

Railroad Safety Statistics

FINAL
REPORT
2002



MARCH 2004

FOREWORD

The Federal Railroad Administration (FRA) has established an ultimate goal of “Zero Tolerance” for railroad-related accidents, injuries and fatalities. In pursuit of that goal, significant progress has been made, particularly over the past six years, in reducing the number of train collisions, derailments, highway-rail grade crossing incidents, and injuries to railroad workers. These results have been achieved because of a collaborative effort involving the FRA, railroad management, rail labor, equipment suppliers, and contractors, as well as other federal and state agencies whose mission involves ensuring railroad safety. Central to the success of this rail safety effort is the ability to understand the nature of rail-related accidents and to analyze trends in railroad safety.

The FRA’s *Railroad Safety Statistics – Annual Report 2002* is intended as a resource for the FRA’s safety partners. It is also intended as a general reference source for individuals and organizations with an interest in rail safety issues. Statistical data, tables and charts are provided to depict the nature and cause of many rail-related accidents and incidents that occurred in 2002. Furthermore, selected historical data is included to provide a baseline for understanding the railroad industry’s improving safety performance.

It is hoped that the information provided in this publication will provide insight into the most significant safety issues facing the rail industry and, in turn, lead to continued rail safety improvements. Only by continuing our understanding about how and why railroad accidents and incidents occur, can we hope to approach our goal of “Zero Tolerance.”

This edition of the Railroad Safety Statistics compiles previous safety bulletins prepared by the Federal Railroad Administration (FRA). These include: the *Accident/Incident Bulletin*; the *Highway-Rail Crossing Accident/Incident And Inventory Bulletin*; and the *Trespasser Bulletin*. The consolidation of accident/incident statistics previously contained in other publications provides the reader with a single source for a comprehensive overview of railroad safety.

The completeness and accuracy of the information presented in this bulletin are primarily dependent upon the data collection and reporting processes of the nation’s railroads. The FRA conducts routine audits of these procedures, but does not have sufficient resources to perform comprehensive reviews of each railroad’s reporting procedures. We extensively review and edit the reports we receive and make inquiry when information is incomplete or inconsistent.

Railroads are required by law to submit accident/incident reports within thirty days after the month to which they pertain. They are also required to update their report if the original information is incomplete or inaccurate. Railroads have until April 15 of the following year to “close out” their records and submit any updates to complete their file.

It is not possible to identify reportable events that were omitted from a railroad’s submission. Likewise, there may be instances where incorrectly reported information passes all reviews and is accepted. Although we attempt to be as vigilant as possible in both the editing and presentation of the accident/incident data reported, errors do occasionally occur.

Any questions, comments, or suggestions regarding the information contained in this publication should be brought to the attention of:

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This report and additional information about the FRA's various programs are available on our Web site at <http://www.fra.dot.gov>.

CHAPTER 1

OVERVIEW OF ACCIDENTS/INCIDENTS AND RATES

Railroads began reporting accidents to the Federal Government following passage of the Reports Act of 1910. The current definitions describing reportable events were adopted in 1975 and have remained largely unchanged since then. A number of modifications to the record-keeping and reporting requirements were put in place for 1997. These modifications did not redefine what was to be reported but did expand the types of information being collected and the forms used for reporting. The changes made in 1997 were implemented for the purpose of collecting additional information necessary for safety analysis and to support the Federal Railroad Administration's (FRA) overall goal of hazard elimination and risk reduction on the Nation's railroads.

A railroad is required by Federal Railroad Administration (FRA) regulations at Title 49, Part 225 of the Code of Federal Regulations to use the current *FRA Guide for Preparing Accident/Incident Reports* ("Guide" or "reporting guide") when preparing its monthly report. The instructions and interpretations contained in this publication are provided to assist railroads in meeting this obligation

"Accident/Incident" is the term used to describe the entire list of reportable events. These include collisions, derailments, and other events involving the operation of on-track equipment and causing reportable damage above an established threshold; impacts between railroad on-track equipment and highway users at crossings; and all other incidents or exposures that cause a fatality or injury to any person, or an occupational illness to a railroad employee.

Accidents/incidents are divided into three major groups for reporting purposes. These correspond to the following FRA forms:

Train accidents. A safety-related event involving on-track rail equipment (both standing and moving), causing monetary damage to the rail equipment and track above a prescribed amount. Reported on form FRA F 6180.54, RAIL EQUIPMENT ACCIDENT/ INCIDENT REPORT. (The threshold for 2002 was \$6,700)

Highway-rail grade crossing incidents. Any impact between a rail and highway user (both motor vehicles and other users of the crossing) at a designated crossing site, including walkways, sidewalks, etc., associated with the crossing. Reported on form FRA F 6180.57, HIGHWAY-RAIL GRADE CROSSING ACCIDENT/INCIDENT REPORT.

Other incidents. Any death, injury, or occupational illness of a railroad employee that is not the result of a "train accident" or "highway-rail incident." Reported on form FRA F 6180.55a, RAILROAD INJURY AND ILLNESS SUMMARY.

A single form is usually sufficient to report most events; however, there are situations when multiple report forms are necessary. An example is a highway-rail crossing incident resulting in

reportable injuries. An accident of this type would require the completion of both a Form FRA F 6180.57 and a Form FRA F 6180.55a. A Form FRA F 6180.54 must also be prepared if reportable on-track equipment and track damage in this accident exceeds the current monetary threshold for train accidents.

Because of overlap in the reporting requirements, some incidents may fall into multiple categories. The incident described above would be counted as a highway-rail incident, but it would also be included in the train accident total. Another example is a motorist hurt in a highway-rail incident after driving around gates at the crossing site. This individual is reported as a "trespasser" on form FRA F 6180.55a, but the event is classified as a highway-rail incident.

If there is an overlap in the information found in different chapters, when possible, a separate column or row total is provided, or counts are excluded when they are more appropriate to another chapter. In the example of the trespasser injured in a highway-rail incident, this injury appears in the highway-rail chapter, but is excluded from the chapter on trespassing. The train accident counts in Chapter 5 include those highway-rail incidents causing reportable damage above the amount needed for reporting on form FRA F 6180-54. The user of this bulletin can exclude these, if desired, since the number of these are identified in most tables in this chapter.

This bulletin provides overall national totals as well as specific areas of safety concern. For example, Chapter 3 is a summary of all fatal and nonfatal casualties, regardless of the type of event causing them. Subsequent chapters summarizing train accidents, highway-rail incidents, employee and trespassing casualties, provide additional information on the events causing these casualties.

The data is presented in the following general format. First, there is a graphic historical review of the major indicators of railroad safety since 1991. Following this are overall totals for the 5-year period beginning with 1998, including summaries by railroad and states for this time frame. Next are a variety of tables and charts for the current year. The chapter for each major reporting area contains a description of the pertinent requirements and definitions associated with that specific accident/incident category.

Extensive consolidation of railroads has occurred over the years. In order to make a more valid comparison of major railroad systems, it was necessary to combine the information reported by predecessor railroads for the years prior to 1998. For example, data from railroads that made up the Southern Pacific Transportation System were merged into the Union Pacific counts.

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TABLE 1-1 ACCIDENT/INCIDENT HISTORICAL SUMMARY, Part I

Category	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
---GRAND TOTAL---												
Accidents/incidents	29,296	26,849	24,740	22,466	19,593	17,691	16,699	16,503	16,776	16,918	16,087	14,404
Rate 1/	26.45	24.17	21.82	19.14	16.60	15.05	14.14	13.78	13.72	13.94	13.56	12.18
Deaths	1,194	1,170	1,279	1,226	1,146	1,039	1,063	1,008	932	937	971	951
Nonfatal conditions	23,468	21,383	19,121	16,812	14,440	12,558	11,767	11,459	11,700	11,643	10,985	11,103

---TRAIN ACCIDENTS-----												
Rate 2/	4.61	3.97	4.25	3.82	3.67	3.64	3.54	3.77	3.89	4.13	4.25	3.76
Total number	2,658	2,359	2,611	2,504	2,459	2,443	2,397	2,575	2,768	2,983	3,023	2,738
Deaths	19	6	67	12	14	25	17	4	9	10	6	15
Injuries	326	171	308	262	294	281	183	129	130	275	310	1,884
Collisions	261	207	205	240	235	205	202	168	205	238	220	192
Deraillments	1,936	1,734	1,930	1,825	1,742	1,816	1,741	1,757	1,961	2,112	2,234	1,989
On main line	1,113	874	955	914	912	941	867	934	858	976	1,025	886
On yard track	1,276	1,209	1,383	1,339	1,279	1,249	1,223	1,306	1,531	1,619	1,569	1,478
Yard track rate 3/	14.41	14.32	15.87	14.91	14.23	14.22	14.41	15.60	17.51	18.21	18.30	18.25
Other track rate 4/	2.83	2.26	2.33	2.06	2.03	2.05	1.98	2.12	1.98	2.15	2.32	1.95
Track caused	952	830	963	911	856	905	879	900	995	1,035	1,121	941
Track caused rate	1.65	1.40	1.57	1.39	1.28	1.35	1.30	1.32	1.40	1.43	1.58	1.29
Human factor caused	887	864	865	911	944	783	855	971	1,031	1,147	1,035	1,050
Equipment caused	415	353	360	293	279	318	271	307	321	372	427	367
Signal caused	16	19	54	36	27	49	39	38	49	70	42	50
Equip Dmg (millions \$)	157.99	85.369	121.83	124.85	134.77	160.91	152.09	162.56	164.65	169.17	200.75	173.98
Track Dmg (millions \$)	51.670	33.572	48.816	43.899	54.458	51.407	58.637	71.337	80.435	94.040	113.71	92.550
Hazmat												
Consists releasing	46	26	28	34	26	34	31	42	41	35	32	31
Cars releasing	83	32	57	40	48	69	38	66	75	75	57	56
People evacuated	6,229	21,218	3,207	15,336	2,817	8,547	8,812	2,058	996	5,258	52,620	5,438

---HIGHWAY-RAIL-----												
Rate 5/	9.34	8.27	7.97	7.60	6.92	6.34	5.71	5.14	4.90	4.84	4.55	4.22
Incidents	5,388	4,910	4,892	4,979	4,633	4,257	3,865	3,508	3,489	3,502	3,237	3,077
Deaths	608	579	626	615	579	488	461	431	402	425	421	357
Injuries	2,094	1,975	1,837	1,961	1,894	1,610	1,540	1,303	1,396	1,219	1,157	999

---OTHER INCIDENTS-----												
Incidents 6/	21,250	19,580	17,237	14,983	12,501	10,991	10,437	10,420	10,519	10,433	9,827	8,589
Deaths	567	585	586	599	553	526	585	573	521	502	544	579
Injuries	21,048	19,237	16,976	14,589	12,252	10,667	10,044	10,027	10,174	10,149	9,518	8,220

1. Total accident/incident rate of all reported events * 1,000,000 / (train miles + hours)

2. Total train accidents * 1,000,000 / total train miles

3. Accidents on yard track * 1,000,000 / yard switching train miles

4. Accidents on other than yard track * 1,000,000 / (total train miles - yard switching)

5. Total incidents * 1,000,000 / total train miles

6. Other events that cause death, injury to any person; or illness to a railroad employee

TABLE 1-2 ACCIDENT/INCIDENT HISTORICAL SUMMARY, Part II

Category	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
...EMPLOYEE COUNTS.....												
All accidents/incidents												
Rate 1/	7.41	6.88	5.93	5.06	4.24	3.66	3.31	3.27	3.39	3.44	3.30	2.94
Deaths	35	34	47	31	34	33	37	27	31	24	22	20
Nonfatal conditions	19,626	17,755	15,363	13,080	10,777	9,199	8,295	8,398	8,622	8,423	7,815	6,644
Cases with days absent	13,688	12,157	10,115	8,758	7,055	5,981	5,371	5,359	5,779	5,788	5,409	4,642
Percent of total	69.62	68.34	65.64	66.80	65.26	64.79	64.46	63.61	66.79	68.52	69.02	69.66
Days absent	743,118	709,297	601,718	492,404	344,035	305,918	244,383	325,127	344,747	367,526	424,301	365,606
Serious injuries	1,557	1,433	1,348	1,303	1,129	1,008	929	910	918	832	834	731
Sprains/strains	9,715	8,674	7,641	6,428	5,203	4,427	3,960	3,945	4,280	4,357	4,025	3,353
Occupational illnesses	663	883	544	285	254	157	128	171	141	129	167	120
...PASSENGERS ON TRAINS												
Rate 2/	2.78	3.01	4.48	3.57	4.18	3.86	4.29	3.69	3.33	4.10	4.78	5.83
Deaths	8	3	58	5	0	12	6	4	14	4	3	7
Injuries	382	411	559	497	573	513	601	535	481	658	746	877
In Train Accs/Highway-Rail												
Deaths	8	0	49	2	0	9	1	2	11	0	1	7
Rate	0.06	0.00	0.36	0.01	0.00	0.07	0.01	0.01	0.07	0.00	0.01	0.05
Injuries	54	113	168	154	119	139	94	30	54	95	149	304
...TRESPASSER COUNTS...												
Rate 3/	1.83	1.81	1.68	1.50	1.43	1.41	1.55	1.54	1.30	1.21	1.29	1.28
Deaths	524	533	523	529	494	471	533	536	479	463	511	540
Injuries	534	540	509	452	461	474	516	513	445	414	404	395
---OPERATIONS(millions)												
Total train miles 4/	576.83	593.70	613.97	655.08	669.82	670.92	676.72	682.89	712.45	722.88	711.55	728.67
Yard switching miles 5/	88.519	84.430	87.122	89.776	89.892	87.823	84.874	83.692	87.459	88.919	85.747	81.002
Employee hours 6/	530.66	517.04	519.67	518.63	510.46	504.60	503.92	514.87	510.00	490.93	475.12	454.10
Passengers carried 7/	369.11	366.90	371.61	393.60	385.83	397.39	408.62	439.96	464.88	501.75	517.25	503.93

1. Total employee deaths, injuries, illnesses * 200,000 / total hours worked
2. All passenger deaths or injuries in all accidents/incidents * 100,000,000 / passenger miles. A passenger mile is the movement of a passenger for a distance of one mile
3. All trespasser deaths and injuries * 1,000,000 / total train miles
4. Movement of a train for a distance of one mile
5. Movement of trains doing yard switching for a distance of one mile
6. Total hours worked by employees of the railroads. Excludes contractors.
7. Passengers transported

TABLE 1-3 SUMMARY BY TYPE INCIDENT AND TYPE PERSON
Train Accidents Excluding Highway-Rail Crossing (HRC) Incidents

Type Person	Fatalities					Nonfatal Conditions				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
A - Worker on duty(rr empl)	3	7	4	4	3	112	106	148	156	157
B - Employee not on duty	-	-	-	-	-	-	7	15	21	-
C - Passenger on train	-	-	-	1	7	11	11	85	129	278
D - Nontrespasser	-	1	3	-	-	-	-	11	1	2
E - Trespasser	1	1	2	1	4	4	-	1	-	3
F - Worker on duty(contractor)	-	-	-	-	-	2	-	-	-	-
G - Contractor(other)	-	-	-	-	-	-	-	2	1	2
J - Nontrespasser, off rr prop	-	-	1	-	1	-	6	13	2	1,442
--Total...	4	9	10	6	15	129	130	275	310	1,884

Highway-Rail Crossing (HRC) Incidents

Type Person	Fatalities					Nonfatal Conditions				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
A - Worker on duty(rr empl)	4	2	2	1	1	122	140	100	97	110
B - Employee not on duty	-	-	-	-	-	3	1	3	1	-
C - Passenger on train	2	11	-	-	-	19	43	10	20	26
D - Nontrespasser	317	296	315	258	249	985	995	906	803	636
E - Trespasser	108	91	107	162	106	164	205	192	223	214
F - Worker on duty(contractor)	-	-	-	-	-	1	-	-	1	-
G - Contractor(other)	-	1	-	-	1	-	-	1	2	1
I - Volunteer(other)	-	-	-	-	-	1	-	-	-	-
J - Nontrespasser, off rr prop	-	1	1	-	-	8	12	7	10	12
--Total...	431	402	425	421	357	1,303	1,396	1,219	1,157	999

Other Incidents, Excluding HRC

Type Person	Fatalities					Nonfatal Conditions				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
A - Worker on duty(rr empl)	20	22	18	17	16	8,164	8,376	8,175	7,562	6,377
B - Employee not on duty	2	-	1	-	1	216	208	268	187	213
C - Passenger on train	2	3	4	2	-	505	427	563	597	573
D - Nontrespasser	7	7	14	11	17	216	312	347	348	251
E - Trespasser	535	478	461	510	536	509	445	413	404	392
F - Worker on duty(contractor)	2	2	-	2	3	234	172	183	167	181
G - Contractor(other)	3	9	3	2	6	143	212	182	212	191
H - Worker on duty(volunteer)	-	-	-	-	-	11	4	6	4	5
I - Volunteer(other)	-	-	-	-	-	2	1	2	-	-
J - Nontrespasser, off rr prop	2	-	1	-	-	27	17	10	37	37
--Total...	573	521	502	544	579	10,027	10,174	10,149	9,518	8,220

GRAND TOTAL

Type Person	Fatalities					Nonfatal Conditions				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
A - Worker on duty(rr empl)	27	31	24	22	20	8,398	8,622	8,423	7,815	6,644
B - Employee not on duty	2	-	1	-	1	219	216	286	209	213
C - Passenger on train	4	14	4	3	7	535	481	658	746	877
D - Nontrespasser	324	304	332	269	266	1,201	1,307	1,264	1,152	889
E - Trespasser	644	570	570	673	646	677	650	606	627	609
F - Worker on duty(contractor)	2	2	-	2	3	237	172	183	168	181
G - Contractor(other)	3	10	3	2	7	143	212	185	215	194
H - Worker on duty(volunteer)	-	-	-	-	-	11	4	6	4	5
I - Volunteer(other)	-	-	-	-	-	3	1	2	-	-
J - Nontrespasser, off rr prop	2	1	3	-	1	35	35	30	49	1,491
--Total...	1,008	932	937	971	951	11,459	11,700	11,643	10,985	11,103

