,159	1,100	30	11	41	---	5	715	484	1,245
NONTRAIN INCIDENTS										
Coupling incidents.....	1,977	---	---	---	---	---	---	---	---	---
Operating switches.....	2,482	---	---	---	---	---	---	---	---	---
Getting on/off locos or cars.....	2,646	---	---	---	---	---	---	---	---	---
Servicing or maintenance of equip.	17,047	9	---	8	8	---	---	1	---	9
Maintenance of way and structures.	18,989	8	---	6	6	---	---	2	---	8
Involving freight, baggage, etc...	233	1	---	---	---	---	---	1	---	1
Involving windows,doors, etc.....	992	3	---	1	1	---	---	2	---	3
Involving passenger car doors.....	21	---	---	---	---	---	---	---	---	---
Stumbling,falling not on car/loco.	5,754	10	1	2	3	---	1	2	5	11
Flying/falling objs, burns, etc...	1,979	13	---	1	1	1	---	3	8	13
Assaults to persons.....	300	2	---	2	2	---	---	---	---	2
Miscellaneous.....	4,793	36	---	9	9	---	---	18	10	37
TOTAL.....	57,213	82	1	29	30	1	1	29	23	84
GRAND TOTAL.....	82,112	1,255	56	45	101	1	6	805	516	1,429

TABLE S12 ACCIDENT/INCIDENT NONFATAL CASUALTIES BY TYPE OF PERSON, 1979

	Total acci- dents	Nonfatal acci- dents	....Employees on duty....			Empl not on duty	Passen- gers	Non Tres- passers	Tres- passers	Total Non-Fatal Casualties
			Trainmen	Other	Total					
TRAIN ACCIDENTS										
Collisions.....	1,425	148	217	48	265	---	351	8	---	624
Derailments.....	7,482	216	287	79	366	10	50	3	4	433
Grade crossing.....	248	84	66	8	74	---	---	96	9	179
Other train accidents.....	585	29	32	4	36	---	1	2	---	39
TOTAL.....	9,740	477	602	139	741	10	402	109	13	1,275
TRAIN INCIDENTS										
Coupling accidents.....	694	691	676	16	692	---	---	---	---	692
Operating locomotives.....	865	865	865	17	882	---	---	1	---	883
Operating rail motor car.....	326	325	28	330	358	7	---	---	---	365
Operating handbrakes.....	332	330	319	11	330	---	---	1	---	331
Operating switches.....	73	73	71	2	73	---	---	---	---	73
Striking fixed structures.....	275	273	267	4	271	1	---	---	1	273
Getting on or off trains.....	2,830	2,808	2,603	91	2,694	2	31	11	77	2,815
Highway grade accidents(Public)...	3,385	2,770	73	17	90	---	2	3,555	196	3,843
Struck or run over.....	1,107	678	108	41	149	5	---	202	395	751
Flying or falling objects.....	1,557	1,557	1,451	89	1,540	---	24	11	6	1,581
Assaults.....	308	307	285	5	290	1	18	---	2	311
Miscellaneous.....	3,407	3,382	2,399	783	3,182	8	233	43	30	3,496
TOTAL.....	15,159	14,059	9,145	1,406	10,551	24	308	3,824	707	15,414
NONTRAIN INCIDENTS										
Coupling incidents.....	1,977	1,977	1,810	171	1,981	---	---	2	---	1,983
Operating switches.....	2,482	2,482	2,320	161	2,481	3	---	1	---	2,485
Getting on/off locos or cars.....	2,646	2,646	1,935	527	2,462	28	132	19	7	2,648
Servicing or maintenance of equip.	17,047	17,038	102	16,814	16,916	122	---	17	---	17,055
Maintenance of way and structures.	18,989	18,981	57	18,813	18,870	110	---	48	---	19,028
Involving freight, baggage, etc....	233	232	11	217	228	---	2	2	---	232
Involving windows, doors, etc.....	992	989	353	588	941	13	20	15	1	990
Involving passenger car doors.....	21	21	6	4	10	---	11	---	---	21
Stumbling, falling not on car/loco.	5,754	5,744	2,502	2,482	4,984	401	105	245	20	5,755
Flying/falling objs, burns, etc...	1,979	1,966	1,120	778	1,898	28	5	44	18	1,993
Assaults to persons.....	300	298	80	193	273	16	4	7	2	302
Miscellaneous.....	4,793	4,757	2,039	2,549	4,588	117	12	191	37	4,945
TOTAL.....	57,213	57,131	12,335	43,297	55,632	838	291	591	85	57,437
GRAND TOTAL.....	82,112	71,667	22,082	44,842	66,924	872	1,001	4,524	805	74,126



### **3.0 ACCIDENTS: DETAIL OF 1979 OCCURRENCES**

TABLE S41. NUMBER OF TRAIN ACCIDENTS AND DAMAGE BY PRINCIPAL CAUSES AND SUBCAUSES, 1979

Cause Of Accident	-----Total-----		Collisions	Derailments	Other	Rail Hwy Crossing
	Accidents	Damage				
TRACK, ROADBED AND STRUCTURES						
Roadbed defects.....	213	11,009,966	6	202	5	---
Track geometry defects.....	1,893	43,507,285	8	1,881	4	---
Rail and joint bar defects.....	1,105	42,496,753	6	1,098	1	---
Frogs, switches and track appliances.....	795	9,664,524	49	735	11	---
Other way and structure.....	30	3,535,945	---	22	8	---
Signal and communication failures.....	14	368,020	5	8	1	---
Subtotal.....	4,050	110,582,493	74	3,946	30	---
MECHANICAL AND ELECTRICAL FAILURES						
*LOCOMOTIVE FAILURE*						
Brakes.....	17	1,408,275	7	9	1	---
Body.....	1	6,612	---	1	---	---
Coupler and draft system.....	3	46,800	---	3	---	---
Truck components.....	9	263,341	---	9	---	---
Axles and journal bearings.....	22	845,878	---	21	1	---
Wheels.....	12	1,303,604	---	11	1	---
Locomotives.....	91	2,304,134	2	13	76	---
Doors.....	---	---	---	---	---	---
General mechanical and electrical failures.....	6	47,727	---	2	4	---
Subtotal (Locomotives).....	161	6,226,371	9	69	83	---
*CAR FAILURE*						
Brakes.....	206	4,832,224	32	143	31	---
Trailer or container on flat car.....	16	487,153	1	7	8	---
Body.....	186	6,306,473	3	166	17	---
Coupler and draft system.....	198	6,691,580	25	157	16	---
Truck components.....	401	13,616,847	1	397	3	---
Axles and journal bearings.....	255	15,658,313	1	246	8	---
Wheels.....	326	21,156,876	2	323	1	---
Doors.....	25	564,776	4	19	2	---
General mechanical and electrical failures.....	41	1,227,917	4	15	22	---
Subtotal (cars).....	1,654	70,542,159	73	1,473	108	---
TOTAL EQUIPMENT FAILURES.....	1,815	76,768,530	82	1,542	191	---
TRAIN OPERATION - HUMAN FACTORS						
Brakes, use of.....	363	8,339,531	188	130	45	---
Employee physical condition.....	5	1,536,934	3	2	---	---
Flagging, fixed, hand and radio signals.....	92	9,242,438	66	23	3	---
Other rules and instructions.....	766	13,035,754	578	145	43	---
Speed.....	266	22,916,418	90	152	24	---
Switches, use of.....	435	7,720,751	122	297	16	---
Miscellaneous.....	733	17,334,044	116	583	34	---
Subtotal.....	2,660	80,125,870	1,163	1,332	165	---
MISCELLANEOUS FACTORS						
Collision with highway user at grade crossing....	248	8,014,634	---	---	---	248
Emergency brake application to avoid accident....	19	375,739	---	16	3	---
Vandalism.....	176	7,024,323	25	103	48	---
Interference with rr oper.-not vandals.....	25	804,502	6	11	8	---
Load shifted.....	87	6,802,864	10	66	11	---
Load fell from car.....	29	841,119	3	17	9	---
Overloaded car.....	19	226,943	---	19	---	---
Improperly loaded car.....	42	1,002,245	1	39	2	---
Oversized load, misrouted.....	12	131,555	4	1	7	---
Object on or fouling track.....	89	1,420,880	2	61	26	---
Equipment on or fouling track.....	26	239,079	15	8	3	---
Trail/container tiedown eqp impr applied.....	6	127,850	1	---	5	---
Overload/improper loaded container etc.....	3	17,950	---	1	2	---
Interaction of lateral/vertical forces.....	125	5,841,346	1	124	---	---
Failure to control car spd with hand brk.....	3	31,552	---	3	---	---
Snow, ice, or mud on track.....	102	2,201,125	10	89	3	---
Other acts of god.....	23	1,968,625	2	12	9	---
Other causes.....	181	9,357,985	26	92	63	---
Subtotal.....	1,215	46,430,316	106	662	199	248
GRAND TOTAL.....	9,740	313,907,209	1,425	7,482	585	248

TABLE S5. TRAIN ACCIDENTS RESULTING FROM OPERATING PRACTICES  
BY SPECIFIC CAUSE, 1979

Cause Of Accident	Accidents	Damage	Collisions	Derailments	Other
Total					
BRAKES, USE OF					
500 Automatic brake, improper use.....	28	2,047,961	6	22	---
501 Dynamic brake, improper use.....	9	477,936	---	9	---
502 Failure to secure engine (R.R. emp.).....	25	1,400,201	16	7	2
503 Failure to secure hnd brk (R.R. emp.).....	108	1,173,292	70	24	14
504 Failure to apply sufficient hand brake.....	69	1,380,141	41	21	7
505 Failure to apply hnd brk on car (emp.).....	41	326,864	26	8	7
506 Fail. to secure eng/car (Non R.R. emp.).....	10	180,197	6	4	---
507 Independent (eng.) brake, improper use.....	20	360,190	3	15	2
508 Fail. to control spd,hnd brk (R.R. emp.).....	17	174,516	6	5	6
509 Other causes involving use of brakes.....	36	818,233	14	15	7
SUBTOTAL.....	363	8,339,531	188	130	45
EMPLOYEE PHYSICAL CONDITION					
510 Impairment due to alcohol or drugs.....	4	1,516,434	3	1	---
513 Employee falling asleep.....	1	20,500	---	1	---
SUBTOTAL.....	5	1,536,934	3	2	---
FLAGGING, FIXED, HAND AND RADIO SIGNALS					
518 Fixed sgnl imprprly displdy(Blue sgnl).....	1	3,236	---	1	---
519 Fixed signal improperly displayed.....	1	25,690	1	---	---
520 Fixed signal, failure to comply.....	31	7,812,458	21	9	1
521 Flagging, improper or failure to flag.....	7	676,064	6	1	---
522 Flagging signal, failure to comply.....	3	68,031	2	1	---
523 Hand signal, failure to comply.....	5	33,571	4	1	---
524 Hand signal improper.....	4	22,075	3	---	1
525 Hand signal, failure to give/receive.....	6	163,644	5	1	---
526 Radio communicatio, failure to comply.....	6	85,570	6	---	---
527 Radio communication, improper.....	4	45,643	3	1	---
528 Radio comm., failure to give/receive.....	14	169,792	10	4	---
529 Flagging, fixed, hand & radio (other).....	10	136,664	5	4	1
SUBTOTAL.....	92	9,242,438	66	23	3
OTHER RULES AND INSTRUCTIONS					
530 Car(s) shoved out & left out of clear.....	62	472,126	49	12	1
531 Cars left foul.....	81	692,826	65	7	9
532 Derail, failure to apply or remove.....	29	309,590	2	27	---
533 Failure to stop train in clear.....	108	1,835,236	94	7	7
534 Hazmat regulations, failure to comply.....	1	41,346	---	1	---
535 Instruction to trn/yard crew improper.....	43	535,684	34	7	2
536 Mtr car/on-trk eqp rules,fail to cmPLY.....	38	905,150	28	4	6
537 Equip move without authority (RR emp).....	21	593,435	17	4	---
538 Shoving move, missing man at lead.....	253	2,748,033	200	45	8
539 Shoving movement, fail to control.....	88	1,732,141	70	15	3
540 Skate, failure to remove or place.....	2	10,764	---	1	1
541 Special op. instr., failure to comply.....	28	593,956	12	12	4
542 Trn ord/timetable auth, fail to comply.....	6	1,327,975	4	1	1
543 Trn ord(radio)err in prep/trans/deliv.....	2	360,524	1	1	---
544 Trn ord(written)err in preparation,etc.....	4	876,968	2	1	1
SUBTOTAL.....	766	13,035,754	578	145	43

TABLE S5. CONTINUATION

Cause Of Accident	Total				
	Accidents	Damage	Collisions	Derailments	Other
550 Coupling speed excessive.....	99	2,103,652	43	40	16
553 Switch movement, excessive speed.....	40	401,095	14	22	4
554 Trn inside yrd limit, excess speed.....	49	8,033,930	20	27	2
555 Trn out yrd limit; clear blk, excess spd.....	50	11,003,092	5	44	1
559 Other Causes involving excessive speed.....	28	1,374,649	8	19	1
SUBTOTAL.....	266	22,916,418	90	152	24
SWITCHES, USE OF:					
560 Spring switch not clear before reverse.....	37	282,881	3	33	1
561 Switch improperly lined.....	266	5,855,082	114	139	13
562 Switch not latched or locked.....	33	342,018	---	33	---
563 Switch previously run through.....	99	1,240,770	5	92	2
SUBTOTAL.....	435	7,720,751	122	297	16
MISCELLANEOUS					
570 Buffing or slack action excessive.....	344	9,704,565	6	336	2
571 Failure to couple.....	39	488,799	24	12	3
572 Lateral drawbar force on curve excess.....	105	1,562,811	---	105	---
573 Moving car, loading ramp not positioned.....	3	15,030	---	1	2
574 Passed couplers.....	99	788,954	13	78	8
575 Retarder, improper manual operation.....	24	192,693	15	6	3
576 Retarder yard skate improperly applied.....	7	75,424	5	2	---
599 Other train operation/human factors.....	112	4,505,768	53	43	16
SUBTOTAL.....	733	17,334,044	116	583	34
GRAND TOTAL.....	2,660	80,125,870	1,163	1,332	165



TABLE S6. TRAIN ACCIDENTS RESULTING FROM MECHANICAL AND ELECTRICAL FAILURES BY SPECIFIC CAUSE, 1979

Cause Of Accident	-----Total-----				
	Accidents	Damage	Collisions	Derailments	Other
BRAKES					
400 Air hose uncoupled or burst.....	39	1,484,906	2	37	---
400L Air hose uncoupled or burst - loco.....	2	14,911	---	2	---
401 Hydraulic hose uncoupled or burst.....	1	31,000	---	1	---
402 Broken brake pipe or connections.....	8	227,486	1	6	1
403 Obstructed brake pipe.....	1	4,000	1	---	---
403L Obstructed brake pipe - locomotive.....	1	5,105	---	1	---
404 Other brake component failure, etc.....	24	522,581	5	17	2
404L Other brake component failure - loco.....	3	1,199,287	2	1	---
405 Brk valve malf. (undesired emergency).....	7	120,325	---	6	1
406 Brake valve malfunction/stuck brake/etc.....	24	245,370	3	4	17
406L Brk valve malf./stuck brake/etc - loco.....	2	9,250	1	---	1
407 Rigging down or dragging.....	56	1,629,096	---	54	2
408 Hand brake/gear broken or defective.....	16	141,396	8	4	4
408L Hand brk/gear broken/defective - loco.....	1	6,800	1	---	---
409 Hand brk linkage/connections failure.....	12	144,446	6	6	---
409L Hand brk linkage etc. failure - loco.....	1	17,500	1	---	---
410 Other brake failure(not on locomotive).....	18	281,618	6	8	4
410L Other brake failure - locomotive.....	7	155,422	2	5	---
SUBTOTAL.....	223	6,240,499	39	152	32
TRAILER OR CONTAINER ON FLAT CAR					
411 Broken or defective tiedown equipment.....	11	387,124	1	5	5
419 Oth trailer/container on flat car fail.....	5	100,029	---	2	3
SUBTOTAL.....	16	487,153	1	7	8
BODY					
420 Body bolster broken or defective.....	15	416,330	---	14	1
421 Center sill broken or bent.....	46	1,083,746	2	30	14
422 Draft sill broken or bent.....	9	688,955	---	9	---
423 Center plate broken or defective.....	45	2,583,368	---	45	---
424 Center plate disengaged from truck.....	45	750,641	---	44	1
425 Center pin broken or missing.....	11	200,532	---	10	1
426 Center plate attachment defective.....	4	117,512	---	4	---
429 Other causes due to body (not loco).....	11	465,389	1	10	---
429L Other causes due to body - locomotive.....	1	6,612	---	1	---
SUBTOTAL.....	187	6,313,085	3	167	17
COUPLER AND DRAFT SYSTEM					
430 Knuckle broken or defective.....	29	1,215,419	11	16	2
431 Coupler mismatch, high/low.....	25	487,718	3	19	3
432 Coupler drawhead broken or defective.....	44	1,308,145	2	40	2
433 Coupler retainer pin/cross key missing.....	14	816,988	1	13	---
433L Coup. retain pin/cross key miss.-loco.....	1	28,050	---	1	---
434 Draft gear/mechanism broken/defective.....	22	1,157,525	1	20	1
435 Coupler carrier broken or defective.....	19	403,263	2	15	2
436 Coupler shank broken or defective.....	9	673,355	1	8	---
439 Other coupler and draft system causes.....	36	629,167	4	26	6
439L Other coupler/draft system causes-loco.....	2	18,750	---	2	---
SUBTOTAL.....	201	6,738,380	25	160	16
TRUCK COMPONENTS					
440 Side bearing clearance improper.....	167	5,472,096	1	166	---
441 Side bearing(s) broken.....	18	455,491	---	18	---
442 Side bearing(s) missing.....	37	1,438,647	---	37	---
443 Truck bolster broken.....	28	2,318,646	---	25	3
444 Side frame broken.....	9	130,338	---	9	---
445 Truck (stiff/improper lateral).....	107	2,647,047	---	107	---
445L Truck (stiff/improper lateral) - loco.....	8	200,841	---	8	---
446 Defective snubbing.....	1	31,812	---	1	---
447 Broken/missing/defective springs.....	7	238,587	---	7	---
449 Other truck component causes.....	27	884,183	---	27	---

TABLE S6. CONTINUATION

Cause Of Accident	Accidents	Damage	Collisions	Derailments	Other
-----Total-----					
TRUCK COMPONENTS (CONT.)					
449L Other truck component causes - loco.....	1	62,500	---	1	---
SUBTOTAL.....	410	13,880,188	1	406	3
AXLES AND JOURNAL BEARINGS					
450 Broken or bent between wheel seats.....	11	565,141	---	11	---
450L Broken/bent between wheel seats-loco.....	15	331,251	---	14	1
451 Journal (plain) failure - overheating.....	164	8,849,490	1	159	4
451L Journal (plain) failure-overheat(loco).....	2	386,900	---	2	---
452 Journal (R. B.) failure - overheat.....	61	4,666,305	---	58	3
452L Journal (R. B.) failure-overheat(loco).....	3	118,455	---	3	---
453 Journal fractured, new cold break.....	11	1,483,457	---	11	---
454 Journal fract., cold brk(prev. O.heat).....	4	29,925	---	4	---
459 Axles and journal bearings (other).....	4	63,995	---	3	1
459L Axles/journal bearings (other) - loco.....	2	9,272	---	2	---
SUBTOTAL.....	277	16,504,191	1	267	9
WHEELS					
460 Broken flange.....	28	3,242,018	---	28	---
461 Broken rim.....	32	4,355,665	---	32	---
461L Broken rim - locomotive.....	2	295,500	---	2	---
462 Broken plate.....	42	4,653,583	---	41	1
463 Broken hub.....	8	1,913,183	---	8	---
464 Worn flange.....	142	1,730,908	2	140	---
464L Worn flange - locomotive.....	5	390,864	---	5	---
465 Worn thread.....	3	103,755	---	3	---
466 Damaged flange/thread, thermal/flat.....	13	626,984	---	13	---
466L Dmg flange/thread, thermal/flat - loco.....	1	3,640	---	1	---
467 Loose wheel.....	38	2,991,588	---	38	---
467L Loose wheel - locomotive.....	2	252,600	---	2	---
469 Other causes involving wheels-not loco.....	20	1,539,192	---	20	---
469L Other causes involving wheel - loco.....	2	361,000	---	1	1
SUBTOTAL.....	338	22,460,480	2	334	2
LOCOMOTIVES					
470L Running gear failure - locomotive.....	6	206,786	---	5	1
471L Traction motor failure - locomotive.....	4	271,190	---	2	2
472L Crank case/air box explosion - loco.....	1	5,000	---	---	1
473L Oil fire - locomotive.....	14	216,164	---	---	14
474L Electrically caused fire - locomotive.....	48	1,306,932	---	---	48
475L Current collector system - loco.....	2	24,114	---	1	1
476L Remote control eqp. inoperative-loco.....	1	4,900	1	---	---
477L Broke/defect swing hanger or plank-loc.....	1	5,950	---	1	---
479L Other causes involving locomotives.....	14	263,098	1	4	9
SUBTOTAL.....	91	2,304,134	2	13	76
DOORS					
480 Box car plug door open.....	2	14,631	2	---	---
481 Box car plug door,attachment defective.....	4	325,442	1	2	1
482 Box car plug door,lock lever not in.....	1	11,236	---	1	---
484 Box car door(not plug) attach defect.....	1	6,000	---	1	---
485 Bottom outlet car door open.....	9	156,641	---	9	---
486 Bottom outlet car door attach defect.....	3	8,393	---	3	---
489 Other causes involving doors.....	5	42,433	1	3	1
SUBTOTAL.....	25	564,776	4	19	2
GENERAL MECHANICAL AND ELECTRICAL FAILURES					
499 General mech/elect failures-not loco.....	41	1,227,917	4	15	22
499L General mech/elect failures - loco.....	6	47,727	---	2	4
SUBTOTAL.....	47	1,275,644	4	17	26
GRAND TOTAL.....	1,815	76,768,530	82	1,542	191

TABLE S7. TRAIN ACCIDENTS RESULTING FROM TRACK, ROADBED AND STRUCTURES  
BY SPECIFIC CAUSE, 1979

Cause Of Accident	-----Total-----		Collisions	Derailments	Other
	Accidents	Damage			
ROADBED DEFECTS					
101 Roadbed settled or soft.....	129	2,869,949	5	124	---
102 Washout/rain/slide/ice,etc. dmg to trk.....	64	7,507,727	---	59	5
109 Other roadbed defects.....	20	632,290	1	19	---
SUBTOTAL.....	213	11,009,966	6	202	5
TRACK GEOMETRY DEFECTS					
110 Wide gage (defect/missing crossties).....	639	7,091,537	3	636	---
111 Wide gage (def/missing rail fasteners).....	99	1,922,494	---	99	---
112 Wide gage (involving gage rods).....	9	69,088	---	8	1
113 Wide gage due to worn rail.....	67	1,811,197	---	67	---
114 Track alignment irregular.....	87	2,468,684	1	86	---
115 Track alignment irregular (buckled).....	114	6,870,519	---	114	---
116 Track profile improper.....	27	769,977	---	26	1
117 Superelevation incorrect.....	48	1,306,372	---	48	---
118 Superelevation runoff improper.....	3	28,075	---	3	---
119 Cross level irregular at joints.....	528	13,633,219	1	526	1
120 Cross level irregular not at joints.....	209	4,652,462	1	208	---
129 Other track geometry defects.....	63	2,883,661	2	60	1
SUBTOTAL.....	1,893	43,507,285	8	1,881	4
RAIL AND JOINT BAR DEFECTS					
✓ 130 Bolt hole crack or break.....	58	4,535,073	---	58	---
✓ 131 Broken base of rail.....	231	7,336,385	2	229	---
132 Broken weld, field.....	2	321,745	---	2	---
133 Broken weld, plant.....	3	291,237	1	2	---
✓ 134 Detail fracture fm shelling/head check.....	13	554,177	---	13	---
✓ 135 Engine burn fracture.....	5	164,780	---	5	---
✓ 136 Head/web sep.(outside joint bar limit).....	106	3,514,598	1	105	---
✓ 137 Head/web sep.(within joint bar limits).....	43	973,233	---	43	---
✓ 138 Horizontal split head.....	25	1,497,936	---	25	---
✓ 139 Piped rail.....	4	44,799	---	4	---
✓ 140 Rail defect with joint bar repair.....	7	68,287	---	7	---
✓ 141 Transverse/compound fissure.....	140	4,561,384	1	139	---
✓ 142 Vertical split head.....	148	4,397,123	---	148	---
143 Worn rail.....	49	1,401,814	---	49	---
144 Mismatched rail-head contour.....	33	305,533	---	32	1
✓ 145 Joint bar broken, compromise.....	12	67,810	---	12	---
✓ 146 Joint bar broken, insulated.....	7	613,907	---	7	---
✓ 147 Joint bar broken, noninsulated.....	87	6,748,996	---	87	---
148 Joint bolts, broken or missing.....	23	568,734	---	23	---
✓ 149 Other rail and joint bar defects.....	109	4,529,202	1	108	---
SUBTOTAL.....	1,105	42,496,753	6	1,098	1

TABLE S7. CONTINUATION

Cause Of Accident	-----Total-----				
	Accidents	Damage	Collisions	Derailments	Other
FROGS, SWITCHES AND TRACK APPLIANCES					
160 Guard rail loose/broken/etc.....	13	213,476	---	13	---
161 Switch damaged/out of adjustment.....	179	1,694,125	1	178	---
162 Switch stand failure (hand oper.).....	21	204,059	---	21	---
163 Switch connecting/oper. rod fail.....	17	165,982	1	16	---
164 Stock rail worn/broken/disconnect.....	14	196,359	---	14	---
165 Switch point worn or broken.....	364	4,656,491	4	360	---
166 Switch rod worn/bent/broken/etc.....	10	321,936	---	10	---
167 Frog, rigid, worn or broken.....	21	157,567	---	21	---
168 Frog, spring, worn or broken.....	7	442,820	---	7	---
169 Frog, self guarded, worn/broken.....	2	10,750	---	2	---
171 Derail, defective.....	6	61,128	---	5	1
173 Retarder worn/broken/malfunction.....	49	400,606	30	11	8
174 Spring/power switch mech. malfunction.....	14	108,559	---	14	---
175 Retarder yard skate defective.....	9	54,049	7	2	---
176 Switch out of adjust.(insuf rail anch).....	8	58,502	---	8	---
179 Other frog/switches/track appl. causes.....	61	918,115	6	53	2
SUBTOTAL.....	795	9,664,524	49	735	11
OTHER WAY AND STRUCTURES					
180 Bridge misalignment or failure.....	5	1,720,969	---	5	---
181 Flangeway clogged.....	9	276,772	---	9	---
189 Other way and structure causes.....	16	1,538,204	---	8	8
SUBTOTAL.....	30	3,535,945	---	22	8
SIGNAL AND COMMUNICATION FAILURES					
200 Fix sig. improperly displayed (defect).....	2	70,022	1	1	---
201 Radio communication equipment failure.....	6	74,580	2	4	---
209 Signal & communication failure N.O.C.....	6	223,418	2	3	1
SUBTOTAL.....	14	368,020	5	8	1
GRAND TOTAL.....	4,050	110,582,493	74	3,946	30



TABLE S8. TRAIN ACCIDENTS RESULTING FROM MISCELLANEOUS CAUSES BY SPECIFIC CAUSE, 1979

Cause Of Accident	Accidents	Damage	Collisions	Derailments	Other
MISC CAUSES NOT OTHERWISE LISTED					
700 Collision with hwy user at grade xing.....	248	8,014,634	---	---	---
701 Emergency brk appl to avoid accident.....	19	375,739	---	16	3
702 Vandalism.....	176	7,024,323	25	103	48
703 Interference with RR oper.-not vandals.....	25	804,502	6	11	8
704 Load shifted.....	87	6,802,864	10	66	11
705 Load fell from car.....	29	841,119	3	17	9
706 Overloaded car.....	19	226,943	---	19	---
707 Improperly loaded car.....	42	1,002,245	1	39	2
708 Oversized load, misrouted.....	12	131,555	4	1	7
709 Object on or fouling track.....	89	1,420,880	2	61	26
710 Equipment on or fouling track.....	26	239,079	15	8	3
711 Trail/contain tiedown eqp-impr applied.....	6	127,850	1	---	5
712 Overload/improper loaded container etc.....	3	17,950	---	1	2
713 Interaction of lateral/vertical forces.....	125	5,841,346	1	124	---
714 Failure to control spd with hand brake.....	3	31,552	---	3	---
715 Snow, ice, or mud on track.....	102	2,201,125	10	89	3
716 Other acts of God.....	23	1,968,625	2	12	9
799 Other miscellaneous causes.....	181	9,357,985	26	92	63
SUBTOTAL.....	1,215	46,430,316	106	662	199
GRAND TOTAL.....	1,215	46,430,316	106	662	199

TABLE S43. DAMAGE TO RAIL EQUIPMENT IN TRAIN ACCIDENTS BY CONSIST TYPE, 1979

Type of consist	....Collisions....		...Derailments....		.....Other.....		..Rail-Hwy X-ing..		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Freight train....	512	20,805,888	5,263	170,718,843	199	2,324,964	171	5,847,000	6,145	199,696,695
Passenger train..	28	3,336,301	52	6,390,004	67	1,820,937	33	528,864	180	12,076,106
Mixed train.....	1	3,500	5	418,125	2	31,900	1	3,461	9	456,986
Work train.....	17	203,680	29	1,146,304	7	288,800	3	75,000	56	1,713,784
Single car.....	269	1,550,933	48	438,295	99	936,850	9	105,187	425	3,031,265
Cut of cars.....	521	2,961,859	181	1,307,904	93	2,203,779	1	600	796	6,474,142
Yard/switching...	987	6,713,102	1,706	10,289,540	101	1,117,622	11	139,109	2,805	18,259,373
Light loco(s)....	234	3,977,009	115	674,520	33	371,560	11	260,250	393	5,283,339
Unknown.....	8	62,001	5	106,300	---	---	---	---	13	168,301
Total.....	2,577	39,614,273	7,404	191,489,835	601	9,096,412	240	6,959,471	10,822	247,159,991

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

#### 4.0 ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS

Year	Number of Accidents	Number of Deaths	Number of Injuries	Number of Property Damages	Number of Environmental Damages
1990	1	0	0	0	0
1991	1	0	0	0	0
1992	1	0	0	0	0
1993	1	0	0	0	0
1994	1	0	0	0	0
1995	1	0	0	0	0
1996	1	0	0	0	0
1997	1	0	0	0	0
1998	1	0	0	0	0
1999	1	0	0	0	0
2000	1	0	0	0	0
2001	1	0	0	0	0
2002	1	0	0	0	0
2003	1	0	0	0	0
2004	1	0	0	0	0
2005	1	0	0	0	0
2006	1	0	0	0	0
2007	1	0	0	0	0
2008	1	0	0	0	0
2009	1	0	0	0	0
2010	1	0	0	0	0
2011	1	0	0	0	0
2012	1	0	0	0	0
2013	1	0	0	0	0
2014	1	0	0	0	0
2015	1	0	0	0	0
2016	1	0	0	0	0
2017	1	0	0	0	0
2018	1	0	0	0	0
2019	1	0	0	0	0
2020	1	0	0	0	0
2021	1	0	0	0	0
2022	1	0	0	0	0
2023	1	0	0	0	0
2024	1	0	0	0	0
2025	1	0	0	0	0
2026	1	0	0	0	0
2027	1	0	0	0	0
2028	1	0	0	0	0
2029	1	0	0	0	0
2030	1	0	0	0	0

#### 4.0 ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS

The reportability of a train accident is based solely on whether or not total reportable damage exceeded the established monetary threshold. The presence of or damage to cars transporting hazardous material is not a consideration when determining reportability. However, for all train accidents, information concerning any placarded hazardous material cars and people evacuated must be included on the report of the accident. Although this does not represent a complete accounting of all releases of hazardous materials, it does provide some insight into the extent of involvement of hazardous material cars in train accidents.

When examining the information in this section, it should be remembered that it only represents those accidents involving consists containing at least one car carrying hazardous material. The accident and resulting damages or casualties may or may not be attributable to the presence of these cars in the consist.

**TOTAL NUMBER OF HAZARDOUS MATERIAL CARS DAMAGED**

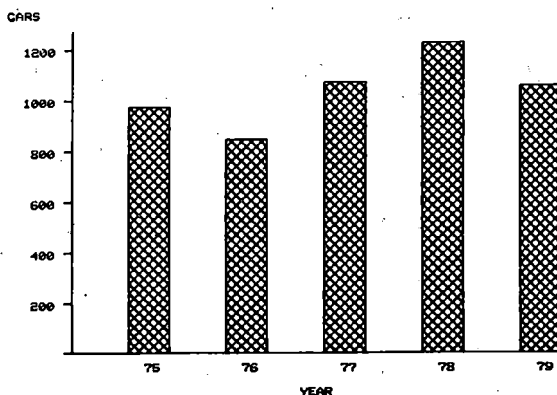


Fig. 19

**TOTAL NUMBER OF HAZARDOUS MATERIAL CAR RELEASES**

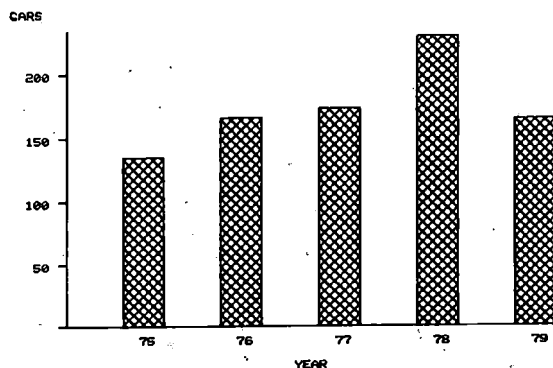


Fig. 20

TABLE S10. TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS BY TYPE OF ACCIDENT, 1979

Type Of Accident	Consists Carrying	.....Cars.....				People Evacuated	Damage To Equipment
		In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat		
Derailment	765	56,904	3,971	935	150	15,423	37,710,948
Head on collision	5	322	17	---	---	---	136,974
Rear end collision	20	828	58	14	2	600	1,647,557
Side collision	100	4,977	384	90	11	50	931,174
Raking collision	14	511	37	4	---	20	145,315
Broken train collision	2	230	7	---	---	---	22,600
Rail-hwy crossing	20	1,593	119	3	---	700	1,561,411
RR grade crossing	3	162	7	1	---	---	20,300
Obstruction	1	128	1	---	---	---	5,100
Explosion-detonation	---	---	---	---	---	---	---
Fire or violent rupture	5	315	14	---	---	---	35,050
Other	22	1,115	78	13	2	---	441,090
TOTAL.....	957	67,085	4,693	1,060	165	16,793	42,657,519

**TABLE S10A TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING  
HAZARDOUS MATERIALS BY CAUSE, 1979**

Cause	Consists Carrying	In Consist	Containing Hazmat	Cars..... Damaged W/Hazmat	Releasing Hazmat	People Evacuated	Damage To Equipment
<b>TRACK, ROADBED AND STRUCTURES</b>							
Roadbed defects.....	17	1,215	81	26	8	535	2,849,447
Track geometry defects.....	175	12,301	887	219	34	2,305	4,978,655
Rail and joint bar defects.....	123	8,532	708	188	33	2,462	7,248,291
Frogs, switches and track appliances.....	74	3,980	311	65	4	---	614,539
Other way and structure.....	2	129	70	25	10	4,501	851,907
Signal and communication failures.....	3	215	22	4	---	---	65,100
Subtotal.....	394	26,372	2,079	527	89	9,803	16,607,939
<b>MECHANICAL AND ELECTRICAL FAILURES</b>							
Brakes.....	31	2,605	179	35	6	20	1,013,974
Trailer or container on flat car.....	1	58	1	---	---	---	12,653
Body.....	23	2,209	100	19	2	75	656,650
Coupler and draft system.....	20	2,245	97	8	4	812	1,044,396
Truck components.....	40	3,012	172	32	5	4	1,575,027
Axles and journal bearings.....	49	4,511	247	56	11	1,021	3,175,924
Wheels.....	38	2,958	196	57	14	1,750	3,330,731
Locomotives.....	5	316	12	4	---	---	252,715
Doors.....	---	---	---	---	---	---	---
General mechanical and electrical failures.....	2	129	14	---	---	---	267,975
Subtotal.....	209	18,043	1,018	211	42	3,682	11,330,045
<b>TRAIN OPERATION - HUMAN FACTORS</b>							
Brakes, use of.....	33	1,668	116	34	1	70	495,403
Employee physical condition.....	1	98	2	---	---	---	1,102,100
Flagging, fixed, hand and radio signals.....	16	591	34	12	2	600	668,289
Other rules and instructions.....	53	2,645	203	42	1	500	484,200
Speed.....	18	874	62	34	5	200	1,628,810
Switches, use of.....	25	1,667	99	9	---	---	222,585
Miscellaneous.....	95	6,549	419	94	11	827	2,416,001
Subtotal.....	241	14,092	935	225	20	2,197	7,017,388
<b>MISCELLANEOUS FACTORS</b>							
Collision with highway user at grade crossing....	20	1,593	119	3	---	700	1,561,411
Emergency brake application to avoid accident....	4	517	4	2	2	---	14,375
Vandalism.....	12	1,047	143	10	1	---	217,850
Interference with rr oper.-not vandals.....	---	---	---	---	---	---	---
Load shifted.....	11	871	23	12	2	---	1,566,285
Load fell from car.....	4	257	28	---	---	---	48,685
Overloaded car.....	---	---	---	---	---	---	---
Improperly loaded car.....	5	353	7	3	---	---	51,630
Oversized load, misrouted.....	3	254	4	1	---	---	17,025
Object on or fouling track.....	8	553	115	15	---	26	359,677
Equipment on or fouling track.....	1	30	1	1	---	---	1,500
Trail/container tiedown eqp impr applied.....	---	---	---	---	---	---	---
Overload/improper loaded container etc.....	---	---	---	---	---	---	---
Interaction of lateral/vertical forces.....	18	1,441	94	23	1	250	1,612,389
Failure to control car spd with hand brk.....	---	---	---	---	---	---	---
Snow, ice, or mud on track.....	8	345	20	9	1	---	149,150
Other acts of god.....	2	159	24	4	---	---	427,900
Other causes.....	17	1,158	79	14	7	135	1,674,270
Subtotal.....	113	8,578	661	97	14	1,111	7,702,147
<b>GRAND TOTAL.....</b>	<b>957</b>	<b>67,085</b>	<b>4,693</b>	<b>1,060</b>	<b>165</b>	<b>16,793</b>	<b>42,657,519</b>

TABLE S9. TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS, BY STATE, 1979

State	Consists Carrying	In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat	People Evacuated	Damage To Equipment
Alabama.....	31	2,192	266	17	1	200	778,459
Alaska.....	3	73	32	7	1	---	103,000
Arizona.....	6	328	13	4	---	---	387,600
Arkansas.....	21	1,560	99	26	1	5	1,968,620
California.....	30	1,944	103	24	2	---	3,710,640
Colorado.....	5	393	9	1	---	---	309,489
Connecticut.....	2	106	5	---	---	---	2,296
Delaware.....	---	---	---	---	---	---	---
Dist of Columbia..	---	---	---	---	---	---	---
Florida.....	18	1,526	291	54	16	5,050	2,719,785
Georgia.....	31	2,700	113	15	7	---	433,161
Idaho.....	4	349	31	6	4	---	770,109
Illinois.....	67	4,611	231	73	12	1,676	1,478,360
Indiana.....	22	1,686	156	31	8	325	486,178
Iowa.....	16	1,313	36	23	3	35	1,422,402
Kansas.....	10	667	26	14	1	612	514,190
Kentucky.....	41	2,482	319	82	16	120	1,656,491
Louisiana.....	70	4,999	417	69	5	700	1,899,044
Maine.....	12	682	40	15	1	2	114,427
Maryland.....	8	565	27	6	---	---	391,800
Massachusetts....	5	444	11	1	---	4	375,111
Michigan.....	25	1,502	118	23	3	1,970	881,415
Minnesota.....	23	1,541	93	14	---	---	459,635
Mississippi.....	28	2,345	95	23	2	---	915,279
Missouri.....	32	2,327	111	22	6	820	1,692,405
Montana.....	10	674	46	6	1	---	323,750
Nebraska.....	4	295	9	6	1	18	420,688
Nevada.....	---	---	---	---	---	---	---
New Hampshire....	1	41	1	---	---	---	1,000
New Jersey.....	6	230	12	12	1	---	113,600
New Mexico.....	8	476	39	10	7	---	866,175
New York.....	18	1,327	53	20	---	400	549,878
North Carolina...	28	2,143	109	23	2	---	603,358
North Dakota.....	8	447	36	12	1	---	248,115
Ohio.....	37	2,468	119	47	5	---	1,345,007
Oklahoma.....	26	1,835	100	18	2	1,000	883,655
Oregon.....	17	637	53	6	---	---	678,085
Pennsylvania.....	39	3,465	163	67	11	1,531	2,032,625
Rhode Island.....	1	12	2	1	---	---	2,400
South Carolina...	4	267	8	3	1	---	477,677
South Dakota.....	---	---	---	---	---	---	---
Tennessee.....	55	3,244	271	62	12	200	1,838,142
Texas.....	107	7,414	783	159	19	504	5,411,087
Utah.....	3	238	4	2	1	---	193,150
Vermont.....	5	400	8	1	---	26	482,725
Virginia.....	16	1,009	40	10	1	1,470	345,572
Washington.....	1	112	13	---	---	---	8,100
West Virginia....	21	1,482	117	28	4	---	880,950
Wisconsin.....	25	1,941	47	4	1	---	463,294
Wyoming.....	7	593	18	13	6	125	1,018,590
Unknown.....	---	---	---	---	---	---	---
TOTAL.....	957	67,085	4,693	1,060	165	16,793	42,657,519