TABLE 1-4 TOTAL CASUALTIES BY RAILROAD

Railroads	Fatalities					Nonfatal				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alton & Southern	-	-	-	-	-	17	15	22	8	13
Alaska RR Corp.	1	-	1	-	-	59	62	50	57	30
Amtrak	120	105	131	139	126	1,180	1,161	1,412	1,527	1,484
Bangor & Aroostook	1	-	-	-	-	47	28	26	15	15
Bessemer & Lake Erie RR	-	-	-	-	-	21	6	7	8	6
Burlington Northern Santa Fe	209	130	151	126	149	1,412	1,495	1,493	1,485	1,242
Belt Rwy Of Chicago	2	-	-	-	-	15	7	5	10	10
Consolidated Rail Corp.	37	20	-	-	-	507	225	-	-	-
Conrail Shared Assets	-	2	1	7	2	-	29	56	53	51
CSX Transportation	125	120	124	143	120	953	1,150	1,324	1,119	859
Delaware & Hudson	-	3	4	5	2	30	49	49	52	47
Dakota,Minnesota & Eastern	-	1	1	-	-	25	32	22	17	14
Duluth,Missabe & Iron Range	-	-	-	-	-	43	25	38	32	21
Duluth,Winnipeg & Pacific	2	1	-	-	1	6	3	3	1	13
Elgin, Joliet & Eastern	-	2	-	-	-	48	41	32	39	12
Florida East Coast	10	16	22	13	24	62	52	46	27	34
Other Railroads	16	21	31	42	35	1,221	1,149	1,204	1,101	1,091
Guilford Rail System	2	2	3	1	-	26	24	29	16	7
Grand Trunk Western RR	4	5	4	7	7	162	131	120	96	64
Gateway Western	2	1	4	1	-	13	20	7	10	-
Illinois Central	18	16	17	26	18	165	186	225	183	150
Indiana Harbor Belt	-	-	2	-	-	57	38	43	42	22
I & M Rail Link, LLC	2	6	6	5	-	65	49	68	43	19
Kansas City Southern	29	23	24	21	21	198	142	143	126	137
Long Island Rail Road	10	6	7	10	9	569	534	414	382	323
MD Assn. of Rail Comm	-	2	2	-	-	3	5	5	7	18
Mass Bay Transit Auth.	2	5	11	11	15	94	93	103	113	127
Metro North Commuter	4	5	4	3	6	389	450	476	466	375
Montana Rail Link	-	3	3	2	1	18	24	22	38	26
Northern IN Comm Trans	3	1	-	-	-	34	40	25	16	32
Northeast IL Reg Comm	6	8	5	4	15	206	232	283	315	216
New Jersey Transit Rail	24	18	21	32	16	94	140	174	219	208
Norfolk Southern Corp.	112	104	118	126	126	563	756	778	653	614
Paducah & Louisville	1	-	-	1	1	8	10	16	9	8
Port Auth Trans Hudson	1	1	1	2	1	164	158	199	158	206
Peninsula Comm San Mateo Cnty	3	3	14	12	5	26	11	25	23	31
Port Terminal RR Assn	1	1	-	-	-	8	6	11	11	20
Southern CA Reg Rail Auth.	6	2	1	1	9	16	15	31	24	53
Southeastern PA Trans.	3	7	3	3	4	374	351	279	262	202
Soo Line	6	7	5	6	8	200	203	166	166	1,606
Term RR Assn Of St. Louis	-	-	-	-	-	2	10	8	13	5
Econo Rail Corporation	-	-	1	-	-	-	7	9	5	4
Union Pacific	240	278	204	211	221	2,192	2,356	1,994	1,877	1,566
Union RR (Pittsburgh)	-	-	-	-	-	30	34	21	25	16
Wisconsin Central Ltd.	6	6	11	11	8	129	132	161	121	97
Wheeling & Lake Erie	-	1	-	-	1	8	14	19	15	9
Total	1,008	932	937	971	951	11,459	11,700	11,643	10,985	11,103

TABLE 1-5 TOTAL CASUALTIES BY STATE

States	Fatalities					Nonfatal					5 Year Total	
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	Kld	Nonf
Alabama	25	18	20	22	18	156	151	143	142	123	103	715
Alaska	1	-	2	-	-	83	84	82	102	47	3	398
Arizona	19	15	27	15	16	121	148	147	173	135	92	724
Arkansas	36	27	30	16	28	261	269	225	231	152	137	1,138
California	114	114	101	132	130	795	770	808	718	723	591	3,814
Colorado	12	9	10	9	12	134	150	112	167	123	52	686
Connecticut	4	10	6	3	7	130	166	159	169	127	30	751
Delaware	1	2	2	3	7	42	53	47	48	44	15	234
Dist Of Columbia	1	-	-	1	1	75	78	90	87	75	3	405
Florida	30	44	45	43	54	276	252	303	299	377	216	1,507
Georgia	31	20	23	27	20	221	216	231	231	169	121	1,068
Hawaii	-	-	-	-	-	-	-	-	1	-	-	1
Idaho	9	4	11	3	2	83	56	53	60	50	29	302
Illinois	70	93	69	73	58	942	1,084	1,109	1,103	949	363	5,187
Indiana	31	33	36	28	26	334	321	317	240	201	154	1,413
Iowa	6	20	9	20	22	198	201	211	220	126	77	956
Kansas	16	13	21	11	15	220	214	226	198	129	76	987
Kentucky	11	5	14	15	11	173	174	170	136	124	56	777
Louisiana	33	28	16	35	28	267	242	310	252	214	140	1,285
Maine	2	-	2	-	-	77	49	58	33	32	4	249
Maryland	4	12	9	7	9	94	105	103	113	176	41	591
Massachusetts	5	12	17	14	15	155	187	183	205	219	63	949
Michigan	16	22	23	22	11	317	305	300	246	191	94	1,359
Minnesota	22	24	11	15	17	314	315	303	261	199	89	1,392
Mississippi	28	26	17	33	24	127	145	120	115	95	128	602
Missouri	34	18	29	16	19	236	287	221	233	179	116	1,156
Montana	7	4	4	3	5	79	93	108	109	82	23	471
Nebraska	15	14	8	7	18	263	295	247	241	185	62	1,231
Nevada	6	4	1	3	4	34	47	25	32	26	18	164
New Hampshire	1	-	-	-	-	14	12	15	6	10	1	57
New Jersey	31	21	28	38	23	325	380	432	438	464	141	2,039
New Mexico	12	8	4	17	12	105	82	106	76	75	53	444
New York	29	25	32	28	30	1,210	1,237	1,168	1,132	956	144	5,703
North Carolina	40	24	24	26	23	145	123	121	113	98	137	600
North Dakota	8	3	9	4	3	68	72	82	76	1,523	27	1,821
Ohio	30	39	28	34	48	368	395	339	247	250	179	1,599
Oklahoma	19	22	22	17	21	135	108	124	109	85	101	561
Oregon	22	10	9	14	7	157	145	152	140	130	62	724
Pennsylvania	17	20	23	35	31	743	663	583	540	481	126	3,010
Rhode Island	2	1	1	1	1	11	17	19	20	19	6	86
South Carolina	23	16	20	12	22	98	80	141	83	101	93	503
South Dakota	-	-	3	1	3	43	48	43	31	20	7	185
Tennessee	25	17	15	24	16	141	153	163	173	143	97	773
Texas	97	84	90	88	83	795	853	777	750	765	442	3,940
Utah	6	7	5	4	5	84	87	88	102	47	27	408
Vermont	1	-	1	1	-	25	33	22	19	30	3	129
Virginia	13	10	13	6	13	160	143	169	154	136	55	762
Washington	21	20	16	23	15	211	195	230	229	179	95	1,044
West Virginia	7	2	9	5	3	83	84	93	88	76	26	424
Wisconsin	11	9	20	15	13	237	219	258	202	180	68	1,096
Wyoming	4	3	2	2	2	94	114	107	92	63	13	470
Total	1,008	932	937	971	951	11,459	11,700	11,643	10,985	11,103	4,799	56,890

TABLE 1-6 TOTAL EMPLOYEE ON DUTY CASES BY RAILROAD

Railroads	1998		1999		2000		2001		2002	
	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate
Alton & Southern	16	4.86	15	4.56	22	6.62	8	2.33	12	3.44
Alaska RR Corp.	54	9.28	51	7.92	40	6.13	50	7.01	28	3.89
Amtrak	842	3.87	914	4.03	920	4.01	881	4.10	824	4.18
Bangor & Aroostook	48	14.56	25	7.78	26	8.33	15	5.97	15	6.89
Bessemer & Lake Erie RR	16	3.54	5	1.05	5	1.06	7	2.43	6	2.74
Burlington Northern Santa Fe	1,014	2.20	1,031	2.39	1,059	2.61	1,067	2.67	854	2.27
Belt Rwy Of Chicago	17	2.58	7	1.06	5	0.80	10	1.83	10	2.11
Consolidated Rail Corp.	419	2.05	194	2.20	-	-	-	-	-	-
Conrail Shared Assets	-	-	25	1.66	32	1.68	28	1.81	33	2.39
CSX Transportation	718	2.45	892	2.70	998	2.89	806	2.44	636	2.00
Delaware & Hudson	28	4.29	44	5.19	40	4.57	49	7.37	47	8.88
Dakota, Minnesota & Eastern	23	6.93	29	8.54	19	5.22	16	4.10	11	3.10
Duluth, Missabe & Iron Range	42	5.88	23	3.34	37	5.56	32	5.77	21	3.76
Duluth, Winnipeg & Pacific	5	2.36	3	1.49	3	1.44	1	0.45	10	4.69
Elgin, Joliet & Eastern	45	5.83	39	5.14	32	4.24	36	4.98	8	1.13
Florida East Coast	29	3.20	30	3.46	26	3.15	15	1.88	22	2.83
Other Railroads	1,006	24.38	972	28.70	965	20.90	873	23.83	778	21.21
Guilford Rail System	21	2.25	20	2.02	28	2.91	11	1.20	6	0.70
Grand Trunk Western RR	153	7.00	122	5.52	108	5.79	84	4.37	59	3.25
Gateway Western	12	4.92	19	7.37	2	0.73	8	2.83	-	-
Illinois Central	105	2.80	118	3.10	159	3.85	132	3.06	113	2.72
Indiana Harbor Belt	53	6.05	34	3.63	37	4.25	39	5.07	20	2.63
I & M Rail Link, LLC	40	5.40	39	5.62	51	7.78	27	3.54	13	1.43
Kansas City Southern	95	3.49	86	3.08	77	2.75	64	2.41	90	3.20
Long Island Rail Road	408	6.88	396	6.68	350	5.59	303	5.12	259	4.17
MD Assn. of Rail Comm	1	0.76	2	1.05	4	1.65	3	1.10	8	2.81
Mass Bay Transit Auth.	85	4.73	83	4.54	80	4.50	91	4.92	104	5.63
Metro North Commuter	319	6.03	334	6.26	367	7.00	347	6.50	282	5.20
Montana Rail Link	12	1.15	20	2.07	21	2.19	37	3.97	25	2.90
Northern IN Comm Trans	28	8.17	40	11.33	25	6.46	13	3.17	25	6.30
Northeast IL Reg Comm	127	5.12	93	3.61	132	5.03	147	5.47	85	3.11
New Jersey Transit Rail	85	2.33	130	3.37	141	3.61	163	4.17	158	3.78
Norfolk Southern Corp.	270	1.07	409	1.27	499	1.46	399	1.33	386	1.33
Paducah & Louisville	6	2.07	9	2.87	13	4.29	4	1.40	4	1.43
Port Auth Trans Hudson	101	10.45	86	8.98	105	11.32	108	11.22	108	10.61
Peninsula Comm San Mateo Cnty	18	5.01	4	1.06	22	5.15	18	4.12	23	5.36
Port Terminal RR Assn	6	1.78	4	1.25	8	2.44	9	2.70	19	6.17
Southern CA Reg Rail Auth.	8	2.71	8	2.97	14	4.72	8	2.68	9	2.83
Southeastern PA Trans.	181	10.27	167	9.82	142	8.30	178	10.01	164	9.49
Soo Line	167	4.96	181	5.74	147	5.08	150	4.84	123	3.92
Term RR Assn Of St. Louis	1	0.36	7	2.40	7	2.27	13	4.52	5	1.78
Econo Rail Corporation	-	-	7	4.76	8	4.13	5	2.44	4	1.93
Union Pacific	1,680	3.16	1,797	3.49	1,532	3.10	1,464	3.01	1,159	2.57
Union RR (Pittsburgh)	28	7.79	34	10.38	21	6.68	25	5.85	15	3.06
Wisconsin Central Ltd.	86	3.81	95	4.12	102	4.35	84	3.84	77	3.98
Wheeling & Lake Erie	7	1.63	10	2.30	16	3.64	9	2.22	6	1.54

Rate is the frequency of total cases per 200,000 hours worked

TABLE 1-7 TRAIN ACCIDENTS BY RAILROAD, EXCLUDING HRC

Railroads	1998		1999		2000		2001		2002	
	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate
Alton & Southern	4	5.37	13	17.26	6	7.80	11	13.82	15	18.43
Alaska RR Corp.	5	4.58	6	4.68	2	1.49	1	0.70	5	3.46
Amtrak	89	2.51	85	2.35	148	4.10	150	3.89	112	2.82
Bangor & Aroostook	3	2.48	7	5.75	6	5.41	2	2.44	2	3.15
Bessemer & Lake Erie RR	2	6.71	-	-	2	8.00	2	8.95	2	8.76
Burlington Northern Santa Fe	435	2.67	481	2.96	573	3.57	623	3.82	538	3.32
Belt Rwy Of Chicago	29	63.18	44	94.23	20	43.56	15	33.53	18	47.81
Consolidated Rail Corp.	236	5.07	104	5.30	-	-	-	-	-	-
Conrail Shared Assets	-	-	17	10.65	40	15.59	33	14.50	31	14.58
CSX Transportation	310	3.71	423	4.02	484	4.23	389	3.58	354	3.22
Delaware & Hudson	4	1.92	8	3.52	9	3.72	8	3.95	9	4.98
Dakota, Minnesota & Eastern	16	23.79	12	14.85	23	28.63	15	19.40	16	21.25
Duluth, Missabe & Iron Range	10	12.87	7	9.61	7	9.60	4	5.57	12	18.05
Duluth, Winnipeg & Pacific	4	5.77	2	2.92	4	5.70	2	2.62	3	3.83
Elgin, Joliet & Eastern	14	20.84	15	22.21	10	15.37	11	17.23	15	24.38
Florida East Coast	20	5.87	24	7.64	18	6.27	15	5.89	11	4.91
Other Railroads	299	11.81	328	13.28	335	13.79	360	12.50	293	17.48
Guilford Rail System	5	4.37	7	6.71	9	9.06	3	1.77	3	2.03
Grand Trunk Western RR	21	3.91	21	4.05	20	3.71	15	2.94	16	3.32
Gateway Western	11	13.13	13	16.28	9	10.37	12	13.16	-	-
Illinois Central	73	7.82	60	6.48	71	6.13	66	6.10	60	6.08
Indiana Harbor Belt	27	17.27	37	21.90	26	17.00	24	18.15	16	11.92
I & M Rail Link, LLC	34	16.26	31	15.42	37	18.56	36	18.54	15	13.73
Kansas City Southern	66	7.62	79	9.32	94	11.84	92	12.01	93	10.88
Long Island Rail Road	19	2.33	15	1.83	18	2.19	19	2.31	14	1.71
MD Assn. of Rail Comm	1	1.39	2	1.85	2	1.82	-	-	2	1.65
Mass Bay Transit Auth.	-	-	2	0.55	1	0.26	2	0.52	-	-
Metro North Commuter	33	4.23	28	3.62	38	4.63	55	6.55	46	5.33
Montana Rail Link	12	3.12	13	3.93	13	3.75	19	5.40	17	4.83
Northern IN Comm Trans	6	7.17	3	3.45	1	1.14	1	1.14	-	-
Northeast IL Reg Comm	1	0.29	4	1.12	5	1.39	7	1.95	4	1.11
New Jersey Transit Rail	12	1.47	8	0.98	17	2.02	25	2.95	39	4.82
Norfolk Southern Corp.	149	2.19	238	2.91	275	2.87	239	2.66	232	2.52
Paducah & Louisville	4	6.48	3	4.77	3	5.07	5	8.78	4	6.93
Port Auth Trans Hudson	-	-	1	0.50	2	0.99	3	1.48	3	1.35
Peninsula Comm San Mateo Cnty	-	-	-	-	2	1.81	1	0.83	1	0.85
Port Terminal RR Assn	12	9.61	6	4.82	13	10.51	18	14.40	15	12.02
Southern CA Reg Rail Auth.	4	2.72	4	2.32	1	0.57	3	1.65	3	1.50
Southeastern PA Trans.	16	3.08	8	1.51	16	2.96	10	1.87	22	4.16
Soo Line	42	5.05	46	5.71	23	2.80	31	3.74	17	2.01
Term RR Assn Of St. Louis	10	17.63	18	29.80	7	10.44	9	13.64	13	21.95
Econo Rail Corporation	-	-	5	8.83	6	7.74	3	3.65	7	8.44
Union Pacific	727	4.62	719	4.08	758	4.19	896	5.19	824	4.41
Union RR (Pittsburgh)	1	6.01	4	26.96	7	50.96	2	17.71	5	37.41
Wisconsin Central Ltd.	23	4.38	35	6.70	48	8.27	34	5.44	31	5.21
Wheeling & Lake Erie	-	-	1	1.90	8	12.11	10	15.47	12	14.72