TABLE R4. TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS,  
BY RAILROAD, 1979

Railroad	Consists Carrying	Cars In Consist	Containing Hazmat	Damaged W/Hazmat	Releasing Hazmat	People Evacuated	Damage To Equipment
CLASS I RAILROADS							
Alabama Great Southern Railroad Co.....	1	109	9	---	---	---	7,500
Amtrak.....	---	---	---	---	---	---	---
Atchison, Topeka And Santa Fe Rwy Co.....	47	2,673	182	49	7	1,000	2,607,065
Baltimore And Ohio Railroad Co.....	58	4,138	291	80	13	1,014	3,297,465
Bessemer And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Boston And Maine Corporation.....	6	427	12	1	---	---	376,521
Burlington Northern Incorporated.....	22	1,366	63	25	6	---	1,326,092
Central Of Georgia Railroad Company.....	---	---	---	---	---	---	---
Chesapeake And Ohio Railway Company.....	27	1,846	174	28	4	1,970	935,590
Chicago And Northwestern Transportation Co..	18	1,341	32	25	6	53	1,214,266
Chicago, Milw, St. Paul And Pacific RR Co...	1	49	7	2	---	---	100
Chicago, Rock Island And Pacific Railroad...	34	2,453	110	29	5	212	1,039,161
Cincinnati, New Orleans And Tx Pacific Co...	3	291	10	2	1	200	1,131,000
Clinchfield Railroad Company.....	5	449	20	2	---	---	78,523
Colorado And Southern Railway Co.....	1	74	5	---	---	---	138,000
Consolidated Rail Corporation.....	69	5,271	264	112	14	1,171	2,129,718
Delaware And Hudson Railway.....	6	577	15	5	1	---	84,600
Denver And Rio Grande Western RR Co.....	1	72	1	---	---	---	99,089
Detroit, Toledo And Ironton RR Co.....	---	---	---	---	---	---	---
Duluth, Missabe And Iron Range Rwy Co.....	1	63	1	---	---	---	36
Elgin, Joliet And Eastern Railway Co.....	1	25	3	3	---	---	4,375
Florida East Coast Railway Co.....	2	42	15	3	---	---	110,728
Forth Worth And Denver Railroad Co.....	5	367	9	5	---	---	576,365
Grand Truck Western Railroad Co.....	---	---	---	---	---	---	---
Illinois Central Gulf Railroad Co.....	103	6,031	598	156	18	696	2,880,562
Kansas City Southern Railway Co.....	15	1,402	59	10	---	---	1,991,300
Long Island Railroad Company.....	---	---	---	---	---	---	---
Louisiana And Arkansas Rwy Company.....	6	497	20	1	---	---	183,600
Louisville And Nashville Railroad Co.....	68	5,201	419	86	31	5,075	3,572,523
Missouri Pacific Railroad Co.....	67	5,289	613	84	17	329	2,551,860
Missouri-Kansas-Texas Railroad Co.....	15	1,245	42	13	---	600	835,600
Norfolk And Western Railway Co.....	17	1,254	48	13	2	1,900	272,892
Pittsburg And Lake Erie Railroad Co.....	---	---	---	---	---	---	---
Seaboard Coast Line Railroad Co.....	59	4,953	386	49	11	50	2,147,549
Souline Railroad Company.....	45	3,190	162	15	---	---	561,375
Southern Pacific Transportation Co.....	90	6,113	362	102	10	700	6,241,409
Southern Railway Company.....	20	1,133	55	26	1	200	677,550
St. Louis Southwestern Railway Co.....	4	189	5	2	---	---	430,800
St. Louis-San Francisco Railway Co.....	35	2,236	97	26	5	---	1,374,825
Union Pacific Railroad Co.....	21	1,705	93	14	8	125	2,007,378
Western Maryland Railway Co.....	4	311	8	2	---	---	64,825
Western Pacific Railroad Co.....	7	391	15	9	---	---	501,640
TOTAL CLASS I RAILROADS.....	884	62,773	4,205	979	160	15,295	41,451,882
CLASS II RAILROADS							
Autotrain Corporation.....	---	---	---	---	---	---	---
Bangor And Aroostook Railroad Co.....	---	---	---	---	---	---	---
Canadian Pacific Lines In Maine.....	2	188	6	---	---	---	257,062
Central Vermont Railway Inc.....	4	296	7	1	---	26	212,496
Chicago And Illinois Midland Rwy Co.....	---	---	---	---	---	---	---
Chicago South Shore And South Bend RR.....	---	---	---	---	---	---	---
Detroit And Toledo Shore Line Railroad.....	2	162	2	---	---	---	9,800
Duluth, Winnipeg And Pacific Rwy Co.....	1	94	1	1	---	---	1,750
Georgia Railroad Lessee Organization.....	1	105	8	---	---	---	8,500
Georgia Southern AND Florida Railway.....	---	---	---	---	---	---	---
Green Bay And Western Railroad.....	---	---	---	---	---	---	---
Illinois Terminal Railroad.....	3	152	18	4	---	---	44,825
Lake Superior And Ishpeming Railroad Co.....	1	10	1	1	---	---	5,000
Maine Central Railroad Company.....	10	455	29	15	1	2	109,090
Michigan Interstate Railroad (Ann Arbor)....	---	---	---	---	---	---	---
Norfolk Southern Railway Company.....	---	---	---	---	---	---	---
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---
Richmond, Fredericksburg And Potomac RR Co...	6	352	12	1	---	---	34,155
Texas, Mexican Railway Company.....	---	---	---	---	---	---	---
Toledo, Peoria And Western Railroad Co.....	1	95	2	---	---	---	45,000
TOTAL CLASS II RAILROADS.....	31	1,909	86	23	1	28	727,678
RECAPITULATION (INCLUDES CLASS III RAILROADS							
CLASS I RAILROADS.....	884	62,773	4,205	979	160	15,295	41,451,882
CLASS II RAILROADS.....	31	1,909	86	23	1	28	727,678
CLASS III RAILROADS.....	42	2,403	402	58	4	1,470	477,959
TOTAL ALL RAILROADS.....	957	67,085	4,693	1,060	165	16,793	42,657,519

## **5.0 ACCIDENTS AND CASUALTIES BY STATE**



TABLE S3A. TRAIN ACCIDENTS BY STATE AND TYPE, 1979

State	....Collisions....		...Derailments....		.....Other.....		..Rail-Hwy X-ing..		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Alabama.....	21	1,155,658	152	5,242,019	11	126,215	11	1,539,870	195	8,063,762
Alaska.....	1	3,200	5	25,067	3	196,464	---	---	9	224,731
Arizona.....	8	185,725	39	3,237,727	6	57,118	---	---	53	3,480,570
Arkansas.....	18	269,538	112	4,768,962	7	222,788	4	42,313	141	5,303,601
California.....	87	3,125,335	235	6,983,038	31	726,013	13	869,742	366	11,704,128
Colorado.....	16	319,508	71	3,839,157	9	106,536	2	18,710	98	4,283,911
Connecticut.....	---	---	8	43,834	7	209,021	4	28,883	19	281,738
Delaware.....	4	34,775	11	288,610	2	14,600	---	---	17	337,985
Dist of Columbia.	---	---	7	69,560	---	---	---	---	7	69,560
Florida.....	12	254,711	100	6,813,453	9	114,463	8	530,358	129	7,712,985
Georgia.....	34	1,549,037	208	4,072,138	22	182,359	10	200,201	274	6,003,735
Idaho.....	10	142,619	35	2,305,454	3	17,220	---	---	48	2,465,293
Illinois.....	157	3,949,573	649	15,964,499	61	756,201	19	238,078	886	20,908,351
Indiana.....	45	546,401	244	3,664,801	12	79,552	10	87,082	311	4,377,836
Iowa.....	45	934,649	462	15,489,961	10	112,321	5	33,337	522	16,570,268
Kansas.....	40	2,912,261	190	7,732,130	14	140,891	5	45,872	249	10,831,154
Kentucky.....	34	452,729	265	8,942,397	14	229,077	4	22,047	317	9,646,250
Louisiana.....	32	520,747	155	4,007,747	4	83,612	9	131,800	200	4,743,906
Maine.....	5	48,809	39	694,168	2	21,432	2	118,786	48	883,195
Maryland.....	12	147,219	72	2,703,160	7	75,500	1	103,750	92	3,029,629
Massachusetts....	9	131,158	39	1,229,968	10	95,058	---	---	58	1,456,184
Michigan.....	52	1,812,896	174	3,903,850	13	176,021	5	245,623	244	6,138,390
Minnesota.....	47	1,414,921	210	4,893,704	13	118,839	5	99,300	275	6,526,764
Mississippi.....	12	304,310	167	5,514,015	9	88,278	4	40,500	192	5,947,103
Missouri.....	40	590,561	243	9,307,675	20	367,925	2	41,150	305	10,307,311
Montana.....	26	545,644	93	6,264,769	8	49,909	3	31,400	130	6,891,722
Nebraska.....	53	972,184	176	8,602,278	5	28,650	5	25,200	239	9,628,312
Nevada.....	4	94,546	30	3,262,293	6	36,837	1	6,900	41	3,400,576
New Hampshire....	1	31,000	5	45,623	---	---	---	---	6	76,623
New Jersey.....	5	513,842	67	904,951	15	239,100	1	3,000	88	1,660,893
New Mexico.....	8	171,177	39	3,227,276	4	45,738	---	---	51	3,444,191
New York.....	39	840,532	247	6,314,883	47	2,189,127	4	26,036	337	9,370,578
North Carolina...	22	764,494	118	4,515,070	9	110,245	10	632,281	159	6,022,090
North Dakota.....	11	81,155	53	4,205,959	11	83,500	1	5,700	76	4,376,314
Ohio.....	59	1,723,095	367	12,009,819	20	209,050	14	255,307	460	14,197,271
Oklahoma.....	26	260,775	117	5,045,344	9	126,235	7	446,550	159	5,878,904
Oregon.....	26	404,767	97	4,002,236	5	22,370	3	17,560	131	4,446,933
Pennsylvania.....	49	4,118,668	542	11,498,329	38	1,222,591	15	177,175	644	17,016,763
Rhode Island.....	2	13,824	5	123,783	2	62,160	---	---	9	199,767
South Carolina...	6	33,657	71	2,547,711	10	211,955	4	636,281	91	3,429,604
South Dakota.....	2	13,900	38	1,164,911	1	14,286	1	17,250	42	1,210,347
Tennessee.....	47	1,782,555	194	5,887,383	11	473,600	2	14,500	254	8,158,038
Texas.....	134	3,010,285	557	19,897,275	37	475,517	26	387,369	754	23,770,446
Utah.....	9	289,266	30	2,705,784	4	62,350	1	7,000	44	3,064,400
Vermont.....	3	30,078	5	614,534	4	49,500	---	---	12	694,112
Virginia.....	20	340,845	86	4,666,138	6	36,744	11	233,342	123	5,277,069
Washington.....	56	832,828	152	4,855,161	12	145,865	5	301,475	225	6,135,329
West Virginia....	21	323,850	179	4,873,503	2	8,000	3	301,000	205	5,506,353
Wisconsin.....	32	2,042,368	238	6,271,029	18	115,696	8	51,906	296	8,480,999
Wyoming.....	23	1,877,668	84	8,387,567	2	6,000	---	---	109	10,271,235
Unknown.....	---	---	---	---	---	---	---	---	---	---
TOTAL.....	1,425	41,919,343	7,482	253,630,703	585	10,342,529	248	8,014,634	9,740	313,907,209

TABLE S3B. TRAIN ACCIDENTS BY STATE AND CAUSE, 1979

State	.....Track.....		....Equipment.....		..Human Factors...		..Miscellaneous...		.....Total.....	
	Number	Damage	Number	Damage	Number	Damage	Number	Damage	Number	Damage
Alabama.....	80	1,449,527	42	1,107,191	48	1,302,659	25	4,204,385	195	8,063,762
Alaska.....	3	13,305	2	96,464	1	3,077	3	111,885	9	224,731
Arizona.....	11	193,703	17	545,364	19	2,384,183	6	357,320	53	3,480,570
Arkansas.....	61	1,697,753	29	1,610,372	36	818,799	15	1,176,677	141	5,303,601
California.....	63	1,874,821	83	2,573,867	169	4,582,802	51	2,672,638	366	11,704,128
Colorado.....	38	2,225,621	19	878,216	29	898,214	12	281,860	98	4,283,911
Connecticut.....	10	228,259	1	8,952	2	8,100	6	36,427	19	281,738
Delaware.....	5	113,900	1	10,600	8	181,385	3	32,100	17	337,985
Dist of Columbia.	3	11,410	---	---	2	18,050	2	40,100	7	69,560
Florida.....	58	4,192,578	22	1,454,993	29	359,850	20	1,705,564	129	7,712,985
Georgia.....	111	2,012,394	57	1,629,670	83	1,956,654	23	405,017	274	6,003,735
Idaho.....	10	435,260	18	1,285,582	17	712,555	3	31,896	48	2,465,293
Illinois.....	379	8,633,885	128	4,672,176	237	4,787,644	142	2,814,646	886	20,908,351
Indiana.....	130	1,898,123	51	1,151,638	82	786,383	48	541,692	311	4,377,836
Iowa.....	297	8,200,484	86	4,370,431	94	1,802,775	45	2,196,578	522	16,570,268
Kansas.....	114	2,689,403	52	1,624,558	68	6,377,152	15	140,041	249	10,831,154
Kentucky.....	151	4,702,159	61	1,684,159	68	2,124,550	37	1,135,382	317	9,646,250
Louisiana.....	96	1,811,613	35	1,416,888	49	1,077,480	20	437,925	200	4,743,906
Maine.....	23	350,024	6	122,322	9	106,289	10	304,560	48	883,195
Maryland.....	37	1,246,660	16	675,225	26	574,869	13	532,875	92	3,029,629
Massachusetts....	16	725,976	18	512,784	14	162,681	10	54,743	58	1,456,184
Michigan.....	72	1,662,123	44	1,332,088	96	2,400,107	32	744,072	244	6,138,390
Minnesota.....	99	2,411,592	65	1,521,408	76	1,905,470	35	688,294	275	6,526,764
Mississippi.....	121	3,379,788	30	1,335,113	24	486,863	17	745,339	192	5,947,103
Missouri.....	131	4,115,346	66	1,585,263	88	3,619,419	20	987,283	305	10,307,311
Montana.....	31	1,405,249	36	3,115,866	48	1,755,897	15	614,710	130	6,891,722
Nebraska.....	98	5,503,892	29	989,387	91	1,960,757	21	1,174,276	239	9,628,312
Nevada.....	8	520,346	16	2,477,831	9	157,136	8	245,263	41	3,400,576
New Hampshire....	5	45,623	---	---	---	---	1	31,000	6	76,623
New Jersey.....	46	477,814	10	307,792	14	620,082	18	255,205	88	1,660,893
New Mexico.....	17	786,091	15	2,014,953	11	310,192	8	332,955	51	3,444,191
New York.....	130	3,135,665	65	2,000,420	87	1,967,483	55	2,267,010	337	9,370,578
North Carolina...	66	2,866,762	25	1,044,825	46	1,254,632	22	855,871	159	6,022,090
North Dakota.....	35	2,906,099	13	1,247,593	18	148,187	10	74,435	76	4,376,314
Ohio.....	198	4,042,226	86	2,724,868	104	4,894,150	72	2,536,027	460	14,197,271
Oklahoma.....	71	2,795,695	32	1,850,441	39	456,473	17	776,295	159	5,878,904
Oregon.....	30	1,001,480	36	960,669	46	1,402,637	19	1,082,147	131	4,446,933
Pennsylvania.....	331	6,975,506	104	2,335,571	122	6,224,717	87	1,480,969	644	17,016,763
Rhode Island.....	3	50,000	3	66,543	2	13,824	1	69,400	9	199,767
South Carolina...	37	403,906	20	1,942,026	22	364,764	12	718,908	91	3,429,604
South Dakota.....	27	623,759	6	476,551	6	65,501	3	44,536	42	1,210,347
Tennessee.....	124	2,603,943	40	3,304,311	71	1,707,772	19	542,012	254	8,158,038
Texas.....	297	8,344,067	117	5,140,458	268	6,593,048	72	3,692,873	754	23,770,446
Utah.....	7	1,723,328	18	799,930	16	503,392	3	37,750	44	3,064,400
Vermont.....	2	73,000	5	286,075	2	96,500	3	238,537	12	694,112
Virginia.....	40	493,641	29	3,092,837	32	418,336	22	1,272,255	123	5,277,069
Washington.....	63	1,425,905	45	1,781,879	87	2,194,528	30	733,017	225	6,135,329
West Virginia....	106	2,075,289	42	1,889,718	32	313,586	25	1,227,760	205	5,506,353
Wisconsin.....	137	2,785,447	50	1,548,935	65	2,653,695	44	1,492,922	296	8,480,999
Wyoming.....	22	1,242,053	24	2,163,727	48	4,610,571	15	2,254,884	109	10,271,235
Unknown.....	---	---	---	---	---	---	---	---	---	---
TOTAL.....	4,050	110,582,493	1,815	76,768,530	2,660	80,125,870	1,215	46,430,316	9,740	313,907,209

TABLE S4. TRAIN ACCIDENTS BY STATE AND MONTH, 1979

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Alabama.....	23	16	15	18	13	12	19	22	16	12	14	15	195
Alaska.....	1	1	---	1	2	1	---	1	---	1	1	---	9
Arizona.....	5	7	2	2	4	1	8	3	5	6	8	2	53
Arkansas.....	20	19	10	12	14	9	11	5	4	11	8	18	141
California.....	20	27	30	27	35	31	36	38	41	22	34	25	366
Colorado.....	5	8	10	11	4	12	7	3	9	13	8	8	98
Connecticut.....	1	2	---	1	2	1	---	4	1	1	4	2	19
Delaware.....	1	1	---	---	2	1	---	5	3	2	---	2	17
Dist of Columbia.	---	---	1	---	---	---	2	1	---	1	1	1	7
Florida.....	13	11	9	5	10	11	14	11	14	7	12	12	129
Georgia.....	27	15	24	26	19	21	29	20	25	17	26	25	274
Idaho.....	8	4	4	2	1	7	6	4	3	3	4	2	48
Illinois.....	90	89	107	75	86	68	56	74	50	74	51	66	886
Indiana.....	34	35	44	33	30	21	19	18	15	13	26	23	311
Iowa.....	24	31	50	61	47	44	57	68	28	32	46	34	522
Kansas.....	24	17	21	15	21	19	31	25	15	12	27	22	249
Kentucky.....	55	22	27	36	16	26	26	22	22	23	18	24	317
Louisiana.....	27	14	19	19	17	13	19	18	12	9	19	14	200
Maine.....	1	1	6	7	8	4	2	6	3	5	2	3	48
Maryland.....	10	4	9	12	7	1	5	5	15	6	8	10	92
Massachusetts....	5	3	11	4	2	10	4	3	4	5	5	2	58
Michigan.....	24	16	27	27	25	19	17	22	16	15	19	17	244
Minnesota.....	22	13	12	24	17	28	33	33	27	28	24	14	275
Mississippi.....	20	17	17	18	14	16	22	9	14	12	21	12	192
Missouri.....	28	28	34	31	26	24	22	25	21	21	26	19	305
Montana.....	14	10	13	7	11	10	17	14	12	4	9	9	130
Nebraska.....	21	18	27	18	20	11	29	23	14	27	22	9	239
Nevada.....	4	3	4	4	4	1	4	3	3	4	3	4	41
New Hampshire....	---	---	---	---	---	1	1	2	---	1	1	---	6
New Jersey.....	5	3	7	9	8	5	11	10	3	7	12	8	88
New Mexico.....	3	1	2	6	2	9	5	9	7	1	3	3	51
New York.....	29	30	28	29	36	31	25	26	35	17	20	31	337
North Carolina...	13	12	15	19	8	9	8	16	10	16	24	9	159
North Dakota.....	7	5	4	3	5	8	7	9	3	7	11	7	76
Ohio.....	39	33	48	42	37	30	39	41	44	33	39	35	460
Oklahoma.....	20	11	17	8	12	18	10	9	12	13	14	15	159
Oregon.....	16	14	11	12	13	6	13	5	10	17	9	5	131
Pennsylvania.....	52	57	72	65	46	42	53	50	61	51	43	52	644
Rhode Island.....	1	---	---	1	---	2	1	3	1	---	---	---	9
South Carolina...	15	12	9	6	4	6	8	3	9	6	4	9	91
South Dakota.....	3	2	5	5	3	6	2	6	4	---	4	2	42
Tennessee.....	28	23	28	21	21	16	22	12	14	18	31	20	254
Texas.....	64	55	51	63	63	71	70	77	60	59	64	57	754
Utah.....	3	4	4	2	4	3	1	1	9	6	4	3	44
Vermont.....	1	---	2	1	---	---	3	3	1	---	1	---	12
Virginia.....	10	12	5	8	11	5	18	12	9	10	12	11	123
Washington.....	17	12	21	20	17	17	29	9	16	26	20	21	225
West Virginia....	18	19	15	22	25	19	13	10	11	14	21	18	205
Wisconsin.....	28	20	23	30	31	24	26	24	18	27	31	14	296
Wyoming.....	12	6	10	7	9	9	7	8	9	10	17	5	109
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	911	763	910	875	812	759	867	830	738	725	831	719	9,740

TABLE S18. CASUALTIES BY STATE AND CLASS OF ACCIDENT/INCIDENT, 1979

State	.....Train Accidents.....			.....Train Incidents.....			...Nontrain Incidents...			.....Total.....		
	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness	Killed	Injured	Illness
Alabama.....	8	16	---	29	291	1	---	742	24	37	1,049	25
Alaska.....	---	---	---	---	16	---	---	102	---	---	118	---
Arizona.....	---	7	---	18	92	5	1	195	1	19	294	6
Arkansas.....	1	9	---	38	271	4	---	826	22	39	1,106	26
California.....	7	48	3	88	867	20	7	2,629	83	102	3,544	106
Colorado.....	1	13	---	25	220	4	1	704	12	27	937	16
Connecticut.....	---	3	---	5	47	---	---	317	10	5	367	10
Delaware.....	---	---	---	1	49	2	---	283	11	1	332	13
Dist of Columbia.	---	1	---	2	34	2	---	259	3	2	294	5
Florida.....	1	12	1	44	464	2	5	791	8	50	1,267	11
Georgia.....	3	39	---	45	533	2	2	1,222	24	50	1,794	26
Idaho.....	---	2	---	9	168	---	1	493	7	10	663	7
Illinois.....	8	97	2	111	1,106	13	4	5,328	168	123	6,531	183
Indiana.....	5	9	---	65	601	3	3	1,738	34	73	2,348	37
Iowa.....	1	14	---	16	236	3	4	1,350	45	21	1,600	48
Kansas.....	13	66	---	20	344	---	3	947	9	36	1,357	9
Kentucky.....	---	14	---	17	256	2	3	2,024	51	20	2,294	53
Louisiana.....	1	19	---	27	493	4	2	989	33	30	1,501	37
Maine.....	---	4	---	3	57	2	---	356	6	3	417	8
Maryland.....	---	12	---	10	215	3	5	1,026	39	15	1,253	42
Massachusetts.....	---	9	---	10	94	---	---	600	7	10	703	7
Michigan.....	3	17	---	40	675	15	2	2,112	42	45	2,804	57
Minnesota.....	1	22	---	33	323	2	1	1,336	44	35	1,681	46
Mississippi.....	1	4	---	19	205	---	1	415	11	21	624	11
Missouri.....	1	33	---	29	403	6	2	1,514	41	32	1,950	47
Montana.....	---	28	1	6	89	2	---	840	36	6	957	39
Nebraska.....	3	21	---	30	324	5	4	1,949	48	37	2,294	53
Nevada.....	---	3	---	6	48	1	---	164	2	6	215	3
New Hampshire.....	---	---	---	5	6	---	---	17	---	5	23	---
New Jersey.....	1	17	---	20	194	5	3	1,005	44	24	1,216	49
New Mexico.....	---	2	---	14	61	---	1	163	1	15	226	1
New York.....	---	24	3	41	520	12	4	3,084	174	45	3,628	189
North Carolina...	2	24	---	34	285	---	---	489	6	36	798	6
North Dakota.....	1	6	---	6	77	3	---	339	25	7	422	28
Ohio.....	4	43	---	80	888	27	4	3,169	93	88	4,100	120
Oklahoma.....	1	17	---	32	253	4	---	540	9	33	810	13
Oregon.....	---	10	---	9	255	5	---	816	8	9	1,081	13
Pennsylvania.....	8	289	---	30	670	11	4	4,473	162	42	5,432	173
Rhode Island.....	---	4	2	---	7	---	---	65	---	---	76	2
South Carolina...	1	7	---	18	149	---	---	338	6	19	494	6
South Dakota.....	---	---	---	2	32	---	---	152	3	2	184	3
Tennessee.....	1	15	---	24	286	5	---	933	24	25	1,234	29
Texas.....	10	150	6	86	1,417	23	4	3,112	96	100	4,679	125
Utah.....	1	9	---	11	145	---	2	433	6	14	587	6
Vermont.....	---	---	---	1	10	---	---	71	---	1	81	---
Virginia.....	3	12	---	21	379	3	5	1,254	43	29	1,645	46
Washington.....	5	39	1	22	288	7	1	905	31	28	1,232	39
West Virginia....	1	23	---	13	181	2	1	801	15	15	1,005	17
Wisconsin.....	1	27	1	22	337	3	3	1,623	49	26	1,987	53
Wyoming.....	2	11	4	8	233	3	1	772	15	11	1,016	22
Unknown.....	---	---	---	---	4	---	---	1	---	---	5	---
TOTAL.....	100	1,251	24	1,245	15,198	216	84	55,806	1,631	1,429	72,255	1,871

TABLE S16. TRAIN ACCIDENT AND TRAIN INCIDENT FATALITIES TO TRESPASSERS  
AND NON-TRESPASSERS BY STATE, 1979

State	.....Trespassers.....				.....Nontrespassers.....				.....Total.....			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	1	5	1	7	5	19	---	24	6	24	1	31
Alaska.....	---	---	---	---	---	---	---	---	---	---	---	---
Arizona.....	---	15	2	17	---	1	---	1	---	16	2	18
Arkansas.....	1	5	---	6	5	24	1	30	6	29	1	36
California.....	3	40	4	47	1	36	8	45	4	76	12	92
Colorado.....	2	11	---	13	1	9	1	11	3	20	1	24
Connecticut.....	---	5	---	5	---	---	---	---	---	5	---	5
Delaware.....	---	---	---	---	---	1	---	1	---	1	---	1
Dist of Columbia.	---	2	---	2	---	---	---	---	---	2	---	2
Florida.....	1	17	---	18	6	20	---	26	7	37	---	44
Georgia.....	---	15	---	15	5	24	3	32	5	39	3	47
Idaho.....	---	---	---	---	---	8	---	8	---	8	---	8
Illinois.....	7	32	15	54	6	45	8	59	13	77	23	113
Indiana.....	2	17	2	21	3	42	---	45	5	59	2	66
Iowa.....	---	2	1	3	---	7	7	14	---	9	8	17
Kansas.....	---	3	---	3	2	21	3	26	2	24	3	29
Kentucky.....	2	5	---	7	---	7	---	7	2	12	---	14
Louisiana.....	1	7	---	8	4	11	4	19	5	18	4	27
Maine.....	---	2	---	2	---	1	---	1	---	3	---	3
Maryland.....	---	5	---	5	---	5	---	5	---	10	---	10
Massachusetts....	2	8	---	10	---	---	---	---	2	8	---	10
Michigan.....	---	8	---	8	5	29	---	34	5	37	---	42
Minnesota.....	---	1	---	1	5	22	4	31	5	23	4	32
Mississippi.....	---	3	1	4	1	12	2	15	1	15	3	19
Missouri.....	1	7	---	8	5	14	1	20	6	21	1	28
Montana.....	---	3	---	3	---	3	---	3	---	6	---	6
Nebraska.....	1	3	---	4	1	25	1	27	2	28	1	31
Nevada.....	---	5	---	5	---	1	---	1	---	6	---	6
New Hampshire....	---	---	---	---	3	2	---	5	3	2	---	5
New Jersey.....	3	11	2	16	---	5	---	5	3	16	2	21
New Mexico.....	1	2	1	4	2	4	3	9	3	6	4	13
New York.....	7	24	3	34	2	1	---	3	9	25	3	37
North Carolina...	---	17	1	18	2	16	---	18	2	33	1	36
North Dakota.....	---	1	1	2	---	5	---	5	---	6	1	7
Ohio.....	2	21	---	23	2	53	1	56	4	74	1	79
Oklahoma.....	---	6	1	7	3	20	3	26	3	26	4	33
Oregon.....	1	4	1	6	---	3	---	3	1	7	1	9
Pennsylvania.....	1	23	---	24	---	5	1	6	1	28	1	30
Rhode Island.....	---	---	---	---	---	---	---	---	---	---	---	---
South Carolina...	1	10	---	11	1	7	---	8	2	17	---	19
South Dakota.....	---	---	1	1	---	---	---	---	---	---	1	1
Tennessee.....	---	3	---	3	3	19	---	22	3	22	---	25
Texas.....	1	30	---	31	6	47	8	61	7	77	8	92
Utah.....	---	1	---	1	3	8	---	11	3	9	---	12
Vermont.....	---	---	---	---	---	1	---	1	---	1	---	1
Virginia.....	---	12	---	12	1	10	---	11	1	22	---	23
Washington.....	1	7	---	8	---	13	3	16	1	20	3	24
West Virginia....	---	6	---	6	---	7	1	8	---	13	1	14
Wisconsin.....	1	5	2	8	---	9	4	13	1	14	6	21
Wyoming.....	---	2	---	2	2	1	1	4	2	3	1	6
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	43	411	39	493	85	623	68	776	128	1,034	107	1,269

TABLE S17. TRAIN ACCIDENT AND TRAIN INCIDENT INJURIES TO TRESPASSERS  
AND NON-TRESPASSERS BY STATE, 1979

State	.....Trespassers.....				.....Nontrespassers.....				.....Total.....			
	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total	Child	Adult	Unknown	Total
Alabama.....	2	9	---	11	8	85	4	97	10	94	4	108
Alaska.....	---	1	---	1	---	---	---	---	---	1	---	1
Arizona.....	---	9	6	15	---	3	4	7	---	12	10	22
Arkansas.....	2	4	---	6	9	94	19	122	11	98	19	128
California.....	11	65	9	85	6	107	40	153	17	172	49	238
Colorado.....	---	4	2	6	3	34	10	47	3	38	12	53
Connecticut.....	---	5	---	5	---	4	---	4	---	9	---	9
Delaware.....	1	1	---	2	---	2	---	2	1	3	---	4
Dist of Columbia.	1	1	---	2	---	1	---	1	1	2	---	3
Florida.....	2	22	---	24	4	104	1	109	6	126	1	133
Georgia.....	3	10	1	14	5	111	10	126	8	121	11	140
Idaho.....	---	---	---	---	8	40	1	49	8	40	1	49
Illinois.....	11	49	25	85	29	156	90	275	40	205	115	360
Indiana.....	6	30	8	44	20	173	24	217	26	203	32	261
Iowa.....	1	4	2	7	5	17	42	64	6	21	44	71
Kansas.....	---	1	---	1	13	91	29	133	13	92	29	134
Kentucky.....	2	8	2	12	4	50	3	57	6	58	5	69
Louisiana.....	1	13	2	16	17	121	62	200	18	134	64	216
Maine.....	---	---	---	---	---	---	---	---	---	---	---	---
Maryland.....	1	2	---	3	---	19	4	23	1	21	4	26
Massachusetts....	10	9	---	19	2	1	2	5	12	10	2	24
Michigan.....	3	20	---	23	12	165	3	180	15	185	3	203
Minnesota.....	2	4	5	11	3	55	35	93	5	59	40	104
Mississippi.....	2	6	3	11	8	36	77	121	10	42	80	132
Missouri.....	---	7	---	7	14	106	20	140	14	113	20	147
Montana.....	---	4	1	5	2	6	4	12	2	10	5	17
Nebraska.....	1	3	1	5	2	42	8	52	3	45	9	57
Nevada.....	---	2	---	2	---	3	1	4	---	5	1	6
New Hampshire....	1	---	---	1	---	---	---	---	1	---	---	1
New Jersey.....	3	12	3	18	3	12	4	19	6	24	7	37
New Mexico.....	1	4	---	5	1	7	6	14	2	11	6	19
New York.....	2	17	1	20	3	33	6	42	5	50	7	62
North Carolina...	2	17	---	19	11	110	---	121	13	127	---	140
North Dakota.....	1	2	---	3	---	12	9	21	1	14	9	24
Ohio.....	7	37	---	44	23	237	4	264	30	274	4	308
Oklahoma.....	1	10	1	12	10	60	54	124	11	70	55	136
Oregon.....	---	11	---	11	---	35	---	35	---	46	---	46
Pennsylvania.....	6	19	1	26	5	64	9	78	11	83	10	104
Rhode Island.....	1	1	---	2	---	1	---	1	1	2	---	3
South Carolina...	2	3	---	5	1	50	---	51	3	53	---	56
South Dakota.....	---	---	---	---	---	1	7	8	---	1	7	8
Tennessee.....	1	11	---	12	12	48	21	81	13	59	21	93
Texas.....	7	33	5	45	31	307	111	449	38	340	116	494
Utah.....	---	4	---	4	6	23	1	30	6	27	1	34
Vermont.....	---	---	---	---	---	2	---	2	---	2	---	2
Virginia.....	4	17	---	21	7	54	---	61	11	71	---	82
Washington.....	---	13	4	17	3	29	11	43	3	42	15	60
West Virginia....	1	16	---	17	7	43	1	51	8	59	1	68
Wisconsin.....	3	5	8	16	7	68	63	138	10	73	71	154
Wyoming.....	---	---	---	---	---	6	1	7	---	6	1	7
Unknown.....	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL.....	105	525	90	720	304	2,828	801	3,933	409	3,353	891	4,653

## **6.0 ACCIDENTS AND CASUALTIES BY RAILROAD**

TABLE R1. SUMMARY OF OPERATIONAL MILES, 1979

RAILROAD	Locomotive Train Miles	Motor Train Miles	Yard Switching Train Miles	Total Train Miles
CLASS I RAILROADS				
Alabama Great Southern Railroad Co.....	2,574,254	---	728,225	3,302,479
Amtrak.....	27,415,316	4,327,578	549,684	32,292,578
Atchison, Topeka And Santa Fe Rwy Co.....	49,547,722	---	8,902,044	58,449,766
Baltimore And Ohio Railroad Co.....	13,686,704	227,653	8,688,210	22,602,567
Bessemer And Lake Erie Railroad Co.....	862,445	---	248,520	1,110,965
Boston And Maine Corporation.....	1,716,310	1,695,448	1,175,176	4,586,934
Burlington Northern Incorporated.....	49,510,693	2,743,680	18,668,104	70,922,477
Central Of Georgia Railroad Company.....	2,572,849	---	1,053,307	3,626,156
Chesapeake And Ohio Railway Company.....	13,446,175	---	5,638,200	19,084,375
Chicago And Northwestern Transportation Co..	12,334,677	2,420,206	6,665,418	21,420,301
Chicago, Milw, St. Paul And Pacific RR Co...	10,517,038	---	4,290,641	14,807,679
Chicago, Rock Island And Pacific Railroad...	7,918,073	---	3,377,513	11,295,586
Cincinnati, New Orleans And Tx Pacific Co...	4,332,116	---	959,041	5,291,157
Clinchfield Railroad Company.....	939,595	---	341,499	1,281,094
Colorado And Southern Railway Co.....	2,238,763	1,523,675	270,715	4,033,153
Consolidated Rail Corporation.....	56,190,552	12,442,991	26,866,800	95,500,343
Delaware And Hudson Railway.....	1,989,577	---	393,790	2,383,367
Denver And Rio Grande Western RR Co.....	5,704,729	---	1,396,740	7,101,469
Detroit, Toledo And Ironton RR Co.....	1,196,177	---	581,271	1,777,448
Duluth, Missabe And Iron Range Rwy Co.....	635,810	---	448,025	1,083,835
Elgin, Joliet And Eastern Railway Co.....	799,054	---	2,361,891	3,160,945
Florida East Coast Railway Co.....	2,254,279	---	823,711	3,077,990
Forth Worth And Denver Railroad Co.....	1,926,934	---	412,372	2,339,306
Grand Truck Western Railroad Co.....	3,084,897	---	2,730,630	5,815,527
Illinois Central Gulf Railroad Co.....	17,437,528	1,380,297	7,051,007	25,868,832
Kansas City Southern Railway Co.....	2,271,354	---	1,411,396	3,682,750
Long Island Railroad Company.....	2,041,868	5,440,611	871,664	8,354,143
Louisiana And Arkansas Rwy Company.....	1,116,002	---	687,373	1,803,375
Louisville And Nashville Railroad Co.....	19,160,376	---	8,372,879	27,533,255
Missouri Pacific Railroad Co.....	27,312,035	22,068	10,768,594	38,102,697
Missouri-Kansas-Texas Railroad Co.....	2,993,729	---	1,557,115	4,550,844
Norfolk And Western Railway Co.....	18,160,021	---	9,041,364	27,201,385
Pittsburg And Lake Erie Railroad Co.....	417,472	---	1,062,618	1,480,090
Seaboard Coast Line Railroad Co.....	21,020,564	---	7,917,666	28,938,230
SooLine Railroad Company.....	4,714,951	---	2,186,666	6,901,617
Southern Pacific Transportation Co.....	34,137,258	---	12,733,068	46,870,326
Southern Railway Company.....	20,995,396	---	6,392,216	27,387,612
St. Louis Southwestern Railway Co.....	5,848,140	---	1,647,047	7,495,187
St. Louis-San Francisco Railway Co.....	9,912,323	---	3,574,833	13,487,156
Union Pacific Railroad Co.....	38,496,416	---	7,061,664	45,558,080
Western Maryland Railway Co.....	1,077,661	---	467,469	1,545,130
Western Pacific Railroad Co.....	3,835,103	---	913,732	4,748,835
TOTAL CLASS I RAILROADS.....	504,342,936	32,224,207	181,289,898	717,857,041
CLASS II RAILROADS				
Autotrain Corporation.....	558,112	---	50,028	608,140
Bangor And Aroostook Railroad Co.....	519,828	---	152,084	671,912
Canadian Pacific Lines In Maine.....	557,951	---	---	557,951
Central Vermont Railway Inc.....	330,933	---	64,190	395,123
Chicago And Illinois Midland Rwy Co.....	70,270	---	76,996	147,266
Chicago South Shore And South Bend RR.....	---	---	---	---
Detroit And Toledo Shore Line Railroad.....	153,982	---	158,240	312,222
Duluth, Winnipeg And Pacific Rwy Co.....	485,620	---	185,980	671,600
Georgia Railroad Lessee Organization.....	506,071	---	591,682	1,097,753
Georgia Southern AND Florida Railway.....	1,220,309	---	156,184	1,376,493
Green Bay And Western Railroad.....	225,319	---	186,086	411,405
Illinois Terminal Railroad.....	229,219	---	524,162	753,381
Lake Superior And Ishpeming Railroad Co.....	35,229	---	151,692	186,921
Maine Central Railroad Company.....	801,617	---	460,692	1,262,309
Michigan Interstate Railroad (Ann Arbor)....	229,216	---	167,700	396,916
Norfolk Southern Railway Company.....	720,495	4,508	234,725	959,728
Northwestern Pacific Railroad.....	---	---	---	---
Richmond, Frederickburg And Potomac RR Co...	1,216,288	---	576,106	1,792,394
Texas, Mexican Railway Company.....	128,296	---	231,164	359,460
Toledo, Peoria And Western Railroad Co.....	496,410	---	128,976	625,386
TOTAL CLASS II RAILROADS.....	8,485,165	4,508	4,096,687	12,586,360
RECAPITULATION (INCLUDES CLASS III RAILROADS)				
CLASS I RAILROADS.....	504,342,936	32,224,207	181,289,898	717,857,041
CLASS II RAILROADS.....	8,485,165	4,508	4,096,687	12,586,360
CLASS III RAILROADS.....	10,477,511	45,619	22,462,143	32,985,273
TOTAL ALL RAILROADS.....	523,305,612	32,274,334	207,848,728	763,428,674