Rate is the frequency of accidents per 1,000,000 train miles

TABLE 1-8 TRAIN ACCIDENTS BY STATE, EXCLUDING HRC

States	1998		1999		2000		2001		2002		5 Year Total	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alabama	48	1.9	45	1.6	51	1.7	76	2.5	54	2.0	274	1.9
Alaska	5	0.2	6	0.2	2	0.1	1	0.0	5	0.2	19	0.1
Arizona	18	0.7	25	0.9	48	1.6	43	1.4	33	1.2	167	1.2
Arkansas	61	2.4	65	2.3	72	2.4	62	2.1	66	2.4	326	2.3
California	135	5.2	154	5.6	183	6.1	182	6.0	184	6.7	838	5.9
Colorado	54	2.1	60	2.2	57	1.9	59	2.0	56	2.0	286	2.0
Connecticut	24	0.9	30	1.1	36	1.2	36	1.2	27	1.0	153	1.1
Delaware	6	0.2	5	0.2	7	0.2	12	0.4	7	0.3	37	0.3
Dist Of Columbia	7	0.3	9	0.3	15	0.5	21	0.7	8	0.3	60	0.4
Florida	58	2.3	61	2.2	66	2.2	43	1.4	52	1.9	280	2.0
Georgia	64	2.5	80	2.9	66	2.2	58	1.9	61	2.2	329	2.3
Idaho	31	1.2	17	0.6	25	0.8	18	0.6	24	0.9	115	0.8
Illinois	189	7.3	288	10.4	231	7.7	229	7.6	241	8.8	1,178	8.4
Indiana	87	3.4	85	3.1	79	2.6	90	3.0	54	2.0	395	2.8
Iowa	94	3.7	86	3.1	82	2.7	91	3.0	90	3.3	443	3.1
Kansas	75	2.9	89	3.2	91	3.1	100	3.3	83	3.0	438	3.1
Kentucky	58	2.3	54	2.0	44	1.5	32	1.1	42	1.5	230	1.6
Louisiana	71	2.8	70	2.5	79	2.6	113	3.7	79	2.9	412	2.9
Maine	10	0.4	15	0.5	13	0.4	7	0.2	5	0.2	50	0.4
Maryland	17	0.7	30	1.1	51	1.7	29	1.0	28	1.0	155	1.1
Massachusetts	12	0.5	18	0.7	23	0.8	24	0.8	18	0.7	95	0.7
Michigan	48	1.9	43	1.6	47	1.6	35	1.2	41	1.5	214	1.5
Minnesota	60	2.3	85	3.1	80	2.7	70	2.3	61	2.2	356	2.5
Mississippi	41	1.6	35	1.3	61	2.0	49	1.6	38	1.4	224	1.6
Missouri	57	2.2	73	2.6	83	2.8	90	3.0	77	2.8	380	2.7
Montana	39	1.5	27	1.0	30	1.0	29	1.0	28	1.0	153	1.1
Nebraska	82	3.2	75	2.7	82	2.7	99	3.3	85	3.1	423	3.0
Nevada	10	0.4	8	0.3	12	0.4	14	0.5	9	0.3	53	0.4
New Hampshire	2	0.1	1	0.0	-	-	1	0.0	1	0.0	5	0.0
New Jersey	27	1.0	36	1.3	56	1.9	52	1.7	71	2.6	242	1.7
New Mexico	21	0.8	18	0.7	25	0.8	32	1.1	15	0.5	111	0.8
New York	102	4.0	105	3.8	139	4.7	132	4.4	106	3.9	584	4.1
North Carolina	27	1.0	36	1.3	28	0.9	29	1.0	21	0.8	141	1.0
North Dakota	28	1.1	23	0.8	24	0.8	26	0.9	22	0.8	123	0.9
Ohio	88	3.4	98	3.5	120	4.0	97	3.2	82	3.0	485	3.4
Oklahoma	52	2.0	47	1.7	61	2.0	68	2.2	49	1.8	277	2.0
Oregon	57	2.2	53	1.9	41	1.4	53	1.8	59	2.2	263	1.9
Pennsylvania	115	4.5	103	3.7	127	4.3	92	3.0	101	3.7	538	3.8
Rhode Island	-	-	-	-	1	0.0	2	0.1	1	0.0	4	0.0
South Carolina	24	0.9	30	1.1	28	0.9	24	0.8	22	0.8	128	0.9
South Dakota	21	0.8	14	0.5	22	0.7	14	0.5	13	0.5	84	0.6
Tennessee	56	2.2	68	2.5	66	2.2	64	2.1	57	2.1	311	2.2
Texas	266	10.3	260	9.4	274	9.2	363	12.0	342	12.5	1,505	10.7
Utah	38	1.5	33	1.2	38	1.3	36	1.2	25	0.9	170	1.2
Vermont	5	0.2	4	0.1	4	0.1	7	0.2	2	0.1	22	0.2
Virginia	44	1.7	48	1.7	44	1.5	35	1.2	42	1.5	213	1.5
Washington	35	1.4	38	1.4	41	1.4	53	1.8	35	1.3	202	1.4
West Virginia	25	1.0	28	1.0	15	0.5	23	0.8	20	0.7	111	0.8
Wisconsin	39	1.5	45	1.6	63	2.1	56	1.9	54	2.0	257	1.8
Wyoming	42	1.6	42	1.5	50	1.7	52	1.7	42	1.5	228	1.6
Total	2,575	100.0	2,768	100.0	2,983	100.0	3,023	100.0	2,738	100.0	14,087	100.0

TABLE 1-9 CONSISTS TRANSPORTING HAZMAT BY RAILROAD

Railroads	1998			1999			2000			2001			2002		
	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls
Alton & Southern	-	-	-	-	-	-	1	1	-	1	1	-	2	2	-
Alaska RR Corp.	1	1	-	2	2	2	1	1	1	-	-	-	1	-	-
Amtrak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangor & Aroostook	-	-	-	3	2	1	2	1	2	1	-	-	-	-	-
Bessemer & Lake Erie RR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe	144	73	6	210	91	10	253	120	7	265	133	9	218	102	5
Belt Rwy Of Chicago	2	1	-	13	5	1	3	3	-	1	1	-	2	1	-
Consolidated Rail Corp.	37	33	5	22	19	3	-	-	-	-	-	-	-	-	-
Conrail Shared Assets	-	-	-	4	4	-	9	6	-	10	10	-	10	6	-
CSX Transportation	99	43	9	110	53	4	116	58	6	94	36	-	98	47	4
Delaware & Hudson	1	1	1	6	1	-	4	3	1	4	2	-	7	5	1
Dakota,Minnesota & Eastern	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Duluth,Missabe & Iron Range	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duluth,Winnipeg & Pacific	-	-	-	1	1	-	2	2	-	1	-	-	3	1	-
Elgin, Joliet & Eastern	3	-	-	3	1	-	1	1	-	1	1	-	2	1	-
Florida East Coast	1	-	-	3	-	-	3	1	-	1	1	-	2	2	-
Guilford Rail System	3	1	-	7	5	-	2	-	-	2	-	-	-	-	-
Grand Trunk Western RR	7	7	1	6	4	-	2	1	-	6	4	-	8	5	1
Gateway Western	4	1	-	2	2	-	3	1	-	7	5	1	-	-	-
Illinois Central	34	21	3	26	25	2	21	11	-	28	19	2	23	15	2
Other Railroads	45	34	3	47	24	4	40	25	2	51	28	2	42	21	2
Indiana Harbor Belt	5	2	1	10	4	-	3	1	-	3	1	-	2	1	-
I & M Rail Link, LLC	11	2	1	12	6	2	15	7	1	14	7	-	1	1	-
Kansas City Southern	9	3	1	21	10	2	34	18	1	31	19	1	59	33	1
Long Island Rail Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD Assn. of Rail Comm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass Bay Transit Auth.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metro North Commuter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana Rail Link	6	2	-	11	7	2	7	5	-	10	5	-	5	3	1
Northern IN Comm Trans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northeast IL Reg Comm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey Transit Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norfolk Southern Corp.	29	7	2	28	13	-	44	22	5	53	25	2	48	27	6
Paducah & Louisville	3	3	-	-	-	-	3	3	-	-	-	-	-	-	-
Port Auth Trans Hudson	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peninsula Comm San Mateo Cnty	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Port Terminal RR Assn	7	6	-	-	-	-	2	1	-	10	8	-	7	5	-
Southern CA Reg Rail Auth.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southeastern PA Trans.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soo Line	9	5	2	15	4	-	6	3	1	5	-	-	5	2	1
Term RR Assn Of St. Louis	-	-	-	1	1	-	1	1	-	1	-	-	-	-	-
Econo Rail Corporation	-	-	-	-	-	-	-	-	-	1	1	-	4	4	-
Union Pacific	163	70	8	142	71	9	152	79	8	184	90	8	176	99	7
Union RR (Pittsburgh)	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Wisconsin Central Ltd.	3	-	-	11	1	-	20	5	2	11	2	-	10	5	-
Wheeling & Lake Erie	-	-	-	-	-	-	2	1	-	2	1	-	2	1	-
Total	628	317	43	716	356	42	753	381	35	799	401	32	737	389	31

Cnt = Number of Consists; Dmg = Damaged; Rls = Releases

TABLE 1-10 CONSISTS TRANSPORTING HAZMAT BY STATE

States	1998			1999			2000			2001			2002		
	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls
Alabama	18	5	-	15	5	-	19	11	2	23	13	3	13	7	1
Alaska	1	1	-	2	2	2	1	1	1	-	-	-	1	-	-
Arizona	10	8	-	11	8	2	20	9	2	16	6	2	14	8	1
Arkansas	15	8	1	18	8	-	16	9	1	15	7	-	18	10	1
California	35	18	1	43	22	4	46	24	2	46	25	1	64	29	1
Colorado	17	7	-	16	3	-	14	7	-	16	6	-	7	4	-
Connecticut	-	-	-	4	1	1	-	-	-	-	-	-	1	1	-
Delaware	-	-	-	-	-	-	-	-	-	2	1	-	3	2	-
Dist Of Columbia	-	-	-	1	1	-	-	-	-	2	-	-	-	-	-
Florida	9	3	2	10	3	-	13	9	2	5	3	-	13	7	-
Georgia	11	3	-	6	3	1	8	3	1	14	7	3	16	8	1
Idaho	8	3	1	6	3	1	9	4	-	10	3	-	8	1	-
Illinois	46	28	5	68	33	5	54	32	1	56	25	1	65	34	1
Indiana	12	7	-	24	12	-	10	6	1	14	8	-	13	5	1
Iowa	15	5	1	23	8	2	17	10	1	21	7	1	18	9	-
Kansas	13	4	1	18	6	2	26	14	-	31	19	1	23	13	2
Kentucky	15	8	-	17	9	-	9	5	-	8	5	-	11	8	-
Louisiana	18	11	1	30	22	2	45	28	3	53	33	3	41	29	4
Maine	3	2	-	9	6	1	4	1	-	4	2	-	-	-	-
Maryland	3	-	-	5	2	-	9	3	-	7	5	2	10	6	1
Massachusetts	2	-	-	4	2	-	2	-	-	3	1	-	-	-	-
Michigan	14	9	1	7	3	-	14	7	-	11	8	-	14	8	1
Minnesota	17	7	-	20	7	-	22	14	1	16	4	-	16	6	-
Mississippi	8	3	1	11	6	2	15	8	-	18	11	-	17	12	1
Missouri	13	5	1	25	10	1	27	10	-	29	15	1	21	6	-
Montana	14	5	-	19	9	4	16	6	-	12	6	-	11	6	1
Nebraska	21	10	1	16	7	1	18	4	1	18	7	-	7	4	-
Nevada	7	3	1	1	1	-	2	1	-	4	1	1	2	1	-
New Hampshire	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-
New Jersey	6	6	2	7	7	-	7	4	-	8	7	-	8	3	-
New Mexico	11	3	-	7	3	-	6	2	-	19	9	1	7	4	-
New York	7	6	1	17	10	1	21	14	2	19	10	1	9	5	1
North Carolina	7	4	-	13	8	1	7	5	2	7	2	-	10	3	-
North Dakota	6	3	1	6	5	-	6	2	-	3	1	-	6	6	1
Ohio	16	11	2	12	5	-	26	14	2	21	5	1	20	10	-
Oklahoma	12	7	-	14	6	-	19	10	-	28	15	1	21	8	-
Oregon	12	4	1	16	4	-	12	6	1	15	8	-	9	3	-
Pennsylvania	20	14	3	14	9	2	26	14	1	16	7	-	20	7	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	9	6	2	11	6	-	8	5	-	4	2	-	6	4	1
South Dakota	3	1	-	-	-	-	-	-	-	2	1	-	2	1	-
Tennessee	32	9	3	26	16	1	25	11	-	18	9	-	23	11	4
Texas	91	55	4	86	46	4	92	40	4	140	80	8	131	82	5
Utah	10	6	-	5	4	1	4	3	1	1	-	-	2	2	-
Vermont	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Virginia	7	3	1	6	1	-	3	2	-	2	1	-	4	3	1
Washington	14	7	1	14	6	-	20	7	-	13	4	-	9	2	1
West Virginia	4	2	2	3	3	-	1	-	-	5	-	-	3	2	-
Wisconsin	6	3	1	11	2	-	21	7	2	13	4	-	11	5	-
Wyoming	9	3	1	17	12	1	13	9	1	11	8	1	9	4	-
Total	628	317	43	716	356	42	753	381	35	799	401	32	737	389	31

TABLE 1-11 TOTAL HIGHWAY-RAIL CROSSING INCIDENTS BY RAILROAD

Railroads	At Public Crossing					At Private Crossing				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alton & Southern	1	-	-	-	-	-	-	-	-	-
Alaska RR Corp.	3	2	7	4	4	1	1	-	-	-
Amtrak	145	158	168	140	118	25	23	34	22	24
Bangor & Aroostook	1	4	1	1	2	1	2	-	1	-
Bessemer & Lake Erie RR	1	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe	462	446	437	410	408	79	82	99	63	54
Belt Rwy Of Chicago	1	1	-	3	-	-	-	-	1	2
Consolidated Rail Corp.	156	58	-	-	-	12	6	-	-	-
Conrail Shared Assets	-	11	20	17	21	-	2	2	2	-
CSX Transportation	378	383	441	471	481	43	42	49	50	55
Delaware & Hudson	2	3	6	2	3	-	3	1	2	-
Dakota,Minnesota & Eastern	14	11	10	9	9	-	-	1	3	1
Duluth,Missabe & Iron Range	1	2	1	1	2	-	-	-	-	-
Duluth,Winnipeg & Pacific	2	2	2	1	2	-	-	-	-	-
Elgin, Joliet & Eastern	6	6	4	3	6	2	1	1	2	3
Florida East Coast	17	20	13	21	18	1	2	1	1	-
Other Railroads	314	331	290	305	317	49	47	57	55	41
Guilford Rail System	5	4	4	3	5	-	-	2	1	-
Grand Trunk Western RR	13	22	24	23	17	1	2	2	1	2
Gateway Western	5	4	5	3	-	-	-	1	1	-
Illinois Central	114	111	101	82	66	12	8	6	8	11
Indiana Harbor Belt	10	10	6	8	3	-	3	3	2	1
I & M Rail Link, LLC	37	30	38	32	14	5	4	7	4	2
Kansas City Southern	176	132	131	113	91	14	12	17	7	13
Long Island Rail Road	6	6	8	5	7	-	-	-	-	-
MD Assn. of Rail Comm	-	4	1	-	1	-	-	-	-	-
Mass Bay Transit Auth.	3	2	6	6	4	-	-	-	-	-
Metro North Commuter	5	2	1	1	2	1	1	-	-	2
Montana Rail Link	11	3	9	10	10	5	5	4	1	2
Northern IN Comm Trans	9	6	5	3	7	3	-	-	1	1
Northeast IL Reg Comm	11	20	18	22	18	1	1	1	-	1
New Jersey Transit Rail	8	7	6	13	16	-	-	-	-	-
Norfolk Southern Corp.	432	497	513	432	449	61	67	73	75	79
Paducah & Louisville	11	6	9	5	8	1	-	1	3	-
Peninsula Comm San Mateo Cnty	2	5	4	6	1	-	-	-	-	1
Port Terminal RR Assn	3	-	3	6	4	2	1	5	2	7
Southern CA Reg Rail Auth.	8	8	8	9	15	-	2	-	1	2
Southeastern PA Trans.	1	1	4	-	-	-	-	-	-	1
Soo Line	45	43	25	27	39	4	8	10	6	3
Term RR Assn Of St. Louis	-	-	1	1	4	-	-	-	-	-
Econo Rail Corporation	-	-	2	-	-	-	4	4	4	4
Union Pacific	590	656	602	555	479	91	69	83	74	53
Wisconsin Central Ltd.	68	66	90	79	50	6	1	6	-	3
Wheeling & Lake Erie	9	7	8	11	8	2	-	-	1	-
Total	3,086	3,090	3,032	2,843	2,709	422	399	470	394	368

TABLE 1-12 TOTAL HIGHWAY-RAIL CROSSING INCIDENTS BY STATE

States	At Public Crossing					At Private Crossing					At Public Crossing			At Private Crossing		
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	Cnt	Kld	Nonf	Cnt	Kld	Nonf
Alabama	134	112	84	93	107	11	12	11	10	11	530	52	159	55	3	20
Alaska	3	2	7	4	4	1	1	-	-	-	20	-	5	2	-	-
Arizona	32	30	26	28	17	3	3	3	1	2	133	18	47	12	1	1
Arkansas	104	95	99	83	83	12	10	16	4	1	464	81	172	43	8	14
California	159	175	141	163	117	31	29	33	17	23	755	147	240	133	20	55
Colorado	25	28	31	28	33	7	5	5	6	5	145	17	44	28	5	14
Connecticut	8	6	4	1	2	2	2	4	2	3	21	4	6	13	1	4
Delaware	4	10	10	6	4	1	1	-	1	2	34	4	16	5	-	1
Dist Of Columbia	-	-	-	-	-	1	-	2	-	-	-	-	-	3	-	-
Florida	68	91	75	99	86	7	4	11	15	13	419	64	184	50	8	19
Georgia	119	125	119	118	128	21	11	9	4	14	609	50	162	59	4	15
Hawaii	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
Idaho	25	20	26	17	18	2	-	7	3	2	106	16	35	14	3	-
Illinois	177	178	196	187	155	22	24	21	25	17	893	161	383	109	9	22
Indiana	176	182	188	153	162	18	11	6	12	13	861	105	293	60	5	11
Iowa	90	92	99	100	63	14	7	10	10	6	444	34	143	47	5	9
Kansas	62	74	58	56	68	9	3	9	7	3	318	38	131	31	4	3
Kentucky	59	49	57	60	72	14	13	12	19	13	297	20	100	71	9	21
Louisiana	192	164	162	147	136	22	16	19	14	13	801	82	375	84	11	44
Maine	7	5	5	7	5	1	2	3	2	1	29	-	11	9	1	-
Maryland	11	16	12	14	10	4	2	7	3	1	63	3	13	17	-	5
Massachusetts	3	9	11	15	12	2	1	1	2	-	50	8	11	6	-	1
Michigan	96	111	128	92	91	8	11	6	4	6	518	53	201	35	4	14
Minnesota	108	92	84	73	72	8	10	7	9	4	429	47	188	38	6	11
Mississippi	124	126	107	96	86	9	8	6	6	11	539	87	252	40	5	16
Missouri	72	88	67	55	64	15	11	21	9	12	346	53	134	68	5	20
Montana	19	11	14	15	23	8	8	10	1	2	82	8	27	29	4	2
Nebraska	49	55	46	39	49	10	9	9	11	6	238	39	81	45	2	11
Nevada	1	3	1	2	1	3	3	1	-	1	8	1	1	8	1	3
New Hampshire	2	6	3	1	-	-	-	-	1	1	12	-	1	2	-	2
New Jersey	16	21	34	31	32	1	3	2	5	1	134	27	43	12	-	2
New Mexico	14	15	13	20	14	3	4	4	4	3	76	14	31	18	3	5
New York	25	24	33	22	31	4	7	8	10	8	135	16	34	37	6	13
North Carolina	93	77	94	65	61	16	22	19	14	17	390	29	107	88	11	37
North Dakota	20	15	16	15	22	3	2	1	2	3	88	14	26	11	1	7
Ohio	142	127	138	123	127	12	19	10	17	14	657	91	209	72	8	8
Oklahoma	60	77	83	65	65	6	7	6	4	4	350	65	149	27	2	9
Oregon	30	22	21	25	24	14	8	9	18	11	122	11	35	60	2	19
Pennsylvania	58	49	59	59	59	5	9	10	9	14	284	22	67	47	5	17
Rhode Island	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
South Carolina	75	61	67	58	61	3	3	13	7	5	322	33	124	31	4	24
South Dakota	14	15	8	16	20	1	-	3	4	1	73	1	24	9	-	2
Tennessee	90	87	80	81	75	14	3	10	16	7	413	41	130	50	3	11
Texas	288	322	327	313	277	34	43	61	49	48	1,527	184	658	235	30	96
Utah	23	18	15	18	16	1	1	3	2	5	90	14	34	12	3	1
Vermont	3	5	2	-	4	1	1	-	-	1	14	-	1	3	-	3
Virginia	36	35	34	31	24	15	20	20	13	15	160	2	67	83	7	27
Washington	48	39	24	30	25	11	12	21	8	10	166	14	27	62	3	12
West Virginia	21	19	14	13	21	2	12	6	7	9	88	5	29	36	1	8
Wisconsin	97	104	110	102	79	8	5	12	2	4	492	43	207	31	3	7
Wyoming	3	3	-	3	4	2	1	3	5	2	13	1	7	13	1	4
Total	3,086	3,090	3,032	2,843	2,709	422	399	470	394	368	14,760	1819	5424	2,053	217	650

TABLE 1-13 HIGHWAY-RAIL CROSSING INCIDENTS CASUALTIES BY RAILROAD

Railroads	Fatalities					Nonfatal				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Alton & Southern	-	-	-	-	-	1	-	-	-	-
Alaska RR Corp.	-	-	-	-	-	2	1	-	1	1
Amtrak	50	52	56	69	42	125	146	90	84	93
Bangor & Aroostook	-	-	-	-	-	-	2	-	1	-
Bessemer & Lake Erie RR	-	-	-	-	-	1	-	-	-	-
Burlington Northern Santa Fe	96	59	65	55	69	183	237	202	181	169
Belt Rwy Of Chicago	-	-	-	-	-	-	-	-	1	-
Consolidated Rail Corp.	14	8	-	-	-	39	19	-	-	-
Conrail Shared Assets	-	1	1	2	-	-	2	10	6	4
CSX Transportation	55	54	55	63	39	161	189	212	206	142
Delaware & Hudson	-	1	1	2	-	-	4	4	1	-
Dakota,Minnesota & Eastern	-	-	-	-	-	2	3	4	1	2
Duluth,Missabe & Iron Range	-	-	-	-	-	1	2	1	-	-
Duluth,Winnipeg & Pacific	1	1	-	-	-	1	-	-	-	1
Elgin, Joliet & Eastern	-	2	-	-	-	1	2	-	2	2
Florida East Coast	1	5	7	3	8	8	12	6	3	5
Guilford Rail System	-	-	-	-	-	2	2	1	2	1
Grand Trunk Western RR	4	3	1	1	5	9	4	10	9	1
Gateway Western	1	-	2	-	-	1	1	3	1	-
Illinois Central	13	10	14	21	7	51	64	55	47	34
Other Railroads	9	13	12	16	17	111	86	90	87	98
Indiana Harbor Belt	-	-	1	-	-	2	-	3	2	1
I & M Rail Link, LLC	2	2	5	4	-	26	11	15	18	6
Kansas City Southern	25	15	19	15	11	88	57	57	60	45
Long Island Rail Road	2	1	1	4	2	3	2	3	1	-
MD Assn. of Rail Comm	-	-	-	-	-	-	-	-	-	1
Mass Bay Transit Auth.	1	-	1	-	4	-	-	1	1	1
Metro North Commuter	-	-	-	-	1	-	3	1	-	2
Montana Rail Link	-	2	3	1	-	6	3	-	2	1
Northern IN Comm Trans	3	1	-	-	-	2	-	-	2	7
Northeast IL Reg Comm	1	2	3	3	6	8	6	-	11	5
New Jersey Transit Rail	5	4	3	6	4	2	1	-	1	8
Norfolk Southern Corp.	44	51	59	67	58	140	187	129	129	96
Paducah & Louisville	-	-	-	-	-	1	1	2	4	4
Peninsula Comm San Mateo Cnty	-	1	2	4	-	1	6	3	-	2
Port Terminal RR Assn	1	1	-	-	-	2	-	2	3	-
Southern CA Reg Rail Auth.	4	2	1	1	5	-	2	2	6	10
Southeastern PA Trans.	-	-	-	-	-	-	1	3	-	-
Soo Line	5	4	2	2	6	22	19	19	17	28
Econo Rail Corporation	-	-	1	-	-	-	-	1	-	-
Union Pacific	89	101	101	72	69	262	281	244	227	208
Wisconsin Central Ltd.	5	6	9	10	4	38	36	43	35	20
Wheeling & Lake Erie	-	-	-	-	-	1	4	3	5	1
Total	431	402	425	421	357	1,303	1,396	1,219	1,157	999

TABLE 1-14 TOTAL HIGHWAY-RAIL CROSSING INCIDENT CASUALTIES BY STATE

States	Fatalities					Nonfatal					5 Year Total	
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	Kld	Nonf
Alabama	11	12	10	9	13	46	34	39	28	32	55	179
Alaska	-	-	-	-	-	2	1	-	1	1	-	5
Arizona	4	1	8	6	-	9	11	13	10	5	19	48
Arkansas	24	15	27	9	14	45	37	36	39	29	89	186
California	32	24	27	54	30	64	73	54	49	55	167	295
Colorado	4	3	6	3	6	13	15	8	10	12	22	58
Connecticut	1	-	2	-	2	4	3	-	2	1	5	10
Delaware	-	1	-	1	2	3	6	7	-	1	4	17
Florida	7	19	15	15	16	30	38	67	36	32	72	203
Georgia	13	7	10	19	5	35	41	38	50	13	54	177
Idaho	4	2	11	1	1	14	6	1	7	7	19	35
Illinois	30	54	31	31	24	67	114	68	89	67	170	405
Indiana	25	26	23	19	17	80	63	55	62	44	110	304
Iowa	3	10	6	16	4	30	28	31	35	28	39	152
Kansas	9	8	11	5	9	30	39	18	20	26	42	133
Kentucky	5	4	5	10	5	20	26	20	31	24	29	121
Louisiana	25	20	14	22	12	101	71	88	93	65	93	418
Maine	-	-	1	-	-	3	2	1	4	1	1	11
Maryland	-	1	1	1	-	2	1	2	9	4	3	18
Massachusetts	1	2	1	-	4	-	3	4	4	1	8	12
Michigan	11	15	13	11	7	46	48	51	36	34	57	215
Minnesota	14	13	6	9	11	47	57	40	25	30	53	199
Mississippi	24	17	15	22	14	63	83	44	47	31	92	268
Missouri	14	9	17	4	14	25	54	27	22	26	58	154
Montana	4	4	1	1	2	11	6	2	4	6	12	29
Nebraska	11	7	7	3	13	19	23	14	17	20	41	93
Nevada	1	-	-	-	1	2	1	-	-	1	2	4
New Hampshire	-	-	-	-	-	-	1	-	-	2	-	3
New Jersey	5	5	5	8	4	4	7	10	11	13	27	45
New Mexico	5	3	-	8	1	6	7	11	8	4	17	36
New York	2	4	5	8	3	6	12	14	5	10	22	47
North Carolina	15	3	14	6	2	48	30	25	21	20	40	144
North Dakota	6	1	6	2	-	7	3	2	8	13	15	33
Ohio	15	21	15	22	26	45	59	38	40	35	99	217
Oklahoma	12	14	12	9	20	39	26	47	19	27	67	158
Oregon	5	2	-	6	-	9	5	13	13	14	13	54
Pennsylvania	1	4	8	8	6	21	19	17	15	12	27	84
South Carolina	6	8	10	4	9	32	27	24	23	42	37	148
South Dakota	-	-	-	1	-	6	6	5	4	5	1	26
Tennessee	14	4	8	10	8	26	36	26	39	14	44	141
Texas	45	41	52	39	37	158	176	164	132	125	214	755
Utah	5	5	2	2	3	6	8	7	8	6	17	35
Vermont	-	-	-	-	-	-	1	-	-	3	-	4
Virginia	2	2	3	1	1	17	26	21	18	12	9	94
Washington	6	3	1	5	2	5	9	10	7	8	17	39
West Virginia	2	1	1	1	1	5	9	8	9	6	6	37
Wisconsin	7	7	15	10	7	48	43	49	43	31	46	214
Wyoming	1	-	-	-	1	4	2	-	4	1	2	11
Total	431	402	425	421	357	1,303	1,396	1,219	1,157	999	2,036	6,074

TABLE 1-15 TRESPASSER CASUALTIES BY RAILROAD, NOT AT HRC

Railroads	Fatalities					Nonfatal					5 Year Total	
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	Kld	Nonf
Alaska RR Corp.	1	-	-	-	-	-	-	-	-	1	-	1
Amtrak	67	51	70	67	78	30	25	18	37	28	333	138
Bessemer & Lake Erie RR	-	-	-	-	-	-	-	2	-	-	-	2
Burlington Northern Santa Fe	104	63	77	62	64	70	53	57	47	52	370	279
Consolidated Rail Corp.	23	6	-	-	-	30	9	-	-	-	29	39
Conrail Shared Assets	-	1	-	5	2	-	1	3	4	6	8	14
CSX Transportation	64	64	61	78	77	55	47	58	84	54	344	298
Delaware & Hudson	-	2	3	3	1	2	2	2	2	1	9	9
Dakota, Minnesota & Eastern	-	-	-	-	-	-	1	-	-	1	-	2
Duluth, Winnipeg & Pacific	1	-	-	-	1	-	-	-	-	-	2	-
Elgin, Joliet & Eastern	-	-	-	-	-	-	-	-	2	-	-	2
Florida East Coast	9	10	15	10	16	16	7	13	7	6	60	49
Guilford Rail System	2	2	3	1	-	3	1	-	3	-	8	7
Grand Trunk Western RR	-	-	3	3	2	-	2	2	2	3	8	9
Gateway Western	1	1	2	1	-	-	-	1	-	-	5	1
Illinois Central	2	6	3	4	11	4	2	10	3	5	26	24
Indiana Harbor Belt	-	-	-	-	-	1	2	2	1	1	-	7
I & M Rail Link, LLC	-	2	1	1	-	2	2	1	-	-	4	5
Kansas City Southern	4	5	5	6	10	11	3	9	2	9	30	34
Long Island Rail Road	6	4	4	6	5	10	3	9	5	3	25	30
MD Assn. of Rail Comm	-	2	2	-	-	1	1	-	-	-	4	2
Mass Bay Transit Auth.	1	5	10	10	11	1	1	5	1	2	37	10
Metro North Commuter	4	5	4	2	4	2	3	1	2	-	19	8
Montana Rail Link	-	1	-	1	1	-	1	-	-	-	3	1
Northeast IL Reg Comm	4	5	2	1	9	9	10	6	4	7	21	36
New Jersey Transit Rail	18	13	17	25	12	2	3	4	5	5	85	19
Norfolk Southern Corp.	63	47	56	55	63	58	50	41	42	50	284	241
Paducah & Louisville	1	-	-	-	1	1	-	1	2	-	2	4
Port Auth Trans Hudson	-	-	-	1	-	2	-	-	1	1	1	4
Peninsula Comm San Mateo Cnty	3	2	12	8	5	6	1	-	1	3	30	11
Port Terminal RR Assn	-	-	-	-	-	-	1	1	-	-	-	2
Southern CA Reg Rail Auth.	2	-	-	-	1	1	-	-	1	2	3	4
Southeastern PA Trans.	3	6	3	1	3	12	7	2	2	1	16	24
Soo Line	1	3	1	3	1	6	1	1	2	4	9	14
Union Pacific	146	165	95	132	146	151	192	141	127	133	684	744
Wisconsin Central Ltd.	1	-	2	1	3	3	1	6	2	-	7	12
Wheeling & Lake Erie	-	1	-	-	1	-	-	-	-	2	2	2
Other Railroads	5	7	12	24	12	24	13	18	12	16	60	83
Total	536	479	463	511	540	513	445	414	404	395	2,529	2,171

TABLE 1-16 TRESPASSER CASUALTIES BY STATE, NOT AT HRC

States	Fatalities					Nonfatal					5 Year Total	
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	Kld	Nonf
Alabama	13	6	10	12	5	5	6	7	3	4	46	25
Alaska	1	-	-	-	-	1	-	-	1	-	1	2
Arizona	15	14	15	9	14	10	15	14	9	11	67	59
Arkansas	12	10	2	7	12	7	7	5	6	9	43	34
California	79	86	72	76	90	56	44	45	39	43	403	227
Colorado	8	6	4	6	4	10	8	4	4	1	28	27
Connecticut	3	10	4	3	4	1	2	-	2	1	24	6
Delaware	1	1	2	1	4	1	1	-	4	-	9	6
Dist Of Columbia	1	-	-	1	1	1	-	1	2	1	3	5
Florida	23	24	29	28	33	35	18	20	26	15	137	114
Georgia	16	11	11	8	14	17	12	5	9	13	60	56
Idaho	4	2	-	2	1	4	1	-	1	1	9	7
Illinois	34	32	31	39	32	24	29	26	27	26	168	132
Indiana	5	5	11	9	8	10	8	5	5	4	38	32
Iowa	3	6	2	1	16	6	4	8	5	4	28	27
Kansas	7	4	9	5	4	9	9	7	12	3	29	40
Kentucky	5	1	8	4	5	12	9	8	8	5	23	42
Louisiana	7	8	2	10	16	11	8	14	8	13	43	54
Maine	1	-	1	-	-	-	-	-	2	-	2	2
Maryland	4	10	7	6	9	7	6	5	2	3	36	23
Massachusetts	4	10	16	13	11	8	3	5	8	4	54	28
Michigan	5	5	9	8	4	7	5	11	4	6	31	33
Minnesota	8	10	5	5	6	10	9	5	6	3	34	33
Mississippi	3	8	2	11	10	6	4	-	5	4	34	19
Missouri	19	7	11	12	5	7	13	8	8	14	54	50
Montana	3	-	2	2	3	-	2	1	1	1	10	5
Nebraska	2	4	1	4	3	4	5	4	1	1	14	15
Nevada	5	4	1	3	3	4	3	4	2	2	16	15
New Hampshire	1	-	-	-	-	6	-	-	-	1	1	7
New Jersey	23	14	21	29	18	3	5	11	8	7	105	34
New Mexico	7	5	4	8	10	8	9	6	3	6	34	32
New York	25	18	24	18	23	23	16	26	25	10	108	100
North Carolina	24	21	10	19	20	14	12	11	13	6	94	56
North Dakota	1	2	2	2	1	2	1	1	3	-	8	7
Ohio	12	14	12	11	20	21	8	9	9	10	69	57
Oklahoma	7	7	10	5	1	5	9	7	9	7	30	37
Oregon	15	8	9	7	7	10	5	14	5	11	46	45
Pennsylvania	16	15	14	23	22	28	15	11	19	22	90	95
Rhode Island	2	1	1	1	1	1	-	-	1	-	6	2
South Carolina	17	8	9	8	13	6	6	7	4	8	55	31
South Dakota	-	-	2	-	3	-	1	6	-	1	5	8
Tennessee	10	12	6	13	7	5	4	1	8	18	48	36
Texas	50	42	34	47	44	78	90	56	60	68	217	352
Utah	1	2	3	2	2	1	1	3	1	2	10	8
Vermont	1	-	1	1	-	2	-	-	-	1	3	3
Virginia	10	8	8	4	11	3	10	4	14	8	41	39
Washington	13	13	14	18	13	7	10	15	4	8	71	44
West Virginia	5	1	8	4	2	6	8	10	4	5	20	33
Wisconsin	4	2	4	5	5	9	4	4	1	4	20	22
Wyoming	1	2	-	1	-	2	-	-	3	-	4	5
Total	536	479	463	511	540	513	445	414	404	395	2,529	2,171

CHAPTER 2

CURRENT YEAR SUMMARY OF ACCIDENTS/INCIDENTS AND RATES

The Federal Railroad Administration's (FRA) regulations on reporting railroad accidents/incidents are found primarily in Title 49 of the Code of Federal Regulations (CFR), Part 225 (49 CFR Part 225). The purpose of the regulations in Part 225 is to provide FRA with accurate information concerning the hazards and risks that exist on the Nation's railroads. FRA needs this information to effectively carry out its regulatory and enforcement responsibilities under the Federal railroad safety statutes. FRA also uses this information for determining comparative trends of railroad safety and to develop hazard elimination and risk reduction programs that focus on preventing railroad injuries and accidents. Issuance of these regulations preempts States from prescribing accident/incident reporting requirements. Any State may, however, require railroads to submit to it copies of reports filed with FRA under Part 225 for accidents/incidents that occur in that State.

These FRA accident/incident reporting requirements apply to all railroads except--

1. A railroad that operates freight trains only on track inside an installation which is not part of the general railroad system of transportation or that owns no track except for track that is inside an installation that is not part of the general railroad system of transportation and used for freight operations.
2. Rail mass transit operations in an urban area that are not connected with the general railroad system of transportation.
3. A railroad that exclusively hauls passengers inside an installation that is insular or that owns no track except for track used exclusively for the hauling of passengers inside an installation that is insular. An operation is not considered insular if one or more of the following exists on its line:
 - a. A public highway-rail grade crossing that is in use;
 - b. An at-grade rail crossing that is in use;
 - c. A bridge over a public road or waters used for commercial navigation; or
 - d. A common corridor with a railroad, i.e., its operations are within 30 feet of those of any railroad.

Part 225 covers any and all activities of a railroad related to the performance of its rail transportation business. "Railroad transportation" means any form of non-highway ground transportation that run on rails or electro-magnetic guideways, including (1) commuter or other short-haul railroad passenger service in a metropolitan or suburban area, as well as any commuter railroad service that was operated by the Consolidated Rail Corporation as of January

1, 1979, and (2) high speed ground transportation systems that connect metropolitan areas, without regard to whether they use new technologies not associated with traditional railroads. Such term does not include rapid transit operations within an urban area that are not connected to the general railroad system of transportation.

Approximately 700 railroads currently submit accident/incident reports. It is not possible to display the safety record of each railroad in this publication. Consequently, the listing of individual railroads has been limited to those defined by the Surface Transportation Board (STB) to be Class 1 railroads, and other railroads reporting annual employees worked in excess of 400,000.

Railroads have been assigned to 1 of 3 groups in this bulletin. Group 1 corresponds to the railroads that have defined as Class 1; Group 2 includes railroads that reported at least 400,000 hours worked; and, Group 3 contains all other railroads.

In order to conserve space, most tables display the reporting code assigned to a railroad. Please see Table 2-8 for a listing of the code and railroad name.