TABLE R3. TRAIN ACCIDENTS BY RAILROAD, TYPE, AND CAUSE, 1979

	.....Collisions.....					.....Derailments.....					.....Defects.....					.....Damages.....				
	Human Factor	Equip	Track	Other	Total	Damages (\$)	Human Factors	Equip	Track	Other	Total	Damages (\$)	Human Factors	Equip	Track	Other	Total	Damages (\$)		
CLASS I RAILROADS																				
EASTERN DISTRICT																				
National Railroad Passenger Corp. (Amtrak).....	12	1	---	3	16	1,264,377	15	16	30	7	68	6,944,101								
Baltimore and Ohio Railroad.....	35	3	2	8	48	648,181	45	69	182	44	340	9,834,544								
Bessemer and Lake Erie Railroad....	---	---	---	---	---	---	1	3	1	1	6	93,610								
Boston and Maine Corp.....	7	---	---	1	8	115,285	3	5	17	5	30	770,375								
Chesapeake and Ohio Railway.....	37	5	6	4	52	514,379	33	66	103	27	229	6,428,486								
Consolidated Rail Corp.....	117	4	9	13	143	6,525,098	170	187	630	103	1,090	19,203,930								
Delaware and Hudson Railway.....	1	---	---	---	1	53,000	8	4	28	6	46	1,991,061								
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	10	1	11	2	24	1,747,925								
Elgin, Joliet and Eastern Railway..	9	---	---	1	10	171,331	6	7	21	12	46	334,813								
Grand Trunk Western Railroad.....	18	1	1	2	22	299,838	8	11	18	3	40	782,642								
Long Island Railroad.....	2	---	---	---	2	22,360	2	1	1	1	5	156,840								
Norfolk and Western Railway.....	20	2	1	3	26	557,541	20	34	49	11	114	4,399,781								
Pittsburg and Lake Erie Railroad...	---	---	---	---	---	---	14	9	28	6	57	822,280								
Western Maryland Railway.....	1	---	1	---	2	13,185	6	6	13	7	32	488,170								
SUBTOTAL, EASTERN DISTRICT:.....	259	16	20	35	330	10,184,575	341	419	1,132	235	2,127	53,998,558								
SOUTHERN DISTRICT																				
Alabama Great Southern Railroad....	1	---	---	---	1	3,600	3	7	---	---	10	161,775								
Central of Georgia Railroad.....	3	---	---	1	4	195,250	10	3	18	2	33	353,525								
Cinn., N.O. & Texas Pacific Railway.....	3	---	---	---	3	337,100	3	7	5	1	16	2,378,411								
Clinchfield Railroad.....	1	1	---	---	2	107,812	2	3	29	4	38	2,676,248								
Florida East Coast Railway.....	2	---	---	---	2	31,845	3	4	3	1	11	2,869,494								
Illinois Central Gulf Railroad.....	35	2	1	7	45	1,945,851	34	64	301	39	438	16,094,170								
Louisville and Nashville Railroad..	31	5	6	4	46	1,344,996	65	78	208	29	380	11,396,696								
Seaboard Coast Line Railroad.....	29	3	5	4	41	777,403	46	59	152	26	283	8,428,763								
Southern Railway.....	36	3	3	1	43	2,464,199	51	48	103	8	210	4,682,760								
SUBTOTAL, SOUTHERN DISTRICT:.....	141	14	15	17	187	7,208,056	217	273	819	110	1,419	49,041,842								
WESTERN DISTRICT																				
Atchison, Topeka and Santa Fe Railway.....	81	2	3	4	90	1,457,475	52	59	93	15	219	11,188,495								
Burlington Northern Inc.....	175	12	4	10	201	4,961,558	117	143	284	55	599	26,844,708								
Chicago and Northwestern Trans. Company.....	51	4	2	3	60	1,858,546	74	101	335	52	562	13,643,653								
Chicago, Milw., St. Paul & Pacific Railroad.....	22	6	5	3	36	732,480	53	63	198	30	344	11,129,983								
Chicago, Rock Island & Pacific Railroad.....	22	2	1	7	32	262,661	50	72	323	15	460	9,095,341								
Colorado and Southern Railway.....	3	---	---	---	3	153,050	9	8	25	7	49	2,342,460								
Denver and Rio Grande Western Railroad.....	1	---	---	---	1	99,089	---	3	5	---	8	432,690								
Duluth, Missabe and Iron Range Railway.....	3	---	---	---	3	34,406	1	4	4	---	9	158,137								
Fort Worth and Denver Railway.....	11	1	---	2	14	178,071	3	7	20	1	31	1,974,638								
Kansas City Southern Railway.....	17	---	---	---	17	506,898	6	15	43	7	71	3,976,003								
Louisiana and Arkansas Railway....	11	---	---	3	14	667,052	5	9	17	2	33	822,304								
Missouri-Kansas-Texas Railroad....	14	---	---	1	15	508,373	14	11	63	4	92	2,634,923								
Missouri Pacific Railroad.....	38	---	1	1	40	1,634,592	45	79	106	12	242	7,841,958								
St. Louis-San Francisco Railway....	46	5	5	2	58	793,392	37	36	92	4	169	9,057,292								
St. Louis Southwestern Railway....	15	---	---	2	17	225,398	17	12	32	6	67	2,638,662								
Soo Line Railroad.....	20	1	---	---	21	1,985,215	22	16	60	11	109	2,703,015								
Southern Pacific Trans. Company....	80	6	2	7	95	3,397,626	145	116	217	47	525	17,227,283								
Union Pacific Railroad.....	87	6	6	3	102	3,108,816	82	81	65	27	255	15,938,117								
Western Pacific Railroad.....	18	---	---	---	18	362,130	12	14	12	8	46	1,487,982								
SUBTOTAL, WESTERN DISTRICT:.....	715	45	29	48	837	22,926,828	744	849	1,994	303	3,890	141,137,644								
CLASS II & III RAILROADS																				
SUBTOTAL, CLASS II & III:.....	109	9	10	9	137	1,599,884	111	79	276	45	511	9,452,659								
RECAPITULATION ALL DISTRICTS																				
Class I RAILROADS.....	1,060	74	64	97	1,295	40,319,459	1,227	1,466	3,677	620	6,990	244,178,044								
Class II & III Railroads.....	103	8	10	9	130	1,599,884	105	76	269	42	492	9,452,659								
TOTAL FOR ALL RAILROADS.....	1,163	82	74	106	1,425	41,919,343	1,332	1,542	3,946	662	7,482	253,630,703								

# CLASS I RAILROADS

## EASTERN DISTRICT

National Railroad Passenger Corp. (Amtrak).....	5	21	3	30	59	1,573,750	143	4.4	9,782,228
Baltimore and Ohio Railroad.....	1	4	---	13	18	753,250	406	18.8	11,235,975
Bessemer and Lake Erie Railroad....	---	---	---	---	---	---	6	5.4	93,610
Boston and Maine Corp.....	---	6	---	3	9	113,258	47	10.3	998,918
Chesapeake and Ohio Railway.....	---	5	2	10	17	463,900	298	15.6	7,406,765
Consolidated Rail Corp.....	20	25	13	90	148	2,944,247	1,381	14.4	28,673,275
Delaware and Hudson Railway.....	---	---	---	---	---	---	47	19.7	2,044,061
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	24	13.5	1,747,925
Elgin, Joliet and Eastern Railway..	1	---	---	2	3	46,710	59	18.6	552,854
Grand Trunk Western Railroad.....	1	---	---	3	4	133,744	66	11.3	1,216,224
Long Island Railroad.....	---	1	1	1	3	35,815	10	1.1	215,015
Norfolk and Western Railway.....	1	2	---	17	20	520,569	160	5.9	5,477,891
Pittsburg and Lake Erie Railroad...	---	---	---	---	---	---	57	38.5	822,280
Western Maryland Railway.....	---	2	---	---	2	12,550	36	23.4	513,905
SUBTOTAL, EASTERN DISTRICT:.....	29	66	19	169	283	6,597,793	2,740	12.1	70,780,926

## SOUTHERN DISTRICT

Alabama Great Southern Railroad....	---	---	---	3	3	14,400	14	4.2	179,775
Central of Georgia Railroad.....	2	2	---	3	7	90,700	44	12.1	639,475
Cinn., N.O. & Texas Pacific Railway.....	1	---	1	2	4	332,000	23	4.3	3,047,511
Clinchfield Railroad.....	---	---	---	---	---	---	40	31.2	2,784,060
Florida East Coast Railway.....	---	---	---	1	1	7,346	14	4.5	2,908,685
Illinois Central Gulf Railroad.....	4	12	1	29	46	564,736	529	20.4	18,604,757
Louisville and Nashville Railroad..	5	7	1	14	27	387,777	453	16.4	13,129,469
Seaboard Coast Line Railroad.....	23	5	3	19	50	1,981,309	374	12.9	11,187,475
Southern Railway.....	6	5	---	13	24	797,425	277	10.1	7,944,384
SUBTOTAL, SOUTHERN DISTRICT:.....	41	31	6	84	162	4,175,693	1,768	14.0	60,425,591

## WESTERN DISTRICT

Atchison, Topeka and Santa Fe Railway.....	18	16	---	17	51	760,130	360	6.1	13,406,100
Burlington Northern Inc.....	12	21	2	46	81	743,983	881	12.4	32,550,249
Chicago and Northwestern Trans. Company.....	7	6	---	10	23	169,931	645	30.1	15,672,130
Chicago, Milw., St. Paul & Pacific Railroad.....	6	2	1	5	14	279,662	394	26.6	12,142,125
Chicago, Rock Island & Pacific Railroad.....	4	2	---	7	13	191,193	505	44.7	9,549,195
Colorado and Southern Railway.....	---	3	---	1	4	45,500	56	27.6	2,541,010
Denver and Rio Grande Western Railroad.....	1	---	---	1	2	19,591	11	1.5	551,370
Duluth, Missabe and Iron Range Railway.....	---	---	---	---	---	---	12	11.0	192,543
Fort Worth and Denver Railway.....	1	---	---	4	5	61,600	50	21.3	2,214,309
Kansas City Southern Railway.....	1	---	---	1	2	18,000	90	24.4	4,500,901
Louisiana and Arkansas Railway....	---	2	---	5	7	80,962	54	31.8	1,570,318
Missouri-Kansas-Texas Railroad.....	1	1	---	8	10	134,244	117	25.7	3,277,540
Missouri Pacific Railroad.....	4	4	---	8	16	570,823	298	7.8	10,047,373
St. Louis-San Francisco Railway....	11	5	2	20	38	1,422,081	265	19.6	11,272,765
St. Louis Southwestern Railway.....	---	4	---	4	8	93,104	92	12.2	2,957,164
Soo Line Railroad.....	6	3	---	14	23	177,628	153	22.1	4,865,858
Southern Pacific Trans. Company....	16	16	---	31	63	1,586,699	683	14.5	22,211,608
Union Pacific Railroad.....	---	4	---	9	13	142,847	370	8.1	19,189,780
Western Pacific Railroad.....	2	4	---	5	11	104,862	75	15.7	1,954,974
SUBTOTAL, WESTERN DISTRICT:.....	90	93	5	196	384	6,602,840	5,111	14.1	170,667,312

## CLASS II & III RAILROADS

SUBTOTAL, CLASS II & III:.....	10	8	2	31	51	980,837	699	14.1	12,033,380
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## RECAPITULATION ALL DISTRICTS

Class I RAILROADS.....	156	183	28	419	786	17,376,326	9,071	12.6	301,873,829
Class II & III Railroads.....	9	8	2	28	47	980,837	669	15.3	12,033,380
TOTAL FOR ALL RAILROADS.....	165	191	30	447	833	18,357,163	9,740	12.8	313,907,209

TABLE R7. FATALITIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS  
BY RAILROAD, 1979

	.....Nontrain Incidents.....						.....Total.....					
	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	1	---	---	2	4	7	3	---	1	5	24	33
Baltimore and Ohio Railroad.....	---	---	---	1	1	2	2	---	---	11	16	29
Bessemer and Lake Erie Railroad.....	---	---	---	---	---	---	---	---	---	1	---	1
Boston and Maine Corp.....	---	---	---	---	---	---	---	---	---	5	6	11
Chesapeake and Ohio Railway.....	2	1	---	2	---	5	3	1	---	25	8	37
Consolidated Rail Corp.....	3	---	---	3	3	9	13	---	---	70	73	156
Delaware and Hudson Railway.....	---	---	---	---	---	---	---	---	---	1	1	2
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	---	---	---	1	---	1
Elgin, Joliet and Eastern Railway.....	---	---	---	---	---	---	2	---	---	---	---	2
Grand Trunk Western Railroad.....	---	---	---	---	---	---	---	---	---	9	5	14
Long Island Railroad.....	1	---	---	---	1	2	1	---	3	---	15	19
Norfolk and Western Railway.....	3	---	---	1	---	4	6	---	---	51	20	77
Pittsburg and Lake Erie Railroad.....	---	---	---	---	1	1	---	---	---	---	2	2
Western Maryland Railway.....	---	---	---	---	---	---	---	---	---	---	2	2
SUBTOTAL, EASTERN DISTRICT:.....	10	1	---	9	10	30	30	1	4	179	172	386
SOUTHERN DISTRICT												
Alabama Great Southern Railroad.....	---	---	---	---	---	---	1	---	---	8	2	11
Central of Georgia Railroad.....	---	---	---	---	---	---	1	---	---	4	3	8
Cinn., N.O. & Texas Pacific Railway.....	---	---	---	---	1	1	---	---	---	4	3	7
Clinchfield Railroad.....	---	---	---	---	---	---	---	---	---	---	1	1
Florida East Coast Railway.....	---	---	---	---	---	---	---	---	---	---	7	7
Illinois Central Gulf Railroad.....	1	---	---	1	1	3	9	---	---	48	13	70
Louisville and Nashville Railroad.....	---	---	---	1	---	1	3	---	---	31	12	46
Seaboard Coast Line Railroad.....	---	---	---	4	1	5	1	---	1	71	35	108
Southern Railway.....	---	---	---	---	---	---	4	---	---	33	18	55
SUBTOTAL, SOUTHERN DISTRICT:.....	1	---	---	6	3	10	19	---	1	199	94	313
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway.....	1	---	---	2	---	3	5	---	---	60	33	98
Burlington Northern Inc.....	3	---	---	2	---	5	6	---	---	53	23	82
Chicago and Northwestern Trans. Company....	5	---	---	3	4	12	8	---	---	20	28	56
Chicago, Milw., St. Paul & Pacific Railroad.....	---	---	---	---	---	---	1	---	---	8	5	14
Chicago, Rock Island & Pacific Railroad....	---	---	---	---	---	---	---	---	---	5	9	14
Colorado and Southern Railway.....	---	---	---	---	---	---	---	---	---	---	---	---
Denver and Rio Grande Western Railroad.....	1	---	---	---	---	1	2	---	---	4	4	10
Duluth, Missabe and Iron Range Railway.....	---	---	---	---	---	---	---	---	---	3	---	3
Fort Worth and Denver Railway.....	---	---	---	---	---	---	---	---	---	4	2	6
Kansas City Southern Railway.....	---	---	---	---	---	---	---	---	---	7	1	8
Louisiana and Arkansas Railway.....	---	---	---	---	---	---	---	---	---	2	---	2
Missouri-Kansas-Texas Railroad.....	1	---	---	---	---	1	1	---	---	3	4	8
Missouri Pacific Railroad.....	---	---	---	1	---	1	5	---	---	78	20	103
St. Louis-San Francisco Railway.....	1	---	---	---	1	2	3	---	---	27	9	39
St. Louis Southwestern Railway.....	---	---	---	---	---	---	1	---	---	9	2	12
Soo Line Railroad.....	1	---	---	---	---	1	1	---	---	17	2	20
Southern Pacific Trans. Company.....	---	---	---	3	4	7	2	---	---	38	68	108
Union Pacific Railroad.....	2	---	---	1	1	4	11	---	---	56	18	85
Western Pacific Railroad.....	---	---	---	---	---	---	---	---	---	4	1	5
SUBTOTAL, WESTERN DISTRICT:.....	15	---	---	12	10	37	46	---	---	398	229	673
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:.....	4	---	1	2	---	7	6	---	1	29	21	57
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	26	1	---	27	23	77	95	1	5	776	495	1,372
Class II & III Railroads.....	4	---	1	2	---	7	6	---	1	29	21	57
TOTAL FOR ALL RAILROADS.....	30	1	1	29	23	84	101	1	6	805	516	1,429

TABLE R7. CONTINUATION

	Train Accidents.....					Train Incidents.....						
	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	2	---	---	---	2	4	---	---	1	3	18	22
Baltimore and Ohio Railroad.....	1	---	---	---	---	1	1	---	---	10	15	26
Bessemer and Lake Erie Railroad.....	---	---	---	---	---	---	---	---	---	1	---	1
Boston and Maine Corp.....	---	---	---	---	---	---	---	---	---	5	6	11
Chesapeake and Ohio Railway.....	---	---	---	4	1	5	1	---	---	19	7	27
Consolidated Rail Corp.....	6	---	---	4	---	10	4	---	---	63	70	137
Delaware and Hudson Railway.....	---	---	---	---	---	---	---	---	---	1	1	2
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	---	---	---	1	---	1
Elgin, Joliet and Eastern Railway.....	---	---	---	---	---	---	2	---	---	---	---	2
Grand Trunk Western Railroad.....	---	---	---	1	---	1	---	---	---	8	5	13
Long Island Railroad.....	---	---	---	---	---	---	---	---	3	---	14	17
Norfolk and Western Railway.....	---	---	---	4	---	4	3	---	---	46	20	69
Pittsburg and Lake Erie Railroad.....	---	---	---	---	---	---	---	---	---	---	1	1
Western Maryland Railway.....	---	---	---	---	---	---	---	---	---	---	2	2
SUBTOTAL, EASTERN DISTRICT:.....	9	---	---	13	3	25	11	---	4	157	159	331
SOUTHERN DISTRICT												
Alabama Great Southern Railroad.....	1	---	---	1	---	2	---	---	---	7	2	9
Central of Georgia Railroad.....	---	---	---	---	---	---	1	---	---	4	3	8
Cinn., N.O. & Texas Pacific Railway.....	---	---	---	---	---	---	---	---	---	4	2	6
Clinchfield Railroad.....	---	---	---	---	---	---	---	---	---	---	1	1
Florida East Coast Railway.....	---	---	---	---	---	---	---	---	---	---	7	7
Illinois Central Gulf Railroad.....	2	---	---	3	---	5	6	---	---	44	12	62
Louisville and Nashville Railroad.....	---	---	---	3	---	3	3	---	---	27	12	42
Seaboard Coast Line Railroad.....	1	---	---	3	1	5	---	---	1	64	33	98
Southern Railway.....	4	---	---	---	---	4	---	---	---	33	18	51
SUBTOTAL, SOUTHERN DISTRICT:.....	8	---	---	10	1	19	10	---	1	183	90	284
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway.....	---	---	---	8	---	8	4	---	---	50	33	87
Burlington Northern Inc.....	2	---	---	4	1	7	1	---	---	47	22	70
Chicago and Northwestern Trans. Company.....	---	---	---	2	---	2	3	---	---	15	24	42
Chicago, Milw., St. Paul & Pacific Railroad.....	---	---	---	---	---	---	1	---	---	8	5	14
Chicago, Rock Island & Pacific Railroad.....	---	---	---	---	---	---	---	---	---	5	9	14
Colorado and Southern Railway.....	---	---	---	---	---	---	---	---	---	---	---	---
Denver and Rio Grande Western Railroad.....	---	---	---	---	---	---	1	---	---	4	4	9
Duluth, Missabe and Iron Range Railway.....	---	---	---	---	---	---	---	---	---	3	---	3
Fort Worth and Denver Railway.....	---	---	---	---	---	---	---	---	---	4	2	6
Kansas City Southern Railway.....	---	---	---	4	---	4	---	---	---	3	1	4
Louisiana and Arkansas Railway.....	---	---	---	---	---	---	---	---	---	2	---	2
Missouri-Kansas-Texas Railroad.....	---	---	---	---	---	---	---	---	---	3	4	7
Missouri Pacific Railroad.....	1	---	---	2	---	3	4	---	---	75	20	99
St. Louis-San Francisco Railway.....	2	---	---	4	---	6	---	---	---	23	8	31
St. Louis Southwestern Railway.....	---	---	---	1	---	1	1	---	---	8	2	11
Soo Line Railroad.....	---	---	---	---	---	---	---	---	---	17	2	19
Southern Pacific Trans. Company.....	2	---	---	3	2	7	---	---	---	32	62	94
Union Pacific Railroad.....	6	---	---	4	---	10	3	---	---	51	17	71
Western Pacific Railroad.....	---	---	---	1	1	2	---	---	---	3	---	3
SUBTOTAL, WESTERN DISTRICT:.....	13	---	---	33	4	50	18	---	---	353	215	586
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:.....	---	---	---	5	1	6	2	---	---	22	20	44
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	30	---	---	56	8	94	39	---	5	693	464	1,201
Class II & III Railroads.....	---	---	---	5	1	6	2	---	---	22	20	44
TOTAL FOR ALL RAILROADS.....	30	---	---	61	9	100	41	---	5	715	484	1,245

TABLE R8. NONFATAL CASUALTIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS BY RAILROAD, 1979

	.....Train Accidents.....						.....Train Incidents.....					
	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total	Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	83	---	77	---	---	160	202	---	72	3	10	287
Baltimore and Ohio Railroad.....	23	---	---	3	1	27	287	---	3	153	23	466
Bessemer and Lake Erie Railroad.....	---	---	---	---	---	---	23	---	---	1	1	25
Boston and Maine Corp.....	4	---	2	---	---	6	36	---	6	2	10	54
Chesapeake and Ohio Railway.....	14	---	---	5	---	19	244	---	1	135	20	400
Consolidated Rail Corp.....	82	1	240	10	1	334	1,411	3	15	248	108	1,785
Delaware and Hudson Railway.....	2	---	---	---	---	2	28	---	---	1	1	30
Detroit, Toledo and Ironton Railroad.....	4	---	---	---	---	4	33	---	---	13	---	46
Elgin, Joliet and Eastern Railway.....	1	---	---	1	---	2	90	---	---	3	3	96
Grand Trunk Western Railroad.....	5	---	---	---	---	5	151	---	1	49	15	216
Long Island Railroad.....	2	2	---	---	---	4	138	1	21	---	10	170
Norfolk and Western Railway.....	22	---	---	8	---	30	451	---	1	271	47	770
Pittsburg and Lake Erie Railroad.....	1	---	---	---	---	1	31	---	---	2	---	33
Western Maryland Railway.....	---	---	---	---	---	---	26	---	---	11	---	37
SUBTOTAL, EASTERN DISTRICT:.....	243	3	319	27	2	594	3,151	4	120	892	248	4,415
SOUTHERN DISTRICT												
Alabama Great Southern Railroad.....	---	---	---	2	---	2	17	---	---	28	3	48
Central of Georgia Railroad.....	2	---	---	1	---	3	62	---	---	26	---	88
Cinn., N.O. & Texas Pacific Railway.....	2	---	---	1	---	3	16	---	---	10	3	29
Clinchfield Railroad.....	---	---	---	---	---	---	23	---	1	5	3	32
Florida East Coast Railway.....	2	---	---	2	---	4	10	---	---	15	10	35
Illinois Central Gulf Railroad.....	20	---	22	5	---	47	369	1	19	244	23	656
Louisville and Nashville Railroad.....	20	---	---	14	---	34	393	---	1	77	22	493
Seaboard Coast Line Railroad.....	30	---	---	8	1	39	481	1	2	189	33	706
Southern Railway.....	24	---	---	6	---	30	292	---	---	203	18	513
SUBTOTAL, SOUTHERN DISTRICT:.....	100	---	22	39	1	162	1,663	2	23	797	115	2,600
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway.....	19	---	---	2	1	22	363	1	---	245	45	654
Burlington Northern Inc.....	56	---	---	2	2	60	783	2	2	136	34	957
Chicago and Northwestern Trans. Company....	25	---	---	---	---	25	216	---	9	110	27	362
Chicago, Milw., St. Paul & Pacific Railroad.....	19	---	---	2	---	21	187	---	2	95	13	297
Chicago, Rock Island & Pacific Railroad....	11	---	---	1	---	12	117	---	6	61	17	201
Colorado and Southern Railway.....	3	---	---	---	---	3	43	---	---	6	1	50
Denver and Rio Grande Western Railroad.....	1	---	---	---	---	1	53	---	---	19	2	74
Duluth, Missabe and Iron Range Railway.....	1	---	---	---	---	1	21	---	---	8	---	29
Fort Worth and Denver Railway.....	1	---	---	1	---	2	30	---	---	11	1	42
Kansas City Southern Railway.....	---	---	---	---	---	---	88	---	---	34	2	124
Louisiana and Arkansas Railway.....	11	---	---	3	---	14	48	---	---	22	3	73
Missouri-Kansas-Texas Railroad.....	9	---	---	1	---	10	102	---	---	45	2	149
Missouri Pacific Railroad.....	42	---	---	3	---	45	464	---	2	495	19	980
St. Louis-San Francisco Railway.....	16	---	---	11	---	27	124	7	---	126	9	266
St. Louis Southwestern Railway.....	1	---	---	---	---	1	80	---	---	36	3	119
Soo Line Railroad.....	13	---	---	3	---	16	128	---	---	91	7	226
Southern Pacific Trans. Company.....	68	7	61	8	6	150	903	1	5	184	100	1,193
Union Pacific Railroad.....	54	---	---	3	---	57	847	4	---	165	14	1,030
Western Pacific Railroad.....	15	---	---	---	1	16	79	---	---	23	4	106
SUBTOTAL, WESTERN DISTRICT:.....	365	7	61	40	10	483	4,676	15	26	1,912	303	6,932
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:.....	33	---	---	3	---	36	1,061	3	139	223	41	1,467
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	708	10	402	106	13	1,239	9,490	21	169	3,601	666	13,947
Class II & III Railroads.....	33	---	---	3	---	36	1,061	3	139	223	41	1,467
TOTAL FOR ALL RAILROADS.....	741	10	402	109	13	1,275	10,551	24	308	3,824	707	15,414

TABLE R8. CONTINUATION

.....Nontrain Incidents.....							.....Total.....						
Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total		Empl on Duty	Empl Not on Duty	Pass- engers	Non Tres- passers	Tres- passers	Total	
CLASS I RAILROADS													
EASTERN DISTRICT													
National Railroad Passenger Corp. (Amtrak).....	2,091	6	60	41	10	2,208	2,376	6	209	44	20	2,655	
Baltimore and Ohio Railroad.....	1,534	31	8	18	3	1,594	1,844	31	11	174	27	2,087	
Bessemer and Lake Erie Railroad.....	213	---	---	---	3	216	236	---	---	1	4	241	
Boston and Maine Corp.....	260	6	9	5	2	282	300	6	17	7	12	342	
Chesapeake and Ohio Railway.....	1,795	32	3	20	---	1,850	2,053	32	4	160	20	2,269	
Consolidated Rail Corp.....	8,755	176	16	29	10	8,986	10,248	180	271	287	119	11,105	
Delaware and Hudson Railway.....	114	2	---	---	2	118	144	2	---	1	3	150	
Detroit, Toledo and Ironton Railroad.....	360	---	---	1	---	361	397	---	---	14	---	411	
Elgin, Joliet and Eastern Railway.....	296	11	---	---	---	307	387	11	---	4	3	405	
Grand Trunk Western Railroad.....	392	4	7	10	2	415	548	4	8	59	17	636	
Long Island Railroad.....	1,080	13	47	48	8	1,196	1,220	16	68	48	18	1,370	
Norfolk and Western Railway.....	2,458	42	5	55	3	2,563	2,931	42	6	334	50	3,363	
Pittsburg and Lake Erie Railroad.....	285	6	1	1	---	293	317	6	1	3	---	327	
Western Maryland Railway.....	102	2	---	4	---	108	128	2	---	15	---	145	
SUBTOTAL, EASTERN DISTRICT:.....	19,735	331	156	232	43	20,497	23,129	338	595	1,151	293	25,506	
SOUTHERN DISTRICT													
Alabama Great Southern Railroad.....	48	2	---	---	---	50	65	2	---	30	3	100	
Central of Georgia Railroad.....	119	1	---	1	---	121	183	1	---	28	---	212	
Cinn., N.O. & Texas Pacific Railway.....	79	3	---	1	---	83	97	3	---	12	3	115	
Clinchfield Railroad.....	86	---	---	1	---	87	109	---	1	6	3	119	
Florida East Coast Railway.....	20	---	---	---	---	20	32	---	---	17	10	59	
Illinois Central Gulf Railroad.....	2,622	21	36	57	4	2,740	3,011	22	77	306	27	3,443	
Louisville and Nashville Railroad.....	1,690	6	---	3	---	1,699	2,103	6	1	94	22	2,226	
Seaboard Coast Line Railroad.....	1,459	21	---	12	1	1,493	1,970	22	2	209	35	2,238	
Southern Railway.....	1,278	22	---	23	1	1,324	1,594	22	---	232	19	1,867	
SUBTOTAL, SOUTHERN DISTRICT:.....	7,401	76	36	98	6	7,617	9,164	78	81	934	122	10,379	
WESTERN DISTRICT													
Atchison, Topeka and Santa Fe Railway.....	1,813	39	---	18	2	1,872	2,195	40	---	265	48	2,548	
Burlington Northern Inc.....	5,241	108	6	32	4	5,391	6,080	110	8	170	40	6,408	
Chicago and Northwestern Trans. Company....	1,988	22	32	28	8	2,078	2,229	22	41	138	35	2,465	
Chicago, Milw., St. Paul & Pacific Railroad.....	1,445	4	6	5	---	1,460	1,651	4	8	102	13	1,778	
Chicago, Rock Island & Pacific Railroad....	954	9	3	8	4	978	1,082	9	9	70	21	1,191	
Colorado and Southern Railway.....	131	1	---	3	---	135	177	1	---	9	1	188	
Denver and Rio Grande Western Railroad.....	178	3	1	---	1	183	232	3	1	19	3	258	
Duluth, Missabe and Iron Range Railway.....	141	2	---	42	---	185	163	2	---	50	---	215	
Fort Worth and Denver Railway.....	127	3	---	2	---	132	158	3	---	14	1	176	
Kansas City Southern Railway.....	275	---	---	---	---	275	363	---	---	34	2	399	
Louisiana and Arkansas Railway.....	119	---	---	2	---	121	178	---	---	27	3	208	
Missouri-Kansas-Texas Railroad.....	305	---	---	14	---	319	416	---	---	60	2	478	
Missouri Pacific Railroad.....	1,514	23	---	13	1	1,551	2,020	23	2	511	20	2,576	
St. Louis-San Francisco Railway.....	786	13	---	13	4	816	926	20	---	150	13	1,109	
St. Louis Southwestern Railway.....	439	4	---	2	---	445	520	4	---	38	3	565	
Soo Line Railroad.....	704	19	---	5	1	729	845	19	---	99	8	971	
Southern Pacific Trans. Company.....	3,379	55	---	11	9	3,454	4,350	63	66	203	115	4,797	
Union Pacific Railroad.....	3,357	91	---	12	---	3,460	4,258	95	---	180	14	4,547	
Western Pacific Railroad.....	280	3	---	2	---	285	374	3	---	25	5	407	
SUBTOTAL, WESTERN DISTRICT:.....	23,176	399	48	212	34	23,869	28,217	421	135	2,164	347	31,284	
CLASS II & III RAILROADS													
SUBTOTAL, CLASS II & III:.....	5,320	32	51	49	2	5,454	6,414	35	190	275	43	6,957	
RECAPITULATION													
ALL DISTRICTS													
Class I RAILROADS.....	50,312	806	240	542	83	51,983	60,510	837	811	4,249	762	67,169	
Class II & III Railroads.....	5,320	32	51	49	2	5,454	6,414	35	190	275	43	6,957	
TOTAL FOR ALL RAILROADS.....	55,632	838	291	591	85	57,437	66,924	872	1,001	4,524	805	74,126	

TABLE R12. INJURIES TO EMPLOYEES ON DUTY BY TYPE OF INJURY AND RAILROAD, 1979

	Amputations						Fractures						
	Arm or Hand	Finger	Leg or Foot	Toe	Other Part	Total	Arm or Hand	Finger	Leg or Foot	Toe	Face or Head	Other	Total
CLASS I RAILROADS													
EASTERN DISTRICT													
National Railroad Passenger Corp. (Amtrak).....	---	3	---	---	---	3	22	53	33	18	6	22	154
Baltimore and Ohio Railroad.....	---	6	4	2	---	12	28	61	35	24	9	20	177
Bessemer and Lake Erie Railroad.....	---	---	---	1	---	1	3	2	2	---	---	---	7
Boston and Maine Corp.....	---	---	---	---	---	---	7	13	6	10	---	8	44
Chesapeake and Ohio Railway.....	---	10	---	1	---	11	30	62	28	24	5	20	169
Consolidated Rail Corp.....	2	22	4	2	---	30	139	310	175	145	53	112	934
Delaware and Hudson Railway.....	2	---	---	---	---	2	2	3	2	1	---	3	11
Detroit, Toledo and Ironton Railroad.....	---	---	---	---	---	---	1	13	6	3	---	---	23
Elgin, Joliet and Eastern Railway.....	---	1	1	---	---	2	3	6	6	1	---	4	20
Grand Trunk Western Railroad.....	---	1	1	---	1	3	7	13	5	4	2	8	39
Long Island Railroad.....	---	1	---	---	---	1	13	15	6	13	2	9	58
Norfolk and Western Railway.....	1	7	---	---	---	8	30	96	52	27	16	38	259
Pittsburg and Lake Erie Railroad.....	---	---	1	---	---	1	4	9	5	1	---	2	21
Western Maryland Railway.....	---	---	---	---	---	---	---	3	4	1	1	3	12
SUBTOTAL, EASTERN DISTRICT:.....	5	51	11	6	1	74	289	659	365	272	94	249	1,928
SOUTHERN DISTRICT													
Alabama Great Southern Railroad.....	---	---	---	---	---	---	1	1	2	---	1	1	6
Central of Georgia Railroad.....	---	---	---	---	---	---	3	2	3	2	1	3	14
Cinn., N.O. & Texas Pacific Railway.....	---	---	---	---	---	---	1	2	1	---	3	1	8
Clinchfield Railroad.....	---	---	---	---	---	---	3	3	3	2	1	3	15
Florida East Coast Railway.....	---	1	---	---	---	1	---	---	5	1	---	2	8
Illinois Central Gulf Railroad.....	---	12	---	---	---	12	35	92	52	30	7	27	243
Louisville and Nashville Railroad.....	1	3	2	---	---	6	23	45	28	27	3	13	139
Seaboard Coast Line Railroad.....	1	4	3	---	---	8	27	59	34	11	12	11	154
Southern Railway.....	---	---	3	1	1	5	18	42	29	11	3	17	120
SUBTOTAL, SOUTHERN DISTRICT:.....	2	20	8	1	1	32	111	246	157	84	31	78	707
WESTERN DISTRICT													
Atchison, Topeka and Santa Fe Railway.....	---	5	2	1	---	8	36	75	48	29	11	20	219
Burlington Northern Inc.....	---	14	3	1	---	18	88	217	126	65	95	53	644
Chicago and Northwestern Trans. Company....	---	6	1	---	---	7	20	50	35	13	10	24	152
Chicago, Milw., St. Paul & Pacific Railroad.....	---	6	---	---	---	6	21	36	23	21	16	14	131
Chicago, Rock Island & Pacific Railroad....	---	4	---	---	1	5	12	13	16	5	4	11	61
Colorado and Southern Railway.....	---	1	---	---	---	1	5	6	3	1	2	2	19
Denver and Rio Grande Western Railroad.....	---	1	---	---	---	1	3	12	10	2	---	6	33
Duluth, Missabe and Iron Range Railway.....	---	1	---	---	---	1	1	2	5	1	1	1	11
Fort Worth and Denver Railway.....	---	---	---	---	---	---	1	6	3	1	1	1	13
Kansas City Southern Railway.....	---	---	---	---	---	---	4	10	10	2	---	1	27
Louisiana and Arkansas Railway.....	---	---	1	---	---	1	2	6	1	1	---	1	11
Missouri-Kansas-Texas Railroad.....	---	2	---	---	---	2	2	14	5	4	3	8	36
Missouri Pacific Railroad.....	1	4	2	---	1	8	23	58	46	24	6	22	179
St. Louis-San Francisco Railway.....	---	1	2	---	---	3	11	34	10	7	3	8	73
St. Louis Southwestern Railway.....	---	1	---	---	---	1	5	8	11	2	2	3	31
Soo Line Railroad.....	1	---	1	2	---	4	8	21	20	6	4	11	70
Southern Pacific Trans. Company.....	2	6	1	1	1	11	50	77	76	31	18	34	286
Union Pacific Railroad.....	1	12	4	---	---	17	56	142	70	43	12	48	371
Western Pacific Railroad.....	---	2	---	---	---	2	2	4	6	1	---	4	17
SUBTOTAL, WESTERN DISTRICT:.....	5	66	17	5	3	96	350	791	524	259	188	272	2,384
CLASS II & III RAILROADS													
SUBTOTAL, CLASS II & III:.....	---	10	4	4	---	18	71	134	94	43	12	47	401
RECAPITULATION ALL DISTRICTS													
Class I RAILROADS.....	12	137	36	12	5	202	750	1,696	1,046	615	313	599	5,019
Class II & III Railroads.....	---	10	4	4	---	18	71	134	94	43	12	47	401
TOTAL FOR ALL RAILROADS.....	12	147	40	16	5	220	821	1,830	1,140	658	325	646	5,420

TABLE R12. CONTINUATION

	.....Other Injuries.....								Total	Total	
	Sprain or Bruise	Strain	Elec Shock Cut or Burn	Other Burn	Dislo- cation	Cinder In Eye	Other	Total	In- juries	Fatal- ities	
CLASS I RAILROADS											
EASTERN DISTRICT											
National Railroad Passenger Corp. (Amtrak).....	593	846	355	10	83	9	91	128	2,115	2,272	3
Baltimore and Ohio Railroad.....	385	663	303	2	41	16	138	45	1,593	1,782	2
Bessemer and Lake Erie Railroad.....	37	122	14	1	4	1	19	16	214	222	---
Boston and Maine Corp.....	50	94	70	1	6	2	24	8	255	299	---
Chesapeake and Ohio Railway.....	448	786	316	6	84	10	146	41	1,837	2,017	3
Consolidated Rail Corp.....	2,037	3,808	1,620	34	191	45	954	252	8,941	9,905	13
Delaware and Hudson Railway.....	42	47	20	---	4	---	6	9	128	141	---
Detroit, Toledo and Ironton Railroad.....	99	140	84	1	7	1	22	16	370	393	---
Elgin, Joliet and Eastern Railway.....	88	107	81	---	6	3	64	10	359	381	2
Grand Trunk Western Railroad.....	117	222	54	---	14	---	56	34	497	539	---
Long Island Railroad.....	326	416	133	19	26	1	102	23	1,046	1,105	1
Norfolk and Western Railway.....	574	1,153	385	11	82	9	273	118	2,605	2,872	6
Pittsburg and Lake Erie Railroad.....	56	111	50	1	3	1	51	18	291	313	---
Western Maryland Railway.....	24	58	17	---	1	---	10	2	112	124	---
SUBTOTAL, EASTERN DISTRICT:.....	4,876	8,573	3,502	86	552	98	1,956	720	20,363	22,365	30
SOUTHERN DISTRICT											
Alabama Great Southern Railroad.....	13	23	8	---	4	2	7	1	58	64	1
Central of Georgia Railroad.....	41	67	24	---	3	2	26	2	165	179	1
Cinn., N.O. & Texas Pacific Railway.....	24	39	14	---	1	---	8	3	89	97	---
Clinchfield Railroad.....	21	33	23	---	2	---	12	3	94	109	---
Florida East Coast Railway.....	4	6	12	---	---	---	1	---	23	32	---
Illinois Central Gulf Railroad.....	643	1,104	447	16	67	10	261	93	2,641	2,896	9
Louisville and Nashville Railroad.....	493	759	334	5	64	11	156	89	1,911	2,056	3
Seaboard Coast Line Railroad.....	422	746	289	8	52	7	198	62	1,784	1,946	1
Southern Railway.....	328	580	248	---	41	7	229	20	1,453	1,578	4
SUBTOTAL, SOUTHERN DISTRICT:.....	1,989	3,357	1,399	29	234	39	898	273	8,218	8,957	19
WESTERN DISTRICT											
Atchison, Topeka and-Santa Fe Railway.....	450	729	453	8	58	23	150	87	1,958	2,185	5
Burlington Northern Inc.....	1,183	2,469	1,005	9	108	33	356	38	5,201	5,863	6
Chicago and Northwestern Trans. Company....	402	790	380	11	101	5	206	89	1,984	2,143	8
Chicago, Milw., St. Paul & Pacific Railroad.....	375	694	248	9	51	19	50	31	1,477	1,614	1
Chicago, Rock Island & Pacific Railroad....	263	400	125	4	60	9	84	63	1,008	1,074	---
Colorado and Southern Railway.....	40	78	25	---	---	1	7	2	153	173	---
Denver and Rio Grande Western Railroad.....	40	80	49	---	7	2	13	5	196	230	2
Duluth, Missabe and Iron Range Railway.....	30	65	22	---	2	---	21	7	147	159	---
Fort Worth and Denver Railway.....	40	57	20	---	2	2	15	5	141	154	---
Kansas City Southern Railway.....	108	115	52	---	7	1	41	9	333	360	---
Louisiana and Arkansas Railway.....	48	64	22	---	4	---	18	4	160	172	---
Missouri-Kansas-Texas Railroad.....	79	127	62	1	5	3	82	8	367	405	1
Missouri Pacific Railroad.....	392	814	280	11	42	12	183	60	1,794	1,981	5
St. Louis-San Francisco Railway.....	162	284	172	---	10	5	134	40	807	883	3
St. Louis Southwestern Railway.....	146	185	75	1	8	4	36	21	476	508	1
Soo Line Railroad.....	154	367	89	---	11	13	70	44	748	822	1
Southern Pacific Trans. Company.....	966	1,612	577	15	87	40	446	115	3,858	4,155	2
Union Pacific Railroad.....	1,000	1,565	563	22	165	19	343	153	3,830	4,218	11
Western Pacific Railroad.....	52	137	56	---	12	1	75	8	341	360	---
SUBTOTAL, WESTERN DISTRICT:.....	5,930	10,632	4,275	91	740	192	2,330	789	24,979	27,459	46
CLASS II & III RAILROADS											
SUBTOTAL, CLASS II & III:.....	1,703	2,138	927	17	257	28	647	193	5,910	6,329	6
RECAPITULATION ALL DISTRICTS											
Class I RAILROADS.....	12,795	22,562	9,176	206	1,526	329	5,184	1,782	53,560	58,781	95
Class II & III Railroads.....	1,703	2,138	927	17	257	28	647	193	5,910	6,329	6
TOTAL FOR ALL RAILROADS.....	14,498	24,700	10,103	223	1,783	357	5,831	1,975	59,470	65,110	101



TABLE R5. CASUALTIES IN TRAIN ACCIDENTS BY RAILROAD, 1979

Railroad	..Collisions..		..Derailments..		....Other.....		.....Totals.....		Miles (000)	Kld/Mil Miles	Inj/Mil Miles
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured			
CLASS I RAILROADS											
EASTERN DISTRICT											
National Railroad Passenger Corp. (Amtrak).....	---	51	2	109	2	---	4	160	32,292	0.12	4.95
Baltimore and Ohio Railroad.....	---	5	1	19	---	3	1	27	21,509	0.04	1.25
Bessemer and Lake Erie Railroad.....	---	---	---	---	---	---	---	---	1,110	0.00	0.00
Boston and Maine Corp.....	---	---	---	6	---	---	---	6	4,541	0.00	1.32
Chesapeake and Ohio Railway.....	---	5	---	6	5	8	5	19	19,060	0.26	0.99
Consolidated Rail Corp.....	6	283	---	27	4	24	10	334	95,416	0.10	3.50
Delaware and Hudson Railway.....	---	2	---	---	---	---	---	2	2,383	0.00	0.83
Detroit, Toledo and Ironton Railroad.....	---	---	---	4	---	---	---	4	1,777	0.00	2.25
Elgin, Joliet and Eastern Railway.....	---	1	---	---	---	1	---	2	3,160	0.00	0.63
Grand Trunk Western Railroad.....	---	2	---	1	1	2	1	5	5,815	0.17	0.86
Long Island Railroad.....	---	---	---	2	---	2	---	4	8,354	0.00	0.47
Norfolk and Western Railway.....	---	7	---	9	4	14	4	30	26,913	0.14	1.11
Pittsburg and Lake Erie Railroad.....	---	---	---	1	---	---	---	1	1,480	0.00	0.67
Western Maryland Railway.....	---	---	---	---	---	---	---	---	1,535	0.00	0.00
SUBTOTAL, EASTERN DISTRICT:.....	6	356	3	184	16	54	25	594	225,351	0.11	2.63
SOUTHERN DISTRICT											
Alabama Great Southern Railroad.....	1	---	---	---	1	2	2	2	3,302	0.60	0.60
Central of Georgia Railroad.....	---	---	---	---	---	3	---	3	3,626	0.00	0.82
Cinn., N.O. & Texas Pacific Railway.....	---	1	---	1	---	1	---	3	5,291	0.00	0.56
Clinchfield Railroad.....	---	---	---	---	---	---	---	---	1,281	0.00	0.00
Florida East Coast Railway.....	---	---	---	2	---	2	---	4	3,077	0.00	1.30
Illinois Central Gulf Railroad.....	2	26	---	15	3	6	5	47	25,868	0.19	1.81
Louisville and Nashville Railroad.....	---	8	---	9	3	17	3	34	27,473	0.10	1.23
Seaboard Coast Line Railroad.....	---	4	---	11	5	24	5	39	28,938	0.17	1.34
Southern Railway.....	---	11	3	7	1	12	4	30	27,387	0.14	1.09
SUBTOTAL, SOUTHERN DISTRICT:.....	3	50	3	45	13	67	19	162	126,247	0.15	1.28
WESTERN DISTRICT											
Atchison, Topeka and Santa Fe Railway.....	---	7	---	11	8	4	8	22	58,449	0.13	0.37
Burlington Northern Inc.....	---	26	---	28	7	6	7	60	70,922	0.09	0.84
Chicago and Northwestern Trans. Company...	---	5	---	19	2	1	2	25	21,420	0.09	1.16
Chicago, Milw., St. Paul & Pacific Railroad.....	---	9	---	8	---	4	---	21	14,807	0.00	1.41
Chicago, Rock Island & Pacific Railroad...	---	1	---	9	---	2	---	12	11,295	0.00	1.06
Colorado and Southern Railway.....	---	---	---	3	---	---	---	3	2,022	0.00	1.48
Denver and Rio Grande Western Railroad....	---	1	---	---	---	---	---	1	7,101	0.00	0.14
Duluth, Missabe and Iron Range Railway....	---	1	---	---	---	---	---	1	1,083	0.00	0.92
Fort Worth and Denver Railway.....	---	1	---	---	---	1	---	2	2,339	0.00	0.85
Kansas City Southern Railway.....	---	---	---	---	4	---	4	---	3,682	1.08	0.00
Louisiana and Arkansas Railway.....	---	5	---	2	---	7	---	14	1,693	0.00	8.26
Missouri-Kansas-Texas Railroad.....	---	5	---	1	---	4	---	10	4,550	0.00	2.19
Missouri Pacific Railroad.....	---	6	1	27	2	12	3	45	38,005	0.07	1.18
St. Louis-San Francisco Railway.....	1	4	---	8	5	15	6	27	13,487	0.44	2.00
St. Louis Southwestern Railway.....	---	---	---	1	1	---	1	1	7,495	0.13	0.13
Soo Line Railroad.....	---	5	---	6	---	5	---	16	6,901	0.00	2.31
Southern Pacific Trans. Company.....	2	96	1	37	4	17	7	150	46,870	0.14	3.20
Union Pacific Railroad.....	3	31	---	18	7	8	10	57	45,558	0.22	1.25
Western Pacific Railroad.....	---	4	---	8	2	4	2	16	4,748	0.42	3.36
SUBTOTAL, WESTERN DISTRICT:.....	6	207	2	186	42	90	50	483	362,435	0.13	1.33
CLASS II & III RAILROADS											
SUBTOTAL, CLASS II & III:.....	---	11	---	18	6	7	6	36	49,393	0.12	0.72
RECAPITULATION ALL DISTRICTS											
Class I RAILROADS.....	15	613	8	415	71	211	94	1,239	714,034	0.13	1.73
Class II & III Railroads.....	---	11	---	18	6	7	6	36	49,393	0.12	0.72
TOTAL FOR ALL RAILROADS.....	15	624	8	433	77	218	100	1,275	763,428	0.13	1.67

TABLE R13. CASUALTIES IN TRAIN INCIDENTS BY OCCURRENCE AND RAILROAD, 1979

	Coupling		Operating Locos/Mtr Crs		Operating Hand Brakes		Operating Switches		Contact With Fixed Structure		Get ...On Off...	
	Kill	Inj	Kill	Inj	Kill	Inj	Kill	Inj	Kill	Inj	Kill	Inj
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	---	1	---	---	---	---	---	---	---	---	1	20
Baltimore and Ohio Railroad.....	---	15	---	19	---	8	---	---	---	10	---	69
Bessemer and Lake Erie Railroad.....	---	1	---	---	---	2	---	---	---	1	---	12
Boston and Maine Corp.....	---	1	---	2	---	1	---	---	---	2	---	15
Chesapeake and Ohio Railway.....	---	28	---	13	---	18	---	4	---	11	---	59
Consolidated Rail Corp.....	1	71	---	130	1	29	---	11	---	18	1	211
Delaware and Hudson Railway.....	---	3	---	1	---	2	---	---	---	1	---	10
Detroit, Toledo and Ironton Railroad...	---	4	---	7	---	---	---	2	---	1	---	2
Elgin, Joliet and Eastern Railway.....	---	7	---	7	---	---	---	1	---	2	---	22
Grand Trunk Western Railroad.....	---	13	---	15	---	3	---	---	---	3	---	51
Long Island Railroad.....	---	4	---	7	---	3	---	---	---	1	3	12
Norfolk and Western Railway.....	---	27	---	36	---	13	---	1	---	16	---	103
Pittsburg and Lake Erie Railroad.....	---	---	---	2	---	---	---	---	---	4	---	7
Western Maryland Railway.....	---	2	---	4	---	2	---	---	---	---	---	6
SUBTOTAL, EASTERN DISTRICT:..	1	177	---	243	1	81	---	19	---	70	5	599
SOUTHERN DISTRICT												
Alabama Great Southern Railroad.....	---	---	---	---	---	---	---	---	---	---	---	4
Central of Georgia Railroad.....	---	5	---	---	---	---	---	---	---	---	---	18
Cinn., N.O. & Texas Pacific Railway....	---	1	---	---	---	---	---	---	---	---	---	6
Clinchfield Railroad.....	---	3	---	4	---	---	---	---	---	1	---	4
Florida East Coast Railway.....	---	1	---	---	---	---	---	---	---	1	---	3
Illinois Central Gulf Railroad.....	---	26	---	33	1	11	---	2	---	12	---	87
Louisville and Nashville Railroad.....	---	28	---	23	---	8	---	1	1	11	1	108
Seaboard Coast Line Railroad.....	---	44	---	47	---	11	---	1	---	7	2	152
Southern Railway.....	---	6	---	---	---	---	---	---	---	---	---	92
SUBTOTAL, SOUTHERN DISTRICT:..	---	114	---	107	1	30	---	4	1	32	3	474
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway..	1	45	---	29	---	20	---	2	1	21	8	153
Burlington Northern Inc.....	---	27	---	94	---	34	---	7	---	13	---	285
Chicago and Northwestern Trans. Company.....	---	6	---	10	---	5	---	1	---	4	---	59
Chicago, Milw., St. Paul & Pacific Railroad.....	---	15	---	6	---	10	---	---	---	13	1	66
Chicago, Rock Island & Pacific Railroad.....	---	16	---	10	---	3	---	1	---	3	---	31
Colorado and Southern Railway.....	---	1	---	4	---	1	---	---	---	1	---	13
Denver and Rio Grande Western Railroad.	---	2	---	8	---	4	---	---	---	1	1	13
Duluth, Missabe and Iron Range Railway.	---	3	---	1	---	1	---	1	---	1	---	9
Fort Worth and Denver Railway.....	---	1	---	7	---	---	---	---	---	1	---	5
Kansas City Southern Railway.....	---	7	---	5	---	---	---	---	---	1	---	28
Louisiana and Arkansas Railway.....	---	6	---	2	---	2	---	---	---	1	---	13
Missouri-Kansas-Texas Railroad.....	---	4	---	21	---	2	---	---	---	---	---	20
Missouri Pacific Railroad.....	1	34	---	69	---	24	---	2	---	15	1	141
St. Louis-San Francisco Railway.....	---	6	---	18	---	7	---	3	---	3	---	24
St. Louis Southwestern Railway.....	---	10	---	6	---	2	---	---	---	1	---	24
Soo Line Railroad.....	---	12	---	9	---	5	---	---	---	4	---	35
Southern Pacific Trans. Company.....	---	51	---	95	---	39	---	3	---	18	1	244
Union Pacific Railroad.....	---	40	---	54	---	37	---	19	---	29	1	290
Western Pacific Railroad.....	---	7	---	6	---	2	---	---	---	---	---	15
SUBTOTAL, WESTERN DISTRICT:..	2	293	---	454	---	198	---	39	1	130	13	1,468
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:....	---	108	---	133	---	22	---	11	---	41	1	274
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	3	584	---	804	2	309	---	62	2	232	21	2,541
Class II & III Railroads.....	---	108	---	133	---	22	---	11	---	41	1	274
TOTAL FOR ALL RAILROADS.....	3	692	---	937	2	331	---	73	2	273	22	2,815

TABLE R13. CONTINUATION

	Acc At		Struck Or		...Other...		.....TOTAL.....			
	Pub	Xings	Run	Over			Per/Mil		Per/Mil	
	Kill	Inj	Kill	Inj	Kill	Inj	Kill Man Hrs	Inj	Man Hrs	
CLASS I RAILROADS										
EASTERN DISTRICT										
National Railroad Passenger Corp.										
(Amtrak).....	---	1	18	12	3	253	22	.58	287 7.54	
Baltimore and Ohio Railroad.....	10	132	16	48	---	165	26	.80	466 14.26	
Bessemer and Lake Erie Railroad.....	1	1	---	1	---	7	1	.36	25 8.98	
Boston and Maine Corp.....	6	5	5	6	---	22	11	1.70	54 8.34	
Chesapeake and Ohio Railway.....	18	129	9	33	---	105	27	.70	400 10.40	
Consolidated Rail Corp.....	77	291	55	62	2	962	137	.79	1,785 10.34	
Delaware and Hudson Railway.....	---	1	2	1	---	11	2	.52	30 7.74	
Detroit, Toledo and Ironton Railroad...	1	13	---	---	---	17	1	.32	46 14.77	
Elgin, Joliet and Eastern Railway.....	---	6	2	3	---	48	2	.35	96 16.95	
Grand Trunk Western Railroad.....	10	59	3	7	---	65	13	1.44	216 23.94	
Long Island Railroad.....	6	4	8	5	---	134	17	1.42	170 14.16	
Norfolk and Western Railway.....	42	268	25	53	2	253	69	1.52	770 17.00	
Pittsburg and Lake Erie Railroad.....	---	---	1	3	---	17	1	.24	33 7.76	
Western Maryland Railway.....	---	10	2	1	---	12	2	.86	37 15.93	
SUBTOTAL, EASTERN DISTRICT:..	171	920	146	235	7	2,071	331	.88	4,415 11.72	
SOUTHERN DISTRICT										
Alabama Great Southern Railroad.....	7	28	2	3	---	13	9	A	48 A	
Central of Georgia Railroad.....	4	26	4	1	---	38	8	A	88 A	
Cinn., N.O. & Texas Pacific Railway....	4	10	2	3	---	9	6	A	29 A	
Clinchfield Railroad.....	---	4	1	4	---	12	1	.57	32 18.28	
Florida East Coast Railway.....	2	20	5	5	---	5	7	2.95	35 14.73	
Illinois Central Gulf Railroad.....	41	233	17	38	3	214	62	1.61	656 17.03	
Louisville and Nashville Railroad.....	29	82	10	18	1	214	42	1.25	493 14.67	
Seaboard Coast Line Railroad.....	66	193	30	32	---	219	98	2.51	706 18.10	
Southern Railway.....	34	190	17	39	---	186	51	1.24	513 12.46	
SUBTOTAL, SOUTHERN DISTRICT:..	187	786	88	143	4	910	284	1.82	2,600 16.62	
WESTERN DISTRICT										
Atchison, Topeka and Santa Fe Railway..	44	245	32	37	1	102	87	1.36	654 10.26	
Burlington Northern Inc.....	49	127	20	43	1	327	70	.71	957 9.76	
Chicago and Northwestern Trans.										
Company.....	30	113	10	20	2	144	42	1.36	362 11.75	
Chicago, Milw., St. Paul & Pacific										
Railroad.....	12	94	---	8	1	85	14	.65	297 13.88	
Chicago, Rock Island & Pacific										
Railroad.....	9	68	5	9	---	60	14	.93	201 13.41	
Colorado and Southern Railway.....	---	7	---	1	---	22	---	---	50 31.93	
Denver and Rio Grande Western Railroad.	4	19	4	4	---	23	9	1.09	74 8.95	
Duluth, Missabe and Iron Range Railway.	3	4	---	---	---	9	3	.92	29 8.92	
Fort Worth and Denver Railway.....	4	9	2	1	---	18	6	2.34	42 16.37	
Kansas City Southern Railway.....	3	35	1	5	---	43	4	.61	124 18.92	
Louisiana and Arkansas Railway.....	1	23	1	5	---	21	2	B	73 B	
Missouri-Kansas-Texas Railroad.....	3	44	4	4	---	54	7	1.23	149 26.28	
Missouri Pacific Railroad.....	66	482	29	47	2	166	99	2.27	980 22.51	
St. Louis-San Francisco Railway.....	23	125	8	14	---	66	31	2.01	266 17.22	
St. Louis Southwestern Railway.....	8	36	2	3	1	37	11	1.31	119 14.13	
Soo Line Railroad.....	17	90	2	7	---	64	19	1.99	226 23.71	
Southern Pacific Trans. Company.....	43	216	48	79	2	448	94	1.35	1,193 17.11	
Union Pacific Railroad.....	45	154	23	23	2	384	71	1.32	1,030 19.10	
Western Pacific Railroad.....	1	22	2	7	---	47	3	.57	106 20.20	
SUBTOTAL, WESTERN DISTRICT:..	365	1,913	193	317	12	2,120	586	1.27	6,932 14.98	
CLASS II & III RAILROADS										
SUBTOTAL, CLASS II & III:....	23	224	15	56	5	598	44	.54	1,467 18.02	
RECAPITULATION										
ALL DISTRICTS										
Class I RAILROADS.....	723	3,619	427	695	23	5,101	1,201	1.21	13,947 14.00	
Class II & III Railroads.....	23	224	15	56	5	598	44	.54	1,467 18.02	
TOTAL FOR ALL RAILROADS.....	746	3,843	442	751	28	5,699	1,245	1.16	15,414 14.31	

NOTE: 'A' Included in Southern Railway System  
'B' Included in Kansas City Southern Railway

TABLE R6. CASUALTIES IN NONTRAIN INCIDENTS BY RAILROAD, 1979

	...Coupling...		Operating Locos/Mtr Crs		Operating Hand Brakes		Operating Switches		Contact with Fixed Structures		Getting on or off car or Loco	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	---	7	---	4	---	---	---	8	---	---	---	50
Baltimore and Ohio Railroad.....	---	62	---	18	---	37	---	76	---	---	---	106
Bessemer and Lake Erie Railroad...	---	3	---	1	---	6	---	7	---	---	---	2
Boston and Maine Corp.....	---	8	---	1	---	3	---	3	---	---	---	22
Chesapeake and Ohio Railway.....	---	88	---	14	---	21	---	90	---	---	---	100
Consolidated Rail Corp.....	---	213	---	151	---	86	---	274	---	1	---	251
Delaware and Hudson Railway.....	---	6	---	---	---	---	---	10	---	---	---	9
Detroit, Toledo and Ironton Railroad.....	---	16	---	2	---	---	---	40	---	---	---	20
Elgin, Joliet and Eastern Railway.	---	8	---	4	---	1	---	24	---	---	---	20
Grand Trunk Western Railroad.....	---	30	---	---	---	5	---	34	---	---	---	31
Long Island Railroad.....	---	10	---	7	---	8	---	18	---	1	---	73
Norfolk and Western Railway.....	---	87	---	23	---	46	---	110	---	2	---	118
Pittsburg and Lake Erie Railroad..	---	4	---	---	---	---	---	9	---	---	---	7
Western Maryland Railway.....	---	3	---	2	---	4	---	4	---	---	---	7
SUBTOTAL, EASTERN DISTRICT:.....	---	545	---	227	---	217	---	707	---	4	---	816
SOUTHERN DISTRICT												
Alabama Great Southern Railroad...	---	3	---	1	---	3	---	4	---	---	---	1
Central of Georgia Railroad.....	---	14	---	---	---	7	---	9	---	---	---	5
Cinn., N.O. & Texas Pacific Railway.....	---	4	---	---	---	2	---	2	---	---	---	1
Clinchfield Railroad.....	---	3	---	---	---	1	---	2	---	---	---	3
Florida East Coast Railway.....	---	---	---	---	---	---	---	1	---	---	---	---
Illinois Central Gulf Railroad....	---	83	---	21	---	19	---	129	---	1	---	124
Louisville and Nashville Railroad.	---	105	---	29	---	40	---	87	---	2	---	109
Seaboard Coast Line Railroad.....	---	70	---	15	---	29	---	74	---	1	---	54
Southern Railway.....	---	57	---	---	---	23	---	67	---	---	---	36
SUBTOTAL, SOUTHERN DISTRICT:.....	---	339	---	66	---	124	---	375	---	4	---	333
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway.....	---	67	---	24	---	37	---	74	---	2	---	130
Burlington Northern Inc.....	---	152	---	82	---	80	---	311	---	1	---	228
Chicago and Northwestern Trans. Company.....	---	57	---	10	---	22	---	74	---	1	---	94
Chicago, Milw., St. Paul & Pacific Railroad.....	---	45	---	24	---	12	---	71	---	---	---	71
Chicago, Rock Island & Pacific Railroad.....	---	27	---	7	---	15	---	54	---	1	---	60
Colorado and Southern Railway.....	---	9	---	3	---	5	---	20	---	---	---	10
Denver and Rio Grande Western Railroad.....	---	11	---	2	---	---	---	15	---	---	---	8
Duluth, Missabe and Iron Range Railway.....	---	8	---	1	---	3	---	7	---	---	---	3
Fort Worth and Denver Railway....	---	4	---	4	---	4	---	7	---	---	---	5
Kansas City Southern Railway.....	---	8	---	1	---	6	---	17	---	---	---	17
Louisiana and Arkansas Railway....	---	3	---	2	---	3	---	10	---	---	---	5
Missouri-Kansas-Texas Railroad....	---	9	---	5	---	7	---	16	---	1	---	17
Missouri Pacific Railroad.....	---	99	---	40	---	28	---	81	---	2	---	117
St. Louis-San Francisco Railway...	---	24	---	13	---	12	---	18	---	1	---	25
St. Louis Southwestern Railway....	---	21	---	2	---	12	---	24	---	---	---	26
Soo Line Railroad.....	---	34	---	9	---	13	---	37	---	1	---	26
Southern Pacific Trans. Company...	---	155	---	41	---	86	---	138	---	---	---	154
Union Pacific Railroad.....	---	67	---	21	---	50	---	116	---	---	---	167
Western Pacific Railroad.....	---	13	---	5	---	8	---	11	---	---	---	16
SUBTOTAL, WESTERN DISTRICT:.....	---	813	---	296	---	403	---	1,101	---	10	---	1,179
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:.....	---	284	---	79	---	97	---	293	---	4	---	315
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	---	1,697	---	89	---	744	---	2,183	---	18	---	2,328
Class II & III Railroads.....	---	284	---	79	---	97	---	293	---	4	---	315
TOTAL FOR ALL RAILROADS.....	---	1,981	---	668	---	841	---	2,476	---	22	---	2,643

TABLE R6. CONTINUATION

	Acc At		Struck or		.....Other.....		Per Mil		Totals		Per Mil	
	Pub	Xings	Killed	Injured	Killed	Injured	Killed	Man Hours	Injured	Man Hours	Illness	Man Hours
CLASS I RAILROADS												
EASTERN DISTRICT												
National Railroad Passenger Corp. (Amtrak).....	---	---	---	---	7	2,036	7	0.18	2,105	55.30	103	2.71
Baltimore and Ohio Railroad.....	1	13	1	1	---	1,228	2	0.06	1,541	47.16	53	1.62
Bessemer and Lake Erie Railroad...	---	---	---	---	---	183	---	---	202	72.56	14	5.03
Boston and Maine Corp.....	---	---	---	1	---	243	---	---	281	43.40	1	0.15
Chesapeake and Ohio Railway.....	1	1	---	---	4	1,487	5	0.13	1,801	46.81	49	1.27
Consolidated Rail Corp.....	---	2	---	---	9	7,717	9	0.05	8,695	50.35	291	1.68
Delaware and Hudson Railway.....	---	---	---	---	---	90	---	---	115	29.65	3	0.77
Detroit, Toledo and Ironton Railroad.....	---	1	---	---	---	278	---	---	357	114.64	4	1.28
Elgin, Joliet and Eastern Railway.	---	---	---	1	---	244	---	---	302	53.32	5	0.88
Grand Trunk Western Railroad.....	---	1	---	---	---	309	---	---	410	45.43	5	0.55
Long Island Railroad.....	---	---	---	---	2	970	2	0.17	1,087	90.55	109	9.08
Morfolk and Western Railway.....	---	13	---	---	4	2,114	4	0.09	2,513	55.48	50	1.10
Pittsburg and Lake Erie Railroad..	---	1	---	1	1	270	1	0.24	292	68.71	1	0.24
Western Maryland Railway.....	---	---	---	---	---	84	---	---	104	44.77	4	1.72
SUBTOTAL, EASTERN DISTRICT:.....	2	32	1	4	27	17,253	30	0.08	19,805	52.57	692	1.84
SOUTHERN DISTRICT												
Alabama Great Southern Railroad...	---	---	---	---	---	37	---	A	49	A	1	A
Central of Georgia Railroad.....	---	---	---	---	---	82	---	A	117	A	4	A
Cinn., N.O. & Texas Pacific Railway.....	---	---	1	---	---	74	1	A	83	A	---	A
Clinchfield Railroad.....	---	1	---	---	---	77	---	---	87	49.69	---	---
Florida East Coast Railway.....	---	---	---	---	---	19	---	---	20	8.42	---	---
Illinois Central Gulf Railroad....	1	10	1	---	1	2,246	3	0.08	2,633	68.35	107	2.78
Louisville and Nashville Railroad.	1	2	---	---	---	1,285	1	0.03	1,659	49.36	40	1.19
Seaboard Coast Line Railroad.....	3	10	---	1	2	1,213	5	0.13	1,467	37.60	26	0.67
Southern Railway.....	---	4	---	1	---	1,122	---	---	1,310	31.81	14	0.34
SUBTOTAL, SOUTHERN DISTRICT:.....	5	27	2	2	3	6,155	10	0.06	7,425	47.46	192	1.23
WESTERN DISTRICT												
Atchison, Topeka and Santa Fe Railway.....	1	9	---	2	2	1,515	3	0.05	1,860	29.17	12	0.19
Burlington Northern Inc.....	1	9	---	1	4	4,304	5	0.05	5,168	52.71	223	2.27
Chicago and Northwestern Trans. Company.....	1	12	1	1	10	1,721	12	0.39	1,992	64.65	86	2.79
Chicago, Milw., St. Paul & Pacific Railroad.....	---	2	---	---	---	1,204	---	---	1,429	66.80	31	1.45
Chicago, Rock Island & Pacific Railroad.....	---	10	---	2	---	796	---	---	972	64.83	6	0.40
Colorado and Southern Railway....	---	2	---	---	---	85	---	---	134	85.57	1	0.64
Denver and Rio Grande Western Railroad.....	---	---	---	---	1	146	1	0.12	182	22.00	1	0.12
Duluth, Missabe and Iron Range Railway.....	---	---	---	---	---	160	---	---	182	55.98	3	0.92
Fort Worth and Denver Railway....	---	2	---	---	---	102	---	---	128	49.90	4	1.56
Kansas City Southern Railway.....	---	---	---	---	---	224	---	---	273	41.65	2	0.31
Louisiana and Arkansas Railway....	---	2	---	---	---	91	---	B	116	B	5	B
Missouri-Kansas-Texas Railroad...	---	5	---	---	1	248	1	0.18	308	54.32	11	1.94
Missouri Pacific Railroad.....	---	8	---	4	1	1,136	1	0.02	1,515	34.80	36	0.83
St. Louis-San Francisco Railway...	---	5	---	2	2	676	2	0.13	776	50.24	40	2.59
St. Louis Southwestern Railway...	---	1	---	---	---	349	---	---	435	51.66	10	1.19
Soo Line Railroad.....	---	5	---	---	1	584	1	0.10	709	74.39	20	2.10
Southern Pacific Trans. Company...	2	4	3	2	2	2,722	7	0.10	3,302	47.37	152	2.18
Union Pacific Railroad.....	1	9	---	1	3	3,001	4	0.07	3,432	63.65	28	0.52
Western Pacific Railroad.....	---	2	---	---	---	220	---	---	275	52.41	10	1.91
SUBTOTAL, WESTERN DISTRICT:.....	6	87	4	15	27	19,284	37	0.08	23,188	50.12	681	1.47
CLASS II & III RAILROADS												
SUBTOTAL, CLASS II & III:.....	1	14	---	2	6	4,300	7	0.09	5,388	66.19	66	0.81
RECAPITULATION ALL DISTRICTS												
Class I RAILROADS.....	13	146	7	21	57	42,692	77	0.08	50,418	50.63	1,565	1.57
Class II & III Railroads.....	1	14	---	2	6	4,300	7	0.09	5,388	66.19	66	0.81
TOTAL FOR ALL RAILROADS.....	14	160	7	23	63	46,992	84	0.08	55,806	51.80	1,631	1.51

NOTE: 'A' Included in Southern Railway System  
'B' Included in Kansas City Southern Railway

TABLE R9. FATALITIES TO EMPLOYEES ON DUTY BY TYPE AND RAILROAD, 1979

	I. Exec Office Staff			III. Maintenance of Way and Structures			IV. Maintenance of Equipment and Stores		
	Man Hrs	Kld/Mil		Man Hrs	Kld/Mil		Man Hrs	Kld/Mil	
	Killed	(Thou)	Man Hrs	Killed	(Thou)	Man Hrs	Killed	(Thou)	Man Hrs
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	1	13,494	0.07	---	6,457	0.00	---	10,017	0.00
Baltimore and Ohio Railroad.....	---	5,195	0.00	---	6,487	0.00	---	6,764	0.00
Bessemer and Lake Erie Railroad.....	---	1,004	0.00	---	430	0.00	---	827	0.00
Boston and Maine Corp.....	---	1,541	0.00	---	1,321	0.00	---	1,480	0.00
Chesapeake and Ohio Railway.....	1	9,768	0.10	---	5,300	0.00	1	10,416	0.10
Consolidated Rail Corp.....	---	41,136	0.00	2	30,211	0.07	2	38,157	0.05
Delaware and Hudson Railway.....	---	981	0.00	---	721	0.00	---	831	0.00
Detroit, Toledo and Ironton Railroad.....	---	698	0.00	---	448	0.00	---	856	0.00
Elgin, Joliet and Eastern Railway.....	1	1,519	0.66	1	1,060	0.94	---	981	0.00
Grand Trunk Western Railroad.....	---	3,053	0.00	---	1,059	0.00	---	1,823	0.00
Long Island Railroad.....	---	2,457	0.00	---	1,907	0.00	1	3,967	0.25
Norfolk and Western Railway.....	1	10,683	0.09	2	9,006	0.22	2	9,972	0.20
Pittsburg and Lake Erie Railroad.....	---	1,177	0.00	---	603	0.00	---	1,189	0.00
Western Maryland Railway.....	---	298	0.00	---	455	0.00	---	521	0.00
SUBTOTAL, EASTERN DISTRICT:.....	4	93,004	0.04	5	65,465	0.08	6	87,801	0.07
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	---	---	A	---	---	A	---	---	A
Central of Georgia Railroad.....	---	---	A	---	---	A	---	---	A
Cinn., N.O. & Texas Pacific Railway.....	---	---	A	---	---	A	---	---	A
Clinchfield Railroad.....	---	183	0.00	---	423	0.00	---	366	0.00
Florida East Coast Railway.....	---	581	0.00	---	697	0.00	---	386	0.00
Illinois Central Gulf Railroad.....	---	8,288	0.00	2	7,120	0.28	1	10,132	0.10
Louisville and Nashville Railroad.....	---	6,663	0.00	1	6,023	0.17	---	7,389	0.00
Seaboard Coast Line Railroad.....	---	7,874	0.00	---	7,226	0.00	---	9,059	0.00
Southern Railway.....	---	9,418	0.00	---	7,107	0.00	---	7,478	0.00
SUBTOTAL, SOUTHERN DISTRICT:.....	---	33,007	0.00	3	28,596	0.10	1	34,810	0.03
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	---	15,178	0.00	1	12,751	0.08	---	14,892	0.00
Burlington Northern Inc.....	1	21,142	0.05	4	23,437	0.17	---	22,864	0.00
Chicago and Northwestern Trans. Company....	1	6,487	0.15	3	6,531	0.46	---	6,297	0.00
Chicago, Milw., St. Paul & Pacific Railroad.....	1	4,732	0.21	---	4,311	0.00	---	4,661	0.00
Chicago, Rock Island & Pacific Railroad....	---	3,172	0.00	---	2,487	0.00	---	3,346	0.00
Colorado and Southern Railway.....	---	129	0.00	---	551	0.00	---	2	0.00
Denver and Rio Grande Western Railroad.....	---	1,828	0.00	---	1,769	0.00	1	2,014	0.50
Duluth, Missabe and Iron Range Railway.....	---	694	0.00	---	730	0.00	---	893	0.00
Fort Worth and Denver Railway.....	---	262	0.00	---	758	0.00	---	297	0.00
Kansas City Southern Railway.....	---	1,438	0.00	---	1,345	0.00	---	953	0.00
Louisiana and Arkansas Railway.....	---	---	B	---	---	B	---	---	B
Missouri-Kansas-Texas Railroad.....	---	1,384	0.00	---	1,158	0.00	1	909	1.10
Missouri Pacific Railroad.....	---	8,950	0.00	---	8,509	0.00	---	7,591	0.00
St. Louis-San Francisco Railway.....	---	3,279	0.00	1	3,237	0.31	1	3,321	0.30
St. Louis Southwestern Railway.....	---	1,720	0.00	---	1,691	0.00	---	1,957	0.00
Soo Line Railroad.....	---	2,097	0.00	---	2,312	0.00	1	1,951	0.51
Southern Pacific Trans. Company.....	---	19,258	0.00	---	12,363	0.00	---	15,012	0.00
Union Pacific Railroad.....	1	15,442	0.06	1	11,281	0.09	2	12,545	0.16
Western Pacific Railroad.....	---	1,529	0.00	---	1,086	0.00	---	874	0.00
SUBTOTAL, WESTERN DISTRICT:.....	4	108,721	0.04	10	96,307	0.10	6	100,379	0.06
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	---	---	C	2	---	C	2	---	C
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	8	234,732	0.03	18	190,368	0.09	13	222,990	0.06
Class II & III Railroads.....	---	---	C	2	---	C	2	---	C
TOTAL FOR ALL RAILROADS.....	8	234,732	0.03	20	190,368	0.11	15	222,990	0.07

TABLE R9. CONTINUATION

	V. VIa. Transportation not train,engine,yard			VIb. Transportation Train and Engine			.....TOTAL.....		
	Killed	Man Hrs (Thou)	Kld/Mil Man Hrs	Killed	Man Hrs (Thou)	Kld/Mil Man Hrs	Killed	Man Hrs (Thou)	Kld/Mil Man Hrs
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	2	8,094	0.25	---	---	---	3	38,062	0.08
Baltimore and Ohio Railroad.....	---	3,037	0.00	2	11,191	0.18	2	32,674	0.06
Bessemer and Lake Erie Railroad.....	---	132	0.00	---	391	0.00	---	2,784	0.00
Boston and Maine Corp.....	---	423	0.00	---	1,710	0.00	---	6,475	0.00
Chesapeake and Ohio Railway.....	---	3,056	0.00	1	9,932	0.10	3	38,472	0.08
Consolidated Rail Corp.....	---	11,483	0.00	9	51,717	0.17	13	172,704	0.08
Delaware and Hudson Railway.....	---	162	0.00	---	1,183	0.00	---	3,878	0.00
Detroit, Toledo and Ironton Railroad.....	---	157	0.00	---	955	0.00	---	3,114	0.00
Elgin, Joliet and Eastern Railway.....	---	369	0.00	---	1,735	0.00	2	5,664	0.35
Grand Trunk Western Railroad.....	---	483	0.00	---	2,606	0.00	---	9,024	0.00
Long Island Railroad.....	---	775	0.00	---	2,899	0.00	1	12,005	0.08
Norfolk and Western Railway.....	---	2,817	0.00	1	12,819	0.08	6	45,297	0.13
Pittsburg and Lake Erie Railroad.....	---	202	0.00	---	1,079	0.00	---	4,250	0.00
Western Maryland Railway.....	---	94	0.00	---	955	0.00	---	2,323	0.00
SUBTOTAL, EASTERN DISTRICT:.....	2	31,284	0.06	13	99,172	0.13	30	376,726	0.08
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	---	---	A	1	---	A	1	---	A
Central of Georgia Railroad.....	---	---	A	1	---	A	1	---	A
Cinn., N.O. & Texas Pacific Railway.....	---	---	A	---	---	A	---	---	A
Clinchfield Railroad.....	---	172	0.00	---	607	0.00	---	1,751	0.00
Florida East Coast Railway.....	---	113	0.00	---	599	0.00	---	2,376	0.00
Illinois Central Gulf Railroad.....	---	2,155	0.00	6	10,826	0.55	9	38,521	0.23
Louisville and Nashville Railroad.....	---	2,049	0.00	2	11,487	0.17	3	33,611	0.09
Seaboard Coast Line Railroad.....	---	2,868	0.00	1	11,986	0.08	1	39,013	0.03
Southern Railway.....	---	2,832	0.00	4	14,345	0.28	4	41,180	0.10
SUBTOTAL, SOUTHERN DISTRICT:.....	---	10,189	0.00	15	49,850	0.30	19	156,452	0.12
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	---	3,824	0.00	4	17,112	0.23	5	63,757	0.08
Burlington Northern Inc.....	---	6,533	0.00	1	24,068	0.04	6	98,044	0.06
Chicago and Northwestern Trans. Company....	---	2,402	0.00	4	9,094	0.44	8	30,811	0.26
Chicago, Milw., St. Paul & Pacific Railroad.....	---	1,643	0.00	---	6,046	0.00	1	21,393	0.05
Chicago, Rock Island & Pacific Railroad....	---	1,242	0.00	---	4,745	0.00	---	14,992	0.00
Colorado and Southern Railway.....	---	24	0.00	---	860	0.00	---	1,566	0.00
Denver and Rio Grande Western Railroad.....	---	484	0.00	1	2,177	0.46	2	8,272	0.24
Duluth, Missabe and Iron Range Railway.....	---	365	0.00	---	569	0.00	---	3,251	0.00
Fort Worth and Denver Railway.....	---	249	0.00	---	999	0.00	---	2,565	0.00
Kansas City Southern Railway.....	---	266	0.00	---	2,552	0.00	---	6,554	0.00
Louisiana and Arkansas Railway.....	---	---	B	---	---	B	---	---	B
Missouri-Kansas-Texas Railroad.....	---	294	0.00	---	1,925	0.00	1	5,670	0.18
Missouri Pacific Railroad.....	---	2,519	0.00	5	15,966	0.31	5	43,535	0.11
St. Louis-San Francisco Railway.....	---	989	0.00	1	4,620	0.22	3	15,446	0.19
St. Louis Southwestern Railway.....	---	401	0.00	1	2,652	0.38	1	8,421	0.12
Soo Line Railroad.....	---	706	0.00	---	2,465	0.00	1	9,531	0.10
Southern Pacific Trans. Company.....	---	3,323	0.00	2	19,757	0.10	2	69,713	0.03
Union Pacific Railroad.....	---	2,828	0.00	7	11,823	0.59	11	53,919	0.20
Western Pacific Railroad.....	---	278	0.00	---	1,480	0.00	---	5,247	0.00
SUBTOTAL, WESTERN DISTRICT:.....	---	28,370	0.00	26	128,910	0.20	46	462,687	0.10
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	---	---	C	2	---	C	6	81,406	0.07
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	2	69,843	0.03	54	277,932	0.19	95	995,865	0.10
Class II & III Railroads.....	---	---	C	2	---	C	6	81,406	0.07
TOTAL FOR ALL RAILROADS.....	2	69,843	0.03	56	277,932	0.20	101	1,077,271	0.09

NOTE: 'A' Included in Southern Railway System  
 'B' Included in Kansas City Southern Railway  
 'C' Class II & III railroad manhours are not available by job categories