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TABLE 2-1 ACCIDENTS/INCIDENTS, BY MONTH, 2002

Months				Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
January	1,248	82	2,243	233	2	1,450	271	28	67	744	52	726
February	1,093	64	692	222	-	10	225	28	61	646	36	621
March	1,198	77	757	223	-	4	281	26	92	694	51	661
April	1,139	75	899	223	7	159	220	21	73	696	47	667
May	1,185	85	814	218	2	19	239	34	107	728	49	688
June	1,217	86	919	208	-	109	263	25	96	746	61	714
July	1,234	99	882	225	1	78	273	49	102	736	49	702
August	1,366	91	885	252	-	11	295	38	101	819	53	773
September	1,214	73	798	225	-	7	236	27	70	753	46	721
October	1,244	84	792	254	-	13	264	28	90	726	56	689
November	1,122	65	726	203	-	8	266	24	80	653	41	638
December	1,144	70	696	252	3	16	244	29	60	648	38	620
Total	14,404	951	11,103	2,738	15	1,884	3,077	357	999	8,589	579	8,220

TABLE 2-2 ACCIDENT/INCIDENT RATES, BY MONTH, 2002

Months	Total Accident/ Incident	Train Accidents	Employee On Duty	Highway-rail Crossing	Other Events	Trespasser	Passenger On Trains	Passenger Train	Yard Track	Other Track
January	12.74	3.94	3.04	4.58	7.60	1.34	3.17	0.54	18.15	2.03
February	11.99	3.98	2.89	4.04	7.09	1.02	3.58	1.32	19.99	1.87
March	11.87	3.58	2.68	4.51	6.88	1.19	4.19	1.07	18.02	1.74
April	11.40	3.67	2.95	3.62	6.96	1.30	13.25	1.48	17.45	1.89
May	11.49	3.47	2.85	3.81	7.06	1.50	3.97	0.39	16.43	1.81
June	12.34	3.39	3.19	4.29	7.57	1.57	10.10	1.76	15.11	1.96
July	12.46	3.71	2.96	4.50	7.43	1.30	8.26	1.42	16.71	2.08
August	13.29	3.98	3.12	4.65	7.97	1.56	3.78	1.70	21.02	1.88
September	12.43	3.70	3.16	3.89	7.71	1.17	4.68	2.04	16.43	2.18
October	12.05	4.00	2.81	4.16	7.03	1.48	4.63	1.82	19.37	2.11
November	11.73	3.38	2.80	4.43	6.82	0.90	4.32	0.68	18.55	1.60
December	12.35	4.32	2.77	4.19	6.99	1.01	5.05	1.45	22.04	2.21
Total	12.18	3.76	2.94	4.22	7.26	1.28	5.83	1.31	18.25	1.95

TABLE 2-3 ACCIDENTS/INCIDENTS, BY RAILROAD GROUP, 2002

Groups	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
I	9,999	796	7,722	2,092	11	1,742	2,442	306	816	5,465	479	5,164
II	2,913	121	2,331	391	3	62	287	35	89	2,235	83	2,180
III	1,492	34	1,050	255	1	80	348	16	94	889	17	876
All	14,404	951	11,103	2,738	15	1,884	3,077	357	999	8,589	579	8,220

TABLE 2-4 OPERATIONAL DATA BY RAILROAD GROUPS, 2002

Groups	Train Miles	Freight Train Miles	Passenger Train Miles	Yard Switching Train Miles	Other Train Miles	Employee Hours	Passengers Carried
I	622,021,079	511,361,880	37,793,452	61,924,711	10,941,036	350,522,799	23,320,755
II	77,168,289	21,686,174	44,679,499	10,720,482	82,134	77,557,377	415,462,036
III	29,484,778	13,837,395	7,097,055	8,357,223	193,105	26,022,067	65,147,204
All	728,674,146	546,885,449	89,570,006	81,002,416	11,216,275	454,102,243	503,929,995

TABLE 2-5 ACCIDENT/INCIDENT RATES BY RAILROAD GROUPS, 2002

Groups	Total Accident/ Incident	Train Accidents	Employee On Duty	Highway-rail Crossing	Other Events	Trespasser	Passenger On Trains	Passenger Train	Yard Track	Other Track
I	10.28	3.36	2.42	3.93	5.62	1.27	9.40	1.19	19.12	1.62
II	18.83	5.07	4.32	3.72	14.44	1.52	2.97	1.50	19.31	2.77
III	26.88	8.65	5.73	11.80	16.02	0.95	9.00	0.70	10.41	7.95
Tot	12.18	3.76	2.94	4.22	7.26	1.28	5.83	1.31	18.25	1.95

TABLE 2-6 ACCIDENTS/INCIDENTS BY RAILROAD, 2002

	Group - Railroads	Total			Train Accidents			HRC Incidents			Other Incidents		
		Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
1	Amtrak	1,458	126	1,484	112	4	226	142	42	93	1,204	80	1,165
	Burlington Northern Santa Fe	2,088	149	1,242	538	3	23	462	69	169	1,088	77	1,050
	CSX Transportation	1,657	120	859	354	-	11	536	39	142	767	81	706
	Grand Trunk Western RR	100	7	64	16	-	-	19	5	1	65	2	63
	Illinois Central	262	18	150	60	-	1	77	7	34	125	11	115
	Kansas City Southern	293	21	137	93	1	1	104	11	45	96	9	91
	Norfolk Southern Corp.	1,328	126	614	232	1	10	528	58	96	568	67	508
	Soo Line	189	8	1,606	17	1	1,441	42	6	28	130	1	137
	Union Pacific	2,778	221	1,566	824	1	29	532	69	208	1,422	151	1,329
2	Alton & Southern	26	-	13	15	-	2	-	-	-	11	-	11
	Alaska RR Corp.	36	-	30	5	-	2	4	-	1	27	-	27
	Bangor & Aroostook	19	-	15	2	-	-	2	-	-	15	-	15
	Bessemer & Lake Erie RR	8	-	6	2	-	-	-	-	-	6	-	6
	Belt Rwy Of Chicago	30	-	10	18	-	-	2	-	-	10	-	10
	Conrail Shared Assets	100	2	51	31	-	-	21	-	4	48	2	47
	Delaware & Hudson	56	2	47	9	-	3	3	-	-	44	2	44
	Dakota,Minnesota & Eastern	38	-	14	16	-	-	10	-	2	12	-	12
	Duluth,Missabe & Iron Range	35	-	21	12	-	-	2	-	-	21	-	21
	Duluth,Winnipeg & Pacific	18	1	13	3	-	-	2	-	1	13	1	12
	Elgin, Joliet & Eastern	34	-	12	15	-	-	9	-	2	10	-	10
	Florida East Coast	74	24	34	11	-	-	18	8	5	45	16	29
	Other Railroads	61	1	41	15	-	1	10	1	4	36	-	36
	Guilford Rail System	14	-	7	3	-	-	5	-	1	6	-	6
	Indiana Harbor Belt	41	-	22	16	-	-	4	-	1	21	-	21
	I & M Rail Link, LLC	43	-	19	15	-	1	16	-	6	12	-	12
	Long Island Rail Road	328	9	323	14	-	23	7	2	-	307	7	300
	MD Assn. of Rail Comm	15	-	18	2	-	5	1	-	1	12	-	12
	Mass Bay Transit Auth.	137	15	127	-	-	-	4	4	1	133	11	126
	Metro North Commuter	425	6	375	46	-	2	4	1	2	375	5	371
	Montana Rail Link	52	1	26	17	-	3	12	-	1	23	1	22
	Northern IN Comm Trans	33	-	32	-	-	-	8	-	7	25	-	25
	Northeast IL Reg Comm	237	15	216	4	-	-	19	6	5	214	9	211
	New Jersey Transit Rail	262	16	208	39	-	2	16	4	8	207	12	198
	Paducah & Louisville	17	1	8	4	-	-	8	-	4	5	1	4
	Port Auth Trans Hudson	201	1	206	3	-	1	-	-	-	198	1	205
	Peninsula Comm San Mateo Cnty	36	5	31	1	-	-	2	-	2	33	5	29
	Port Terminal RR Assn	45	-	20	15	-	-	11	-	-	19	-	20
	Southern CA Reg Rail Auth.	51	9	53	3	3	13	17	5	10	31	1	30
	Southeastern PA Trans.	228	4	202	22	-	1	1	-	-	205	4	201
	Term RR Assn Of St. Louis	22	-	5	13	-	-	4	-	-	5	-	5
	Econo Rail Corporation	15	-	4	7	-	-	4	-	-	4	-	4
	Union RR (Pittsburgh)	21	-	16	5	-	-	-	-	-	16	-	16
	Wisconsin Central Ltd.	161	8	97	31	-	3	53	4	20	77	4	74
	Wheeling & Lake Erie	29	1	9	12	-	-	8	-	1	9	1	8
3	Other Railroads	1,515	34	1,050	278	1	80	348	16	94	889	17	876

Highway-Rail Counts Are Excluded From Other Categories

TABLE 2-7 ACCIDENT/INCIDENT RATES BY RAILROAD, 2002

Group - Railroads		Total Rate 1/	Train Acc Rate 2/	EOD Rate 3/	HRC Rate 4/	Other Events 5/	Tres Rate 6/	Psgr Rate 7/	Psgr Train Rate 8/	Yard Rate 9/	Other Track Rate 10/
1	Amtrak	18.43	2.82	4.18	3.58	15.22	2.67	9.40	1.20	25.14	1.62
	Burlington Northern Santa Fe	8.81	3.32	2.27	2.86	4.59	0.72	.	.	22.97	1.64
	CSX Transportation	9.54	3.22	2.00	4.88	4.42	1.19	.	.	14.11	1.56
	Grand Trunk Western RR	11.83	3.32	3.25	3.94	7.69	1.04	.	.	7.86	2.10
	Illinois Central	14.41	6.08	2.72	7.81	6.88	1.62	.	.	12.23	4.14
	Kansas City Southern	20.66	10.88	3.20	12.16	6.77	2.22	.	.	46.45	5.16
	Norfolk Southern Corp.	8.83	2.52	1.33	5.73	3.78	1.23	.	.	9.17	1.39
	Soo Line	12.84	2.01	3.92	4.97	8.83	0.59	.	.	5.81	0.92
	Union Pacific	10.03	4.41	2.57	2.85	5.13	1.49	.	.	36.44	2.05
2	Alton & Southern	17.20	18.43	3.44	.	7.28	.	.	.	18.43	.
	Alaska RR Corp.	12.49	3.46	3.89	2.77	9.37	.	.	.	3.88	3.23
	Bangor & Aroostook	17.75	3.15	6.89	3.15	14.01	.	.	.	.	3.31
	Bessemer & Lake Erie RR	11.99	8.76	2.74	.	9.00	.	.	.	112.13	.
	Belt Rwy Of Chicago	22.63	47.81	2.11	5.31	7.54	.	.	.	45.04	69.08
	Conrail Shared Assets	20.47	14.58	2.39	9.88	9.83	3.76	.	.	13.20	20.85
	Delaware & Hudson	19.54	4.98	8.88	1.66	15.35	1.11	.	.	10.58	3.94
	Dakota,Minnesota & Eastern	26.00	21.25	3.10	13.28	8.21	1.33	.	.	11.94	22.42
	Duluth,Missabe & Iron Range	19.63	18.05	3.76	3.01	11.78	.	.	.	56.48	14.71
	Duluth,Winnipeg & Pacific	14.89	3.83	4.69	2.56	10.75	1.28	.	.	46.71	2.63
	Elgin, Joliet & Eastern	16.69	24.38	1.13	14.63	4.91	.	.	.	47.18	10.47
	Florida East Coast	19.49	4.91	2.83	8.04	11.85	9.82	.	.	15.43	2.24
	Other Railroads	78.86	8.05	15.49	5.37	68.07	.	8.72	.	22.96	6.93
	Guilford Rail System	4.40	2.03	0.70	3.38	1.88	.	.	.	3.83	1.04
	Indiana Harbor Belt	14.33	11.92	2.63	2.98	7.34	0.75	.	.	.	2.24
	I & M Rail Link, LLC	14.75	13.73	1.43	14.65	4.12	.	.	.	54.56	5.50
	Long Island Rail Road	15.91	1.71	4.17	0.85	14.89	0.98	1.50	0.24	.	0.37
	MD Assn. of Rail Comm	8.41	1.65	2.81	0.82	6.73	.	3.85	1.76	.	1.65
	Mass Bay Transit Auth.	18.04	.	5.63	1.03	17.51	3.33	2.87	.	.	.
	Metro North Commuter	21.84	5.33	5.20	0.46	19.27	0.46	1.12	4.06	.	4.52
	Montana Rail Link	9.92	4.83	2.90	3.41	4.39	0.28	.	.	17.38	2.94
	Northern IN Comm Trans	19.67	.	6.30	9.04	14.90	.	.	.	.	.
	Northeast IL Reg Comm	26.20	1.11	3.11	5.29	23.65	4.46	12.12	0.29	12.25	0.86
	New Jersey Transit Rail	15.93	4.82	3.78	1.98	12.59	2.10	0.95	0.88	175.43	1.64
	Paducah & Louisville	14.98	6.93	1.43	13.87	4.41	1.73	.	.	23.99	2.21
	Port Auth Trans Hudson	47.13	1.35	10.61	.	46.42	0.45	5.23	.	.	1.55
	Peninsula Comm San Mateo Cnty	17.74	0.85	5.36	1.71	16.26	6.83	0.55	.	26.11	.
	Port Terminal RR Assn	24.14	12.02	6.17	8.81	10.19	.	.	.	10.41	.
	Southern CA Reg Rail Auth.	19.39	1.50	2.83	8.52	11.78	1.50	5.58	1.00	.	1.00
	Southeastern PA Trans.	26.06	4.16	9.49	0.19	23.43	0.76	7.76	3.40	.	3.59
	Term RR Assn Of St. Louis	19.08	21.95	1.78	6.75	4.34	.	.	.	15.20	.
	Econo Rail Corporation	12.06	8.44	1.93	4.83	3.22	.	.	.	1.21	.
	Union RR (Pittsburgh)	18.83	37.41	3.06	.	14.35	.	.	.	22.44	.
	Wisconsin Central Ltd.	16.40	5.21	3.98	8.91	7.84	0.50	.	.	12.58	3.36
	Wheeling & Lake Erie	18.20	14.72	1.54	9.81	5.65	3.68	.	.	32.01	10.62
3	Other Railroads	27.29	9.43	5.73	11.80	16.02	0.95	9.00	0.70	11.49	8.61

1. Total accident/incident rate of all reported events * 1,000,000 / (train miles + hours)

2. Train accidents * 1,000,000 / total train miles

3. Employee deaths, injuries, illnesses * 200,000 / total hours worked

4. Highway rail incidents * 1,000,000 / total train miles

5. Other events (not train accidents or crossing incidents) * 1,000,000 / (train miles + hours)

6. Trespassing deaths and injuries * 1,000,000 / total train miles

7 Passenger on train deaths and injuries * 100,000,000 / total passenger miles

8. Passenger train accidents * 1,000,000 / passenger train miles

9. Accidents on yard track * 1,000,000 / yard switching train miles

10. Accidents on other than yard track * 1,000,000 / (total train miles - yard switching)

TABLE 2-8 RAILROAD RANKINGS, 2002

	Railroads	Train Miles	Hours	Total Rate	Train Acc Rate	EOD Rate	HRC Rate	Other Events	Tres Rate
1	ATK - Amtrak (Natl RR Passenger Corp.)	5	5	18	3	4	4	15	3
	BNSF - Burlington Northern Santa Fe	2	2	9	3	2	3	5	1
	CSX - CSX Transportation	3	3	10	3	2	5	4	1
	GTW - Grand Trunk Western RR Inc.	9	9	12	3	3	4	8	1
	IC - Illinois Central RR Co.	6	6	14	6	3	8	7	2
	KCS - Kansas City Southern Rwy Co.	7	8	21	11	3	12	7	2
	NS - Norfolk Southern Corp.	4	4	9	3	1	6	4	1
	SOO - Soo Line RR Co.	8	7	13	2	4	5	9	1
	UP - Union Pacific RR Co.	1	1	10	4	3	3	5	1
2	ALS - Alton & Southern RR	25	25	17	18	3	0	7	0
	ARR - Alaska RR Corp.	16	15	12	3	4	3	9	0
	BAR - Bangor & Aroostook RR	29	33	18	3	7	3	14	0
	BLE - Bessemer & Lake Erie RR Co.	34	32	12	9	3	0	9	0
	BRC - Belt Rwy Co. Of Chicago	33	20	23	48	2	5	8	0
	CRSH - Conrail Shared Assets	11	8	20	15	2	10	10	4
	DH - Delaware & Hudson Rwy Co.	14	18	20	5	9	2	15	1
	DME - Dakota, Minnesota & Eastern RR	27	24	26	21	3	13	8	1
	DMIR - Duluth, Missabe & Iron Range Rwy	28	17	20	18	4	3	12	0
	DWP - Duluth, Winnipeg & Pacific Rwy	26	34	15	4	5	3	11	1
	EJE - Elgin, Joliet & Eastern Rwy Co.	30	16	17	24	1	15	5	0
	FEC - Florida East Coast Rwy Co.	9	13	19	5	3	8	12	10
	GCRX - Other Railroads	36	35	66	0	13	0	66	0
	GRS - Guilford Rail System	15	12	4	2	1	3	2	0
	ICE - Other Railroads	13	31	13	8	2	5	2	0
	IHB - Indiana Harbor Belt RR Co.	17	14	14	12	3	3	7	1
	IMRL - I & M Rail Link, LLC	21	10	15	14	1	15	4	0
	LI - Long Island Rail Road	2	1	16	2	4	1	15	1
	MACZ - MD Assn. of Rail Comm	19	28	8	2	3	1	7	0
	MBTA - Massachusetts Bay Transit Auth.	6	6	18	0	6	1	18	3
	MNCW - Metro North Commuter RR Co.	1	2	22	5	5	0	19	0
	MRL - Montana Rail Link	8	11	10	5	3	3	4	0
	NICD - Northern IN Commuter Trans. Dist	22	22	20	0	6	9	15	0
	NIRC - Northeast IL Reg Commuter Rail	7	4	26	1	3	5	24	4
	NJTR - New Jersey Transit Rail	3	3	16	5	4	2	13	2
	PAL - Paducah & Louisville Rwy Co.	32	30	15	7	1	14	4	2
	PATH - Port Authority Trans Hudson	10	9	47	1	11	0	46	0
	PCMZ - Peninsula Commuter(San Mateo Cnty	20	21	18	1	5	2	16	7
	PTRA - Port Terminal RR Association	18	27	24	12	6	9	10	0
	SCAX - Southern CA Regional Rail Auth.	12	26	19	2	3	9	12	2
	SEPA - Southeastern PA Trans. Authority	5	7	26	4	9	0	23	1
	TRRA - Terminal RR Assn Of St. Louis	31	29	19	22	2	7	4	0
	TXTX - Other Railroads	23	36	12	8	2	5	3	0
	URR - Union RR Co. (Pittsburgh)	35	19	19	37	3	0	14	0
	WC - Wisconsin Central Ltd.	4	5	16	5	4	9	8	1
	WE - Wheeling & Lake Erie Rwy Co.	24	23	18	15	2	10	6	4