TABLE R10. INJURIES TO EMPLOYEES ON DUTY BY TYPE AND RAILROAD, 1979

	I. Exec Office Staff II. Prof, Clerical, General			III. Maintenance of Way and Structures			IV. Maintenance of Equipment and Stores		
	Man Hrs	Inj/Mil		Man Hrs	Inj/Mil		Man Hrs	Inj/Mil	
	Injured (Thou)	Man Hrs		Injured (Thou)	Man Hrs		Injured (Thou)	Man Hrs	
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	223	13,494	16.53	949	6,457	146.97	631	10,017	62.99
Baltimore and Ohio Railroad.....	79	5,195	15.21	543	6,487	83.71	403	6,764	59.58
Bessemer and Lake Erie Railroad.....	10	1,004	9.96	55	430	127.91	109	827	131.80
Boston and Maine Corp.....	14	1,541	9.09	116	1,321	87.81	91	1,480	61.49
Chesapeake and Ohio Railway.....	69	9,768	7.06	396	5,300	74.72	849	10,416	81.51
Consolidated Rail Corp.....	500	41,136	12.15	3,244	30,211	107.38	3,041	38,157	79.70
Delaware and Hudson Railway.....	2	981	2.04	36	721	49.93	40	831	48.13
Detroit, Toledo and Ironton Railroad.....	11	698	15.76	142	448	316.96	93	856	108.64
Elgin, Joliet and Eastern Railway.....	32	1,519	21.07	98	1,060	92.45	78	981	79.51
Grand Trunk Western Railroad.....	34	3,053	11.14	69	1,059	65.16	132	1,823	72.41
Long Island Railroad.....	73	2,457	29.71	264	1,907	138.44	432	3,967	108.90
Norfolk and Western Railway.....	112	10,683	10.48	907	9,006	100.71	895	9,972	89.75
Pittsburg and Lake Erie Railroad.....	12	1,177	10.20	96	603	159.20	137	1,189	115.22
Western Maryland Railway.....	6	298	20.13	28	455	61.54	31	521	59.50
SUBTOTAL, EASTERN DISTRICT:.....	1,177	93,004	12.66	6,943	65,465	106.06	6,962	87,801	79.29
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	4	---	A	16	---	A	4	---	A
Central of Georgia Railroad.....	7	---	A	42	---	A	5	---	A
Cinn., N.O. & Texas Pacific Railway.....	5	---	A	27	---	A	22	---	A
Clinchfield Railroad.....	2	183	10.93	51	423	120.57	20	366	54.64
Florida East Coast Railway.....	---	581	0.00	10	697	14.35	9	386	23.32
Illinois Central Gulf Railroad.....	80	8,288	9.65	993	7,120	139.47	1,055	10,132	104.13
Louisville and Nashville Railroad.....	77	6,663	11.56	575	6,023	95.47	488	7,389	66.04
Seaboard Coast Line Railroad.....	45	7,874	5.72	532	7,226	73.62	488	9,059	53.87
Southern Railway.....	75	9,418	7.96	298	7,107	41.93	562	7,478	75.15
SUBTOTAL, SOUTHERN DISTRICT:.....	295	33,007	8.94	2,544	28,596	88.96	2,653	34,810	76.21
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	79	15,178	5.20	595	12,751	46.66	676	14,892	45.39
Burlington Northern Inc.....	208	21,142	9.84	2,243	23,437	95.70	1,556	22,864	68.05
Chicago and Northwestern Trans. Company....	77	6,487	11.87	657	6,531	100.60	747	6,297	118.63
Chicago, Milw., St. Paul & Pacific Railroad.....	83	4,732	17.54	487	4,311	112.97	568	4,661	121.86
Chicago, Rock Island & Pacific Railroad....	28	3,172	8.83	249	2,487	100.12	443	3,346	132.40
Colorado and Southern Railway.....	1	129	7.75	66	551	119.78	2	2	0.00
Denver and Rio Grande Western Railroad.....	4	1,828	2.19	86	1,769	48.62	47	2,014	23.34
Duluth, Missabe and Iron Range Railway.....	3	694	4.32	52	730	71.23	52	893	58.23
Fort Worth and Denver Railway.....	---	262	0.00	79	758	104.22	21	297	70.71
Kansas City Southern Railway.....	1	1,438	0.70	129	1,345	95.91	76	953	79.75
Louisiana and Arkansas Railway.....	2	---	B	68	---	B	12	---	B
Missouri-Kansas-Texas Railroad.....	13	1,384	9.39	156	1,158	134.72	51	909	56.11
Missouri Pacific Railroad.....	42	8,950	4.69	624	8,509	73.33	356	7,591	46.90
St. Louis-San Francisco Railway.....	23	3,279	7.01	277	3,237	85.57	323	3,321	97.26
St. Louis Southwestern Railway.....	15	1,720	8.72	225	1,691	133.06	78	1,957	39.86
Soo Line Railroad.....	20	2,097	9.54	307	2,312	132.79	214	1,951	109.69
Southern Pacific Trans. Company.....	278	19,258	14.44	1,139	12,363	92.13	928	15,012	61.82
Union Pacific Railroad.....	202	15,442	13.08	1,167	11,281	103.45	1,425	12,545	113.59
Western Pacific Railroad.....	13	1,529	8.50	71	1,086	65.38	92	874	105.26
SUBTOTAL, WESTERN DISTRICT:.....	1,092	108,721	10.04	8,677	96,307	90.10	7,667	100,379	76.38
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	274	---	C	2,063	---	C	1,477	---	C
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	2,564	234,732	10.92	18,164	190,368	95.42	17,282	222,990	77.56
Class II & III Railroads.....	274	---	C	2,063	---	C	1,477	---	C
TOTAL FOR ALL RAILROADS.....	2,838	234,732	12.09	20,227	190,368	106.25	18,759	222,990	84.12



TABLE R10. CONTINUATION

	V. Via Transportation not train, engine, yard			Vib. Transportation Train and Engine			.....TOTAL.....		
	Injured	Man Hrs (Thou)	Inj/Mil Man Hrs	Injured	Man Hrs (Thou)	Inj/Mil Man Hrs	Injured	Man Hrs (Thou)	Inj/Mil Man Hrs
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	468	8,094	57.82	1	---	*	2,272	38,062	59.69
Baltimore and Ohio Railroad.....	51	3,037	16.79	706	11,191	63.09	1,782	32,674	54.54
Bessemer and Lake Erie Railroad.....	3	132	22.73	45	391	115.09	222	2,784	79.74
Boston and Maine Corp.....	7	423	16.55	71	1,710	41.52	299	6,475	46.18
Chesapeake and Ohio Railway.....	65	3,056	21.27	638	9,932	64.24	2,017	38,472	52.43
Consolidated Rail Corp.....	169	11,483	14.72	2,951	51,717	57.06	9,905	172,704	57.35
Delaware and Hudson Railway.....	2	162	12.35	61	1,183	51.56	141	3,878	36.36
Detroit, Toledo and Ironton Railroad.....	5	157	31.85	142	955	148.69	393	3,114	126.20
Elgin, Joliet and Eastern Railway.....	8	369	21.68	165	1,735	95.10	381	5,664	67.27
Grand Trunk Western Railroad.....	6	483	12.42	298	2,606	114.35	539	9,024	59.73
Long Island Railroad.....	38	775	49.03	298	2,899	102.79	1,105	12,005	92.04
Norfolk and Western Railway.....	46	2,817	16.33	912	12,819	71.14	2,872	45,297	63.40
Pittsburg and Lake Erie Railroad.....	1	202	4.95	67	1,079	62.09	313	4,250	73.65
Western Maryland Railway.....	3	94	31.91	56	955	58.64	124	2,323	53.38
SUBTOTAL, EASTERN DISTRICT:.....	872	31,284	27.87	6,411	99,172	64.65	22,365	376,726	59.37
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	2	---	A	38	---	A	64	---	A
Central of Georgia Railroad.....	1	---	A	124	---	A	179	---	A
Cinn., N.O. & Texas Pacific Railway.....	3	---	A	40	---	A	97	---	A
Clinchfield Railroad.....	4	172	23.26	32	607	52.72	109	1,751	62.25
Florida East Coast Railway.....	---	113	0.00	13	599	21.70	32	2,376	13.47
Illinois Central Gulf Railroad.....	26	2,155	12.06	742	10,826	68.54	2,896	38,521	75.18
Louisville and Nashville Railroad.....	37	2,049	18.06	879	11,487	76.52	2,056	33,611	61.17
Seaboard Coast Line Railroad.....	60	2,868	20.92	821	11,986	68.50	1,946	39,013	49.88
Southern Railway.....	8	2,832	2.82	635	14,345	44.27	1,578	41,180	38.32
SUBTOTAL, SOUTHERN DISTRICT:.....	141	10,189	13.84	3,324	49,850	66.68	8,957	156,452	57.25
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	15	3,824	3.92	820	17,112	47.92	2,185	63,757	34.27
Burlington Northern Inc.....	90	6,533	13.78	1,766	24,068	73.38	5,863	98,044	59.80
Chicago and Northwestern Trans. Company...	70	2,402	29.14	592	9,094	65.10	2,143	30,811	69.55
Chicago, Milw., St. Paul & Pacific Railroad.....	15	1,643	9.13	461	6,046	76.25	1,614	21,393	75.45
Chicago, Rock Island & Pacific Railroad...	9	1,242	7.25	345	4,745	72.71	1,074	14,992	71.64
Colorado and Southern Railway.....	---	24	0.00	104	860	120.93	173	1,566	110.47
Denver and Rio Grande Western Railroad....	3	484	6.20	90	2,177	41.34	230	8,272	27.80
Duluth, Missabe and Iron Range Railway....	3	365	8.22	49	569	86.12	159	3,251	48.91
Fort Worth and Denver Railway.....	---	249	0.00	54	999	54.05	154	2,565	60.04
Kansas City Southern Railway.....	1	266	3.76	153	2,552	59.95	360	6,554	54.93
Louisiana and Arkansas Railway.....	---	---	B	90	---	B	172	---	B
Missouri-Kansas-Texas Railroad.....	2	294	6.80	183	1,925	95.06	405	5,670	71.43
Missouri Pacific Railroad.....	42	2,519	16.67	917	15,966	57.43	1,981	43,535	45.50
St. Louis-San Francisco Railway.....	10	989	10.11	250	4,620	54.11	883	15,446	57.17
St. Louis Southwestern Railway.....	1	401	2.49	189	2,652	71.27	508	8,421	60.33
Soo Line Railroad.....	15	706	21.25	266	2,465	107.91	822	9,531	86.24
Southern Pacific Trans. Company.....	68	3,323	20.46	1,742	19,757	88.17	4,155	69,713	59.60
Union Pacific Railroad.....	69	2,828	24.40	1,355	11,823	114.61	4,218	53,919	78.23
Western Pacific Railroad.....	6	278	21.58	178	1,480	120.27	360	5,247	68.61
SUBTOTAL, WESTERN DISTRICT:.....	419	28,370	14.77	9,604	128,910	74.50	27,459	462,687	59.35
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	230	---	C	2,285	---	C	6,329	81,406	77.75
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	1,432	69,843	20.50	19,339	277,932	69.58	58,781	995,865	59.03
Class II & III Railroads.....	230	---	C	2,285	---	C	6,329	81,406	77.75
TOTAL FOR ALL RAILROADS.....	1,662	69,843	23.80	21,624	277,932	77.80	65,110	1,077,271	60.44

NOTE: 'A' Included in Southern Railway System  
'B' Included in Kansas City Southern Railway  
'C' Class II & III railroad manhours are not available by job categories

TABLE R11. ILLNESSES TO EMPLOYEES ON DUTY BY TYPE AND RAILROAD, 1979

	I. Exec Office Staff			III. Maintenance of Way and Structures			IV. Maintenance of Equipment and Stores		
	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	31	13,494	2.30	57	6,457	8.83	10	10,017	1.00
Baltimore and Ohio Railroad.....	3	5,195	0.58	15	6,487	2.31	15	6,764	2.22
Bessemer and Lake Erie Railroad.....	---	1,004	0.00	11	430	25.58	3	827	3.63
Boston and Maine Corp.....	---	1,541	0.00	---	1,321	0.00	---	1,480	0.00
Chesapeake and Ohio Railway.....	1	9,768	0.10	10	5,300	1.89	11	10,416	1.06
Consolidated Rail Corp.....	19	41,136	0.46	124	30,211	4.10	98	38,157	2.57
Delaware and Hudson Railway.....	---	981	0.00	1	721	1.39	2	831	2.41
Detroit, Toledo and Ironton Railroad.....	---	698	0.00	1	448	2.23	3	856	3.50
Elgin, Joliet and Eastern Railway.....	1	1,519	0.66	1	1,060	0.94	3	981	3.06
Grand Trunk Western Railroad.....	---	3,053	0.00	3	1,059	2.83	2	1,823	1.10
Long Island Railroad.....	3	2,457	1.22	66	1,907	34.61	29	3,967	7.31
Norfolk and Western Railway.....	6	10,683	0.56	25	9,006	2.78	18	9,972	1.81
Pittsburg and Lake Erie Railroad.....	---	1,177	0.00	---	603	0.00	---	1,189	0.00
Western Maryland Railway.....	---	298	0.00	3	455	6.59	---	521	0.00
SUBTOTAL, EASTERN DISTRICT:.....	64	93,004	0.69	317	65,465	4.84	194	87,801	2.21
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	---	---	A	---	---	A	1	---	A
Central of Georgia Railroad.....	---	---	A	---	---	A	---	---	A
Cinn., N.O. & Texas Pacific Railway.....	---	---	A	---	---	A	---	---	A
Clinchfield Railroad.....	---	183	0.00	---	423	0.00	---	366	0.00
Florida East Coast Railway.....	---	581	0.00	---	697	0.00	---	386	0.00
Illinois Central Gulf Railroad.....	2	8,288	0.24	70	7,120	9.83	33	10,132	3.26
Louisville and Nashville Railroad.....	2	6,663	0.30	17	6,023	2.82	14	7,389	1.89
Seaboard Coast Line Railroad.....	---	7,874	0.00	10	7,226	1.38	9	9,059	0.99
Southern Railway.....	---	9,418	0.00	1	7,107	0.14	6	7,478	0.80
SUBTOTAL, SOUTHERN DISTRICT:.....	4	33,007	0.12	98	28,596	3.43	63	34,810	1.81
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	---	15,178	0.00	6	12,751	0.47	1	14,892	0.07
Burlington Northern Inc.....	5	21,142	0.24	92	23,437	3.93	73	22,864	3.19
Chicago and Northwestern Trans. Company.....	---	6,487	0.00	37	6,531	5.67	37	6,297	5.88
Chicago, Milw., St. Paul & Pacific Railroad.....	3	4,732	0.63	19	4,311	4.41	6	4,661	1.29
Chicago, Rock Island & Pacific Railroad....	1	3,172	0.32	2	2,487	0.80	1	3,346	0.30
Colorado and Southern Railway.....	---	129	0.00	1	551	1.81	---	2	0.00
Denver and Rio Grande Western Railroad.....	---	1,828	0.00	---	1,769	0.00	---	2,014	0.00
Duluth, Missabe and Iron Range Railway.....	---	694	0.00	1	730	1.37	2	893	2.24
Fort Worth and Denver Railway.....	---	262	0.00	4	758	5.28	---	297	0.00
Kansas City Southern Railway.....	---	1,438	0.00	---	1,345	0.00	2	953	2.10
Louisiana and Arkansas Railway.....	---	---	B	3	---	B	---	---	B
Missouri-Kansas-Texas Railroad.....	---	1,384	0.00	6	1,158	5.18	4	909	4.40
Missouri Pacific Railroad.....	4	8,950	0.45	17	8,509	2.00	5	7,591	0.66
St. Louis-San Francisco Railway.....	---	3,279	0.00	22	3,237	6.80	15	3,321	4.52
St. Louis Southwestern Railway.....	2	1,720	1.16	3	1,691	1.77	1	1,957	0.51
Soo Line Railroad.....	---	2,097	0.00	15	2,312	6.49	5	1,951	2.56
Southern Pacific Trans. Company.....	12	19,258	0.62	65	12,363	5.26	41	15,012	2.73
Union Pacific Railroad.....	2	15,442	0.13	11	11,281	0.98	7	12,545	0.56
Western Pacific Railroad.....	---	1,529	0.00	5	1,086	4.60	2	874	2.29
SUBTOTAL, WESTERN DISTRICT:.....	29	108,721	0.27	309	96,307	3.21	202	100,379	2.01
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	2	---	C	34	---	C	16	---	C
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	97	234,732	0.41	724	190,368	3.80	459	222,990	2.06
Class II & III Railroads.....	2	---	C	34	---	C	16	---	C
TOTAL FOR ALL RAILROADS.....	99	234,732	0.42	758	190,368	3.98	475	222,990	2.13

TABLE R11. CONTINUATION

	V. Via. Transportation not train, engine, yard			Vib. Transportation Train and Engine			.....TOTAL.....		
	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs	Illness	Man Hrs (Thou)	Ill/Mil Man Hrs
CLASS I RAILROADS									
EASTERN DISTRICT									
National Railroad Passenger Corp. (Amtrak).....	6	8,094	0.74	---	---	*	104	38,062	2.73
Baltimore and Ohio Railroad.....	---	3,037	0.00	29	11,191	2.59	62	32,674	1.90
Bessemer and Lake Erie Railroad.....	---	132	0.00	---	391	0.00	14	2,784	5.03
Boston and Maine Corp.....	---	423	0.00	1	1,710	0.58	1	6,475	0.15
Chesapeake and Ohio Railway.....	---	3,056	0.00	14	9,932	1.41	36	38,472	0.94
Consolidated Rail Corp.....	2	11,483	0.17	100	51,717	1.93	343	172,704	1.99
Delaware and Hudson Railway.....	---	162	0.00	---	1,183	0.00	3	3,878	0.77
Detroit, Toledo and Ironton Railroad.....	---	157	0.00	---	955	0.00	4	3,114	1.28
Elgin, Joliet and Eastern Railway.....	---	369	0.00	1	1,735	0.58	6	5,664	1.06
Grand Trunk Western Railroad.....	---	483	0.00	4	2,606	1.53	9	9,024	1.00
Long Island Railroad.....	2	775	2.58	15	2,899	5.17	115	12,005	9.58
Norfolk and Western Railway.....	2	2,817	0.71	8	12,819	0.62	59	45,297	1.30
Pittsburg and Lake Erie Railroad.....	---	202	0.00	4	1,079	3.71	4	4,250	0.94
Western Maryland Railway.....	---	94	0.00	1	955	1.05	4	2,323	1.72
SUBTOTAL, EASTERN DISTRICT:.....	12	31,284	0.38	177	99,172	1.78	764	376,726	2.03
SOUTHERN DISTRICT									
Alabama Great Southern Railroad.....	---	---	A	---	---	A	1	---	A
Central of Georgia Railroad.....	---	---	A	4	---	A	4	---	A
Cinn., N.O. & Texas Pacific Railway.....	---	---	A	---	---	A	---	---	A
Clinchfield Railroad.....	---	172	0.00	---	607	0.00	---	1,751	0.00
Florida East Coast Railway.....	---	113	0.00	---	599	0.00	---	2,376	0.00
Illinois Central Gulf Railroad.....	1	2,155	0.46	9	10,826	0.83	115	38,521	2.99
Louisville and Nashville Railroad.....	2	2,049	0.98	12	11,487	1.04	47	33,611	1.40
Seaboard Coast Line Railroad.....	---	2,868	0.00	5	11,986	0.42	24	39,013	0.62
Southern Railway.....	1	2,832	0.35	8	14,345	0.56	16	41,180	0.39
SUBTOTAL, SOUTHERN DISTRICT:.....	4	10,189	0.39	38	49,850	0.76	207	156,452	1.32
WESTERN DISTRICT									
Atchison, Topeka and Santa Fe Railway.....	---	3,824	0.00	3	17,112	0.18	10	63,757	0.16
Burlington Northern Inc.....	5	6,533	0.77	42	24,068	1.75	217	98,044	2.21
Chicago and Northwestern Trans. Company....	1	2,402	0.42	11	9,094	1.21	86	30,811	2.79
Chicago, Milw., St. Paul & Pacific Railroad.....	1	1,643	0.61	8	6,046	1.32	37	21,393	1.73
Chicago, Rock Island & Pacific Railroad....	---	1,242	0.00	4	4,745	0.84	8	14,992	0.53
Colorado and Southern Railway.....	---	24	0.00	3	860	3.49	4	1,566	2.55
Denver and Rio Grande Western Railroad.....	---	484	0.00	2	2,177	0.92	2	8,272	0.24
Duluth, Missabe and Iron Range Railway.....	---	365	0.00	1	569	1.76	4	3,251	1.23
Fort Worth and Denver Railway.....	---	249	0.00	---	999	0.00	4	2,565	1.56
Kansas City Southern Railway.....	---	266	0.00	1	2,552	0.39	3	6,554	0.46
Louisiana and Arkansas Railway.....	---	---	B	3	---	B	6	---	B
Missouri-Kansas-Texas Railroad.....	---	294	0.00	1	1,925	0.52	11	5,670	1.94
Missouri Pacific Railroad.....	---	2,519	0.00	13	15,966	0.81	39	43,535	0.90
St. Louis-San Francisco Railway.....	---	989	0.00	6	4,620	1.30	43	15,446	2.78
St. Louis Southwestern Railway.....	---	401	0.00	6	2,652	2.26	12	8,421	1.43
Soo Line Railroad.....	---	706	0.00	3	2,465	1.22	23	9,531	2.41
Southern Pacific Trans. Company.....	1	3,323	0.30	76	19,757	3.85	195	69,713	2.80
Union Pacific Railroad.....	---	2,828	0.00	20	11,823	1.69	40	53,919	0.74
Western Pacific Railroad.....	---	278	0.00	7	1,480	4.73	14	5,247	2.67
SUBTOTAL, WESTERN DISTRICT:.....	8	28,370	0.28	210	128,910	1.63	758	462,687	1.64
CLASS II & III RAILROADS									
SUBTOTAL, CLASS II & III:.....	---	---	C	33	---	C	85	81,406	1.04
RECAPITULATION ALL DISTRICTS									
Class I RAILROADS.....	24	69,843	0.34	425	277,932	1.53	1,729	995,865	1.74
Class II & III Railroads.....	---	---	B	33	---	B	85	81,406	1.04
TOTAL FOR ALL RAILROADS.....	24	69,843	0.34	458	277,932	1.65	1,814	1,077,271	1.68

NOTE: 'A' Included in Southern Railway System  
 'B' Included in Kansas City Southern Railway  
 'C' Class II & III railroad manhours are not available by job categories

TABLE R14. SUMMARY OF EMPLOYEE ON DUTY NONFATAL INJURIES, BY RAILROAD, 1979

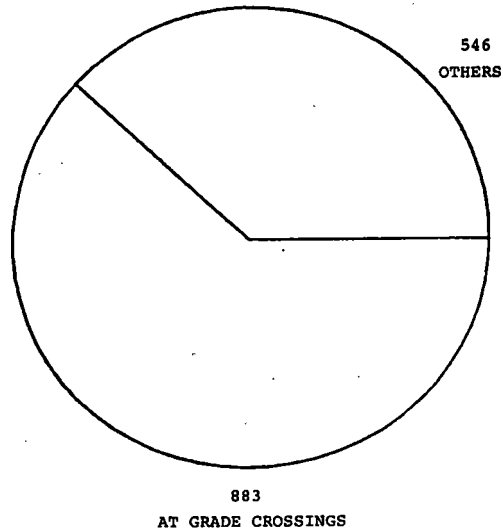
	Total Cases	Total Cases	Lost WD Cases	Restr And/Or Wd Cases	Lost Workdays	Restricted Workdays	Other Cases
CLASS I RAILROADS							
Alabama Great Southern Railroad Co.....	64	41	33	8	382	93	23
Amtrak.....	2,272	1,769.	1,694	75	16,777	608	503
Atchison, Topeka And Santa Fe Rwy Co.....	2,185	1,386	1,241	145	15,800	2,034	799
Baltimore And Ohio Railroad Co.....	1,864	1,269	1,079	190	13,796	1,709	595
Bessemer And Lake Erie Railroad Co.....	222	117	99	18	1,667	77	105
Boston And Maine Corporation.....	308	187	174	13	3,161	174	121
Burlington Northern Incorporated.....	5,863	4,102	3,887	215	33,391	2,133	1,761
Central Of Georgia Railroad Company.....	179	87	66	21	764	178	92
Chesapeake And Ohio Railway Company.....	2,020	1,614	1,142	472	12,941	2,889	406
Chicago And Northwestern Transportation Co..	2,143	1,247	848	399	12,880	3,488	896
Chicago, Milw, St. Paul And Pacific RR Co..	1,614	1,324	1,297	27	15,069	186	290
Chicago, Rock Island And Pacific Railroad...	1,074	774	767	7	11,922	46	300
Cincinnati, New Orleans And Tx Pacific Co..	97	48	36	12	633	116	49
Clinchfield Railroad Company.....	109	63	63	---	756	---	46
Colorado And Southern Railway Co.....	246	176	168	8	1,566	39	70
Consolidated Rail Corporation.....	9,909	6,541	6,126	415	98,210	3,002	3,368
Delaware And Hudson Railway.....	141	128	127	1	2,278	1	13
Denver And Rio Grande Western RR Co.....	230	163	161	2	2,513	31	67
Detroit, Toledo And Ironton RR Co.....	393	190	190	---	2,237	---	203
Duluth, Missabe And Iron Range Rwy Co.....	159	100	92	8	960	70	59
Elgin, Joliet And Eastern Railway Co.....	381	174	174	---	3,293	25	207
Florida East Coast Railway Co.....	32	26	7	19	123	413	6
Forth Worth And Denver Railroad Co.....	154	99	93	6	975	33	55
Grand Truck Western Railroad Co.....	539	336	277	59	5,205	1,171	203
Illinois Central Gulf Railroad Co.....	2,896	1,697	1,181	516	19,591	9,088	1,199
Kansas City Southern Railway Co.....	360	299	299	---	3,994	---	61
Long Island Railroad Company.....	1,105	992	992	---	12,001	---	113
Louisiana And Arkansas Rwy Company.....	199	159	159	---	2,315	---	40
Louisville And Nashville Railroad Co.....	2,061	1,498	1,457	41	17,951	403	563
Missouri Pacific Railroad Co.....	2,017	1,461	1,383	78	26,249	886	556
Missouri-Kansas-Texas Railroad Co.....	405	273	270	3	2,627	149	132
Norfolk And Western Railway Co.....	2,920	1,437	1,220	217	22,527	1,856	1,483
Pittsburg And Lake Erie Railroad Co.....	313	129	119	10	3,520	162	184
Seaboard Coast Line Railroad Co.....	1,946	1,528	1,455	73	19,090	878	418
Sooline Railroad Company.....	822	663	620	43	7,404	854	159
Southern Pacific Transportation Co.....	4,155	2,575	2,396	179	40,664	2,194	1,580
Southern Railway Company.....	1,578	786	503	283	7,234	2,196	792
St. Louis Southwestern Railway Co.....	508	303	288	15	4,386	130	205
St. Louis-San Francisco Railway Co.....	883	442	422	20	5,634	263	441
Union Pacific Railroad Co.....	4,218	2,637	2,134	503	22,709	3,489	1,581
Western Maryland Railway Co.....	124	78	70	8	1,126	79	46
Western Pacific Railroad Co.....	360	265	265	---	4,283	---	95
TOTAL CLASS I RAILROADS.....	59,068	39,183	35,074	4,109	480,604	41,143	19,885
CLASS II RAILROADS							
Autotrain Corporation.....	201	36	36	---	210	---	165
Bangor And Aroostook Railroad Co.....	68	48	47	1	451	2	20
Canadian Pacific Lines In Maine.....	69	40	23	17	1,114	55	29
Central Vermont Railway Inc.....	21	7	7	---	71	4	14
Chicago And Illinois Midland Rwy Co.....	86	65	63	2	634	4	21
Chicago South Shore And South Bend RR.....	---	---	---	---	---	---	---
Detroit And Toledo Shore Line Railroad.....	105	36	36	---	409	---	69
Duluth, Winnipeg And Pacific Rwy Co.....	30	14	14	---	116	10	16
Georgia Railroad Lessee Organization.....	81	76	76	---	358	---	5
Georgia Southern AND Florida Railway.....	70	42	27	15	452	138	28
Green Bay And Western Railroad.....	84	53	53	---	865	---	31
Illinois Terminal Railroad.....	150	136	136	---	1,541	---	14
Lake Superior And Ishpeming Railroad Co....	37	37	37	---	186	---	---
Maine Central Railroad Company.....	220	165	152	13	1,394	102	55
Michigan Interstate Railroad (Ann Arbor)....	35	30	30	---	160	---	5
Norfolk Southern Railway Company.....	78	39	33	6	487	32	39
Northwestern Pacific Railroad.....	---	---	---	---	---	---	---
Richmond, Frederickburg And Potomac RR Co..	202	109	109	---	1,988	---	93
Texas, Mexican Railway Company.....	155	73	72	1	1,178	70	82
Toledo, Peoria And Western Railroad Co.....	81	67	61	6	625	37	14
TOTAL CLASS II RAILROADS.....	1,773	1,073	1,012	61	12,239	454	700
RECAPITULATION (INCLUDES CLASS III RAILROADS)							
CLASS I RAILROADS.....	59,068	39,183	35,074	4,109	480,604	41,143	19,885
CLASS II RAILROADS.....	1,773	1,073	1,012	61	12,239	454	700
CLASS III RAILROADS.....	4,269	2,553	2,384	169	29,933	1,944	1,716
TOTAL ALL RAILROADS.....	65,110	42,809	38,470	4,339	522,776	43,541	22,301

7.0 CASUALTIES: EMPLOYEE, TRESPASSER, NON-TRESPASSER

**7.0 CASUALTIES: EMPLOYEE, TRESPASSER, NONTRESPASSER**

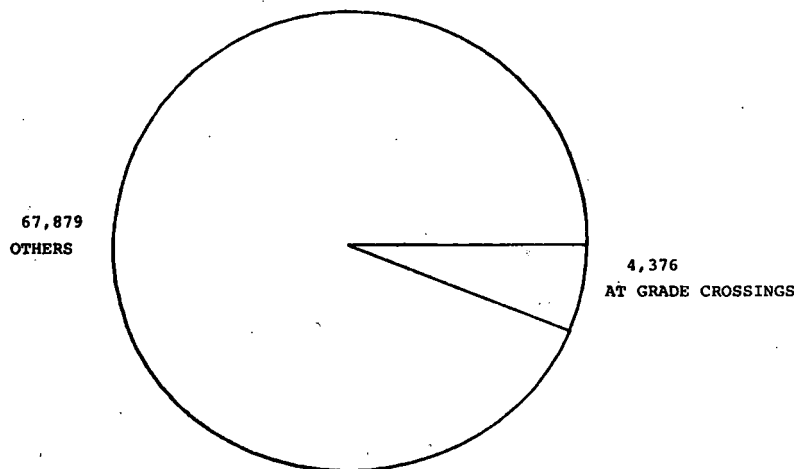
**7.1 Summary of Casualties**

**FATALITIES FOR 1979**



**Fig. 21**

**INJURIES FOR 1979**



**Fig. 22**

TABLE S13. FATALITIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979

Type Of Accident/Incident	Total A/I W. Cas	Fatal A/I	Total Killed	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
TRAIN ACCIDENTS								
Class I Railroads.....	385	16	23	20	2	22	---	1
Class II Railroads.....	9	---	---	---	---	---	---	---
Class III Railroads.....	15	---	---	---	---	---	---	---
Total All Railroads.....	409	16	23	20	2	22	---	1
TRAIN INCIDENTS								
Class I Railroads.....	10,362	427	436	28	10	38	---	384
Class II Railroads.....	464	9	6	1	---	1	---	5
Class III Railroads.....	764	10	11	1	---	1	---	9
Total All Railroads.....	11,590	446	453	30	10	40	---	398
NONTRAIN INCIDENTS								
Class I Railroads.....	51,663	62	65	1	26	27	---	22
Class II Railroads.....	1,542	3	2	---	1	1	---	---
Class III Railroads.....	3,886	3	3	---	2	2	---	---
Total All Railroads.....	57,091	68	70	1	29	30	1	22
RAIL-HIGHWAY CROSSING (Excluded from above categories)								
Class I Railroads.....	3,620	698	858	5	4	9	---	95
Class II Railroads.....	74	16	14	---	---	---	---	---
Class III Railroads.....	138	11	11	---	---	---	---	---
Total All Railroads.....	3,832	725	883	5	4	9	---	95
GRAND TOTAL								
Class I Railroads.....	66,030	1,203	1,382	54	42	96	1	502
Class II Railroads.....	2,089	28	22	1	1	2	1	5
Class III Railroads.....	4,803	24	25	1	2	3	---	9
Total All Railroads.....	72,922	1,255	1,429	56	45	101	6	516

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

TABLE S14. INJURIES IN TRAIN ACCIDENTS, TRAIN INCIDENTS AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979

Type Of Accident/Incident	Total A/I W. Cas	Injury A/I	Total Injured	...Employees On Trainmen	Duty... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
TRAIN ACCIDENTS										
Class I Railroads.....	385	358	1,042	497	124	621	10	402	5	4
Class II Railroads.....	9	9	10	8	2	10	---	---	---	---
Class III Railroads.....	15	15	20	15	5	20	---	---	---	---
Total All Railroads.....	409	382	1,072	520	131	651	10	402	5	4
TRAIN INCIDENTS										
Class I Railroads.....	10,362	9,766	10,019	8,061	1,195	9,256	17	172	89	485
Class II Railroads.....	464	453	452	239	83	322	2	124	---	4
Class III Railroads.....	764	736	690	567	85	652	1	9	9	19
Total All Railroads.....	11,590	10,955	11,161	8,867	1,363	10,230	20	305	98	508
NONTRAIN INCIDENTS										
Class I Railroads.....	51,663	50,081	50,510	10,755	38,267	49,022	781	245	386	76
Class II Railroads.....	1,542	1,520	1,492	298	1,139	1,437	11	42	2	---
Class III Railroads.....	3,886	3,838	3,644	1,035	2,552	3,587	19	3	34	1
Total All Railroads.....	57,091	55,439	55,646	12,088	41,958	54,046	811	290	422	77
RAIL-HIGHWAY CROSSING (Excluded from above categories)										
Class I Railroads.....	3,620	2,921	4,127	137	32	169	4	---	3,752	202
Class II Railroads.....	74	58	86	4	---	4	---	---	82	---
Class III Railroads.....	138	127	163	8	2	10	---	2	137	14
Total All Railroads.....	3,832	3,106	4,376	149	34	183	4	2	3,971	216
GRAND TOTAL										
Class I Railroads.....	66,030	63,126	65,698	19,450	39,618	59,068	812	819	4,232	767
Class II Railroads.....	2,089	2,040	2,040	549	1,224	1,773	13	166	84	4
Class III Railroads.....	4,803	4,716	4,517	1,625	2,644	4,269	20	14	180	34
Total All Railroads.....	72,922	69,882	72,255	21,624	43,486	65,110	845	999	4,496	805

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



TABLE S15. ILLNESSES IN TRAIN ACCIDENTS, TRAIN INCIDENTS, AND NONTRAIN INCIDENTS BY TYPE OF PERSON, 1979

Type Of Accident/Incident	Total A/I W. Cas	Illness A/I	Total Illness	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
TRAIN ACCIDENTS								
Class I Railroads.....	385	11	24	16	---	---	8	---
Class II Railroads.....	9	---	---	---	---	---	---	---
Class III Railroads.....	15	---	---	---	---	---	---	---
Total All Railroads.....	409	11	24	16	---	---	8	---
TRAIN INCIDENTS								
Class I Railroads.....	10,362	169	194	177	15	192	1	1
Class II Railroads.....	464	2	3	3	---	3	---	---
Class III Railroads.....	764	18	17	15	2	17	---	---
Total All Railroads.....	11,590	189	214	195	17	212	1	1
NONTRAIN INCIDENTS								
Class I Railroads.....	51,663	1,520	1,572	235	1,293	1,528	26	1
Class II Railroads.....	1,542	19	18	2	16	18	---	---
Class III Railroads.....	3,886	45	41	10	30	40	1	---
Total All Railroads.....	57,091	1,584	1,631	247	1,339	1,586	27	1
RAIL-HIGHWAY CROSSING (Excluded from above categories)								
Class I Railroads.....	3,620	1	2	---	---	---	---	2
Class II Railroads.....	74	---	---	---	---	---	---	---
Class III Railroads.....	138	---	---	---	---	---	---	---
Total All Railroads.....	3,832	1	2	---	---	---	---	2
GRAND TOTAL								
Class I Railroads.....	66,030	1,701	1,792	428	1,308	1,736	26	2
Class II Railroads.....	2,089	21	21	5	16	21	---	---
Class III Railroads.....	4,803	63	58	25	32	57	1	---
Total All Railroads.....	72,922	1,785	1,871	458	1,356	1,814	27	2

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

TABLE S23. NATURE OF INJURIES BY TRAIN ACCIDENTS, TRAIN INCIDENTS, AND  
NONTRAIN INCIDENTS, 1979

Class of Accident	.....Amputations.....						.....Fractures.....							
	Arm or Hand	Finger	Leg or Foot	Toe	Other Part	Total	Arm or Hand	Finger	Leg or Foot	Toe	Head or Face Bones	Torso	Other	Total
TRAIN ACCIDENTS														
Collisions.....	---	---	---	---	---	---	10	1	7	---	18	10	19	65
Derailments.....	---	---	---	---	---	---	2	1	7	1	6	16	6	39
Other Train Accidents.....	---	---	1	---	---	1	2	---	4	---	7	7	3	23
Total.....	---	---	1	---	---	1	14	2	18	1	31	33	28	127
TRAIN INCIDENTS														
Coupling or uncoupling.....	3	5	6	1	---	15	15	16	6	5	3	4	---	49
Operating locomotives.....	---	1	---	---	---	1	3	1	2	2	4	9	2	23
Operating rail motor car...	---	---	1	---	---	1	7	11	23	2	3	7	2	55
Operating hand brakes.....	---	---	5	1	---	6	7	7	8	1	3	10	1	37
Operating switches.....	---	---	---	---	---	---	---	2	4	1	2	---	---	9
Coming in contact w/fxd obj.....	---	1	---	---	---	1	4	3	8	3	---	9	3	30
Getting on/off loco or cars.....	3	3	37	7	---	50	46	19	109	13	6	31	6	230
Accidents at Highway Grades.....	2	1	8	---	---	11	92	11	160	3	97	174	44	581
Other struck or run over...	13	6	90	9	4	122	30	4	33	5	18	32	9	131
Flying or falling objects..	---	---	---	---	---	---	---	1	8	4	1	3	---	17
Assaults.....	---	---	---	---	---	---	---	1	---	---	4	---	1	6
Miscellaneous.....	6	10	9	4	1	30	61	80	79	24	17	81	26	368
Total.....	27	27	156	22	5	237	265	156	440	63	158	360	94	1,536
NONTRAIN INCIDENTS														
Coupling incidents.....	1	4	2	---	---	7	19	32	16	20	3	15	6	111
Operating switches.....	---	3	---	---	---	3	19	36	18	29	1	10	1	114
Getting on/off locos or cars.....	---	---	2	---	---	2	35	15	93	10	6	32	6	197
Servicing or maintenance of equip.....	1	46	2	5	---	54	198	563	197	196	99	87	30	1,370
Maintenance of way and structures.....	2	61	1	---	3	67	222	782	374	282	114	74	30	1,878
Involving freight, baggage, etc.....	---	---	---	---	---	---	---	6	7	1	---	2	---	16
Involving windows, doors, etc.....	---	3	---	---	---	3	15	105	10	6	5	5	2	148
Involving passenger car doors.....	---	---	---	---	---	---	---	1	---	---	---	1	---	2
Stumbling, falling not on car/loco.....	---	1	---	---	---	1	160	51	219	21	17	89	23	580
Flying/falling objs, burns, etc.....	---	---	---	---	---	---	1	16	16	29	7	2	1	72
Assaults to persons.....	---	---	1	---	---	1	4	4	5	---	12	7	2	34
Miscellaneous.....	---	11	2	3	---	16	76	94	68	22	24	38	6	328
TOTAL.....	4	129	10	8	3	154	749	1,705	1,023	616	288	362	107	4,850
GRAND TOTAL.....	31	156	167	30	8	392	1,028	1,863	1,481	680	477	755	229	6,513

TABLE S23. CONTINUATION

Class of Accident	.....Other Injuries.....						
	Bruise	Sprain or Strain	Cut or Lacer- ation	Electric Shock or Burn	Other Burns	Dislo- cation	Cinder, etc in Eye
TRAIN ACCIDENTS							
Collisions.....	314	114	80	---	3	4	1
Derailments.....	154	158	46	---	2	4	2
Other Train Accidents.....	57	43	43	1	5	4	2
Total.....	525	315	169	1	10	12	5
TRAIN INCIDENTS							
Coupling or uncoupling.....	196	289	102	---	6	4	13
Operating locomotives.....	146	203	59	5	3	4	357
Operating rail motor car...	128	98	62	---	2	4	3
Operating hand brakes.....	101	135	42	---	---	3	---
Operating switches.....	19	30	7	---	---	---	6
Coming in contact w/fixd obj.....	126	49	57	---	---	1	1
Getting on/off loco or cars.....	723	1,506	237	---	1	35	3
Accidents at Highway Grades.....	1,263	340	1,039	---	6	12	3
Other struck or run over...	198	62	147	---	1	5	1
Flying or falling objects..	62	11	29	10	118	---	1,185
Assaults.....	87	15	125	---	1	---	61
Miscellaneous.....	1,308	1,109	506	2	14	23	14
Total.....	4,357	3,847	2,412	17	152	91	1,647
NONTRAIN INCIDENTS							
Coupling incidents.....	541	944	277	1	12	12	25
Operating switches.....	396	1,803	71	---	1	13	12
Getting on/off locos or cars.....	617	1,536	230	---	---	23	2
Servicing or maintenance of equip.....	3,280	5,337	3,003	145	1,058	64	1,905
Maintenance of way and structures.....	4,011	6,722	3,584	39	395	101	1,077
Involving freight, baggage, etc.....	45	116	43	---	4	1	2
Involving windows, doors, etc.....	285	220	295	---	1	6	6
Involving passenger car doors.....	6	6	6	---	---	---	---
Stumbling, falling not on car/loco.....	1,422	2,989	633	1	1	42	1
Flying/falling objs, burns, etc.....	145	40	202	33	141	---	1,089
Assaults to persons.....	94	48	93	---	1	2	7
Miscellaneous.....	992	1,797	752	10	43	32	114
TOTAL.....	11,834	21,558	9,189	229	1,657	296	4,240
GRAND TOTAL.....	16,716	25,720	11,770	247	1,819	399	5,892

.....