TABLE 2-9 OPERATIONAL DATA, BY RAILROAD, 2002

Railroads	Total Train Miles	%	Employee Hours Worked	%	Freight Train Miles	Passenger Train Miles	Yard Switching Miles	Other Train Miles	Psgs Carried	Psgr Miles Millions
ALS	813,997	0.11	697,617	0.15	-	-	813,997	-	-	-
ARR	1,444,912	0.20	1,437,912	0.32	739,916	189,301	515,228	467	489,568	21
ATK	39,652,480	5.44	39,450,311	8.69	-	37,624,000	2,028,480	-	23,320,755	5,338
BAR	635,411	0.09	435,305	0.10	604,754	-	30,657	-	-	-
BLE	228,401	0.03	438,587	0.10	210,565	-	17,836	-	-	-
BNSF	161,813,974	22.21	75,101,971	16.54	149,058,126	-	12,755,848	-	-	-
BRC	376,469	0.05	949,473	0.21	43,430	-	333,039	-	-	-
CRSH	2,126,411	0.29	2,758,193	0.61	383,681	-	1,742,730	-	-	-
CSX	109,901,185	15.08	63,702,671	14.03	95,208,161	169,452	14,523,572	-	-	-
DH	1,807,610	0.25	1,058,958	0.23	1,524,085	-	283,525	-	-	-
DME	752,805	0.10	708,916	0.16	669,075	-	83,730	-	-	-
DMIR	664,972	0.09	1,117,846	0.25	611,853	-	53,119	-	-	-
DWP	782,424	0.11	426,794	0.09	761,014	-	21,410	-	-	-
EJE	615,198	0.08	1,421,975	0.31	382,061	-	233,137	-	-	-
FEC	2,239,763	0.31	1,556,400	0.34	1,786,034	-	453,729	-	-	-
GCRX	60,598	0.01	421,767	0.09	-	56,617	1,597	2,384	385,519	23
GRS	1,479,858	0.20	1,703,351	0.38	957,873	-	521,985	-	-	-
GTW	4,826,133	0.66	3,627,492	0.80	3,791,484	-	1,018,349	16,300	-	-
IC	9,861,460	1.35	8,317,458	1.83	7,480,740	-	2,370,902	9,818	-	-
ICE	1,863,477	0.26	452,535	0.10	1,732,812	-	130,665	-	-	-
IHB	1,341,855	0.18	1,520,061	0.33	1,341,855	-	-	-	-	-
IMRL	1,092,419	0.15	1,822,323	0.40	909,119	-	183,300	-	-	-
KCS	8,551,673	1.17	5,629,839	1.24	7,367,599	-	1,184,074	-	-	-
LI	8,190,200	1.12	12,426,104	2.74	-	8,190,200	-	-	83,918,140	2,205
MACZ	1,213,917	0.17	570,105	0.13	-	1,134,576	4,640	74,701	5,991,520	182
MBTA	3,902,192	0.54	3,692,299	0.81	-	3,902,192	-	-	39,752,841	452
MNCW	8,624,310	1.18	10,837,992	2.39	-	8,624,310	-	-	71,549,801	2,053
MRL	3,517,522	0.48	1,726,064	0.38	3,042,816	14,317	460,389	-	6,797	1
NICD	884,521	0.12	793,467	0.17	121,370	763,151	-	-	3,818,824	113
NIRC	3,589,043	0.49	5,457,987	1.20	-	3,507,426	81,617	-	36,852,131	784
NJTR	8,085,232	1.11	8,359,465	1.84	-	7,937,026	148,206	-	62,747,490	1,364
NS	92,214,833	12.66	58,167,947	12.81	78,907,473	-	13,307,360	-	-	-
PAL	576,951	0.08	557,929	0.12	451,874	-	125,077	-	-	-
PATH	2,229,169	0.31	2,035,827	0.45	-	1,938,430	290,739	-	63,544,858	268
PCMZ	1,170,956	0.16	858,581	0.19	-	1,132,656	38,300	-	9,238,057	183
PTRA	1,248,348	0.17	616,064	0.14	-	-	1,248,348	-	-	-
SCAX	1,994,754	0.27	636,099	0.14	-	1,994,754	-	-	8,739,071	305
SEPA	5,293,883	0.73	3,456,719	0.76	-	5,293,883	-	-	28,427,356	387
SOO	8,449,125	1.16	6,276,020	1.38	6,557,325	-	1,891,800	-	-	-
TRRA	592,280	0.08	561,034	0.12	-	-	592,280	-	-	-
TXTX	828,916	0.11	414,456	0.09	-	-	828,916	-	-	-
UP	186,750,216	25.63	90,249,090	19.87	162,990,972	-	12,844,326	10,914,918	-	-
URR	133,662	0.02	981,548	0.22	-	-	133,662	-	-	-
WC	5,950,682	0.82	3,869,332	0.85	4,753,022	660	1,192,418	4,582	63	0
WE	815,171	0.11	778,292	0.17	658,965	-	156,206	-	-	-
XXXX	29,484,778	4.05	26,022,067	5.73	13,837,395	7,097,055	8,357,223	193,105	65,147,204	1,489
Total	728,674,146	100.0	454,102,243	100.0	546,885,449	89,570,006	81,002,416	11,216,275	503,929,995	15,167

XXXX = all other railroads

TABLE 2-10 OPERATIONAL DATA, BY MONTH, 2002

Months	Total Train Miles	%	Employee Hours Worked	%	Freight Train Miles	Passenger Train Miles	Yard Switching Miles	Other Train Miles	Psgs Carried	Psgr Miles Millions
January	59,168,333	8.12	38,770,400	8.54	43,795,670	7,423,527	6,996,418	952,718	40,844,648	1,197
February	55,721,390	7.65	35,437,755	7.80	41,549,938	6,806,196	6,504,019	861,237	39,515,938	1,145
March	62,356,509	8.56	38,564,645	8.49	46,886,761	7,476,707	7,048,894	944,147	41,779,502	1,266
April	60,775,451	8.34	39,171,387	8.63	45,457,039	7,417,481	6,933,371	967,560	42,195,122	1,268
May	62,802,846	8.62	40,320,515	8.88	46,990,484	7,706,393	7,122,321	983,648	43,690,231	1,311
June	61,277,254	8.41	37,326,430	8.22	46,282,962	7,385,230	6,683,930	925,132	42,179,997	1,356
July	60,655,392	8.32	38,394,165	8.45	45,185,250	7,736,988	6,761,464	971,690	43,473,434	1,416
August	63,373,319	8.70	39,403,691	8.68	47,803,223	7,651,747	6,945,205	973,144	43,273,803	1,376
September	60,736,684	8.34	36,907,714	8.13	45,972,305	7,344,508	6,512,183	907,688	41,500,162	1,176
October	63,421,900	8.70	39,853,315	8.78	47,752,664	7,709,839	6,970,471	988,926	43,889,985	1,252
November	60,087,626	8.25	35,595,115	7.84	45,587,474	7,316,863	6,307,031	876,258	40,759,470	1,157
December	58,297,442	8.00	34,357,111	7.57	43,621,679	7,594,527	6,217,109	864,127	40,827,703	1,248
Total	728,674,146	100.0	454,102,243	100.0	546,885,449	89,570,006	81,002,416	11,216,275	503,929,995	15,167

TABLE 2-11 SUMMARY OF ACCIDENTS/INCIDENTS BY STATE, 2002

States	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
Alabama	268	18	123	54	-	-	118	13	32	96	5	91
Alaska	53	-	47	5	-	2	4	-	1	44	0	44
Arizona	192	16	135	33	-	-	19	-	5	140	16	130
Arkansas	283	28	152	66	-	-	84	14	29	133	14	123
California	1,038	130	723	184	3	26	140	30	55	714	97	642
Colorado	210	12	123	56	-	1	38	6	12	116	6	110
Connecticut	163	7	127	27	-	-	5	2	1	131	5	126
Delaware	59	7	44	7	-	-	6	2	1	46	5	43
Dist Of Columbia	84	1	75	8	-	-	-	-	-	76	1	75
Florida	385	54	377	52	4	137	99	16	32	234	34	208
Georgia	370	20	169	61	1	1	142	5	13	167	14	155
Idaho	83	2	50	24	-	3	20	1	7	39	1	40
Illinois	1,228	58	949	241	-	78	172	24	67	815	34	804
Indiana	377	26	201	54	-	17	175	17	44	148	9	140
Iowa	256	22	126	90	-	3	69	4	28	97	18	95
Kansas	262	15	129	83	-	-	71	9	26	108	6	103
Kentucky	230	11	124	42	-	2	85	5	24	103	6	98
Louisiana	388	28	214	79	-	-	149	12	65	160	16	149
Maine	41	-	32	5	-	1	6	-	1	30	0	30
Maryland	137	9	176	28	-	83	11	-	4	98	9	89
Massachusetts	252	15	219	18	-	-	12	4	1	222	11	218
Michigan	297	11	191	41	-	2	97	7	34	159	4	155
Minnesota	310	17	199	61	-	-	76	11	30	173	6	169
Mississippi	207	24	95	38	1	1	97	14	31	72	9	63
Missouri	300	19	179	77	-	5	76	14	26	147	5	148
Montana	129	5	82	28	-	2	25	2	6	76	3	74
Nebraska	302	18	185	85	-	5	55	13	20	162	5	160
Nevada	39	4	26	9	-	-	2	1	1	28	3	25
New Hampshire	10	-	10	1	-	-	1	-	2	8	0	8
New Jersey	560	23	464	71	-	3	33	4	13	456	19	448
New Mexico	107	12	75	15	-	2	17	1	4	75	11	69
New York	1,076	30	956	106	-	28	39	3	10	931	27	918
North Carolina	194	23	98	21	1	2	78	2	20	95	20	76
North Dakota	118	3	1,523	22	1	1,441	25	-	13	71	2	69
Ohio	456	48	250	82	-	1	141	26	35	233	22	214
Oklahoma	176	21	85	49	-	1	69	20	27	58	1	57
Oregon	211	7	130	59	-	4	35	-	14	117	7	112
Pennsylvania	652	31	481	101	-	3	73	6	12	478	25	466
Rhode Island	21	1	19	1	-	-	-	-	-	20	1	19
South Carolina	155	22	101	22	-	-	66	9	42	67	13	59
South Dakota	50	3	20	13	2	-	21	-	5	16	1	15
Tennessee	272	16	143	57	-	3	82	8	14	133	8	126
Texas	1,304	83	765	342	2	14	325	37	125	637	44	626
Utah	87	5	47	25	-	2	21	3	6	41	2	39
Vermont	34	-	30	2	-	-	5	-	3	27	0	27
Virginia	211	13	136	42	-	4	39	1	12	130	12	120
Washington	252	15	179	35	-	-	35	2	8	182	13	171
West Virginia	121	3	76	20	-	-	30	1	6	71	2	70
Wisconsin	288	13	180	54	-	2	83	7	31	151	6	147
Wyoming	106	2	63	42	-	5	6	1	1	58	1	57
Total	14,404	951	11,103	2,738	15	1,884	3,077	357	999	8,589	579	8,220

CHAPTER 3

CASUALTY REPORTING

Any event connected with the operation of a railroad that results in one or more of the following consequences must be reported on Form FRA F 6180.55a:

1. Death of a person within 365 calendar days of the accident/incident;
2. Injury to a person, other than a railroad employee, that requires medical treatment;
3. Injury to a railroad employee that requires medical treatment or results in restriction of work for one or more work days, the loss of one or more work days, termination of employment, transfer to another job, or loss of consciousness; or
4. Any occupational illness of a railroad employee.

A railroad need not report the following:

1. Casualties at highway-rail crossing sites that do not involve the presence or operation of on-track rail equipment, or the presence of railroad employees engaged in the operation of a railroad;
2. Casualties in or about living quarters that are not on the railroad premises and that do not arise from the operation of a railroad;
3. Suicides, as determined by a coroner or other public authority;
4. Attempted suicides.

The distinction between medical treatment and first aid depends not only on the treatment provided, but also on the severity of the injury being treated. First aid is:

1. Limited to one-time treatment and subsequent observation; and
2. Involves treatment of only minor injuries, not emergency treatment of serious injuries. An injury is not minor if:
 - a. It must be treated only by a physician or licensed medical personnel;
 - b. It impairs bodily function (i.e., normal use of senses, limbs, etc.);
 - c. It results in damage to the physical structure of a non-superficial nature (e.g. fractures); or

- d. It involves complications requiring follow-up medical treatment.

One-time treatment of an injury should not be used as the sole basis for classifying a treatment or procedure as first aid. Medical treatment can, and often is, given on a one-time basis, e.g., the suturing of a wound. The procedures used and the skills required to treat an injury, as well as the seriousness of the injury, are all factors that must be considered when determining the type of treatment rendered.

Likewise, medical treatment cannot be determined solely on the basis of who treats a case. First aid treatment can be given by a physician, and medical treatment, by someone other than a physician.

The following are examples of typical medical treatment that are reportable:

Closure of a wound with suture (stitch), staple, Steri-strip, butterfly, or the like.

The application of a cast or other professional means of immobilizing an injured part of the body, regardless of how long the cast, sling, splint, or the like, is actually worn.

Injection. Any application of medication through the use of a syringe, except a tetanus shot.

Bruise. The treatment of a bruise by drainage of blood.

Debridement. Surgical debridement, that is, the removal of dead or damaged skin.

Treatment of a burn. The treatment of a second- or third-degree burn is almost always medical treatment if the size of the affected area cannot be covered with a quarter.

Prescription medication. Any prescription medication prescribed or provided for a condition that is intended for subsequent use. A single dose taken orally or applied externally on the initial visit is considered to be first aid and is not reportable. (See definition of prescription medication.)

Eye injury. Removal of any object embedded in the eye, or the application of a patch or a bandage.

X-Ray. An X-Ray that is positive.

Whirlpool treatment. Any injury that requires more than one whirlpool treatment.

Multiple treatments. Any injury that results in additional treatment by a physician or other medical professional on a second or subsequent visit. This does not include a routine examination of the progress of an injury or instances where bandages or other dressings are replaced.

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CHAPTER 3

CASUALTY REPORTING

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TABLE 3-1 CASUALTIES BY TYPE PERSON AND PRIMARY EVENT, 2002

Type Person	Total Incidents 1/		Total Casualties		Train Accs w/o HRC		HRC Incs		Other Events	
	Fatal	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal
A - Worker on duty(rr employee)	20	6,399	20	6,644	3	157	1	110	16	6,377
B - Employee not on duty	1	203	1	213	.	.	.	.	1	213
C - Passenger on train	2	572	7	877	7	278	.	26	.	573
D - Nontrespasser	215	715	266	889	.	2 249	.	636	17	251
E - Trespasser	606	542	646	609	4	3 106	.	214 536	.	392
F - Worker on duty(contractor)	3	180	3	181	.	.	.	.	3	181
G - Contractor(other)	7	186	7	194	.	2 1	1	6	.	191
H - Worker on duty(volunteer)	.	5	.	5	.	.	.	.	.	5
J - Nontrespasser, off rr property	1	21	1	1,491	1	1,442	.	12	.	37
Total..	855	8,823	951	11,103	15	1,884 357	.	999 579	.	8,220

1/ The count of incidents that resulted in a death or nonfatal condition
W/O = without, HRC = highway-rail crossing, Incs = incidents

TABLE 3-2 FATALITIES BY TYPE PERSON AND RAILROAD, 2002

			Type Person Codes							
	Total	%	A	B	C	D	E	F	G	J
Amtrak	126	13.2	-	-	4	22	100	-	-	-
Burlington Northern Santa Fe	149	15.7	4	-	-	52	86	1	6	-
Conrail Shared Assets	2	0.2	-	-	-	-	2	-	-	-
CSX Transportation	120	12.6	3	1	-	28	87	-	1	-
Delaware & Hudson	2	0.2	1	-	-	-	1	-	-	-
Duluth,Winnipeg & Pacific	1	0.1	-	-	-	-	1	-	-	-
Florida East Coast	24	2.5	-	-	-	8	16	-	-	-
Grand Trunk Western RR	7	0.7	-	-	-	5	2	-	-	-
Illinois Central	18	1.9	-	-	-	7	11	-	-	-
Other Railroads	35	3.7	2	-	-	12	19	2	-	-
Kansas City Southern	21	2.2	-	-	-	11	10	-	-	-
Long Island Rail Road	9	0.9	1	-	-	1	7	-	-	-
Mass Bay Transit Auth.	15	1.6	-	-	-	-	15	-	-	-
Metro North Commuter	6	0.6	1	-	-	1	4	-	-	-
Montana Rail Link	1	0.1	-	-	-	-	1	-	-	-
Northeast IL Reg Comm	15	1.6	-	-	-	1	14	-	-	-
New Jersey Transit Rail	16	1.7	-	-	-	-	16	-	-	-
Norfolk Southern Corp.	126	13.2	4	-	-	46	76	-	-	-
Paducah & Louisville	1	0.1	-	-	-	-	1	-	-	-
Port Auth Trans Hudson	1	0.1	-	-	-	1	-	-	-	-
Peninsula Comm San Mateo Cnty	5	0.5	-	-	-	-	5	-	-	-
Southern CA Reg Rail Auth.	9	0.9	-	-	3	-	6	-	-	-
Southeastern PA Trans.	4	0.4	1	-	-	-	3	-	-	-
Soo Line	8	0.8	-	-	-	5	2	-	-	1
Union Pacific	221	23.2	2	-	-	62	157	-	-	-
Wisconsin Central Ltd.	8	0.8	1	-	-	4	3	-	-	-
Wheeling & Lake Erie	1	0.1	-	-	-	-	1	-	-	-
Total	951	100	20	1	7	266	646	3	7	1

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

TABLE 3-3 FATALITIES BY TYPE PERSON KILLED AND STATE, 2002

States			Type Person Codes							
	Total	%	A	B	C	D	E	F	G	J
Alabama	18	1.9	-	-	-	8	10	-	-	-
Arizona	16	1.7	-	-	-	1	14	1	-	-
Arkansas	28	2.9	1	-	-	13	13	-	1	-
California	130	13.7	-	-	3	10	114	1	2	-
Colorado	12	1.3	1	-	-	7	4	-	-	-
Connecticut	7	0.7	1	-	-	1	5	-	-	-
Delaware	7	0.7	1	-	-	2	4	-	-	-
Dist Of Columbia	1	0.1	-	-	-	-	1	-	-	-
Florida	54	5.7	1	-	4	12	37	-	-	-
Georgia	20	2.1	1	-	-	2	17	-	-	-
Idaho	2	0.2	-	-	-	1	1	-	-	-
Illinois	58	6.1	-	-	-	17	41	-	-	-
Indiana	26	2.7	1	-	-	12	13	-	-	-
Iowa	22	2.3	-	-	-	3	18	-	1	-
Kansas	15	1.6	-	-	-	10	5	-	-	-
Kentucky	11	1.2	1	-	-	4	6	-	-	-
Louisiana	28	2.9	-	-	-	10	18	-	-	-
Maryland	9	0.9	-	-	-	-	9	-	-	-
Massachusetts	15	1.6	-	-	-	-	15	-	-	-
Michigan	11	1.2	-	-	-	4	7	-	-	-
Minnesota	17	1.8	-	-	-	4	13	-	-	-
Mississippi	24	2.5	-	-	-	14	10	-	-	-
Missouri	19	2.0	-	-	-	12	7	-	-	-
Montana	5	0.5	-	-	-	1	4	-	-	-
Nebraska	18	1.9	1	-	-	10	7	-	-	-
Nevada	4	0.4	-	-	-	1	3	-	-	-
New Jersey	23	2.4	-	1	-	-	22	-	-	-
New Mexico	12	1.3	-	-	-	1	11	-	-	-
New York	30	3.2	2	-	-	3	25	-	-	-
North Carolina	23	2.4	1	-	-	2	20	-	-	-
North Dakota	3	0.3	-	-	-	1	1	-	-	1
Ohio	48	5.0	2	-	-	24	21	-	1	-
Oklahoma	21	2.2	-	-	-	17	4	-	-	-
Oregon	7	0.7	-	-	-	-	7	-	-	-
Pennsylvania	31	3.3	2	-	-	1	27	1	-	-
Rhode Island	1	0.1	-	-	-	-	1	-	-	-
South Carolina	22	2.3	-	-	-	7	15	-	-	-
South Dakota	3	0.3	-	-	-	-	3	-	-	-
Tennessee	16	1.7	1	-	-	5	9	-	1	-
Texas	83	8.7	1	-	-	33	48	-	1	-
Utah	5	0.5	-	-	-	3	2	-	-	-
Virginia	13	1.4	-	-	-	2	11	-	-	-
Washington	15	1.6	-	-	-	-	15	-	-	-
West Virginia	3	0.3	-	-	-	1	2	-	-	-
Wisconsin	13	1.4	1	-	-	6	6	-	-	-
Wyoming	2	0.2	1	-	-	1	-	-	-	-
Total	951	100.0	20	1	7	266	646	3	7	1

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

TABLE 3-4 NONFATAL CONDITIONS BY TYPE PERSON AND RAILROAD, 2002

			Type Person Codes									
	Total	%	A	B	C	D	E	F	G	H	I	J
Alton & Southern	13	0.1	12	1	-	-	-	-	-	-	-	-
Alaska RR Corp.	30	0.3	28	2	-	-	-	-	-	-	-	-
Amtrak	1,484	13.4	824	35	498	77	46	2	2	-	-	-
Bangor & Aroostook	15	0.1	15	-	-	-	-	-	-	-	-	-
Bessemer & Lake Erie RR	6	0.1	6	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe	1,242	11.2	850	52	-	124	88	17	110	1	-	-
Belt Rwy Of Chicago	10	0.1	10	-	-	-	-	-	-	-	-	-
Conrail Shared Assets	51	0.5	33	2	-	4	8	4	-	-	-	-
CSX Transportation	859	7.7	633	30	-	66	121	3	6	-	-	-
Delaware & Hudson	47	0.4	46	-	-	-	1	-	-	-	-	-
Dakota,Minnesota & Eastern	14	0.1	11	-	-	2	1	-	-	-	-	-
Duluth,Missabe & Iron Range	21	0.2	21	-	-	-	-	-	-	-	-	-
Duluth,Winnipeg & Pacific	13	0.1	10	1	-	1	-	-	1	-	-	-
Elgin, Joliet & Eastern	12	0.1	8	-	-	1	1	2	-	-	-	-
Florida East Coast	34	0.3	22	1	-	5	6	-	-	-	-	-
Other Railroads	1,091	9.8	776	7	136	94	27	37	6	4	4	4
Guilford Rail System	7	0.1	6	-	-	-	1	-	-	-	-	-
Grand Trunk Western RR	64	0.6	59	1	-	1	3	-	-	-	-	-
Illinois Central	150	1.4	113	2	-	26	8	-	-	-	-	1
Indiana Harbor Belt	22	0.2	20	-	-	-	2	-	-	-	-	-
I & M Rail Link, LLC	19	0.2	13	-	-	6	-	-	-	-	-	-
Kansas City Southern	137	1.2	90	2	-	34	9	1	1	-	-	-
Long Island Rail Road	323	2.9	258	2	33	23	3	-	4	-	-	-
MD Assn. of Rail Comm	18	0.2	8	-	7	2	1	-	-	-	-	-
Mass Bay Transit Auth.	127	1.1	104	3	13	5	2	-	-	-	-	-
Metro North Commuter	375	3.4	281	14	23	38	-	-	13	-	6	6
Montana Rail Link	26	0.2	25	-	-	1	-	-	-	-	-	-
Northern IN Comm Trans	32	0.3	25	-	-	-	-	-	-	-	7	7
Northeast IL Reg Comm	216	1.9	85	4	95	18	11	1	-	-	2	2
New Jersey Transit Rail	208	1.9	158	4	13	16	11	3	3	-	-	-
Norfolk Southern Corp.	614	5.5	382	24	-	77	65	43	21	-	2	2
Paducah & Louisville	8	0.1	4	-	-	-	4	-	-	-	-	-
Port Auth Trans Hudson	206	1.9	108	2	14	42	1	29	10	-	-	-
Peninsula Comm San Mateo Cnty	31	0.3	23	1	1	2	4	-	-	-	-	-
Port Terminal RR Assn	20	0.2	19	-	-	-	-	-	-	-	1	1
Southern CA Reg Rail Auth.	53	0.5	9	-	14	-	6	21	3	-	-	-
Southeastern PA Trans.	202	1.8	163	1	30	7	1	-	-	-	-	-
Soo Line	1,606	14.5	123	1	-	24	7	2	-	-	1,449	1,449
Term RR Assn Of St. Louis	5	0.0	5	-	-	-	-	-	-	-	-	-
Econo Rail Corporation	4	0.0	4	-	-	-	-	-	-	-	-	-
Union Pacific	1,566	14.1	1,157	20	-	173	168	16	13	-	19	19
Union RR (Pittsburgh)	16	0.1	15	1	-	-	-	-	-	-	-	-
Wisconsin Central Ltd.	97	0.9	76	-	-	20	-	-	1	-	-	-
Wheeling & Lake Erie	9	0.1	6	-	-	-	3	-	-	-	-	-
Total	11,103	100	6,644	213	877	889	609	181	194	5	1,491	

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

TABLE 3-5 NONFATAL CONDITIONS BY TYPE PERSON AND STATE, 2002

			Type Person codes								
	Total	%	A	B	C	D	E	F	G	H	J
Alabama	123	1.1	87	2	2	20	7	-	5	-	-
Alaska	47	0.4	44	2	1	-	-	-	-	-	-
Arizona	135	1.2	109	1	5	3	15	2	-	-	-
Arkansas	152	1.4	106	-	1	30	11	1	3	-	-
California	723	6.5	470	9	75	28	68	30	42	-	1
Colorado	123	1.1	103	-	6	10	1	1	2	-	-
Connecticut	127	1.1	91	5	19	5	1	-	2	-	4
Delaware	44	0.4	39	3	-	1	-	-	-	1	-
Dist Of Columbia	75	0.7	68	2	4	-	1	-	-	-	-
Florida	377	3.4	159	9	150	17	26	7	6	-	3
Georgia	169	1.5	119	8	5	9	18	4	6	-	-
Idaho	50	0.5	45	-	-	3	1	-	1	-	-
Illinois	949	8.5	542	26	213	76	41	17	22	-	12
Indiana	201	1.8	127	7	15	23	15	5	2	-	7
Iowa	126	1.1	85	6	-	27	6	-	2	-	-
Kansas	129	1.2	83	9	2	24	7	2	2	-	-
Kentucky	124	1.1	88	1	3	14	13	3	2	-	-
Louisiana	214	1.9	129	3	8	50	19	4	1	-	-
Maine	32	0.3	31	-	-	-	1	-	-	-	-
Maryland	176	1.6	89	-	78	4	5	-	-	-	-
Massachusetts	219	2.0	189	5	16	5	4	-	-	-	-
Michigan	191	1.7	141	1	4	26	11	8	-	-	-
Minnesota	199	1.8	158	3	3	23	8	2	2	-	-
Mississippi	95	0.9	52	-	9	24	7	2	-	-	1
Missouri	179	1.6	115	6	3	24	16	6	9	-	-
Montana	82	0.7	64	4	5	6	2	1	-	-	-
Nebraska	185	1.7	155	8	2	13	5	-	2	-	-
Nevada	26	0.2	23	-	-	1	2	-	-	-	-
New Hampshire	10	0.1	7	-	-	2	1	-	-	-	-
New Jersey	464	4.2	308	10	27	52	15	41	11	-	-
New Mexico	75	0.7	55	1	7	5	7	-	-	-	-
New York	956	8.6	729	24	72	88	13	8	19	1	2
North Carolina	98	0.9	64	1	6	9	15	-	3	-	-
North Dakota	1,523	13.7	63	3	2	11	2	1	1	-	1,440
Ohio	250	2.3	175	8	9	19	27	10	1	1	-
Oklahoma	85	0.8	53	1	-	22	9	-	-	-	-
Oregon	130	1.2	93	-	9	10	13	2	3	-	-
Pennsylvania	481	4.3	380	12	37	17	27	5	2	1	-
Rhode Island	19	0.2	17	-	-	1	-	1	-	-	-
South Carolina	101	0.9	43	1	25	7	20	2	1	-	2
South Dakota	20	0.2	12	2	-	3	3	-	-	-	-
Tennessee	143	1.3	95	4	2	13	20	3	6	-	-
Texas	765	6.9	493	12	16	100	94	6	24	1	19
Utah	47	0.4	36	-	2	7	2	-	-	-	-
Vermont	30	0.3	27	-	-	1	1	1	-	-	-
Virginia	136	1.2	91	3	19	13	10	-	-	-	-
Washington	179	1.6	139	5	9	7	9	2	8	-	-
West Virginia	76	0.7	58	1	3	6	5	2	1	-	-
Wisconsin	180	1.6	136	2	3	30	4	2	3	-	-
Wyoming	63	0.6	59	3	-	-	1	-	-	-	-
Total	11,103	100.0	6,644	213	877	889	609	181	194	5	1,491

A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property

TABLE 3-6 REPORTABLE CONDITIONS, ALL TYPE PERSONS, 2002

Condition	Cnt	%	Type of Person *								
			A	B	C	D	E	F	G	H	J
Bruise/contusion	1,641	13.6	985	34	269	195	75	36	39	1	7
Occ. Illness	127	1.1	120	3	-	-	1	2	1	-	-
Other	25	0.2	18	-	2	2	3	-	-	-	-
Sprain/Str., other	74	0.6	54	-	6	11	1	1	1	-	-
Sprain/Str.,arm/hand	386	3.2	350	10	8	6	-	5	7	-	-
Sprain/Str.,leg/foot	1,097	9.1	928	36	66	24	3	17	21	1	1
Sprain/Str.,head/face	294	2.4	206	17	25	27	10	2	6	-	1
Sprain/Str.,torso	2,045	17.0	1,815	44	105	33	9	19	19	-	1
Cut/abrasion	1,213	10.1	766	18	118	139	95	36	37	2	2
Puncture wound	163	1.4	132	12	6	5	-	2	5	-	-
Electric shock/burn	40	0.3	27	-	1	1	7	1	3	-	-
Other burn	74	0.6	58	3	4	-	1	3	5	-	-
Dislocation	81	0.7	57	1	10	4	3	2	4	-	-
Fracture,arm/hand	412	3.4	259	8	42	42	26	17	14	1	3
Fracture,leg/foot	351	2.9	175	8	53	49	37	15	13	-	1
Fracture,head/face	65	0.5	28	-	10	14	8	4	1	-	-
Fracture,torso	197	1.6	82	4	49	40	13	4	5	-	-
Fracture,multiple	19	0.2	2	-	1	11	5	-	-	-	-
Fracture,other	4	0.0	1	-	-	3	-	-	-	-	-
Dental related	50	0.4	36	-	6	5	1	1	-	-	1
Amputation,arm/hand	36	0.3	17	2	-	-	16	-	1	-	-
Amputation,leg/foot	99	0.8	11	-	-	7	81	-	-	-	-
Fatality	951	7.9	20	1	7	266	646	3	7	-	1
Object in eye	160	1.3	141	5	2	-	-	10	2	-	-
Hernia	54	0.4	52	-	-	-	-	-	2	-	-
Concussion	92	0.8	30	2	11	35	11	-	3	-	-
Nervous shock	3	0.0	1	-	-	1	1	-	-	-	-
Internal injury	82	0.7	17	-	14	26	24	-	1	-	-
Skin reaction	1,489	12.4	33	2	2	-	-	-	-	-	1,452
One-time exp. to noise	9	0.1	8	-	-	-	-	1	-	-	-
Unspecified injury	648	5.4	182	2	65	209	177	3	4	-	6
One-time exp.-fumes	73	0.6	53	2	2	-	-	-	-	-	16
Total	12,054	100.0	6,664	214	884	1,155	1,255	184	201	5	1,492

A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
J - Nontrespasser, off rr property

**TABLE 3-7 TOTAL CASUALTIES BY AGE OF INDIVIDUAL, 2002
AND TYPE OF PERSON**

Age	Total		Type of Person *									
	Cnt	%	A	B	C	D	E	F	G	H	I	J
Kld	Unk	76	0.6	-	-	3	8	65	-	-	-	-
	1-5	6	0.0	-	-	-	3	3	-	-	-	-
	6-10	16	0.1	-	-	-	10	6	-	-	-	-
	11-15	32	0.3	-	-	-	14	18	-	-	-	-
	16-20	90	0.7	1	-	-	29	60	-	-	-	-
	21-25	101	0.8	-	-	-	27	74	-	-	-	-
	26-30	88	0.7	-	-	-	19	68	1	-	-	-
	31-35	92	0.8	2	-	-	15	70	2	3	-	-
	36-40	87	0.7	5	-	-	19	61	-	1	-	1
	41-45	95	0.8	2	-	-	23	69	-	1	-	-
	46-50	68	0.6	2	1	-	20	44	-	1	-	-
	51-55	59	0.5	7	-	-	15	37	-	-	-	-
	56-60	34	0.3	-	-	-	12	22	-	-	-	-
	> 60	107	0.9	1	-	4	52	49	-	1	-	-
	Total	951	7.9	20	1	7	266	646	3	7	-	1
Nonfatal	Unk	287	2.4	1	-	97	104	44	5	18	-	18
	1-5	155	1.3	-	-	10	17	9	-	-	-	119
	6-10	119	1.0	-	-	5	22	16	-	-	-	76
	11-15	120	1.0	-	-	11	15	28	-	-	-	66
	16-20	363	3.0	44	2	20	104	72	6	12	1	102
	21-25	714	5.9	312	4	32	80	84	26	29	-	147
	26-30	1,007	8.4	663	17	36	64	56	24	32	-	115
	31-35	1,228	10.2	833	17	48	81	71	27	31	1	119
	36-40	1,131	9.4	754	27	61	73	61	28	27	-	100
	41-45	1,373	11.4	986	32	58	61	56	26	14	1	139
	46-50	1,590	13.2	1,204	43	75	58	34	22	12	-	142
	51-55	1,394	11.6	1,062	40	67	67	26	10	7	1	114
	56-60	840	7.0	620	23	63	42	14	5	8	1	64
	> 60	782	6.5	165	8	294	101	38	2	4	-	170
	Total	11,103	92.1	6,644	213	877	889	609	181	194	5	1,491
Total		12,054	100.0	6,664	214	884	1,155	1,255	184	201	5	1,492

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

TABLE 3-8 TOTAL CASUALTIES BY MONTH AND TYPE PERSON, 2002

Month		Total Cnt	Type of Person *									
			A	B	C	D	E	F	G	H	I	J
Kld	January	82	2	-	-	21	56	-	2	-	-	1
	February	64	-	-	-	21	43	-	-	-	-	-
	March	77	4	-	-	22	51	-	-	-	-	-
	April	75	1	-	7	16	51	-	-	-	-	-
	May	85	3	-	-	26	56	-	-	-	-	-
	June	86	3	-	-	21	58	2	2	-	-	-
	July	99	1	-	-	36	62	-	-	-	-	-
	August	91	1	-	-	27	62	-	1	-	-	-
	September	73	3	-	-	21	48	-	1	-	-	-
	October	84	-	-	-	19	65	-	-	-	-	-
	November	65	2	1	-	21	40	1	-	-	-	-
	December	70	-	-	-	15	54	-	1	-	-	-
	Total	951	20	1	7	266	646	3	7	-	-	1
Nonfatal	January	2,243	587	14	38	61	48	15	22	-	-	1,458
	February	692	512	17	41	54	40	8	19	-	-	1
	March	757	512	23	53	91	44	21	13	-	-	-
	April	899	577	16	161	57	52	18	11	1	6	-
	May	814	571	21	52	67	67	20	16	-	-	-
	June	919	592	17	137	76	66	10	16	1	4	-
	July	882	568	22	117	92	51	16	11	1	4	-
	August	885	614	12	52	98	65	16	23	1	4	-
	September	798	580	19	55	63	44	19	18	-	-	-
	October	792	559	13	58	79	55	14	14	-	-	-
	November	726	496	13	50	77	41	19	19	-	11	-
	December	696	476	26	63	74	36	5	12	1	3	-
	Total	11,103	6,644	213	877	889	609	181	194	5	1,491	-
Total		12,054	6,664	214	884	1,155	1,255	184	201	5	1,492	-

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

**TABLE 3-9 TOTAL CASUALTIES BY TIME OF DAY
AND TYPE OF PERSON, 2002**

Time	Total		Type of Person *								
	Cnt	%	A	B	C	D	E	F	G	H	J
AM											
1	1,764	14.6	202	4	11	37	64	3	2	-	1,441
2	294	2.4	191	4	10	21	64	1	3	-	-
3	237	2.0	154	4	5	19	44	3	6	-	2
4	209	1.7	151	2	3	11	36	3	3	-	-
5	208	1.7	135	14	14	17	24	-	4	-	-
6	285	2.4	161	40	23	25	22	7	7	-	-
7	458	3.8	267	14	37	53	56	6	9	-	16
8	647	5.4	433	12	63	83	31	15	10	-	-
9	690	5.7	517	4	44	51	35	19	14	2	4
10	751	6.2	560	4	44	60	38	21	20	1	3
11	673	5.6	470	6	25	76	51	21	13	1	10
12	290	2.4	184	3	9	18	66	2	8	-	-
Total	6,506	54.0	3,425	111	288	471	531	101	99	4	1,476
PM											
1	674	5.6	453	13	83	53	45	12	14	-	1
2	578	4.8	391	10	21	79	51	14	11	-	1
3	562	4.7	302	17	79	73	69	6	12	-	4
4	486	4.0	290	8	30	80	64	3	8	-	3
5	634	5.3	306	3	146	92	71	11	5	-	-
6	473	3.9	259	5	51	61	84	5	4	1	3
7	341	2.8	196	9	19	54	52	4	6	-	1
8	308	2.6	196	5	19	29	52	2	4	-	1
9	277	2.3	158	7	15	23	57	5	11	-	1
10	300	2.5	169	12	12	30	63	6	8	-	-
11	264	2.2	157	10	8	23	54	2	9	-	1
12	651	5.4	362	4	113	87	62	13	10	-	-
Total	5,548	46.0	3,239	103	596	684	724	83	102	1	16
Total	12,054	100	6,664	214	884	1,155	1,255	184	201	5	1,492

*A - Worker on duty(rr employee), B - Employee not on duty, C - Passenger on train, D - Nontrespasser
 E - Trespasser, F - Worker on duty(contractor), G - Contractor(other), H - Worker on duty(volunteer), I - Volunteer
 J - Nontrespasser, off rr property*

CHAPTER 4

EMPLOYEE ON DUTY CASUALTIES

The work environment is the physical location, equipment, materials processed or used, and activities of a railroad employee associated with his or her work, whether on or off the railroad's property. There are no stated exclusions of place or circumstance. All activities of a Worker on Duty--Employee (Class A) while in the work environment are presumed to be work-related for accident/incident reporting purposes.