Other	Total	Total Injuries	Total Injury Fatalities
37	553	618	15
21	387	426	8
28	183	207	77
86	1,123	1,251	100
15	625	689	3
25	802	826	---
7	304	360	1
7	288	331	2
---	62	71	---
8	242	273	2
28	2,533	2,813	22
586	3,249	3,841	746
84	498	751	442
28	1,443	1,460	---
16	305	311	1
98	3,074	3,472	26
902	13,425	15,198	1,245
51	1,863	1,981	---
63	2,359	2,476	---
36	2,444	2,643	---
403	15,195	16,619	9
446	16,375	18,320	8
4	215	231	1
24	837	988	3
1	19	21	---
75	5,164	5,745	11
52	1,702	1,774	13
21	266	301	2
623	4,363	4,707	37
1,799	50,802	55,806	84
2,787	65,350	72,255	1,429

TABLE S24. NATURE OF INJURIES BY TYPE OF PERSON, 1979

Class of Person	.....Amputations.....						.....Fractures.....							
	Arm or Hand	Finger	Leg or Foot	Toe	Other Part	Total	Arm or Hand	Finger	Leg or Foot	Toe	Head or Face	Torso	Other	Total
<b>EMPLOYEES ON DUTY</b>														
<b>YARD SERVICE:</b>														
Engineers and Motormen.	---	---	---	---	---	---	9	5	14	4	3	9	---	44
Firemen and Helpers....	---	---	---	---	---	---	2	3	2	3	---	1	---	11
Conductors and Foremen.	---	4	6	1	---	11	27	26	41	14	9	14	4	135
Brakemen and Helpers...	5	4	10	3	---	22	72	109	118	54	17	46	10	426
<b>FREIGHT SERVICE:</b>														
Engineers and Motormen.	---	2	---	---	---	2	16	14	19	6	4	14	3	76
Firemen and Helpers....	---	---	---	---	---	---	3	2	5	---	3	1	---	14
Conductors.....	1	5	2	1	---	9	37	30	48	10	8	46	19	198
Brakemen and Flagmen...	---	8	10	4	2	24	87	99	92	23	21	78	13	413
<b>PASSENGER SERVICE:</b>														
Engineers and Motormen.	---	---	---	---	---	---	1	4	2	2	1	3	---	13
Firemen and Helpers....	---	---	---	---	---	---	2	2	---	---	---	1	---	5
Conductors.....	---	---	---	---	---	---	3	4	2	2	1	5	---	17
Baggagemen.....	---	---	---	---	---	---	1	---	1	---	---	---	---	2
Brakemen and Flagmen...	---	1	---	---	---	1	2	5	2	1	---	4	---	14
HOSTLERS.....	---	---	---	---	---	---	5	8	7	3	3	3	---	29
OTHER EMPLOYEES.....	6	123	12	7	3	151	554	1,519	787	536	255	281	91	4,023
<b>SUMMARY</b>														
Total employees on duty..	12	147	40	16	5	220	821	1,830	1,140	658	325	506	140	5,420
Employees not on duty....	---	---	---	---	---	---	34	8	43	7	3	8	2	105
Passengers.....	---	---	1	---	---	1	17	7	23	2	24	16	24	113
Nontrespassers.....	2	5	6	1	---	14	127	17	205	8	107	191	52	707
Trespassers.....	17	4	120	13	3	157	29	1	70	5	18	34	11	168
GRAND TOTAL.....	31	156	167	30	8	392	1,028	1,863	1,481	680	477	755	229	6,513

TABLE S24. CONTINUATION

Class of Person	.....Other Injuries.....								Total Injuries	Total Injury Fatalities	
	Bruise	Sprain or Strain	Cut or Laceration	Electric Shock or Burn	Other Burns	Dislocation	Cinder etc in eye	Other			
EMPLOYEES ON DUTY											
YARD SERVICE:											
Engineers and Motormen.	218	349	100	5	12	5	192	43	924	968	---
Firemen and Helpers....	28	37	19	---	4	1	30	6	125	136	---
Conductors and Foremen.	483	943	197	2	29	12	185	67	1,918	2,064	7
Brakemen and Helpers...	1,812	3,742	700	3	87	45	811	159	7,359	7,807	15
FREIGHT SERVICE:											
Engineers and Motormen.	275	468	150	6	17	16	266	44	1,242	1,320	6
Firemen and Helpers....	31	73	27	4	3	---	40	2	180	194	---
Conductors.....	532	832	259	---	18	17	175	68	1,901	2,108	4
Brakemen and Flagmen...	1,498	2,678	635	3	54	43	681	171	5,763	6,200	23
PASSENGER SERVICE:											
Engineers and Motormen.	35	45	31	3	3	---	29	8	154	167	---
Firemen and Helpers....	11	24	12	2	4	---	11	3	67	72	---
Conductors.....	60	77	21	1	2	---	22	5	188	205	---
Baggagemen.....	2	11	6	---	---	---	---	---	19	21	---
Brakemen and Flagmen...	55	64	41	1	1	1	17	5	185	200	1
HOSTLERS.....	84	141	45	---	5	3	36	10	324	353	---
OTHER EMPLOYEES.....	9,374	15,216	7,860	193	1,544	214	3,336	1,384	39,121	43,295	45
SUMMARY											
Total employees on duty..	14,498	24,700	10,103	223	1,783	357	5,831	1,975	59,470	65,110	101
Employees not on duty....	187	367	105	---	14	11	30	26	740	845	1
Passengers.....	463	183	164	---	12	7	13	43	885	999	6
Nontrespassers.....	1,423	449	1,201	2	10	17	17	656	3,775	4,496	805
Trespassers.....	145	21	197	22	---	7	1	87	480	805	516
GRAND TOTAL.....	16,716	25,720	11,770	247	1,819	399	5,892	2,787	65,350	72,255	1,429

## 7.2 Employee Casualties

### NONFATAL CASUALTIES TO EMPLOYEES ON DUTY

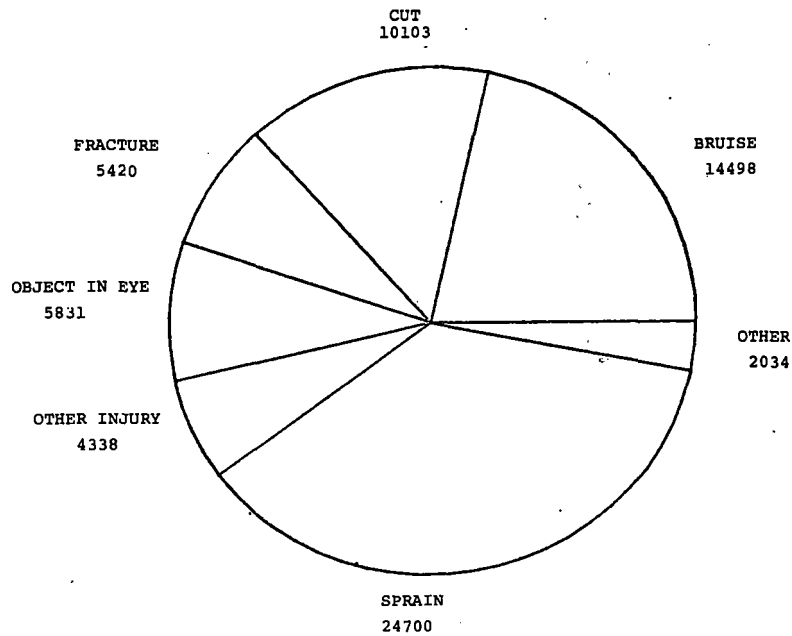


Fig. 23

### FATALITIES BY TYPE OF EMPLOYEE

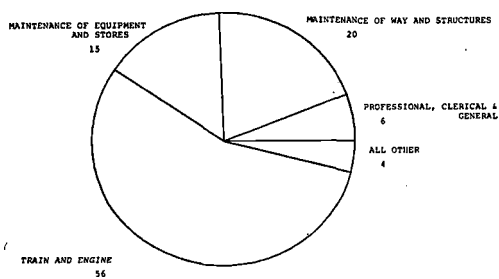


Fig. 24A.

### INJURIES BY TYPE OF EMPLOYEE

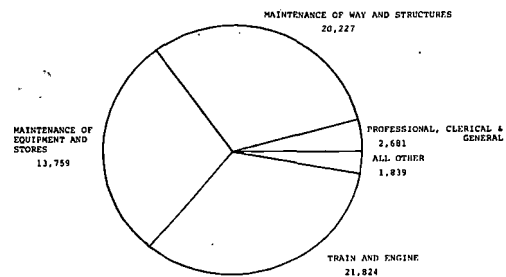


Fig. 24B.

TABLE S27. ACCIDENT/INCIDENT CASUALTIES TO EMPLOYEES ON DUTY, 1979

Type/Location Of Casualty	Total Cases	---Cases Total Cases	Involving Lost WD Cases	Lost And/Or Restr Wd Cases	Restricted Lost Workdays	Restricted Workdays	Other Cases
I N J U R I E S							
Bruise - Contusion--Arm or hand.	2,692	1,876	1,617	259	14,871	1,862	816
Fingers.....	1,922	879	692	187	5,519	1,359	1,043
Leg or foot.	5,106	3,847	3,517	330	32,382	2,417	1,259
Toes.....	419	254	215	39	1,365	260	165
Torso.....	2,782	2,100	1,971	129	26,087	1,213	682
Other parts.	1,577	1,078	1,023	55	10,963	426	499
Sprain - Strain--Arm or hand.	2,743	2,010	1,736	274	18,895	2,260	733
Fingers.....	441	285	218	67	2,046	468	156
Leg or foot.	6,923	6,029	5,651	378	73,678	3,876	894
Toes.....	43	34	32	2	245	9	9
Torso.....	13,296	10,282	9,307	975	130,852	9,994	3,014
Other parts.	1,254	937	842	95	9,804	759	317
Cut or Laceration--Arm or hand.	2,011	769	647	122	6,485	1,024	1,242
Fingers.....	3,014	1,160	866	294	9,021	2,528	1,854
Leg or foot.	1,627	928	851	77	7,762	596	699
Toes.....	85	51	45	6	462	46	34
Head or Face	2,974	1,072	1,023	49	9,358	324	1,902
Torso.....	262	136	122	14	1,604	107	126
Other parts.	130	66	64	2	755	23	64
Electrical burn or shock.....	223	131	121	10	1,372	120	92
Other burns.....	1,783	962	840	122	7,870	610	821
Dislocation.....	357	298	272	26	6,315	483	59
Fracture--Arm or hand.	821	716	629	87	19,223	2,589	105
Fingers.....	1,830	1,131	842	289	14,427	4,722	699
Leg or foot.	1,140	1,078	1,024	54	38,642	1,861	62
Toes.....	658	508	444	64	7,470	1,009	150
Head or Face	325	166	162	4	3,983	210	159
Torso.....	506	438	401	37	12,404	676	68
Other parts.	140	99	97	2	3,028	143	41
Amputation--Arm or hand.	12	11	10	1	1,536	5	1
Fingers.....	147	129	116	13	3,586	245	18
Leg or foot.	40	39	39	---	6,672	---	1
Toes.....	16	16	16	---	1,404	1	---
Other parts.	5	5	4	1	140	45	---
Cinder or other particle in eye.	5,831	2,114	1,883	231	7,790	549	3,717
Hernia.....	373	356	347	9	12,192	301	17
Concussion.....	179	166	164	2	2,821	31	13
Nervous shock.....	39	31	31	---	451	---	8
Internal injuries.....	51	47	47	---	1,760	---	4
Loss of eye.....	7	6	6	---	1,176	---	1
Not otherwise classified.....	1,326	569	536	33	6,360	390	757
Total nonfatal injuries.....	65,110	42,809	38,470	4,339	522,776	43,541	22,301
I L L N E S S E S							
Skin diseases or disorders.....	721	243	221	22	1,301	369	478
Dust diseases of the lungs.....	12	7	7	---	29	33	5
Respiratory conditions.....	391	276	273	3	2,440	15	115
Poisoning.....	75	54	54	---	331	---	21
Disorders due to physical agents	381	165	157	8	778	66	216
Disorders due to repeated trauma	88	49	42	7	365	82	39
All other occupational illnesses	146	87	83	4	639	54	59
Total nonfatal illnesses.....	1,814	881	837	44	5,883	619	933
-----F A T A L I T I E S-----							
Fatal injuries.....	101	---	---	---	---	---	---
Fatal illnesses.....	---	---	---	---	---	---	---
Total fatalities..	101	---	---	---	---	---	---



TABLE S25. ACCIDENT/INCIDENT CASUALTIES BY TYPE OF EMPLOYEE ON DUTY, 1979

Class of Person	Kld	Total Inj	Ill
I.--EXECUTIVES, OFFICIALS, AND STAFF ASSISTANTS			
EXECUTIVE, GENERAL OFFICERS, AND ASSISTANTS.....	2	41	---
DIVISION OFFICERS, ASSISTANTS, AND STAFF ASSISTANT.....	---	136	3
Subtotal.....	2	177	3
II.--PROFESSIONAL, CLERICAL, AND GENERAL			
PROFESSIONAL AND SUBPROFESSIONAL ASSISTANTS.....	1	87	2
SUPERVISORY OR CHIEF CLERKS(MAJOR DEPARTMENTS).....	---	30	---
CHIEF CLERKS(MINOR DEPARTMENTS)AND ASSISTANTS.....	---	28	2
CLERKS AND CLERICAL SPECIALISTS.....	---	130	31
CLERKS.....	---	1,003	28
MECHANICAL DEVICE OPERATORS (OFFICE).....	---	28	---
STENOGRAPHERS AND SECRETARIES.....	---	17	---
STENOGRAPHERS AND TYPISTS.....	---	20	---
STOREKEEPERS, SALES AGENTS, AND BUYERS.....	---	30	1
TICKET AGENTS AND ASSISTANT TICKET AGENTS.....	1	34	1
TRAVELING AUDITORS OR ACCOUNTANTS.....	---	2	---
TELEPHONE SWITCHBOARD OPERATORS AND OFFICE ASSIST..	---	5	---
MESSENGERS AND OFFICE BOYS.....	---	29	---
ELEVATOR OPERATORS AND OTHER OFFICE ATTENDANTS.....	---	4	1
LIEUTENANTS AND SERGEANTS OF POLICE.....	---	91	---
PATROLMEN AND WATCHMEN.....	1	354	12
TRAFFIC AND VARIOUS OTHER AGENTS, INSPECTORS, ETC..	---	22	---
CLAIM AGENTS OR INVESTIGATORS.....	---	6	1
FREIGHT CLAIM AGENTS OR INVESTIGATORS.....	---	11	---
CHIEF CLAIM AGENTS OR INVESTIGATORS.....	---	1	---
MISCELLANEOUS TRADE WORKERS(OTHER THAN PLUMBERS)...	1	120	---
MOTOR VEHICLE AND MOTOR CAR OPERATORS.....	2	468	14
TEAMSTERS AND STABLEMEN.....	---	2	---
JANITORS AND CLEANERS.....	---	139	3
Subtotal.....	6	2,661	96
III.--MAINTENANCE OF WAY AND STRUCTURE			
ROADMASTERS, GENERAL FOREMAN, AND ASSISTANTS.....	---	167	5
MAINTENANCE OF WAY AND SCALE INSPECTORS.....	---	74	2
BRIDGE AND BUILDING GANG FOREMEN(SKILLED LABOR)....	1	157	8
BRIDGE AND BUILDING CARPENTERS.....	1	897	41
BRIDGE AND BUILDING IRONWORKERS.....	---	115	5
BRIDGE AND BUILDING PAINTERS.....	---	86	5
MASONS, BRICKLAYERS, PLASTERERS, AND PLUMBERS.....	---	445	23
MAINTENANCE OF WAY/STRUCTURE HELPERS & ASSISTANTS..	3	533	14
PORTABLE STEAM EQUIPMENT OPERATORS.....	2	1,681	59
PORTABLE STEAM EQUIPMENT OPERATOR HELPERS.....	---	63	4
PUMPING EQUIPMENT OPERATORS.....	---	6	1
GANG FOREMEN(EXTRA GANG AND WORK-TRAIN LABORERS)...	---	264	7
GANG FOREMEN(BRIDGE AND BUILDING, SIGNAL ETC).....	---	21	5
GANG OR SECTION FOREMEN.....	---	1,035	26
EXTRA GANG MEN.....	4	4,440	124
SECTION MEN.....	9	8,051	283
MAINTENANCE OF WAY LABORERS(OTHER THAN TRACK/RDWAY).	---	334	9
GENERAL & ASS'T GEN FOREMEN/INSPECTORS (SIGNAL, ETC.	---	57	3
GANG FOREMEN(SIGNAL AND TELEGRAPH SKILLED TRADES ).	---	60	2
SIGNALMEN AND SIGNAL MAINTAINERS.....	---	804	49
LINEMEN AND GROUNDMEN.....	---	326	34
ASSISTANT SIGNALMEN AND ASSISTANT SIGNAL MAINT.....	---	426	36
SIGNALMEN AND SIGNAL MAINTAINER HELPERS.....	---	185	13
Subtotal.....	20	20,227	758
IV.--MAINTENANCE OF EQUIPMENT AND STORES			
GENERAL, ASSISTANT GENERAL, AND DEPARTMENT FOREMEN. ---	---	153	3
GENERAL AND ASSISTANT GENERAL FOREMEN(STORES).....	---	28	---
EQUIPMENT, SHOP, ELEC, MATERIAL, & SUPPLIES INSPTR. ---	---	175	5
GANG FOREMEN AND GANG LEADERS(SKILLED LABOR).....	2	273	6
BLACKSMITHS.....	---	225	2
BOILERMAKERS.....	---	390	9
CARMEN (A AND B).....	1	4,548	92
CARMEN (C AND D).....	4	3,655	79
ELECTRICAL WORKERS (A).....	2	1,363	38
ELECTRICAL WORKERS (B).....	1	56	1
ELECTRICAL WORKERS (C).....	---	34	---
MACHINISTS.....	2	3,051	85
MOLDERS.....	---	21	---
SHEET-METAL WORKERS.....	1	645	27
SKILLED TRADES HELPERS(M OF E AND STORES).....	---	654	24
HELPER APPRENTICES(M OF E AND STORES).....	---	131	2
REGULAR APPRENTICES(M OF E AND STORES).....	1	643	17
COACH CLEANERS.....	---	355	11
GANG FOREMEN(SHOPS, ENGINE HOUSES, & POWER PLANTS).	---	65	---
GANG FOREMEN(STORES AND ICE, RECLAMATION, ETC).....	---	11	---
CLASSIFIED LABORERS(SHOPS, ENGINE HOUSES, ETC).....	---	712	21
GENERAL LABORERS(SHOP, ENGINE HOUSES, ETC).....	1	1,021	45
GENERAL LABORERS(STORES AND ICE, RECLAMATION, ETC).	---	500	8
STATIONARY ENGINEERS(STEAM).....	---	15	---
STATIONARY FIREMEN, OILERS, COAL PASSERS, AND ETC..	---	35	---
Subtotal.....	15	18,759	475

TABLE S25. CONTINUATION

Class of Person	Total		
	Kld	Inj	Ill
V.--TRANSPORTATION			
CHIEF TRAIN DISPATCHERS.....	---	3	---
TRAIN DISPATCHERS.....	---	12	---
TRAIN DIRECTORS.....	---	8	---
STATION AGENTS(SUPERVISORY, MAJOR STATIONS).....	---	12	---
STATION AGENTS(SMALLER STATIONS, NONTELEGRAPHERS)..	---	27	---
STATION AGENTS(TELEGRAPHERS AND TELEPHONERS).....	---	23	1
CHIEF TELEGRAPHERS AND TELEPHONERS OR WIRE CHIEFS..	---	7	---
CLERK-TELEGRAPHERS AND CLERK-TELEPHONERS.....	---	40	1
TELEGRAPHERS, TELEPHONERS, AND TOWERMEN.....	---	111	1
STATIONMASTERS AND ASSISTANTS.....	---	1	---
SUPERVISING BAGGAGE AGENTS.....	---	2	---
BAGGAGE AGENTS AND ASSISTANTS.....	---	6	---
BAGGAGE, PARCEL ROOM, AND STATION ATTENDANTS.....	---	54	---
GENERAL FOREMEN(FREIGHT STATIONS, WAREHOUSES, ETC)..	---	---	---
ASST. GENERAL FOREMAN(FRT STATIONS, WAREHOUSES)....	---	2	---
GANG FOREMEN(FREIGHT STATION, WAREHOUSE, ETC).....	---	7	---
CALLERS, LOADERS, SEALERS, SCALERS, ETC.....	---	32	---
TRUCKERS(STATIONS, WAREHOUSES, AND PLATFORMS).....	---	55	---
LABORERS(COAL AND ORE DOCKS AND GRAIN ELEVATORS)...	---	77	2
COMMON LABORERS(STATIONS, WAREHOUSES, PLATFORMS)...	---	111	1
STEWARDS, RESTAURANT & LODGING-HOUSE MANAGERS, ETC.	1	25	---
CHEFS AND COOKS(RESTAURANTS OR DINING CARS).....	---	73	---
WAITERS, CAMP COOKS, KITCHEN HELPERS, ETC.....	---	92	4
OFFICERS, WORKERS, ATT'ANTS ON BARGES, LAUNCHES....	---	47	---
TRANSPORTATION AND DINING-SERVICE INSPECTORS.....	---	1	---
PARLOR AND SLEEPING CARD CONDUCTORS.....	---	---	---
TRAIN ATTENDANTS.....	1	277	4
BRIDGE OPERATORS AND HELPERS.....	---	19	2
CROSSING AND BRIDGE FLAGMEN AND GATEMEN.....	---	6	---
FOREMEN(LAUNDRY)AND LAUNDRY WORKERS.....	---	3	---
Subtotal.....	2	1,133	16
VI.--(a)TRANSPORTATION			
YARDMASTERS.....	---	133	1
ASSISTANT YARDMASTERS.....	---	7	1
SWITCH TENDERS.....	---	36	---
OUTSIDE HOSTLERS.....	---	203	3
INSIDE HOSTLERS.....	---	69	---
OUTSIDE HOSTLERS HELPERS.....	---	81	3
Subtotal.....	---	529	8
VI.--(b)TRANSPORTATION(train and engine)			
ROAD PASSENGER CONDUCTORS.....	---	205	10
ASSIST ROAD PASSENGER CONDUCTORS & TICKET COLLECTO.	---	162	2
ROAD FREIGHT CONDUCTORS(THROUGH FREIGHT).....	2	1,169	32
ROAD FREIGHT CONDUCTORS(LOCAL AND WAY FREIGHT).....	2	939	24
ROAD PASSENGER BAGGAGEMEN.....	---	21	---
ROAD PASSENGER BRAKEMEN AND FLAGMEN.....	1	200	4
ROAD FREIGHT BRAKEMEN AND FLAGMEN(THROUGH FREIGHT).	12	3,104	72
ROAD FREIGHT BRAKEMEN AND FLAGMEN(LOCAL & WAY FRGH.	11	3,096	49
YARD CONDUCTORS AND YARD FOREMEN.....	7	2,064	37
YARD BRAKEMEN AND YARD HELPERS.....	15	7,807	102
ROAD PASSENGER ENGINEERS AND MOTORMEN.....	---	167	10
ROAD FREIGHT ENGINEERS AND MOTORMEN(THROUGH FRGHT)..	5	801	36
ROAD FREIGHT ENGINEERS & MOTORMEN(LOCAL & WAY FRGH.	1	519	16
YARD ENGINEERS AND MOTORMEN.....	---	968	51
ROAD PASSENGER FIREMEN AND HELPERS.....	---	72	1
ROAD FREIGHT FIREMEN AND HELPERS(THROUGH FREIGHT)..	---	131	4
ROAD FREIGHT FIREMEN & HELPERS(LOCAL & WAY FRGHT)..	---	63	2
YARD FIREMEN AND HELPERS.....	---	136	6
Subtotal.....	56	21,624	458
TOTAL.....	101	65,110	1,814

TABLE S20. SUMMARY OF EMPLOYEE ON DUTY FATALITIES BY JOB GROUPS, 1979

Type accident/incident	I*	II	III	IV	V	VI	VII	Total
TRAIN ACCIDENTS								
Collisions.....	---	---	---	---	---	---	15	15
Derailments.....	---	---	---	---	2	---	5	7
Miscellaneous.....	---	---	3	---	---	---	5	8
Total.....	---	---	3	---	2	---	25	30
TRAIN INCIDENTS								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	2	2
Coupling/uncoupling air/steam hose, safety chains..	---	---	---	---	---	---	1	1
Operating locomotives.....	---	---	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	1	---	---	---	1	2
Operating switches.....	---	---	---	---	---	---	---	---
Contacting fixed objects while on locos or cars...	---	---	---	---	---	---	1	1
Getting on or off cars or locomotives.....	---	---	---	---	---	---	6	6
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	1	---	---	---	---	4	5
Struck by/ran into locos/cars(not at public x-ing.	2	---	2	---	---	---	8	12
Servicing or maintenance of equipment.....	---	1	---	---	---	---	---	1
Maintenance of way and structures.....	---	---	4	---	---	---	---	4
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc.....	---	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	5	5
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	---	---	---	---	---
Operation of on-track work equipment.....	---	---	---	---	---	---	1	1
Assault.....	---	---	---	---	---	---	---	---
Other occurrences.....	---	---	---	---	---	---	1	1
Total.....	2	2	7	---	---	---	30	41
NONTRAIN INCIDENTS								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	---	---
Coupling/uncoupling air/steam hose, safety chains..	---	---	---	---	---	---	---	---
Operating locomotives.....	---	---	---	---	---	---	---	---
Operating rail motorcars.....	---	---	---	---	---	---	---	---
Operating hand brakes.....	---	---	---	---	---	---	---	---
Operating switches.....	---	---	---	---	---	---	---	---
Contacting fixed objects while on locos or cars...	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	---	---
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	---	---	---	---	---	---	---
Struck by/ran into locos/cars(not at public x-ing.	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	---	---	8	---	---	---	8
Maintenance of way and structures.....	---	---	5	1	---	---	---	6
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc.....	---	---	---	1	---	---	---	1
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	2	---	---	---	1	3
Flying or falling objects, burns, etc., N.O.C.....	---	---	---	1	---	---	---	1
Operation of on-track work equipment.....	---	---	---	---	---	---	---	---
Assault.....	---	1	---	1	---	---	---	2
Other occurrences.....	---	3	3	3	---	---	---	9
Total.....	---	4	10	15	---	---	1	30
Grand total.....	2	6	20	15	2	---	56	101

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

TABLE S21. SUMMARY OF EMPLOYEE ON DUTY INJURIES BY JOB, GROUPS, 1979

Type accident/incident	I*	II	III	IV	V	VI	VII	Total
TRAIN ACCIDENTS								
Collisions.....	---	3	24	1	19	1	216	264
Derailments.....	3	---	11	3	61	1	283	362
Miscellaneous.....	---	1	10	1	---	---	87	99
Total.....	3	4	45	5	80	2	586	725
TRAIN INCIDENTS								
Coupling and uncoupling locomotives or cars.....	---	1	3	4	---	5	572	585
Coupling/uncoupling air/steam hose, safety chains..	---	---	2	---	---	1	101	104
Operating locomotives.....	---	1	---	2	1	13	808	825
Operating rail motorcars.....	1	---	46	1	---	---	4	52
Operating hand brakes.....	1	---	3	5	---	2	319	330
Operating switches.....	---	---	1	---	---	1	69	71
Contacting fixed objects while on locos or cars...	---	1	2	---	---	1	267	271
Getting on or off cars or locomotives.....	1	9	15	21	10	35	2,601	2,692
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	4	31	5	9	5	392	446
Struck by/ran into locos/cars(not at public x-ing.	1	7	21	10	1	1	108	149
Servicing or maintenance of equipment.....	---	3	14	181	15	7	8	228
Maintenance of way and structures.....	---	2	241	2	1	---	5	251
Freight, baggage, express or mail.....	---	---	---	1	10	---	20	31
Windows, doors, etc.....	3	2	3	5	19	3	212	247
Passenger car doors.....	---	---	---	---	1	---	4	5
Stumbling, slipping, falling, caught, N.O.C.....	10	10	6	9	44	5	631	715
Flying or falling objects, burns, etc., N.O.C.....	3	9	19	10	33	12	1,335	1,421
Operation of on-track work equipment.....	1	4	268	4	1	---	23	301
Assault.....	---	---	---	---	4	1	285	290
Other occurrences.....	2	17	24	24	66	6	1,186	1,325
Total.....	23	70	699	284	215	98	8,950	10,339
NONTRAIN INCIDENTS								
Coupling and uncoupling locomotives or cars.....	---	1	5	40	5	19	1,255	1,325
Coupling/uncoupling air/steam hose, safety chains..	---	2	6	89	---	4	553	654
Operating locomotives.....	---	---	6	14	---	13	433	466
Operating rail motorcars.....	---	3	191	1	---	3	3	201
Operating hand brakes.....	1	2	1	31	1	9	794	839
Operating switches.....	1	6	49	39	25	41	2,311	2,472
Contacting fixed objects while on locos or cars...	1	1	---	4	---	---	16	22
Getting on or off cars or locomotives.....	---	88	68	280	19	71	1,932	2,458
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	---	---	---	---	---	---	---
Struck by/ran into locos/cars(not at public x-ing.	---	1	---	1	---	---	7	9
Servicing or maintenance of equipment.....	10	271	685	15,192	146	78	98	16,480
Maintenance of way and structures.....	37	406	16,670	949	60	6	55	18,183
Freight, baggage, express or mail.....	2	71	5	33	106	---	10	227
Windows, doors, etc.....	6	83	104	338	40	15	353	939
Passenger car doors.....	---	1	---	2	1	---	6	10
Stumbling, slipping, falling, caught, N.O.C.....	32	832	532	743	231	108	2,498	4,976
Flying or falling objects, burns, etc., N.O.C.....	14	201	155	221	69	30	1,007	1,697
Operation of on-track work equipment.....	2	8	179	14	2	---	1	206
Assault.....	3	89	60	23	13	5	79	272
Other occurrences.....	42	521	767	456	120	27	677	2,610
Total.....	151	2,587	19,483	18,470	838	429	12,088	54,046
Grand total.....	177	2,661	20,227	18,759	1,133	529	21,624	65,110

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

TABLE S21A. SUMMARY OF EMPLOYEE ON DUTY NONFATAL INJURIES, 1979

Type of Occurrence	Total Cases	---Cases Involving Lost WD	Restr Wd	Lost Workdays	Restricted Workdays	Other Cases
TRAIN ACCIDENTS						
Collisions.....	264	229	228	1	5,555	35
Deraillments.....	362	328	326	2	6,977	34
Miscellaneous.....	99	92	91	1	2,413	7
Total.....	725	649	645	4	14,945	76
TRAIN INCIDENTS						
Coupling and uncoupling locomotives or cars.....	585	494	476	18	7,748	91
Coupling/uncoupling air/steam hose, safety chains.....	104	87	84	3	1,538	17
Operating locomotives.....	825	551	536	15	6,406	274
Operating rail motorcars.....	52	29	28	1	527	23
Operating hand brakes.....	330	285	280	5	5,296	45
Operating switches.....	71	61	59	2	1,009	10
Contacting fixed objects while on locos or cars..	271	225	220	5	3,856	46
Getting on or off cars or locomotives.....	2,692	2,397	2,355	42	34,838	295
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).....	446	398	390	8	7,335	48
Struck by/ran into locos/cars(not at public x-ing.....	149	124	123	1	4,491	25
Servicing or maintenance of equipment.....	228	182	171	11	4,214	46
Maintenance of way and structures.....	251	183	163	20	2,785	68
Freight, baggage, express or mail.....	31	29	29	---	380	2
Windows, doors, etc.....	247	194	189	5	2,588	53
Passenger car doors.....	5	4	4	---	47	1
Stumbling, slipping, falling, caught, N.O.C.....	715	598	590	8	9,846	117
Flying or falling objects, burns, etc., N.O.C....	1,421	745	715	30	4,284	676
Operation of on-track work equipment.....	301	226	206	20	4,141	75
Assault.....	290	236	235	1	2,578	54
Other occurrences.....	1,325	1,062	1,043	19	17,148	263
Total.....	10,339	8,110	7,896	214	121,055	2,229
NONTRAIN INCIDENTS						
Coupling and uncoupling locomotives or cars.....	1,325	1,078	1,045	33	15,259	247
Coupling/uncoupling air/steam hose, safety chains.....	654	494	480	14	5,935	160
Operating locomotives.....	466	327	323	4	4,350	139
Operating rail motorcars.....	201	136	123	13	1,594	65
Operating hand brakes.....	839	665	652	13	9,835	174
Operating switches.....	2,472	2,092	2,025	67	28,631	380
Contacting fixed objects while on locos or cars..	22	13	13	---	125	9
Getting on or off cars or locomotives.....	2,458	2,070	2,001	69	27,795	388
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).....	---	---	---	---	---	---
Struck by/ran into locos/cars(not at public x-ing.....	9	4	4	---	28	5
Servicing or maintenance of equipment.....	16,480	9,178	7,480	1,698	90,198	7,302
Maintenance of way and structures.....	18,183	10,492	8,697	1,795	109,152	7,691
Freight, baggage, express or mail.....	227	165	162	3	1,982	62
Windows, doors, etc.....	939	590	542	48	6,745	349
Passenger car doors.....	10	8	7	1	92	2
Stumbling, slipping, falling, caught, N.O.C.....	4,976	3,999	3,801	198	54,007	977
Flying or falling objects, burns, etc., N.O.C....	1,697	810	767	43	4,975	887
Operation of on-track work equipment.....	206	124	112	12	1,626	82
Assault.....	272	200	192	8	2,467	72
Other occurrences.....	2,610	1,605	1,503	102	21,980	1,005
Total.....	54,046	34,050	29,929	4,121	386,776	19,996
Grand total.....	65,110	42,809	38,470	4,339	522,776	22,301

TABLE S22: SUMMARY OF EMPLOYEE ON DUTY ILLNESSES BY JOB, GROUPS, 1979

Type accident/incident	I*	II	III	IV	V	VI	VII	Total
<b>TRAIN ACCIDENTS</b>								
Collisions.....	---	---	---	---	---	---	1	1
Derailments.....	---	---	---	---	---	---	4	4
Miscellaneous.....	---	---	---	---	---	---	11	11
Total.....	---	---	---	---	---	---	16	16
<b>TRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	2	2
Coupling/uncoupling air/steam hose, safety chains..	---	---	---	---	---	---	1	1
Operating locomotives.....	---	---	---	---	---	---	57	57
Operating rail motorcars.....	---	---	1	---	---	---	1	2
Operating hand brakes.....	---	---	---	---	---	---	---	---
Operating switches.....	---	---	---	---	---	---	2	2
Contacting fixed objects while on locos or cars...	---	---	---	---	---	---	---	---
Getting on or off cars or locomotives.....	---	---	---	---	---	---	2	2
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	---	---	---	---	---	1	1
Struck by/ran into locos/cars(not at public x-ing.	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	---	---	2	---	---	---	2
Maintenance of way and structures.....	---	---	6	---	---	---	---	6
Freight, baggage, express or mail.....	---	---	---	---	---	---	---	---
Windows, doors, etc.....	---	---	---	---	---	---	---	---
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	---	---	---	---	2	2
Flying or falling objects, burns, etc., N.O.C....	---	---	2	1	---	---	116	119
Operation of on-track work equipment.....	---	---	3	---	---	---	---	3
Assault.....	---	---	---	---	---	---	---	---
Other occurrences.....	---	---	---	---	2	---	11	13
Total.....	---	---	12	3	2	---	195	212
<b>NONTRAIN INCIDENTS</b>								
Coupling and uncoupling locomotives or cars.....	---	---	---	---	---	---	2	2
Coupling/uncoupling air/steam hose, safety chains..	---	---	---	---	---	---	---	---
Operating locomotives.....	---	---	---	---	---	1	44	45
Operating rail motorcars.....	---	---	1	---	---	---	---	1
Operating hand brakes.....	---	---	---	---	---	---	1	1
Operating switches.....	---	---	---	---	---	---	9	9
Contacting fixed objects while on locos or cars...	---	---	---	---	---	---	1	1
Getting on or off cars or locomotives.....	---	---	1	---	---	---	3	4
Collision/derailment/rr-hwy x-ing, etc(<= \$2,900).	---	---	---	---	---	---	---	---
Struck by/ran into locos/cars(not at public x-ing.	---	---	---	---	---	---	---	---
Servicing or maintenance of equipment.....	---	4	31	397	---	---	4	436
Maintenance of way and structures.....	1	9	643	29	3	---	2	687
Freight, baggage, express or mail.....	---	---	---	---	---	---	1	1
Windows, doors, etc.....	---	1	---	1	---	---	---	2
Passenger car doors.....	---	---	---	---	---	---	---	---
Stumbling, slipping, falling, caught, N.O.C.....	---	---	1	2	1	---	4	8
Flying or falling objects, burns, etc., N.O.C....	1	65	7	7	5	3	113	201
Operation of on-track work equipment.....	---	---	---	---	---	---	---	---
Assault.....	---	---	---	---	---	---	1	1
Other occurrences.....	1	17	62	36	5	4	62	187
Total.....	3	96	746	472	14	8	247	1,586
Grand total.....	3	96	758	475	16	8	458	1,814

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

### 7.3 Casualties in Train Accidents

TABLE S34. FATALITIES IN TRAIN ACCIDENTS RESULTING FROM MISCELLANEOUS CAUSES BY SPECIFIC CAUSE AND TYPE OF PERSON, 1979

Cause	Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
		Trainmen	Other	Total			
MISC CAUSES NOT OTHERWISE LISTED							
700 Collision with hwy user at grade xing..	77	5	3	8	---	61	8
703 Interference with RR oper.-not vandals.	1	1	---	1	---	---	---
704 Load shifted.....	1	---	---	---	---	---	1
799 Other miscellaneous causes.....	4	4	---	4	---	---	---
SUBTOTAL.....	83	10	3	13	---	61	9
GRAND TOTAL.....	83	10	3	13	---	61	9

TABLE S35. NONFATAL CASUALTIES IN TRAIN ACCIDENTS RESULTING FROM MISCELLANEOUS CAUSES, BY SPECIFIC CAUSE AND TYPE OF PERSON, 1979

Cause	Total Injured	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
		Trainmen	Other	Total			
MISC CAUSES NOT OTHERWISE LISTED							
700 Collision with hwy user at grade xing..	179	66	8	74	---	96	9
701 Emergency brk appl to avoid accident...	3	3	---	3	---	---	---
702 Vandalism.....	24	21	1	22	2	---	---
703 Interference with RR oper.-not vandals.	1	1	---	1	---	---	---
704 Load shifted.....	4	2	---	2	---	---	2
707 Improperly loaded car.....	1	1	---	1	---	---	---
708 Oversized load, misrouted.....	2	2	---	2	---	---	---
709 Object on or fouling track.....	8	7	---	7	---	1	---
710 Equipment on or fouling track.....	2	2	---	2	---	---	---
711 Trail/container tiedown eqp-impr applied.	1	1	---	1	---	---	---
712 Overload/improper loaded container etc.	1	1	---	1	---	---	---
713 Interaction of lateral/vertical forces..	2	2	---	2	---	---	---
715 Snow, ice, or mud on track.....	7	5	2	7	---	---	---
716 Other acts of God.....	1	1	---	1	---	---	---
799 Other miscellaneous causes.....	23	17	4	21	---	1	1
SUBTOTAL.....	259	132	15	147	2	98	12
GRAND TOTAL.....	259	132	15	147	2	98	12

TABLE S28. FATALITIES IN TRAIN ACCIDENTS RESULTING FROM OPERATING PRACTICES, BY SPECIFIC CAUSE AND TYPE OF PERSON, 1979

Cause		Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
			Trainmen	Other	Total			
BRAKES, USE OF								
509	Other causes involving use of brakes...	1	1	---	1	---	---	---
	SUBTOTAL.....	1	1	---	1	---	---	---
EMPLOYEE PHYSICAL CONDITION								
510	Impairment due to alcohol or drugs.....	1	1	---	1	---	---	---
	SUBTOTAL.....	1	1	---	1	---	---	---
FLAGGING, FIXED, HAND AND RADIO SIGNALS								
520	Fixed signal, failure to comply.....	5	5	---	5	---	---	---
528	Radio comm., failure to give/receive...	1	1	---	1	---	---	---
	SUBTOTAL.....	6	6	---	6	---	---	---
OTHER RULES AND INSTRUCTIONS								
531	Cars left foul.....	1	1	---	1	---	---	---
	SUBTOTAL.....	1	1	---	1	---	---	---
SPEED								
550	Coupling speed excessive.....	1	1	---	1	---	---	---
554	Trn inside yrd limit, excess speed.....	2	---	2	2	---	---	---
	SUBTOTAL.....	3	1	2	3	---	---	---
SWITCHES, USE OF								
561	Switch improperly lined.....	3	3	---	3	---	---	---
	SUBTOTAL.....	3	3	---	3	---	---	---
MISCELLANEOUS								
599	Other train operation/human factors....	2	2	---	2	---	---	---
	SUBTOTAL.....	2	2	---	2	---	---	---
	GRAND TOTAL.....	17	15	2	17	---	---	---



TABLE S29. NONFATAL CASUALTIES IN TRAIN ACCIDENTS RESULTING FROM OPERATING PRACTICES BY SPECIFIC CAUSE AND TYPE OF PERSON, 1979

Cause	Total Injured	...Employees On Duty... Trainmen	Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
BRAKES, USE OF							
500 Automatic brake, improper use.....	1	1	---	1	---	---	---
502 Failure to secure engine (R.R. emp.)...	4	4	---	4	---	---	---
503 Failure to secure hnd brk (R.R. emp)...	5	5	---	5	---	---	---
504 Failure to apply sufficient hand brake.	3	2	1	3	---	---	---
506 Fail. to secure eng/car (Non R.R. emp).	1	1	---	1	---	---	---
509 Other causes involving use of brakes...	8	8	---	8	---	---	---
SUBTOTAL.....	22	21	1	22	---	---	---
EMPLOYEE PHYSICAL CONDITION							
510 Impairment due to alcohol or drugs.....	5	5	---	5	---	---	---
SUBTOTAL.....	5	5	---	5	---	---	---
FLAGGING, FIXED, HAND AND RADIO SIGNALS							
520 Fixed signal, failure to comply.....	281	38	2	40	---	241	---
521 Flagging, improper or failure to flag..	12	12	---	12	---	---	---
522 Flagging signal, failure to comply.....	3	3	---	3	---	---	---
524 Hand signal improper.....	1	1	---	1	---	---	---
526 Radio communicatio, failure to comply..	2	2	---	2	---	---	---
528 Radio comm., failure to give/receive...	8	3	---	3	---	5	---
529 Flagging, fixed, hand & radio (other)...	1	1	---	1	---	---	---
SUBTOTAL.....	308	60	2	62	---	241	5
OTHER RULES AND INSTRUCTIONS							
531 Cars left foul.....	2	2	---	2	---	---	---
532 Derail, failure to apply or remove.....	1	---	1	1	---	---	---
533 Failure to stop train in clear.....	24	14	10	24	---	---	---
535 Instruction to trn/yard crew improper..	5	5	---	5	---	---	---
536 Mtr car/on-trk eqp rules,fail to cmPLY.	26	3	20	23	---	3	---
537 Equip move without authority (RR emp)...	3	3	---	3	---	---	---
538 Shoving move, missing man at lead.....	9	9	---	9	---	---	---
539 Shoving movement, fail to control.....	12	9	1	10	---	2	---
541 Special op. instr., failure to comply..	9	9	---	9	---	---	---
543 Trn ord(radio)err in prep/trans/deliv..	2	2	---	2	---	---	---
544 Trn ord(written)err in preparation,etc.	10	---	5	5	---	5	---
SUBTOTAL.....	103	56	37	93	---	5	5
SPEED							
550 Coupling speed excessive.....	11	11	---	11	---	---	---
553 Switch movement, excessive speed.....	9	9	---	9	---	---	---
554 Trn inside yrd limit, excess speed.....	62	29	20	49	---	13	---
555 Trn out yrd limit,clear blk,excess spd.	12	12	---	12	---	---	---
559 Other Causes involving excessive speed.	65	3	1	4	---	61	---
SUBTOTAL.....	159	64	21	85	---	74	---
SWITCHES, USE OF							
561 Switch improperly lined.....	68	22	2	24	---	44	---
SUBTOTAL.....	68	22	2	24	---	44	---
MISCELLANEOUS							
570 Buffing or slack action excessive.....	7	7	---	7	---	---	---
571 Failure to couple.....	2	2	---	2	---	---	---
572 Lateral drawbar force on curve excess..	4	3	1	4	---	---	---
574 Passed couplers.....	1	1	---	1	---	---	---
599 Other train operation/human factors....	17	9	8	17	---	---	---
SUBTOTAL.....	31	22	9	31	---	---	---
GRAND TOTAL.....	696	250	72	322	---	364	10

TABLE S31. NONFATAL CASUALTIES IN TRAIN ACCIDENTS RESULTING FROM MECHANICAL AND ELECTRICAL FAILURES, BY SPECIFIC CAUSE AND TYPE OF PERSON, 1979

Cause	Total Injured	...Employees On Duty... Trainmen	Other	Emp. Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
BRAKES							
400 Air hose uncoupled or burst.....	2	2	---	2	---	---	---
404 Other brake component failure, etc....	4	2	2	4	---	---	---
404L Other brake component failure - loco...	1	1	---	1	---	---	---
408 Hand brake/gear broken or defective....	1	1	---	1	---	---	---
410 Other brake failure(not on locomotive)...	1	---	1	1	---	---	---
410L Other brake failure - locomotive.....	4	1	3	4	---	---	---
SUBTOTAL.....	13	7	6	13	---	---	---
BODY							
421 Center sill broken or bent.....	1	1	---	1	---	---	---
423 Center plate broken or defective.....	3	3	---	3	---	---	---
424 Center plate disengaged from truck.....	1	1	---	1	---	---	---
429 Other causes due to body (not loco)....	2	2	---	2	---	---	---
SUBTOTAL.....	7	7	---	7	---	---	---
COUPLER AND DRAFT SYSTEM							
430 Knuckle broken or defective.....	2	2	---	2	---	---	---
432 Coupler drawhead broken or defective...	4	4	---	4	---	---	---
434 Draft gear/mechanism broken/defective..	3	3	---	3	---	---	---
439 Other coupler and draft system causes..	3	3	---	3	---	---	---
SUBTOTAL.....	12	12	---	12	---	---	---
TRUCK COMPONENTS							
440 Side bearing clearance improper.....	8	8	---	8	---	---	---
441 Side bearing(s) broken.....	1	1	---	1	---	---	---
442 Side bearing(s) missing.....	2	2	---	2	---	---	---
445 Truck (stiff/improper lateral).....	4	4	---	4	---	---	---
445L Truck (stiff/improper lateral) - loco..	1	1	---	1	---	---	---
449 Other truck component causes.....	2	2	---	2	---	---	---
SUBTOTAL.....	18	18	---	18	---	---	---
AXLES AND JOURNAL BEARINGS							
450L Broken/bent between wheel seats-loco...	8	1	2	3	---	5	---
451 Journal (plain) failure - overheating..	7	6	---	6	---	---	1
SUBTOTAL.....	15	7	2	9	---	5	1
WHEELS							
461 Broken rim.....	1	1	---	1	---	---	---
462 Broken plate.....	22	1	11	12	7	3	---
464L Worn flange - locomotive.....	1	1	---	1	---	---	---
466 Damaged flange/thread, thermal/flat....	1	1	---	1	---	---	---
467 Loose wheel.....	27	5	9	14	---	13	---
SUBTOTAL.....	52	9	20	29	7	16	---
LOCOMOTIVES							
473L Oil fire - locomotive.....	1	1	---	1	---	---	---
474L Electrically caused fire - locomotive..	13	13	---	13	---	---	---
SUBTOTAL.....	14	14	---	14	---	---	---
DOORS							
480 Box car plug door open.....	1	---	1	1	---	---	---
SUBTOTAL.....	1	---	1	1	---	---	---
GENERAL MECHANICAL AND ELECTRICAL							
499 General mech/elect failures-not loco...	9	8	1	9	---	---	---
SUBTOTAL.....	9	8	1	9	---	---	---
GRAND TOTAL.....	141	82	30	112	7	21	1

TABLE S33. NONFATAL CASUALTIES IN TRAIN ACCIDENTS RESULTING FROM TRACK, ROADBED AND STRUCTURES BY SPECIFIC CAUSE, AND TYPE OF PERSON, 1979

Cause	Total Injured	...Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
ROADBED DEFECTS								
101 Roadbed settled or soft.....	8	8	---	8	---	---	---	---
102 Washout/rain/slide/ice,etc. dmg to trk.	39	19	9	28	---	11	---	---
SUBTOTAL.....	47	27	9	36	---	11	---	---
TRACK GEOMETRY DEFECTS								
110 Wide gage (defect/missing crossties)...	13	8	5	13	---	---	---	---
111 Wide gage (def/missing rail fasteners).	1	1	---	1	---	---	---	---
112 Wide gage (involving gage rods).....	1	1	---	1	---	---	---	---
113 Wide gage due to worn rail.....	2	2	---	2	---	---	---	---
114 Track alignment irregular.....	3	3	---	3	---	---	---	---
115 Track alignment irregular (buckled)....	9	9	---	9	---	---	---	---
117 Superelevation incorrect.....	1	1	---	1	---	---	---	---
119 Cross level irregular at joints.....	12	11	1	12	---	---	---	---
120 Cross level irregular not at joints....	7	6	---	6	1	---	---	---
129 Other track geometry defects.....	5	5	---	5	---	---	---	---
SUBTOTAL.....	54	47	6	53	1	---	---	---
RAIL AND JOINT BAR DEFECTS								
130 Bolt hole crack or break.....	4	4	---	4	---	---	---	---
131 Broken base of rail.....	7	7	---	7	---	---	---	---
136 Head/web sep.(outside joint bar limit).	7	7	---	7	---	---	---	---
138 Horizontal split head.....	4	4	---	4	---	---	---	---
141 Transverse/compound fissure.....	3	3	---	3	---	---	---	---
142 Vertical split head.....	6	6	---	6	---	---	---	---
143 Worn rail.....	2	2	---	2	---	---	---	---
145 Joint bar broken, compromise.....	1	1	---	1	---	---	---	---
146 Joint bar broken, insulated.....	1	1	---	1	---	---	---	---
147 Joint bar broken, noninsulated.....	17	6	6	12	---	5	---	---
149 Other rail and joint bar defects.....	11	10	1	11	---	---	---	---
SUBTOTAL.....	63	51	7	58	---	5	---	---
FROGS, SWITCHES AND TRACK APPLIANCES								
160 Guard rail loose/broken/etc.....	1	1	---	1	---	---	---	---
161 Switch damaged/out of adjustment.....	2	2	---	2	---	---	---	---
162 Switch stand failure (hand oper.).....	1	1	---	1	---	---	---	---
165 Switch point worn or broken.....	6	6	---	6	---	---	---	---
167 Frog, rigid, worn or broken.....	1	1	---	1	---	---	---	---
SUBTOTAL.....	11	11	---	11	---	---	---	---
OTHER WAY AND STRUCTURES								
189 Other way and structure causes.....	3	1	---	1	---	1	1	---
SUBTOTAL.....	3	1	---	1	---	1	1	---
SIGNAL AND COMMUNICATION FAILURES								
209 Signal & communication failure N.O.C...	1	1	---	1	---	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---	---
GRAND TOTAL.....	179	138	22	160	1	17	1	---

## 7.4 Casualties in Train Incidents

TABLE S36. FATALITIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence		Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
			Trainmen	Other	Total			
COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS								
001T	Adjusting coupler, equipment moving unexpectedly	1	1	---	1	---	---	---
009T	Other acc/inc while coupling/uncoupling cars or locos - equip moving	1	1	---	1	---	---	---
SUBTOTAL.....		2	2	---	2	---	---	---
COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.								
057T	Opening or closing angle cocks - equipment moving	1	1	---	1	---	---	---
SUBTOTAL.....		1	1	---	1	---	---	---
OPERATING HAND BRAKES								
205T	Caught between parts of equipment or lading - equipment moving	1	---	1	1	---	---	---
209T	Other accidents/incidents while operating hand brakes - eqp moving	1	1	---	1	---	---	---
SUBTOTAL.....		2	1	1	2	---	---	---
CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS								
402T	Persons on side/end of locos/cars contacting fixed objects - eqp mov	1	1	---	1	---	---	---
409T	Persons on loco/car coming in contact with fixed obj(other)-eqp mov	1	---	---	---	---	---	1
SUBTOTAL.....		2	1	---	1	---	---	1
GETTING ON OR OFF CARS OR LOCOMOTIVES								
501T	Slip/fell due to lost/missed hold of grabiron, handhold, etc.-eqp mov	3	1	---	1	---	---	2
502T	Slip/fell due to losing/missing footing on step, stirrup, etc.-eqp mov	2	1	---	1	---	---	1
505T	Slipping on ice or snow on ground - equipment moving	1	---	---	---	---	---	1
507T	Falling, slipping, tripping, not elsewhere classified - eqp moving	6	4	---	4	---	---	2
508T	Slipping/falling while boarding/alighting fm passenger eqp (moving)	3	---	---	---	1	1	1
512T	Striking or being struck by bridges or trestles - equipment moving	1	---	---	---	---	---	1
513T	Jumping from equipment - equipment moving	4	---	---	---	3	---	1
519T	Other acc/inc while getting on or off cars or locos - equipment mov	2	---	---	---	---	---	2
SUBTOTAL.....		22	6	---	6	4	1	11
COLLISIONS, DERAILMENTS, PUBLIC RAIL-HWY CROSSING, ETC.(<= \$2,900)								
602T	Casualty resulting fm a derailment which did not satisfy \$ threshold	4	4	---	4	---	---	---
603T	Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	1	---	---	---	---	---	1
609T	Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	746	---	1	1	---	662	83
SUBTOTAL.....		751	4	1	5	---	662	84
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT PUBLIC X-INGS)								
701T	Standing, walking or running on or along track - equipment moving	124	5	2	7	---	1	116
702T	Crossing track at private rail-highway crossing - equipment moving	46	---	---	---	---	43	3
703T	Crossing track not at a crossing - equipment moving	55	---	---	---	---	---	55
705T	On bridges or trestles - equipment moving	22	---	---	---	---	1	21

TABLE S36. CONTINUATION

Occurrence	Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT PUBLIC X-INGS) (CONT.)						
706T Sitting or lying on track or near track, not in clear - eqp moving	137	1	---	1	---	136
707T While working on or along track - equipment moving	5	1	2	3	---	---
708T Passing over, through, or under cars - equipment moving	15	---	---	---	---	15
709T Struck by or ran into locos/cars (not at public X-ing),misc-eqp mov	38	1	---	1	---	36
SUBTOTAL.....	442	8	4	12	---	48
SERVICING OR MAINTENANCE OF EQUIPMENT						
803T Striking or being struck by eqp, structures, or material-eqp mov	1	---	1	1	---	---
SUBTOTAL.....	1	---	1	1	---	---
MAINTENANCE OF WAY AND STRUCTURES						
853T Striking or being struck by eqp, structures, or material-eqp mov	4	---	4	4	---	---
SUBTOTAL.....	4	---	4	4	---	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED						
932T Stumbling/slipping, etc. on parts of track in place-equipment moving	1	---	---	---	---	1
934T Slip/fall, etc. between loco/car and other cars and struct-eqp mov	3	3	---	3	---	---
935T From bridges of trestles-equipment moving	1	1	---	1	---	---
938T While on locomotive or car-equipment moving	4	1	---	1	---	3
939T Other, stumbling, slipping, falling, caught, etc. - equipment moving	1	---	---	---	---	1
SUBTOTAL.....	10	5	---	5	---	5
OPERATION OF ON-TRACK WORK EQUIPMENT						
959T Other A/I involving on-track work equipment - equipment moving	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
ASSAULT						
964T Other assaults to persons on trains-equipment moving	1	---	---	---	1	---
SUBTOTAL.....	1	---	---	---	1	---
OTHER OCCURRENCES						
972T Sudden movement of car, not otherwise classified	1	---	---	---	---	1
975T Slack action, other	1	1	---	1	---	---
989T Other accidents/incidents-equipment moving	4	---	---	---	---	3
SUBTOTAL.....	6	1	---	1	---	4
GRAND TOTAL.....	1,245	30	11	41	---	715

NOTE: Contractor employees are included with nontrespassers

TABLE S37. INJURIES IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence		Total Injured	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
			Trainmen	Other	Total			
COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS								
001T	Adjusting coupler, equipment moving unexpectedly	29	28	1	29	---	---	---
002T	Adjusting coupler - equipment moving	32	32	---	32	---	---	---
004T	Adjusting coupler, part of coupler fell striking person - eqp moving	12	11	1	12	---	---	---
005T	Use of uncoupling lever - equipment moving	148	147	1	148	---	---	---
006T	Use of uncoupling lever - equipment moving unexpectedly	17	14	3	17	---	---	---
007T	Striking parts of body against equipment - equipment moving	104	100	4	104	---	---	---
008T	Stumbled,slipped,fell,etc. on foreign obj/irreg surface-eqp moving	128	126	2	128	---	---	---
009T	Other acc/inc while coupling/uncoupling cars or locos - equip moving	115	114	1	115	---	---	---
SUBTOTAL.....		585	572	13	585	---	---	---
COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.								
052T	Uncoupl air hose,struck by hose due to sudden release of air-eqp mov	26	26	---	26	---	---	---
053T	Coupling air hose,stk by hose due to sudden release of air - eqp mov	5	5	---	5	---	---	---
054T	Stumbled,slipped,fell, or stepped on foreign obj, etc., eqp moving	23	23	---	23	---	---	---
057T	Opening or closing angle cocks - equipment moving	20	20	---	20	---	---	---
059T	Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp mov	30	27	3	30	---	---	---
SUBTOTAL.....		104	101	3	104	---	---	---
OPERATING LOCOMOTIVES								
101T	Burn or electrical shock - equipment moving	7	7	---	7	---	---	---
102T	Striking parts of body against equipment, moving about loco-eqp mov	43	43	---	43	---	---	---
103T	Struck by tools or other objects falling - equipment moving	12	12	---	12	---	---	---
104T	Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp moving	25	24	1	25	---	---	---
105T	Checking, oiling, servicing locomotive, etc. - equipment moving	5	5	---	5	---	---	---
106T	Unexpected movement of locomotive, other than slack action	123	121	2	123	---	---	---
107T	Slack action in locomotive	54	54	---	54	---	---	---
108T	Striking parts of body against equipment due to sudden stop of loco	72	70	2	72	---	---	---
109T	Inhalation of or contact with fumes or gases - equipment moving	11	11	---	11	---	---	---
110T	Defective locomotive seat - equipment moving	14	14	---	14	---	---	---
111T	Adjusting locomotive seat - equipment moving	6	6	---	6	---	---	---
112T	Foreign object in eye - equipment moving	353	342	11	353	---	---	---
119T	Other accidents/incidents while operating locomotives - eqp moving	101	99	1	100	---	1	---
SUBTOTAL.....		826	808	17	825	---	1	---
OPERATING RAIL MOTORCARS								
151T	Striking parts of body against equipment - equipment moving	10	3	7	10	---	---	---
152T	Struck by tools or other objects falling - equipment moving	3	1	2	3	---	---	---
153T	Stumbled, slipped, fell or stepped on foreign obj, etc., - eqp mov	4	---	4	4	---	---	---
154T	Unexpected movement of rail motorcar	9	---	9	9	---	---	---
159T	Other accidents/incidents while operating rail motorcars - eqp mov	26	---	26	26	---	---	---
SUBTOTAL.....		52	4	48	52	---	---	---

TABLE S37. CONTINUATION

Occurrence	Total Injured	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
OPERATING HAND BRAKES						
201T Defective equipment - equipment moving	34	33	1	34	---	---
202T Pawl slipping or accidentally knocked out of ratchet - eqp moving	2	2	---	2	---	---
203T Striking body due to movement of equipment	74	73	---	73	---	1
205T Caught between parts of equipment or lading - equipment moving	14	14	---	14	---	---
206T Brake chains or bolts, breaking or giving way - equipment moving	8	8	---	8	---	---
207T Losing hold, slipping, or falling - equipment moving	64	62	2	64	---	---
208T Caught hand or fingers in spinning brake wheel - equipment moving	8	8	---	8	---	---
209T Other accidents/incidents while operating hand brakes - eqp moving	127	119	8	127	---	---
SUBTOTAL.....	331	319	11	330	---	1
OPERATING SWITCHES						
304T Struck by moving on-track equipment	11	10	1	11	---	---
306T Lining switches, no defects, eqp moving	1	1	---	1	---	---
309T Other accidents/incidents while operating switches - equipment mov	59	58	1	59	---	---
SUBTOTAL.....	71	69	2	71	---	---
CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS						
401T Persons on top locos/cars contacting fixed objects - equipment mov	17	17	---	17	---	---
402T Persons on side/end of locos/cars contacting fixed objects - eqp mov	185	183	1	184	1	---
409T Persons on loco/car coming in contact with fixed obj(other)-eqp mov	71	67	3	70	---	1
SUBTOTAL.....	273	267	4	271	1	1
GETTING ON OR OFF CARS OR LOCOMOTIVES						
501T Slip/fell due to lost/missed hold of grabiron, handhold, etc.-eqp mov	198	182	5	187	---	11
502T Slip/fell due to losing/missing footing on step, stirrup, etc.-eqp mov	397	377	10	387	1	8
503T Stepping or tripping on parts of track in place - equipment moving	135	134	1	135	---	---
504T Stepping or tripping on foreign material or irreg surface - eqp mov	811	790	21	811	---	---
505T Slipping on ice or snow on ground - equipment moving	121	115	5	120	---	1
506T Slipping on ice/snow on cars or locomotives - equipment moving	41	40	1	41	---	---
507T Falling, slipping, tripping, not elsewhere classified - eqp moving	218	182	7	189	2	6
508T Slipping/falling while boarding/alighting fm passenger eqp (moving)	28	9	---	9	18	1
510T Striking body or falling due to sudden movement of equipment	91	80	9	89	2	---
511T Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp mov	140	133	6	139	1	---
513T Jumping from equipment - equipment moving	185	149	10	159	1	16
514T Defective equipment - equipment moving	44	44	---	44	---	---
519T Other acc/inc while getting on or off cars or locos - equipment mov	404	366	16	382	1	19
SUBTOTAL.....	2,813	2,601	91	2,692	2	77

TABLE S37. CONTINUATION

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
COLLISIONS, DERAILMENTS, PUBLIC RAIL-HWY CROSSING, ETC.(<= \$2,900)								
601T Casualty resulting fm a collision which did not satisfy \$ threshold	210	186	6	192	---	13	4	1
602T Casualty resulting fm a derailment which did not satisfy \$ threshold	153	121	27	148	---	2	3	---
603T Casualty resulting fm oth than Rail Equip A/I(not at rail-hwy X-ing)	25	12	4	16	---	1	1	7
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	3,841	73	17	90	---	2	3,553	196
SUBTOTAL.....	4,229	392	54	446	---	18	3,561	204
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT PUBLIC X-INGS)								
701T Standing, walking or running on or along track - equipment moving	169	45	5	50	---	---	8	111
702T Crossing track at private rail-highway crossing - equipment moving	196	10	9	19	4	---	170	3
703T Crossing track not at a crossing - equipment moving	64	4	5	9	---	---	4	51
704T While on public thoroughfare - equipment moving	2	---	1	1	---	---	1	---
705T On bridges or trestles - equipment moving	16	---	2	2	---	---	1	13
706T Sitting or lying on track or near track, not in clear - eqp moving	116	2	---	2	---	---	---	114
707T While working on or along track - equipment moving	66	37	19	56	1	---	6	3
708T Passing over, through, or under cars - equipment moving	59	1	---	1	---	---	---	58
709T Struck by or ran into locos/cars (not at public X-ing),misc-eqp mov	63	9	---	9	---	---	12	42
SUBTOTAL.....	751	108	41	149	5	---	202	395
SERVICING OR MAINTENANCE OF EQUIPMENT								
802T Crossing over, under, or between locos or cars - equipment moving	13	1	12	13	---	---	---	---
803T Striking or being struck by eqp, structures, or material-eqp mov	105	4	101	105	---	---	---	---
804T Use of hand tools, eqp moving	1	1	---	1	---	---	---	---
813T Loading and unloading materials - equipment moving	1	---	1	1	---	---	---	---
814T Handling material by hand - moving ontrack equipment	8	---	8	8	---	---	---	---
815T Moving equipment for repairs	52	---	52	52	---	---	---	---
823T Burned or irritated by hot,corrosive, or toxic sub, eqp mov	2	---	2	2	---	---	---	---
825T Other acc/inc while servicing or maintaining eqp-eqp moving	46	2	44	46	---	---	---	---
SUBTOTAL.....	228	8	220	228	---	---	---	---
MAINTENANCE OF WAY AND STRUCTURES								
852T Crossing over, under, or between locos or cars-eqp moving	6	---	6	6	---	---	---	---
853T Striking or being-struck by eqp, structures, or material-eqp mov	174	1	173	174	---	---	---	---
874T Stumbling, slipping, falling, caught, N.O.C. - equipment moving	7	3	4	7	---	---	---	---
878T Load/unload ties, sw, timbers, ties plates and fast, eqp mov	1	---	1	1	---	---	---	---
889T Other acc/inc while maintaining way and structures-eqp moving	63	1	62	63	---	---	---	---
SUBTOTAL.....	251	5	246	251	---	---	---	---
FREIGHT, BAGGAGE, EXPRESS OR MAIL								
901T Handling freight, baggage, express or mail-eqp moving	15	8	6	14	---	1	---	---
902T Struck or caught by shifted lading-eqp moving	4	4	---	4	---	---	---	---
903T Tripping over, or struck by falling baggage in	6	3	1	4	---	2	---	---



TABLE S37. CONTINUATION

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
FREIGHT, BAGGAGE, EXPRESS OR MAIL (CONT.)							
passenger car-eqp mov							
904T Other acc/inc involving freight, baggage, express, or mail - eqp mov	10	5	4	9	---	---	1
SUBTOTAL.....	35	20	11	31	---	3	1
WINDOWS, DOORS, ETC							
908T Clo/opn frt/bag car doors, exc plug type car doors, def eqp-eqp mov	4	2	2	4	---	---	---
909T Clo/opn frt/bag car doors, exc plug type car doors, no def-eqp mov	3	1	2	3	---	---	---
912T Closing or opening coach trap doors-equipment moving	13	12	1	13	---	---	---
913T Interior doors-equipment moving	60	26	7	33	---	27	---
914T Opening or closing locomotive doors-equipment moving	60	60	---	60	---	---	---
915T Opening or closing locomotive windows-equipment moving	19	17	2	19	---	---	---
916T Opening or closing caboose doors-equipment moving	28	27	1	28	---	---	---
917T Opening or closing caboose windows-equipment moving	6	6	---	6	---	---	---
918T Opening and closing other windows-equipment moving	5	2	---	2	---	3	---
919T Other accidents/incidents involving windows or doors-eqp mov	93	59	20	79	---	13	1
SUBTOTAL.....	291	212	35	247	---	43	1
PASSENGER CAR DOORS							
920T Caught by side doors while entering coach-equipment moving	3	2	---	2	---	1	---
921T Caught by side doors while exiting coach-equipment moving	1	---	---	---	---	1	---
922T Dragged by train while caught in side doors, entering coach	1	---	---	---	---	1	---
923T Dragged by train while caught in side doors, exiting coach	1	1	---	1	---	---	---
925T Struck by side doors while exiting coach-equipment moving	1	---	1	1	---	---	---
927T Striking side door while exiting coach-equipment moving	1	1	---	1	---	---	---
SUBTOTAL.....	8	4	1	5	---	3	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED							
930T Stumbling/slipping, etc. on snow or ice - equipment moving	68	65	3	68	---	---	---
931T Stumbling/slipping, etc. on foreign mat./irregular surface-eqp mov	184	163	13	176	1	6	1
932T Stumbling/slipping, etc. on parts of track in place-equipment moving	29	26	2	28	---	---	1
933T Slipping, caught, etc. on stairs, ramps, platforms - eqp mov	1	---	---	---	---	1	---
934T Slip/fall, etc. between loco/car and other cars and struct-eqp mov	29	15	5	20	---	4	1
935T From bridges of trestles-equipment moving	3	2	1	3	---	---	---
936T From structures other than bridges or trestles-equipment moving	3	1	---	1	2	---	---
937T Into depressions - equipment moving	23	22	1	23	---	---	---
938T While on locomotive or car-equipment moving	425	272	35	307	2	103	3
939T Other, stumbling, slipping, falling, caught, etc. - equipment moving	116	65	24	89	1	20	3
SUBTOTAL.....	881	631	84	715	6	134	8

TABLE S37. CONTINUATION

Occurrence	Total Injured	...Employees On Duty... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.								
940T Foreign object in eye-equipment moving	1,172	1,124	41	1,165	---	5	2	---
941T Struck by flying of falling object (except assaults)-eqp mov	110	76	16	92	---	9	7	2
942T Electrical flash, shock, or burn-equipment moving	9	5	---	5	---	---	---	4
943T Fire or explosion of fusees or torpedoes-equipment moving	8	7	1	8	---	---	---	---
944T Other fire or explosion-equipment moving	10	9	1	10	---	---	---	---
945T Burned by hot or corrosive substances-equipment moving	101	80	13	93	---	7	1	---
946T Inhalation of or contact with fumes or gases-equipment moving	21	20	1	21	---	---	---	---
949T Other A/I resulting from flying/falling objs, burns, etc. - eqp mov	29	14	13	27	---	2	---	---
SUBTOTAL.....	1,460	1,335	86	1,421	---	23	10	6
OPERATION OF ON-TRACK WORK EQUIPMENT								
950T Collision with train or car	21	5	16	21	---	---	---	---
951T Collision with other on-track work equipment	40	1	32	33	7	---	---	---
952T Jumping from equipment in anticipation of a collision	28	10	18	28	---	---	---	---
953T Derailment that does not satisfy monetary threshold	103	5	98	103	---	---	---	---
954T Getting on/off on-track work equipment - equipment moving	14	---	14	14	---	---	---	---
959T Other A/I involving on-track work equipment - equipment moving	102	2	100	102	---	---	---	---
SUBTOTAL.....	308	23	278	301	7	---	---	---
ASSAULT								
960T Struck by thrown or otherwise propelled object,while on loco-eqp mov	157	155	---	155	1	1	---	---
961T Struck by thrown or otherwise propelled object,while no cab-eqp mov	84	82	1	83	---	1	---	---
962T Struck by thrown or otherwise propelled object,while on car-eqp mov	31	18	1	19	---	12	---	---
964T Other assaults to persons on trains-equipment moving	39	30	3	33	---	4	---	2
SUBTOTAL.....	311	285	5	290	1	18	---	2
OTHER OCCURRENCES								
970T Performing rerailling or other clearing operations-equipment moving	16	11	5	16	---	---	---	---
971T Loco or car coming against car placed for loading or unloading	25	10	4	14	---	---	11	---
972T Sudden movement of car, not otherwise classified	195	156	30	186	---	8	1	---
974T Slack action in caboose	610	598	11	609	---	---	1	---
975T Slack action, other	187	174	8	182	---	2	2	1
976T Emergency or severe application of air brakes due to def eqp	28	27	---	27	---	1	---	---
977T Emergency or severe application of air brakes not due to def eqp	112	99	8	107	---	2	3	---
978T Motor vehicle A/I (other than rail highway grade crossing) - eqp std	4	---	3	3	---	---	1	---
980T Horse play - equipment moving	1	---	---	---	---	1	---	---
982T Insect bites, moving	7	7	---	7	---	---	---	---
989T Other accidents/incidents-equipment moving	205	104	70	174	2	20	7	2
SUBTOTAL.....	1,390	1,186	139	1,325	2	34	26	3
GRAND TOTAL.....	15,198	8,950	1,389	10,339	24	307	3,821	707

NOTE: Contractor employees are included with nontrespassers

TABLE S38. ILLNESS IN TRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence	Total Illness	...Employees On Duty...	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
		Trainmen Other	Total			
COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS						
008T Stumbled,slipped,fell,etc. on foreign obj/irreg surface-eqp moving	1	1	---	1	---	---
009T Other acc/inc while coupling/uncoupling cars or locos - equip moving	1	1	---	1	---	---
SUBTOTAL.....	2	2	---	2	---	---
COUPLING/UNCOUPLING AIR OR STEAM HOSE, SAFETY CHAINS ETC.						
052T Uncoupl air hose,struck by hose due to sudden release of air-eqp mov	1	1	---	1	---	---
SUBTOTAL.....	1	1	---	1	---	---
OPERATING LOCOMOTIVES						
109T Inhalation of or contact with fumes or gases - equipment moving	48	48	---	48	---	---
119T Other accidents/incidents while operating locomotives - eqp moving	9	9	---	9	---	---
SUBTOTAL.....	57	57	---	57	---	---
OPERATING RAIL MOTORCARS						
159T Other accidents/incidents while operating rail motorcars - eqp mov	2	1	1	2	---	---
SUBTOTAL.....	2	1	1	2	---	---
OPERATING SWITCHES						
309T Other accidents/incidents while operating switches - equipment mov	2	2	---	2	---	---
SUBTOTAL.....	2	2	---	2	---	---
GETTING ON OR OFF CARS OR LOCOMOTIVES						
519T Other acc/inc while getting on or off cars or locos - equipment mov	2	2	---	2	---	---
SUBTOTAL.....	2	2	---	2	---	---
COLLISIONS, DERAILMENTS, PUBLIC RAIL-HWY CROSSING, ETC.( $\leq$ \$2,900)						
602T Casualty resulting fm a derailment which did not satisfy \$ threshold	1	1	---	1	---	---
609T Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp mov	2	---	---	---	---	2
SUBTOTAL.....	3	1	---	1	---	2
SERVICING OR MAINTENANCE OF EQUIPMENT						
815T Moving equipment for repairs	2	---	2	2	---	---
SUBTOTAL.....	2	---	2	2	---	---
MAINTENANCE OF WAY AND STRUCTURES						
853T Striking or being struck by eqp, structures, or material-eqp mov	2	---	2	2	---	---
889T Other acc/inc while maintaining way and structures-eqp moving	4	---	4	4	---	---
SUBTOTAL.....	6	---	6	6	---	---

TABLE S38. CONTINUATION

Occurrence	Total Illness	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
MAINTENANCE OF WAY AND STRUCTURES (CONT.)						
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED						
938T While on locomotive or car-equipment moving	1	1	---	1	---	---
939T Other, stumbling, slipping, falling, caught, etc. - equipment moving	1	1	---	1	---	---
SUBTOTAL.....	2	2	---	2	---	---
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.						
940T Foreign object in eye-equipment moving	1	---	1	1	---	---
944T Other fire or explosion-equipment moving	1	1	---	1	---	---
945T Burned by hot or corrosive substances-equipment moving	13	13	---	13	---	---
946T Inhalation of or contact with fumes or gases-equipment moving	103	99	2	101	---	1
949T Other A/I resulting from flying/falling objs, burns, etc. - eqp mov	3	3	---	3	---	---
SUBTOTAL.....	121	116	3	119	---	1
OPERATION OF ON-TRACK WORK EQUIPMENT						
959T Other A/I involving on-track work equipment - equipment moving	3	---	3	3	---	---
SUBTOTAL.....	3	---	3	3	---	---
OTHER OCCURRENCES						
989T Other accidents/incidents-equipment moving	13	11	2	13	---	---
SUBTOTAL.....	13	11	2	13	---	---
GRAND TOTAL.....	216	195	17	212	---	3

NOTE: Contractor employees are included with nontrespassers

# 7.5 Casualties in Nontrain Incidents

TABLE 39A. FATALITIES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence		Total Killed	...Employees On Duty... Trainmen Other	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
COLLISIONS, DERAILMENTS, PUBLIC RAIL-HWY CROSSING, ETC.(<= \$2,900)							
609	Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp std	14	---	---	---	13	1
	SUBTOTAL.....	14	---	---	---	13	1
STRUCK BY OR RAN INTO LOCOMOTIVES OR CARS (NOT AT PUBLIC X-INGS)							
703	Crossing track not at a crossing - equipment standing	2	---	---	---	1	1
709	Struck by or ran into locos/cars (not at public X-ing),misc-eqp std	5	---	---	---	---	5
	SUBTOTAL.....	7	---	---	---	1	6
SERVICING OR MAINTENANCE OF EQUIPMENT							
803	Striking or being struck by eqp, structures, or material-eqp std	2	---	1	1	---	---
810	Use of cranes, hoists, derricks, piledrivers, etc.	2	---	2	2	---	---
820	Electrical flash, shock, or burn	2	---	2	2	---	---
824	Stumbling, slipping, falling, caught, not elsewhere classified	1	---	1	1	---	---
825	Other acc/inc while servicing or maintaining eqp-eqp std	2	---	2	2	---	---
	SUBTOTAL.....	9	---	8	8	---	---
MAINTENANCE OF WAY AND STRUCTURES							
860	Use of cranes, hoists, derricks, piledrivers, etc.	1	---	---	---	1	---
864	Handling material by hand	2	---	1	1	---	---
869	Struck by flying or falling object	1	---	1	1	---	---
870	Electrical flash, shock, or burn	1	---	1	1	---	---
875	Use of maintenance of way equipment not elsewhere classified	2	---	2	2	---	---
889	Other acc/inc while maintaining way and structures	1	---	1	1	---	---
	SUBTOTAL.....	8	---	6	6	---	---
FREIGHT, BAGGAGE, EXPRESS OR MAIL							
902	Struck or caught by shifted lading	1	---	---	---	1	---
	SUBTOTAL.....	1	---	---	---	1	---
WINDOWS, DOORS, ETC							
909	Clo/opn frt/bag car doors, exc plug type car doors, no def-eqp std	1	---	---	---	1	---
910	Closing or opening plug type car doors, defective equipment-eqp std	1	---	1	---	---	---
919	Other accidents/incidents involving windows or doors	1	---	---	---	1	---
	SUBTOTAL.....	3	---	1	1	---	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED							
933	Stumbling/slipping, etc. on stairways, ramps or platforms	1	---	---	---	1	---
935	From bridges or trestles	5	1	1	2	---	3
936	From structures other than bridges or trestles	1	---	1	1	---	---
938	While on locomotive or car-equipment standing	2	---	---	---	---	2
939	Other, stumbling, slipping, falling, caught, etc.	2	---	---	1	1	---
	SUBTOTAL.....	11	1	2	3	1	5

TABLE S39A. CONTINUATION

Occurrence		Total Killed	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
			Trainmen	Other	Total			
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.								
941	Struck by flying of falling object (except assaults)	2	---	1	1	---	---	1
942	Electrical flash, shock, or burn	9	---	---	---	1	---	8
944	Other fire or explosion	1	---	---	---	---	---	1
949	Other acc/inc resulting from flying/falling objs, burns, etc.	1	---	---	---	---	---	1
	SUBTOTAL.....	13	---	1	1	1	---	3
ASSAULT								
969	Other assaults to persons not on trains	2	---	2	2	---	---	---
	SUBTOTAL.....	2	---	2	2	---	---	---
OTHER OCCURRENCES								
970	Performing rerailling or other clearing operations	1	---	1	1	---	---	---
978	Motor vehicle acc/inc (other than rail-highway grade crossing)	10	---	7	7	---	---	1
989	Other accidents/incidents	5	---	1	1	---	---	3
	SUBTOTAL.....	16	---	9	9	---	---	4
	GRAND TOTAL.....	84	1	29	30	1	1	29

NOTE: Contractor employees are included with nontrespassers

TABLE 39B. INJURIES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence		Total Injuries	....Employees On Trainmen	Duty.... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passer
<b>A. COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS</b>									
002	Adjusting coupler - equipment standing.....	532	511	20	531	---	---	1	---
004	Adjusting coupler, part of coupler fell striking person-eqp standing.....	113	108	5	113	---	---	---	---
005	Use of uncoupling lever - equipment standing.....	200	188	12	200	---	---	---	---
007	Striking parts of body against equipment - equipment standing.....	83	80	3	83	---	---	---	---
008	Stumbled,slipped,fell,stepped on foreign obj/irreg surface-eqp std.....	176	160	15	175	---	---	1	---
009	Other acc/inc while coupling/uncoupling cars or locos - equip std.....	223	208	15	223	---	---	---	---
	SUBTOTAL.....	1,327	1,255	70	1,325	---	---	2	---
<b>B. COUPLING OR UNCOUPLING AIR OR STEAM HOSE</b>									
052	Uncoupl air hose, struck by hose due to sudden release of air-eqp std.....	110	100	10	110	---	---	---	---
053	Coupling air hose, stk by hose due to sudden release of air - eqp std.....	62	53	9	62	---	---	---	---
054	Stumbled,slipped,fell, or stepped on foreign obj, etc., eqp standing.....	139	107	32	139	---	---	---	---
055	Defective equipment - equipment standing.....	11	10	1	11	---	---	---	---
056	Burned by hot water or steam from hose - equipment standing.....	8	3	5	8	---	---	---	---
057	Opening or closing angle cocks - equipment standing....	101	93	8	101	---	---	---	---
059	Oth A/I while coupl/uncoupl air/steam hose or turn angl cock-eqp std.....	223	187	36	223	---	---	---	---
	SUBTOTAL.....	654	553	101	654	---	---	---	---
<b>C. OPERATING LOCOMOTIVES</b>									
101	Burn or electrical shock - equipment standing.....	20	18	2	20	---	---	---	---
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.....	23	20	3	23	---	---	---	---
104	Stumbled, slipped, fell, stepped on foreign obj, etc., - eqp std.....	105	100	5	105	---	---	---	---
105	Checking, oiling, servicing locomotive, etc. - equipment standing.....	64	55	9	64	---	---	---	---
109	Inhalation of or contact with fumes or gases - equipment standing.....	4	4	---	4	---	---	---	---
110	Defective locomotive seat - equipment standing.....	9	7	2	9	---	---	---	---
111	Adjusting locomotive seat - equipment standing.....	30	29	1	30	---	---	---	---
112	Foreign object in eye - equipment standing.....	72	70	2	72	---	---	---	---
119	Other accidents/incidents while operating locomotives - eqp standing.....	84	80	4	84	---	---	---	---
	SUBTOTAL.....	466	433	33	466	---	---	---	---
<b>D. OPERATING RAIL MOTORCARS</b>									
151	Striking parts of body against equipment - equipment standing.....	10	2	8	10	---	---	---	---
152	Struck by tools or other objects falling - equipment standing.....	3	1	2	3	---	---	---	---
153	Stumbled, slipped, fell or stepped on foreign obj, etc., - eqp std.....	6	---	5	5	1	---	---	---
155	Placing or removing rail motorcar on or off rail.....	163	---	163	163	---	---	---	---
159	Other accidents/incidents while operating rail motorcars - eqp std.....	20	---	20	20	---	---	---	---
	SUBTOTAL.....	202	3	198	201	1	---	---	---
<b>E. OPERATING HAND BRAKES</b>									
201	Defective equipment - equipment standing.....	73	70	3	73	---	---	---	---
202	Pawl slipping or accidentally knocked out of ratchet - eqp standing.....	24	22	2	24	---	---	---	---
203	Striking body not due to movement of equipment.....	54	53	1	54	---	---	---	---
205	Caught between parts of equipment or lading - equipment standing.....	17	14	3	17	---	---	---	---
206	Brake chains or bolts, breaking or giving way - equipment standing.....	26	22	4	26	---	---	---	---
207	Losing hold, slipping, or falling - equipment standing.	135	127	7	134	---	---	1	---
208	Caught hand or fingers in spinning brake wheel - equipment standing.....	43	41	2	43	---	---	---	---
209	Other accidents/incidents while operating hand brakes - eqp standing.....	469	445	23	468	---	---	1	---
	SUBTOTAL.....	841	794	45	839	---	---	2	---

TABLE S39B. CONTINUATION

Occurrence	Total Injuries	....Employees Trainmen	On Duty.... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passer
<b>F. OPERATING SWITCHES</b>								
301 Slipped, tripped or fell due to ice or snow.....	174	158	15	173	1	---	---	---
302 Slipped, tripped or fell not due to ice or snow.....	181	176	5	181	---	---	---	---
303 Parts of body struck or caught by mechanism of switch..	238	211	26	237	---	---	1	---
305 Lining switches, defective equipment.....	322	311	11	322	---	---	---	---
306 Lining switches, no defects.....	1,084	1,014	69	1,083	1	---	---	---
309 Other accidents/incidents while operating switches - equipment std.....	477	441	35	476	1	---	---	---
SUBTOTAL.....	2,476	2,311	161	2,472	3	---	1	---
<b>G. PERSONS ON LOCOS OR CARS COMING IN CONTACT WITH FIXED OBJS</b>								
401 Persons on top locos/cars contacting fixed objects - equipment std.....	4	3	1	4	---	---	---	---
402 Persons on side/end of locos/cars contacting fixed objects - eqp std.....	9	7	2	9	---	---	---	---
409 Persons on loco/car coming in contact with fixed obj(other)-eqp std.....	9	6	3	9	---	---	---	---
SUBTOTAL.....	22	16	6	22	---	---	---	---
<b>H. GETTING ON OR OFF CARS OR LOCOMOTIVES</b>								
501 Slip/fell due to lost/missed hold of grabiron,handhold,etc.-eqp std.....	117	92	20	112	1	---	2	2
502 Slip/fell due to losing/missing footing on step,stirrup,etc.-eqp std.....	541	385	142	527	6	4	4	---
503 Stepping or tripping on parts of track in place - equipment standing.....	102	88	11	99	3	---	---	---
504 Stepping or tripping on foreign material or irreg surface - eqp std.....	776	649	115	764	5	5	2	---
505 Slipping on ice or snow on ground - equipment standing.	128	104	22	126	---	2	---	---
506 Slipping on ice/snow on cars or locomotives - equipment standing.....	100	75	23	98	---	2	---	---
507 Falling, slipping, tripping, not elsewhere classified - eqp std.....	228	158	57	215	3	7	1	2
508 Slipping/falling while boarding/alighting fm passenger eqp(standing).....	141	20	14	34	---	104	3	---
511 Strike/struck by eqp/structures(not bridge/trestle), or mat -eqp std.....	99	74	21	95	---	4	---	---
512 Striking or being struck by bridges or trestles - equipment standing.....	1	1	---	1	---	---	---	---
513 Jumping from equipment - equipment standing.....	47	13	26	39	2	2	2	2
514 Defective equipment - equipment standing.....	32	20	9	29	---	---	3	---
519 Other acc/inc while getting on or off cars or locos - equipment std.....	331	253	66	319	7	2	2	1
SUBTOTAL.....	2,643	1,932	526	2,458	27	132	19	7
<b>I. RAIL EQUIPMENT AND RAIL-HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT</b>								
609 Casualty at public rail-hwy X-ing (not rptd on form 6180-54)-eqp std.....	160	---	---	---	---	---	152	8
SUBTOTAL.....	160	---	---	---	---	---	152	8
<b>J. STRUCK BY/RAN INTO LOCOS OR CARS NOT AT HWY GRADE CROSSING</b>								
701 Standing, walking or running on or along track - equipment standing.....	7	3	1	4	---	---	1	2
703 Crossing track not at a crossing - equipment standing..	4	---	---	---	---	---	1	3
708 Passing over, through, or under cars - equipment standing.....	5	3	---	3	---	---	---	2
709 Struck by or ran into locos/cars (not at public X-ing),misc-eqp std.....	7	1	1	2	---	---	1	4
SUBTOTAL.....	23	7	2	9	---	---	3	11
<b>K. SERVICING OR MAINTENANCE OF EQUIPMENT</b>								
802 Crossing over, under, or between locos or cars - equipment standing.....	130	4	123	127	3	---	---	---
803 Striking or being struck by eqp, structures, or material-eqp std.....	1,282	15	1,265	1,280	1	---	1	---
804 Use of hand tools.....	2,097	11	2,084	2,095	1	---	1	---
805 Use of portable power tools.....	374	---	373	373	---	---	1	---
806 Use of welding equipment.....	458	---	457	457	---	---	1	---



TABLE S39B. CONTINUATION

Occurrence	Total Injuries	....Employees On Trainmen	Duty.... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passer
807 Use of oxygen-acetylene, natural gas cutting equipment..	330	---	330	330	---	---	---	---
808 Use of grinding equipment.....	124	---	124	124	---	---	---	---
809 Use of scaffolds, ladders, etc.....	172	1	171	172	---	---	---	---
810 Use of cranes, hoists, derricks, piledrivers, etc.....	316	---	315	315	---	---	1	---
811 Use of lift trucks and other portable material handling eqp.....	287	---	287	287	---	---	---	---
812 Use of shop machinery not elsewhere classified.....	248	---	248	248	---	---	---	---
813 Loading and unloading materials.....	425	2	423	425	---	---	---	---
814 Handling material by hand.....	2,548	12	2,534	2,546	1	---	1	---
816 Inhalation of or contact with fumes or gases.....	13	---	13	13	---	---	---	---
817 Foreign object in eye, using eye protection.....	847	2	844	846	1	---	---	---
818 Foreign object in eye, not using eye protection.....	765	9	748	757	8	---	---	---
819 Struck by flying of falling object.....	918	8	906	914	3	---	1	---
820 Electrical flash, shock, or burn.....	172	2	169	171	---	---	1	---
821 Fire or explosion of fuses or torpedoes.....	4	1	2	3	1	---	---	---
822 Other fire or explosion.....	68	1	67	68	---	---	---	---
823 Burned or irritated by hot, corrosive, or toxic substances.....	413	4	409	413	---	---	---	---
824 Stumbling, slipping, falling, caught, not elsewhere classified.....	2,567	13	2,455	2,468	98	---	1	---
825 Other acc/inc while servicing or maintaining eqp-eqp std.....	2,061	13	2,035	2,048	5	---	8	---
SUBTOTAL.....	16,619	98	16,382	16,480	122	---	17	---
L. MAINTENANCE OF WAY AND STRUCTURES								
852 Crossing over, under, or between locos or cars-eqp std.	21	---	20	20	1	---	---	---
853 Striking or being struck by eqp, structures, or material-eqp std.....	890	4	882	886	3	---	1	---
854 Use of hand tools.....	2,493	7	2,478	2,485	2	---	6	---
855 Use of portable power tools.....	420	---	420	420	---	---	---	---
856 Use of welding equipment.....	123	---	118	118	---	---	5	---
857 Use of oxygen-acetylene, natural gas cutting equipment.	84	---	84	84	---	---	---	---
858 Use of grinding equipment.....	118	---	118	118	---	---	---	---
859 Use of scaffolds, ladders, etc.....	105	1	100	101	1	---	3	---
860 Use of cranes, hoists, derricks, piledrivers, etc.....	249	---	248	248	---	---	1	---
861 Use of lift trucks and other portable material handling eqp.....	133	---	131	131	---	---	2	---
862 Use of shop machinery not elsewhere classified.....	57	---	57	57	---	---	---	---
863 Loading and unloading materials.....	1,190	4	1,184	1,188	1	---	1	---
864 Handling material by hand.....	2,071	10	2,053	2,063	1	---	7	---
866 Inhalation of or contact with fumes or gases.....	12	---	12	12	---	---	---	---
867 Foreign object in eye, using eye protection.....	284	5	277	282	---	---	2	---
868 Foreign object in eye, not using eye protection.....	555	2	546	548	3	---	4	---
869 Struck by flying of falling object.....	1,169	3	1,161	1,164	2	---	3	---
870 Electrical flash, shock, or burn.....	43	---	42	42	---	---	1	---
871 Fire or explosion of fuses or torpedoes.....	5	---	5	5	---	---	---	---
872 Other fire or explosion.....	55	2	49	51	3	---	1	---
873 Burned or irritated by hot, corrosive or toxic substances.....	161	2	158	160	1	---	---	---
874 Stumbling, slipping, falling, caught, not elsewhere classified.....	2,288	8	2,213	2,221	61	---	6	---
875 Use of maintenance of way equipment not elsewhere classified.....	311	1	309	310	---	---	1	---
876 Inset/remov ties,switch timbers,tie plates,etc.by use of hand tools.....	2,475	---	2,474	2,474	1	---	---	---
877 Inset/remov ties,switch tim,tie plates,etc.by use of por power tools.....	290	---	290	290	---	---	---	---
878 Loading/unloading ties, switch timbers, tie plates and fastenings.....	1,162	3	1,155	1,158	2	---	2	---
879 Handling rail by use of power tools.....	162	---	161	161	---	---	1	---
880 Handling rail by use of hand tools.....	689	1	688	689	---	---	---	---
889 Other acc/inc while maintaining way and structures.....	705	2	695	697	7	---	1	---
SUBTOTAL.....	18,320	55	18,128	18,183	89	---	48	---
M. MISCELLANEOUS								
1. FREIGHT, BAGGAGE, EXPRESS, OR MAIL								
901 Handling freight, baggage, express or mail.....	159	5	153	158	---	---	1	---
902 Struck or caught by shifted lading.....	10	2	7	9	---	---	1	---
903 Tripping over, or struck by falling baggage in passenger car-eqp std.....	5	1	4	5	---	---	---	---
904 Other accident/incident involving freight, baggage, express, or mail.....	57	2	53	55	---	2	---	---
SUBTOTAL.....	231	10	217	227	---	2	2	---

TABLE S39B. CONTINUATION

Occurrence	Total Injuries	.....Employees Trainmen	On Duty..... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passer
<b>2. WINDOWS, DOORS, ETC.</b>								
908 Clo/opn frt/bag car doors, exc plug type car doors, def eqp-eqp std.....	75	10	63	73	---	---	1	1
909 Clo/opn frt/bag car doors, exc plug type car doors, no def-eqp std.....	135	19	112	131	---	---	4	---
910 Closing or opening plug type car doors, defective equipment-eqp std.....	41	5	32	37	---	---	4	---
911 Closing or opening plug type car doors, no defects-equipment std.....	74	8	65	73	---	---	1	---
912 Closing or opening coach trap doors-equipment standing.....	53	37	14	51	---	2	---	---
913 Interior doors-equipment standing.....	60	12	38	50	---	8	2	---
914 Opening or closing locomotive doors-equipment standing.....	133	103	29	132	1	---	---	---
915 Opening or closing locomotive windows-equipment standing.....	42	34	8	42	---	---	---	---
916 Opening or closing caboose doors-equipment standing.....	23	19	4	23	---	---	---	---
918 Opening and closing other windows.....	20	7	13	20	---	---	---	---
919 Other accidents/incidents involving windows or doors...	332	99	208	307	12	10	3	---
SUBTOTAL.....	988	353	586	939	13	20	15	1
<b>3. PASSENGER CAR DOORS</b>								
920 Caught by side doors while entering coach-equipment standing.....	10	2	---	2	---	8	---	---
921 Caught by side doors while exiting coach-equipment standing.....	2	1	---	1	---	1	---	---
924 Struck by side doors while entering coach-equipment standing.....	5	2	3	5	---	---	---	---
925 Struck by side doors while exiting coach-equipment standing.....	2	---	1	1	---	1	---	---
926 Striking side door while entering coach-equipment standing.....	2	1	---	1	---	1	---	---
SUBTOTAL.....	21	6	4	10	---	11	---	---
<b>4. STUMBLING, SLIPPING, FALLING, CAUGHT, NOC</b>								
930 Stumbling/slipping, etc. on snow or ice.....	1,177	491	521	1,012	136	5	23	1
931 Stumbling/slipping, etc. on foreign material or irregular surface.....	1,905	1,101	673	1,774	91	9	30	1
932 Stumbling/slipping, etc. on parts of track in place....	361	201	137	338	16	2	2	3
933 Stumbling/slipping, etc. on stairways, ramps or platforms.....	736	106	364	470	88	55	121	2
934 Slip/fall, etc. between loco/car and other cars and struct-eqp std.....	87	61	18	79	2	5	1	---
935 From bridges or trestles.....	58	14	35	49	2	---	3	4
936 From structures other than bridges or trestles.....	76	10	61	71	1	---	2	2
937 Into depressions.....	311	151	146	297	8	---	6	---
938 While on locomotive or car-equipment standing.....	316	140	121	261	7	18	26	4
939 Other, stumbling, slipping, falling, caught, etc.....	718	223	402	625	48	11	31	3
SUBTOTAL.....	5,745	2,498	2,478	4,976	399	105	245	20
<b>5. FLYING OR FALLING OBJECTS, BURNS AND SIMILAR CAUSES, NOC</b>								
940 Foreign object in eye.....	1,077	760	293	1,053	16	1	7	---
941 Struck by flying or falling object (except assaults)...	385	95	266	361	3	2	18	1
942 Electrical flash, shock, or burn.....	43	10	18	28	---	---	---	15
943 Fire or explosion of fuses or torpedoes.....	40	37	3	40	---	---	---	---
944 Other fire or explosion.....	41	16	16	32	7	---	1	1
945 Burned by hot or corrosive substances.....	62	39	23	62	---	---	---	---
946 Inhalation of or contact with fumes or gases.....	25	13	11	24	---	---	1	---
949 Other acc/inc resulting from flying/falling objs, burns, etc.....	101	37	60	97	1	2	---	1
SUBTOTAL.....	1,774	1,007	690	1,697	27	5	27	18
<b>6. OPERATION OF ON-TRACK WORK EQUIPMENT</b>								
954 Getting on/off on-track work equipment - equipment standing.....	65	---	65	65	---	---	---	---
959 Other A/I involving on-track work equipment - equipment standing.....	141	1	140	141	---	---	---	---
SUBTOTAL.....	206	1	205	206	---	---	---	---
<b>7. ASSAULT</b>								
960 Struck by thrown or otherwise propelled object,while on loco-eqp std.....	9	7	2	9	---	---	---	---
961 Struck by thrown or otherwise propelled object,while on								

TABLE S39B. CONTINUATION

Occurrence	Total Injuries	....Employees On Duty..... Trainmen	Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passer
cab-eqp std.....	5	4	1	5	---	---	---	---
962 Struck by thrown or otherwise propelled object, while on car-eqp std.....	9	5	1	6	---	3	---	---
963 Struck by thrown or otherwise propelled object, not on on-track eqp.....	31	12	17	29	---	---	2	---
964 Other assaults to persons on trains - equipment standing.....	34	21	10	31	2	1	---	---
969 Other assaults to persons not on trains.....	213	30	162	192	14	---	5	2
SUBTOTAL.....	301	79	193	272	16	4	7	2
8. OTHER CAUSES								
970 Performing rerailling or other clearing operations.....	194	32	158	190	---	---	4	---
978 Motor vehicle acc/inc (other than rail-highway grade crossing).....	1,037	215	745	960	57	---	13	7
979 Servicing and maintenance of highway vehicles.....	49	1	47	48	---	---	1	---
980 Horseplay.....	40	4	29	33	4	2	---	1
981 Animal bites, including snake bites.....	31	8	21	29	1	---	1	---
982 Insect bites.....	474	129	329	458	12	4	---	---
989 Other accidents/incidents.....	962	288	604	892	40	5	15	10
SUBTOTAL.....	2,787	677	1,933	2,610	114	11	34	18
SUBTOTAL.....	12,053	4,631	6,306	10,937	569	158	330	59
GRAND TOTAL.....	55,806	12,088	41,958	54,046	811	290	574	85

TABLE 39C. ILLNESSES IN NONTRAIN INCIDENTS BY SPECIFIC OCCURRENCE AND TYPE OF PERSON, 1979

Occurrence		Total Illness	...Employees On Duty...		Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
			Trainmen	Other	Total			
COUPLING AND UNCOUPLING LOCOMOTIVES OR CARS								
002	Adjusting coupler - equipment standing	1	1	---	1	---	---	---
007	Striking parts of body against equipment - equipment standing	1	1	---	1	---	---	---
	SUBTOTAL.....	2	2	---	2	---	---	---
OPERATING LOCOMOTIVES								
101	Burn or electrical shock - equipment standing	1	1	---	1	---	---	---
102	Striking parts of body against equipment, moving about loco-eqp std	1	1	---	1	---	---	---
105	Checking, oiling, servicing locomotive, etc. - equipment standing	3	3	---	3	---	---	---
109	Inhalation of or contact with fumes or gases - equipment standing	34	34	---	34	---	---	---
119	Other accidents/incidents while operating locomotives - eqp standing	6	5	1	6	---	---	---
	SUBTOTAL.....	45	44	1	45	---	---	---
OPERATING RAIL MOTORCARS								
159	Other accidents/incidents while operating rail motorcars - eqp std	1	---	1	1	---	---	---
	SUBTOTAL.....	1	---	1	1	---	---	---
OPERATING HAND BRAKES								
209	Other accidents/incidents while operating hand brakes - eqp standing	1	1	---	1	---	---	---
	SUBTOTAL.....	1	1	---	1	---	---	---
OPERATING SWITCHES								
303	Parts of body struck or caught by mechanism of switch	1	1	---	1	---	---	---
306	Lining switches, no defects	4	4	---	4	---	---	---
309	Other accidents/incidents while operating switches - equipment std	4	4	---	4	---	---	---
	SUBTOTAL.....	9	9	---	9	---	---	---
CONTACTING FIXED OBJECTS WHILE ON LOCOMOTIVES OR CARS								
409	Persons on loco/car coming in contact with fixed obj(other)-eqp std	1	1	---	1	---	---	---
	SUBTOTAL.....	1	1	---	1	---	---	---
GETTING ON OR OFF CARS OR LOCOMOTIVES								
501	Slip/fell due to lost/missed hold of grabiron, handhold, etc.-eqp std	1	1	---	1	---	---	---
502	Slip/fell due to losing/missing footing on step, stirrup, etc.-eqp std	1	---	---	---	1	---	---
506	Slipping on ice/snow on cars or locomotives - equipment standing	1	---	1	1	---	---	---
519	Other acc/inc while getting on or off cars or locos - equipment std	2	2	---	2	---	---	---
	SUBTOTAL.....	5	3	1	4	1	---	---

TABLE S39C. CONTINUATION

Occurrence	Total Illness	...Employees Trainmen	On Duty... Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
SERVICING OR MAINTENANCE OF EQUIPMENT								
802 Crossing over, under, or between locos or cars - equipment standing	1	---	1	1	---	---	---	---
804 Use of hand tools	11	---	11	11	---	---	---	---
805 Use of portable power tools	3	---	3	3	---	---	---	---
806 Use of welding equipment	62	---	62	62	---	---	---	---
807 Use of oxygen-acetylene, natural gas cutting equipment	3	---	3	3	---	---	---	---
808 Use of grinding equipment	1	---	1	1	---	---	---	---
809 Use of scaffolds, ladders, etc.	1	---	1	1	---	---	---	---
810 Use of cranes, hoists, derricks, piledrivers, etc.	1	---	1	1	---	---	---	---
811 Use of lift trucks and other portable material handling eqp	2	---	2	2	---	---	---	---
812 Use of shop machinery not elsewhere classified	2	---	2	2	---	---	---	---
813 Loading and unloading materials	1	---	1	1	---	---	---	---
814 Handling material by hand	14	---	14	14	---	---	---	---
816 Inhalation of or contact with fumes or gases	59	1	58	59	---	---	---	---
818 Foreign object in eye, not using eye protection	3	---	3	3	---	---	---	---
819 Struck by flying of falling object	1	---	1	1	---	---	---	---
820 Electrical flash, shock, or burn	54	---	54	54	---	---	---	---
822 Other fire or explosion	3	---	3	3	---	---	---	---
823 Burned or irritated by hot, corrosive, or toxic substances	108	1	107	108	---	---	---	---
824 Stumbling, slipping, falling, caught, not elsewhere classified	4	---	4	4	---	---	---	---
825 Other acc/inc while servicing or maintaining eqp-eqp std	102	2	100	102	---	---	---	---
SUBTOTAL.....	436	4	432	436	---	---	---	---
MAINTENANCE OF WAY AND STRUCTURES								
853 Striking or being struck by eqp, structures, or material-eqp std	4	1	3	4	---	---	---	---
854 Use of hand tools	41	---	41	41	---	---	---	---
855 Use of portable power tools	5	---	5	5	---	---	---	---
856 Use of welding equipment	33	---	33	33	---	---	---	---
857 Use of oxygen-acetylene, natural gas cutting equipment	1	---	1	1	---	---	---	---
858 Use of grinding equipment	2	---	2	2	---	---	---	---
860 Use of cranes, hoists, derricks, piledrivers, etc.	2	---	2	2	---	---	---	---
862 Use of shop machinery not elsewhere classified	1	---	1	1	---	---	---	---
863 Loading and unloading materials	9	---	9	9	---	---	---	---
864 Handling material by hand	48	---	48	48	---	---	---	---
866 Inhalation of or contact with fumes or gases	49	---	46	46	3	---	---	---
868 Foreign object in eye, not using eye protection	5	---	5	5	---	---	---	---
870 Electrical flash, shock, or burn	30	---	30	30	---	---	---	---
872 Other fire or explosion	3	---	3	3	---	---	---	---
873 Burned or irritated by hot, corrosive or toxic substances	75	---	75	75	---	---	---	---
874 Stumbling, slipping, falling, caught, not elsewhere classified	2	---	2	2	---	---	---	---
875 Use of maintenance of way equipment not elsewhere classified	10	---	10	10	---	---	---	---
876 Inser/remov ties, switch timbers, tie plates, etc. by use of hand tools	45	---	45	45	---	---	---	---
877 Inser/remov ties, switch tim, tie plates, etc. by use of por power tools	18	---	18	18	---	---	---	---
878 Loading/unloading ties, switch timbers, tie plates and fastenings	48	---	48	48	---	---	---	---
879 Handling rail by use of power tools	1	---	1	1	---	---	---	---
880 Handling rail by use of hand tools	4	---	4	4	---	---	---	---
889 Other acc/inc while maintaining way and structures	272	1	253	254	18	---	---	---
SUBTOTAL.....	708	2	685	687	21	---	---	---
FREIGHT, BAGGAGE, EXPRESS OR MAIL								
901 Handling freight, baggage, express or mail	1	1	---	1	---	---	---	---
SUBTOTAL.....	1	1	---	1	---	---	---	---

TABLE S39C. CONTINUATION

Occurrence		Total Illness	...Employees On Duty... Trainmen Other	Total	Emp Not On Duty	Passen- gers	Non Tres- passers	Tres- passers
WINDOWS, DOORS, ETC								
919	Other accidents/incidents involving windows or doors	2	---	2	---	---	---	---
	SUBTOTAL.....	2	---	2	---	---	---	---
STUMBLING, SLIPPING, FALLING, CAUGHT, NOT ELSEWHERE CLASSIFIED								
930	Stumbling/slipping, etc. on snow or ice	1	---	1	---	---	---	---
933	Stumbling/slipping, etc. on stairways, ramps or platforms	2	---	---	2	---	---	---
939	Other, stumbling, slipping, falling, caught, etc.	7	4	3	---	---	---	---
	SUBTOTAL.....	10	4	4	2	---	---	---
FLYING OR FALLING OBJECTS, BURNS AND SIMILAR OCCURRENCES, N.O.C.								
943	Fire or explosion of fusees or torpedoes	2	1	1	---	---	---	---
944	Other fire or explosion	6	4	2	---	---	---	---
945	Burned by hot or corrosive substances	6	4	2	---	---	---	---
946	Inhalation of or contact with fumes or gases	187	100	69	1	---	17	---
949	Other acc/inc resulting from flying/falling objs, burns, etc.	18	4	14	---	---	---	---
	SUBTOTAL.....	219	113	88	1	---	17	---
ASSAULT								
964	Other assaults to persons on trains - equipment standing	1	1	---	---	---	---	---
	SUBTOTAL.....	1	1	---	---	---	---	---
OTHER OCCURRENCES								
970	Performing rerailling or other clearing operations	8	---	8	---	---	---	---
978	Motor vehicle acc/inc (other than rail-highway grade crossing)	2	1	1	---	---	---	---
980	Horseplay	3	---	3	---	---	---	---
981	Animal bites, including snake bites	1	---	1	---	---	---	---
982	Insect bites	76	24	52	---	---	---	---
989	Other accidents/incidents	100	37	60	2	1	---	---
	SUBTOTAL.....	190	62	125	2	1	---	---
	GRAND TOTAL.....	1,631	247	1,339	27	1	17	---

NOTE: Contractor employees are included with nontrespassers

## **APPENDIX A: REPORTING FORMS**

DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION <b>RAILROAD INJURY AND ILLNESS SUMMARY</b>										<i>Form Approved</i> OMB No. 04-R4009							
1. NAME OF REPORTING RAILROAD					2. ALPHABETIC CODE		3. REPORT MONTH & YEAR		4. STATE ALPHABETIC CODE		5. COUNTY						
NAME OF REPORTING OFFICER										OFFICIAL TITLE							
ADDRESS										TELEPHONE (Area Code) (Number)							
6. I, _____, being first duly sworn, do say upon my oath that I (Name of Affiant) am _____, of the railroad aforesaid and as such officer of the said railroad it is my duty to have supervision (Title of Office held by affiant) over the record of reportable incidents arising from the operation of the said railroad, and that I have caused to be compiled from the said record and to be carefully examined the annexed report of such incidents occurring during the month named at the head of this sheet; and that the said report is true and complete to the best of my knowledge and belief.  Subscribed and sworn to before me, a notary public in and for the State and County aforesaid, this _____ day of _____, 19 _____.  (Use an im- [L.S] pression seal) _____ (Notary Public) _____ (Signature of affiant)																	
7. MILES RUN DURING MONTH																	
A. LOCOMOTIVE TRAIN MILES				B. MOTOR TRAIN MILES				C. YARD SWITCHING MILES		D. TOTAL							
8.																	
A. EMPLOYEE MANHOURS WORKED				B. PASSENGER MILES OPERATED				C. NUMBER OF PASSENGERS TRANSPORTED									
TOTAL TRAIN ACCIDENTS				TOTAL FRA FORMS 6180-55A				TOTAL FRA FORMS 6180-54		TOTAL FRA FORMS 6180-57							
SECTION A—RECAPITULATION OF ALL CASUALTIES INCLUDING HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES								CLASS OF PERSON FOR SECTIONS A AND B		SECTION B—RECAPITULATION OF ALL HIGHWAY GRADE CROSSING ACCIDENT/INCIDENT CASUALTIES							
TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS		TOTAL		1. Employees on duty 2. Employees not on duty 3. Passengers on trains 4. Other nontrespassers 5. Trespassers (all classes) 6. Contractor Employees 7. GRAND TOTAL	TRAIN ACCIDENTS		TRAIN INCIDENTS		NONTRAIN INCIDENTS		TOTAL		
Kid	Inj	Kid	Inj	Kid	Inj	Kid	Inj		Kid	Inj	Kid	Inj	Kid	Inj	Kid	Inj	
SECTION C—MEMORANDUM—SUBSEQUENT FATALITIES DEVELOPED FROM REPORTED CASUALTIES																	
LINE NO.	ACCIDENT/INCIDENT NUMBER				TYPE PERSON OR JOB CODE				DATE OF INJURY				DATE OF DEATH		STATE		
1.																	
2.																	
3.																	
4.																	

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

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



SHEET        OF

## RAIL EQUIPMENT ACCIDENT/INCIDENT REPORT

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

RAIL-HIGHWAY GRADE CROSSING  
ACCIDENT/INCIDENT REPORT

1. NAME OF REPORTING RAILROAD		Amtrak <input type="checkbox"/> Autotrain <input type="checkbox"/>	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"/>
<b>LOCATION</b>				
7. NEAREST RAILROAD STATION			8. COUNTY	9. STATE (two letter code) CODE
10. CITY (if in a city)			11. HIGHWAY NAME OR NUMBER (if private crossing, so state)	
<b>ACCIDENT/INCIDENT SITUATION</b>				
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) 3. Train (standing) 4. Car(s) (moving) 5. Car(s) (standing) 6. Light loco(s) (moving) 7. Light loco(s) (standing) 8. Other (specify)	CODE	
13. SPEED (estimated mph at impact)	14. DIRECTION (geographical) 1. North      3. East 2. South      4. West	CODE	17. POSITION OF CAR/UNIT IN TRAIN CODE	
15. POSITION 1. Stalled on crossing 2. Stopped on crossing 3. Moving over crossing	CODE	18. CIRCUMSTANCE 1. Train struck highway user 2. Train struck by highway user		CODE
19. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials?			1. Highway user      2. Rail equipment      3. Both      4. Neither CODE	
<b>ENVIRONMENT</b>				
20. TEMPERATURE (specify, if minus) °F	21. VISIBILITY (single entry) 1. Dawn      3. Dusk 2. Day      4. Dark	CODE	22. WEATHER (single entry) CODE 1. Clear      3. Rain      5. Sleet 2. Cloudy      4. Fog      6. Snow	
<b>TRAIN AND TRACK</b>				
23. TYPE OF TRAIN 1. Freight      3. Mixed      5. Yard/Switching 2. Passenger      4. Work      6. Light Locomotive(s)	CODE	24. TRACK TYPE USED BY TRAIN INVOLVED CODE 1. Main      3. Siding 2. Yard      4. Industry		
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) MPH      Est      Recorded	30. TIME TABLE DIRECTION CODE 1. North      3. East 2. South      4. West		
<b>CROSSING WARNING</b>				
31. TYPE (place X in appropriate box(es)) 1. <input type="checkbox"/> Gates      5. <input type="checkbox"/> Hwy. Traffic Signals      9. <input type="checkbox"/> Watchman 2. <input type="checkbox"/> Cantilever FLS      6. <input type="checkbox"/> Audible      10. <input type="checkbox"/> Flagged by crew 3. <input type="checkbox"/> Standard FLS      7. <input type="checkbox"/> Crossbucks      11. <input type="checkbox"/> Other (specify) 4. <input type="checkbox"/> Wig Wags      8. <input type="checkbox"/> Stop Signs      12. <input type="checkbox"/> None	32. SIGNALLED 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
<b>MOTORIST ACTION</b>				
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 CODE	
38. MOTORIST 1. Drove around or thru the gate      2. Stopped and then proceeded      3. Did not stop      4. Other (specify)      5. Unknown		CODE		
39. VIEW OF TRACK OBSCURED BY (primary obstruction) 1. Permanent structure      2. Standing railroad equipment      3. Passing train      5. Vegetation      7. Other (specify) 4. Topography      6. Highway vehicles      8. Not obstructed		CODE		
<b>HIGHWAY VEHICLE PROPERTY DAMAGE/CASUALTIES</b>				
40. HIGHWAY VEHICLE PROPERTY DAMAGE (est. dollar damage)	41. DRIVER WAS 1. Killed      2. Injured      3. Uninjured	CODE	42. WAS DRIVER IN THE VEHICLE? CODE 1. Yes      2. No	
43. TOTAL NUMBER OF OCCUPANTS KILLED	44. TOTAL NUMBER OF OCCUPANTS INJURED		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

**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	<b>OCCUPATIONAL INJURIES</b>								
2	<b>OCCUPATIONAL ILLNESSES</b>	Occupational Skin Diseases or Disorders							
3		Dust Diseases of the Lungs							
4		Respiratory Conditions Due to Toxic Agents							
5		Poisoning (Systemic Effects of Toxic Materials)							
6		Disorders Due to Physical Agents							
7		Disorders Associated With Repeated Trauma							
8		All Other Occupational Illnesses							
9		<b>TOTAL OCCUPATIONAL ILLNESSES</b> (Add Lines 2 through 8)							
10	<b>TOTAL OCCUPATIONAL INJURIES AND ILLNESSES</b> (Add Lines 1 and 9)								
<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
3. ANNUAL MANHOURS					
A. STATE	B. CODE	C. M/HRS.	A. STATE	B. CODE	C. M/HRS.
(1) ALABAMA	AL		(26) MONTANA	MT	
(2) ALASKA	AK		(27) NEBRASKA	NE	
(3) ARIZONA	AZ		(28) NEVADA	NV	
(4) ARKANSAS	AR		(29) NEW HAMPSHIRE	NH	
(5) CALIFORNIA	CA		(30) NEW JERSEY	NJ	
(6) COLORADO	CO		(31) NEW MEXICO	NM	
(7) CONNECTICUT	CT		(32) NEW YORK	NY	
(8) DELAWARE	DE		(33) NORTH CAROLINA	NC	
(9) DISTRICT OF COLUMBIA	DC		(34) NORTH DAKOTA	ND	
(10) FLORIDA	FL		(35) OHIO	OH	
(11) GEORGIA	GA		(36) OKLAHOMA	OK	
(12) IDAHO	ID		(37) OREGON	OR	
(13) ILLINOIS	IL		(38) PENNSYLVANIA	PA	
(14) INDIANA	IN		(39) RHODE ISLAND	RI	
(15) IOWA	IA		(40) SOUTH CAROLINA	SC	
(16) KANSAS	KS		(41) SOUTH DAKOTA	SD	
(17) KENTUCKY	KY		(42) TENNESSEE	TN	
(18) LOUISIANA	LA		(43) TEXAS	TX	
(19) MAINE	ME		(44) UTAH	UT	
(20) MARYLAND	MD		(45) VERMONT	VT	
(21) MASSACHUSETTS	MA		(46) VIRGINIA	VA	
(22) MICHIGAN	MI		(47) WASHINGTON	WA	
(23) MINNESOTA	MN		(48) WEST VIRGINIA	WV	
(24) MISSISSIPPI	MS		(49) WISCONSIN	WI	
(25) MISSOURI	MO		(50) WYOMING	WY	
4. TYPED NAME AND TITLE			5. SIGNATURE		6. DATE

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

## **APPENDIX B: REPORTABILITY REQUIREMENTS AND DEFINITIONS**

## REPORTABILITY REQUIREMENTS

The rules governing monthly reporting of railroad accidents/incidents which were in effect at the close of 1978 define a reportable accident/incident as an event arising from the operation of a railroad that results, with minor exceptions, 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 grade crossing;

(b) Any collision, derailment, fire, explosion, act of God, or other event involving operation of railroad on-track equipment (standing or moving) which results in more than \$2,900 in damages to railroad on-track equipment, signals, track, track structures, and roadbed;

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

- (i) death of one or more persons;
- (ii) injury to one or more persons, other than railroad employees, that requires medical treatment;
- (iii) injury to one or more employees that requires medical treatment or results in restriction of work or motion for one or more days, one or more lost workdays, 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 Accidents are events, with or without casualties, arising in connection with the operation of railroad on-track equipment which satisfy the conditions specified in (b) above. The damage threshold for reporting train accidents from 1957 through 1974 was \$750. In 1975 the threshold was increased to \$1,750, in 1977 to \$2,300, and in 1979 to \$2,900. The reporting threshold is reviewed periodically and adjusted every two years as necessary.

Train Incidents are events arising in connection with the movement of railroad on-track equipment which result in a reportable death, injury or illness, but do not result in damage to railroad equipment, track or roadbed of more than \$2,900.

Nontrain Incidents are events which result in a reportable death, injury or illness arising from the operation of a railroad, but not from the movement of railroad on-track equipment.



## CLASSIFICATION OF CASUALTIES

Fatalities: Prior to 1975, a death which resulted from railroad operations, but which occurred more than 24 hours after the injury, was reported as an injury and a subsequent fatality. Such fatal injuries now are classified as fatalities. In addition, fatalities resulting from occupational illnesses, if they occur within 365 days of the initial diagnosis of the illness are now reportable. These were not reportable prior to 1975.

Nonfatal Casualties: This is any injury or illness caused by a railroad accident/incident that is nonfatal, and includes the following:

Occupational Injuries: Major changes were made in the definition of a reportable injury in 1975. This was done to allow comparability of railroad industry statistics with those published by the Occupational Safety and Health Administration (OSHA) for other industries. Previous regulations required the reporting of any employee injury which prevented the employee from performing normally assigned duties for more than 24 hours in the aggregate during 10 days immediately following the injury. This resulted in the reporting of only those injuries causing at least 2 days of lost or restricted time. The revised regulation requires the reporting of any employee injury which results in one or more lost or restricted workdays, the administration of medical treatment beyond first aid, transfer to another job, termination of employment, or loss of consciousness. In addition, the case remains active for 365 days rather than the 10-day period previously specified. An injury to a person other than an employee-on-duty was formerly reportable if it prevented the customary vocation or mode of life of the injured person for more than 24 hours during the 10 days immediately following the injury. Such an injury is presently reportable if the injured person requires medical treatment beyond first aid. Lost and/or restricted workdays are tabulated only for employee-on-duty injuries and illnesses.

Occupational Illnesses: This is a new category with no counterpart in casualty statistics prior to 1975, and applies to employees only. An occupational illness is any abnormal condition or disorder, other than one resulting from an injury, which is caused by environment factors associated with an employee's employment, including but not limited to acute and chronic illness or diseases which may be caused by inhalation.

## TYPE OF PERSONS

Employees "on duty" are those persons who are engaged in the operation of a railroad. Ordinarily the fact that the employee is or is not under pay will determine this. However, employees on railroad property while

on rest or meal periods, "trading time", or doing work which they are expected to do but actually perform before pay starts or after pay stops, are considered to be employees "on duty".

Employees "not on duty" are those employees who are on railroad property for purposes connected with their employment or with other railroad permission, but who are not "on duty" as defined above.

Passengers are persons on, boarding, or alighting from railroad cars for the purpose of travel.

Nontrespassers are persons who are lawfully on that part of railroad property which is used in railroad operation (other than those herein defined as employees, passengers, or trespassers), and persons adjacent to railroad premises when injured as the result of the operation of a railroad.

Trespassers are persons who are on that part of railroad property used in railroad operation, and whose presence is prohibited, forbidden, or unlawful. Employees who are injured while trespassing are categorized as "trespassers". Also, a person on a rail-highway grade crossing is classified as a "trespasser" if the crossing is protected by gates or other barriers which are closed when the person enters the crossing, or if a person attempts to pass over or under trains or cars at the crossing.

Contractor employees are persons who are employed by a contractor engaged by a railroad to perform normal maintenance work to railroad rolling stock, track structure, bridges, building, etc.

#### CLASSIFICATION OF ON-TRACK EQUIPMENT

Train - A train is a locomotive unit(s) coupled, with or without cars and with or without markers displayed. Included in this definition are those trains consisting entirely of self-propelled units designed to carry passengers and/or freight traffic.

Locomotive - A locomotive is a self-propelled unit of equipment designed for moving other equipment. It includes a self-propelled unit designed to carry freight and/or passenger traffic.

Car - A car is any unit of equipment designed to be hauled by locomotives, or any unit of on-track work equipment such as a track motorcar, highway-rail car, on-track crane, on-track ballast tamping machine, etc.

Equipment Consist - An equipment consist is a train, locomotive(s), cut of cars, or any single car not coupled to another car or locomotive.

## DEFINITIONS

Class of Railroad: Railroads (including both line haul and switching and terminal companies) are classified according to annual gross operating revenues as follows:

- Class I - in excess of \$50 million.
- Class II - between \$10 million and \$50,000
- Class III - less than \$10 million, and all switching and terminal companies

Reportable Property Damage: Excludes cost of clearing wreck. Includes labor cost, and all other costs to repair or replace in kind damaged on-track equipment, signals, track, track structures, or roadbed.

Trainmen, the term as it is used in this publication, includes engineers and motormen, firemen and helpers, conductors, brakemen, and flagmen engaged in passenger, freight, yard or work service and train baggagemen, but does not include hostlers.

Man-hours refers to the service hours or days worked by employees, as shown on the "Monthly Report of Employees, Service, and Compensation" (ICC Wage Statistics, Form A and B) for Class I Railroads. For all other categories of railroads, this information is a total of employee hours worked as reported on the monthly Railroad Injury and Illness Summary (FRA F 6180-55).

Medical Treatment is treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment (one-time treatment), precautionary measures such as tetanus shots, or subsequent observation of minor scratches, cuts, bruises, splinters, etc., which do not require medical care, even though these services were provided by a physician or registered professional personnel.

Lost Workdays - This term applies to employees only. It includes all full days or parts of days the employee, because of injury or occupational illness, is away from work (consecutive or not) on regularly assigned workdays (except on the day of injury or first day of illness).

Restriction of Work or Motion - This term applies to employees only. Restriction of work or motion occurs when an employee, because of injury or occupational illness, is assigned to a temporary job, works less than full time at a permanent job, or is unable to perform all normally assigned duties.

Locomotive Mile is a movement under its own power of a locomotive a distance of one mile. This item covers miles run by locomotives in road service and in train and yard-switching service. Switching miles are computed at the rate of six miles per hour for the time actually engaged in such service. A motor train-mile is a movement under its own power of a motor train a distance of one mile.

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Accident/Incident Bulletin, No. 148 Calendar Year  
1979, US DOT, FRA Office of Safety, 1980 -12-  
Safety