An employee is in the work environment:

1. While engaged in work activity or apprenticeship/vocational training required by the employer.
2. While on break, in the rest room, or in storage areas when located on the employer's premises.
3. While performing work for pay or compensation at home, pursuant to the employer's instructions, if the injury or illness is directly related to the performance of work rather than the general home environment or setting.
4. While traveling on business, including to and from customer contacts. Employees in travel status (i.e., traveling on company business) should be considered engaged in work-related activities during all of their time spent in the "interest of their company". This includes, but is not limited to, travel to and from customer contacts, conducting job tasks, and entertaining or being entertained for the purpose of transacting, discussing, or promoting business.
5. While employee is engaged in work activity where a vehicle is considered the work environment (e.g., truck, taxi).
6. While at conferences where attendance is expected or required by the employer.
7. Some workplaces provide living quarters for employees on their premises. In these workplaces, injuries or illnesses are presumed to be work-related if the employee is on-duty or engaged in a work activity. The injury or illness is also considered work-related if the employee was harmed as a result of a serious workplace accident such as a chemical release, fire, explosion, derailment, collision, or building collapse. All other injuries and illnesses occurring during off-duty hours while in living quarters are considered non-work-related. The worker should be classified as an "employee not on duty" in these cases if a reportable condition occurs.

Employees present in the work environment, but for reasons unconnected with their employment, generally are not reportable as Worker on Duty--Employee (Class A) should they be injured. These individuals are more appropriately classified as employees not on duty, nontrespassers on railroad property, passengers on train, etc., and if hurt should be identified as such. The following are examples:

1. Injuries or illnesses that occur to employees present at their employer's establishment as a member of the general public rather than as a worker.
2. Injuries or illnesses that are solely the result of employees doing personal tasks (unrelated to their employment) at the establishment outside of normal working hours.
3. Injuries or illnesses occurring on company parking lots and access roads while employees are arriving at or leaving work.
4. An injury or illness solely associated with participation in voluntary community or civic projects, e.g., Operation Lifesaver presentations; unless the employee was under pay status.

Injury/Illness Distinction. The distinction between occupational illnesses and injuries is based primarily on the event or exposure that precipitated the employee's condition. Injuries are generally the result of instantaneous events; for example, an employee is struck by an object and sustains a cut or a bruise. Illnesses, on the other hand, are usually the result of an exposure that occurs over time; such as hearing impairment caused by working in a noisy environment. Exceptions to this general rule are muscular sprains, strains, or soreness, occurring after work activity for which no single movement or event can be isolated as the primary causal factor. Physical conditions of this type are to be recorded as injuries when the condition is attributable to activity of limited duration--typically no more than a single work shift.

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TABLE 4-1 REPORTABLE CONDITIONS TO RR EMPLOYEES ON DUTY, 2002

Condition	Total		Days Absent			Absent Cases 1/		Term./ Trans. 2/	Days Restricted			Hazmat Exp. 3/
	Cnt	%	Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.	
Bruise/contusion	985	14.8	45,970	12.6	47	714	15.4	4	5,608	13.2	6	-
Occ. Illness	120	1.8	5,364	1.5	45	80	1.7	-	1,034	2.4	9	4
Other	18	0.3	1,060	0.3	59	11	0.2	-	93	0.2	5	-
Sprain/Str., other	54	0.8	3,763	1.0	70	51	1.1	1	273	0.6	5	-
Sprain/Str.,arm/hand	350	5.3	18,150	5.0	52	228	4.9	-	3,897	9.2	11	-
Sprain/Str.,leg/foot	928	13.9	60,887	16.7	66	752	16.2	3	7,533	17.7	8	-
Sprain/Str.,head/face	206	3.1	14,466	4.0	70	160	3.4	-	1,543	3.6	7	-
Sprain/Str.,torso	1,815	27.2	134,822	36.9	74	1,436	30.9	7	12,970	30.6	7	-
Cut/abrasion	766	11.5	12,011	3.3	16	311	6.7	4	1,465	3.5	2	-
Puncture wound	132	2.0	2,393	0.7	18	50	1.1	-	355	0.8	3	2
Electric shock/burn	27	0.4	260	0.1	10	22	0.5	-	42	0.1	2	-
Other burn	58	0.9	952	0.3	16	31	0.7	-	107	0.3	2	-
Dislocation	57	0.9	5,672	1.6	100	40	0.9	-	270	0.6	5	-
Fracture,arm/hand	259	3.9	10,724	2.9	41	164	3.5	-	3,309	7.8	13	-
Fracture,leg/foot	175	2.6	16,750	4.6	96	160	3.4	2	1,429	3.4	8	-
Fracture,head/face	28	0.4	2,194	0.6	78	24	0.5	-	203	0.5	7	-
Fracture,torso	82	1.2	6,741	1.8	82	74	1.6	1	611	1.4	7	-
Fracture,multiple	2	0.0	109	0.0	55	1	0.0	-	20	0.0	10	-
Fracture,other	1	0.0	4	0.0	4	1	0.0	-	13	0.0	13	-
Dental related	36	0.5	412	0.1	11	11	0.2	-	9	0.0	0	-
Amputation,arm/hand	17	0.3	1,303	0.4	77	13	0.3	1	278	0.7	16	-
Amputation,leg/foot	11	0.2	1,702	0.5	155	11	0.2	1	0	0.0	0	-
Fatality	20	0.3	0	0.0	0	-	-	-	0	0.0	0	-
Object in eye	141	2.1	353	0.1	3	45	1.0	-	24	0.1	0	2
Hernia	52	0.8	2,641	0.7	51	46	1.0	1	236	0.6	5	-
Concussion	30	0.5	2,592	0.7	86	24	0.5	1	384	0.9	13	-
Nervous shock	1	0.0	0	0.0	0	-	-	-	0	0.0	0	-
Internal injury	17	0.3	1,678	0.5	99	13	0.3	-	65	0.2	4	-
Skin reaction	33	0.5	373	0.1	11	17	0.4	-	1	0.0	0	11
One-time exp. to noise	8	0.1	45	0.0	6	6	0.1	-	0	0.0	0	-
Unspecified injury	182	2.7	11,071	3.0	61	111	2.4	3	671	1.6	4	2
One-time exp.-fumes	53	0.8	1,144	0.3	22	35	0.8	-	6	0.0	0	7
Total	6,664	100	365,606	100	55	4,642	100	29	42,449	100	6	28

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

TABLE 4-2 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY, BY RAILROAD, 2002

RR	Total		Deaths		Nonfatal		Days Absent			Absent Cases		Term./	Days Restricted			Hazmat
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Avg.	Cnt	%	Trans.	Cnt	%	Avg.	Exp.
ALS	12	0.2	-	0.0	12	0.2	369	0.1	31	12	0.3	-	0	0.0	0	-
ARR	28	0.4	-	0.0	28	0.4	576	0.2	21	16	0.3	-	343	0.8	12	-
ATK	824	12.4	-	0.0	824	12.4	34,681	9.5	42	611	13.2	-	3,194	7.5	4	-
BAR	15	0.2	-	0.0	15	0.2	262	0.1	17	10	0.2	1	23	0.1	2	-
BLE	6	0.1	-	0.0	6	0.1	6	0.0	1	1	0.0	-	0	0.0	0	-
BNSF	854	12.8	4	20.0	850	12.8	49,964	13.7	59	524	11.3	-	18,572	43.8	22	6
BRC	10	0.2	-	0.0	10	0.2	468	0.1	47	9	0.2	-	0	0.0	0	-
CRSH	33	0.5	-	0.0	33	0.5	4,138	1.1	125	25	0.5	-	0	0.0	0	-
CSX	636	9.5	3	15.0	633	9.5	68,231	18.7	107	538	11.6	-	120	0.3	0	1
DH	47	0.7	1	5.0	46	0.7	494	0.1	11	32	0.7	-	35	0.1	1	-
DME	11	0.2	-	0.0	11	0.2	45	0.0	4	7	0.2	-	2	0.0	0	-
DMIR	21	0.3	-	0.0	21	0.3	770	0.2	37	11	0.2	-	243	0.6	12	-
DWP	10	0.2	-	0.0	10	0.2	119	0.0	12	7	0.2	1	6	0.0	1	-
EJE	8	0.1	-	0.0	8	0.1	62	0.0	8	2	0.0	-	51	0.1	6	-
FEC	22	0.3	-	0.0	22	0.3	1,627	0.4	74	16	0.3	1	369	0.9	17	-
GCRX	28	0.4	-	0.0	28	0.4	413	0.1	15	19	0.4	2	483	1.1	17	-
GRS	6	0.1	-	0.0	6	0.1	9	0.0	2	3	0.1	-	0	0.0	0	-
GTW	59	0.9	-	0.0	59	0.9	1,997	0.5	34	44	0.9	1	80	0.2	1	-
IC	113	1.7	-	0.0	113	1.7	5,333	1.5	47	72	1.6	4	113	0.3	1	1
ICE	5	0.1	-	0.0	5	0.1	61	0.0	12	2	0.0	-	4	0.0	1	-
IHB	20	0.3	-	0.0	20	0.3	809	0.2	40	15	0.3	-	9	0.0	0	-
IMRL	13	0.2	-	0.0	13	0.2	54	0.0	4	7	0.2	-	6	0.0	0	-
KCS	90	1.4	-	0.0	90	1.4	2,404	0.7	27	46	1.0	1	1,817	4.3	20	1
LI	259	3.9	1	5.0	258	3.9	3,249	0.9	13	253	5.5	-	2,693	6.3	10	-
MACZ	8	0.1	-	0.0	8	0.1	556	0.2	70	5	0.1	-	0	0.0	0	-
MBTA	104	1.6	-	0.0	104	1.6	3,379	0.9	32	73	1.6	-	10	0.0	0	-
MNCW	282	4.2	1	5.0	281	4.2	7,752	2.1	27	153	3.3	-	2,815	6.6	10	-
MRL	25	0.4	-	0.0	25	0.4	1,079	0.3	43	18	0.4	2	392	0.9	16	-
NICD	25	0.4	-	0.0	25	0.4	99	0.0	4	11	0.2	-	228	0.5	9	-
NIRC	85	1.3	-	0.0	85	1.3	722	0.2	8	61	1.3	-	65	0.2	1	-
NJTR	158	2.4	-	0.0	158	2.4	3,990	1.1	25	130	2.8	1	12	0.0	0	5
NS	386	5.8	4	20.0	382	5.7	44,907	12.3	116	288	6.2	-	528	1.2	1	2
PAL	4	0.1	-	0.0	4	0.1	39	0.0	10	3	0.1	-	0	0.0	0	-
PATH	108	1.6	-	0.0	108	1.6	1,691	0.5	16	106	2.3	-	115	0.3	1	-
PCMZ	23	0.3	-	0.0	23	0.3	603	0.2	26	18	0.4	-	125	0.3	5	-
PTRA	19	0.3	-	0.0	19	0.3	251	0.1	13	17	0.4	1	6	0.0	0	-
SCAX	9	0.1	-	0.0	9	0.1	39	0.0	4	5	0.1	-	34	0.1	4	-
SEPA	164	2.5	1	5.0	163	2.5	2,807	0.8	17	120	2.6	-	500	1.2	3	3
SOO	123	1.8	-	0.0	123	1.9	5,495	1.5	45	85	1.8	1	809	1.9	7	1
TRRA	5	0.1	-	0.0	5	0.1	17	0.0	3	2	0.0	-	20	0.0	4	-
TXTX	4	0.1	-	0.0	4	0.1	0	0.0	0	-	-	-	12	0.0	3	-
UP	1,159	17.4	2	10.0	1,157	17.4	105,617	28.9	91	817	17.6	-	4,388	10.3	4	2
URR	15	0.2	-	0.0	15	0.2	675	0.2	45	10	0.2	-	155	0.4	10	-
WC	77	1.2	1	5.0	76	1.1	1,276	0.3	17	54	1.2	-	192	0.5	2	-
WE	6	0.1	-	0.0	6	0.1	53	0.0	9	1	0.0	3	5	0.0	1	-
XXXX	745	11.2	2	10.0	743	11.2	8,418	2.3	11	383	8.3	10	3,875	9.1	5	6
Tot.	6,664	100	20	100	6,644	100	365,606	100	55	4,642	100	29	42,449	100	6	28

XXXX = All other railroads

TABLE 4-3 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY, BY STATE, 2002

	Total		Deaths		Nonfatal		Days Absent			Absent Cases		Term./	Days Restricted			Hazmat
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	Cnt	%	Avg.	Cnt
AL	87	1.3	-	0.0	87	1.3	8,161	2.2	94	58	1.2	-	373	0.9	4	-
AK	44	0.7	-	0.0	44	0.7	653	0.2	15	23	0.5	-	343	0.8	8	-
AZ	109	1.6	-	0.0	109	1.6	6,276	1.7	58	76	1.6	2	1,804	4.2	17	-
AR	107	1.6	1	5.0	106	1.6	8,952	2.4	84	67	1.4	-	455	1.1	4	-
CA	470	7.1	-	0.0	470	7.1	30,904	8.5	66	324	7.0	1	3,998	9.4	9	3
CO	104	1.6	1	5.0	103	1.6	3,714	1.0	36	61	1.3	1	489	1.2	5	-
CT	92	1.4	1	5.0	91	1.4	2,009	0.5	22	46	1.0	-	616	1.5	7	-
DE	40	0.6	1	5.0	39	0.6	1,149	0.3	29	14	0.3	-	117	0.3	3	-
DC	68	1.0	-	0.0	68	1.0	3,239	0.9	48	47	1.0	-	607	1.4	9	-
FL	160	2.4	1	5.0	159	2.4	12,922	3.5	81	126	2.7	1	584	1.4	4	-
GA	120	1.8	1	5.0	119	1.8	12,977	3.5	108	94	2.0	-	186	0.4	2	1
ID	45	0.7	-	0.0	45	0.7	3,026	0.8	67	35	0.8	-	541	1.3	12	-
IL	542	8.1	-	0.0	542	8.2	28,040	7.7	52	380	8.2	1	3,225	7.6	6	-
IN	128	1.9	1	5.0	127	1.9	7,360	2.0	58	82	1.8	1	502	1.2	4	-
IA	85	1.3	-	0.0	85	1.3	2,930	0.8	34	47	1.0	-	356	0.8	4	-
KS	83	1.2	-	0.0	83	1.2	2,819	0.8	34	40	0.9	-	1,536	3.6	19	2
KY	89	1.3	1	5.0	88	1.3	8,106	2.2	91	65	1.4	-	10	0.0	0	1
LA	129	1.9	-	0.0	129	1.9	8,134	2.2	63	88	1.9	2	878	2.1	7	4
ME	31	0.5	-	0.0	31	0.5	553	0.2	18	19	0.4	1	59	0.1	2	1
MD	89	1.3	-	0.0	89	1.3	5,162	1.4	58	67	1.4	1	357	0.8	4	-
MA	189	2.8	-	0.0	189	2.8	6,865	1.9	36	135	2.9	-	215	0.5	1	-
MI	141	2.1	-	0.0	141	2.1	5,524	1.5	39	92	2.0	1	263	0.6	2	-
MN	158	2.4	-	0.0	158	2.4	5,261	1.4	33	90	1.9	1	1,735	4.1	11	-
MS	52	0.8	-	0.0	52	0.8	1,744	0.5	34	30	0.6	-	384	0.9	7	-
MO	115	1.7	-	0.0	115	1.7	9,204	2.5	80	79	1.7	-	875	2.1	8	-
MT	64	1.0	-	0.0	64	1.0	3,562	1.0	56	44	0.9	2	763	1.8	12	1
NE	156	2.3	1	5.0	155	2.3	10,765	2.9	69	92	2.0	-	966	2.3	6	-
NV	23	0.3	-	0.0	23	0.3	2,211	0.6	96	17	0.4	-	0	0.0	0	-
NH	7	0.1	-	0.0	7	0.1	3	0.0	0	2	0.0	-	33	0.1	5	-
NJ	308	4.6	-	0.0	308	4.6	8,504	2.3	28	259	5.6	1	126	0.3	0	5
NM	55	0.8	-	0.0	55	0.8	3,674	1.0	67	37	0.8	1	883	2.1	16	-
NY	731	11.0	2	10.0	729	11.0	17,626	4.8	24	587	12.6	-	5,245	12.4	7	-
NC	65	1.0	1	5.0	64	1.0	5,473	1.5	84	45	1.0	-	31	0.1	0	-
ND	63	0.9	-	0.0	63	0.9	1,961	0.5	31	29	0.6	-	837	2.0	13	1
OH	177	2.7	2	10.0	175	2.6	17,043	4.7	96	136	2.9	4	94	0.2	1	1
OK	53	0.8	-	0.0	53	0.8	4,644	1.3	88	33	0.7	-	463	1.1	9	1
OR	93	1.4	-	0.0	93	1.4	6,312	1.7	68	67	1.4	1	1,304	3.1	14	-
PA	382	5.7	2	10.0	380	5.7	18,603	5.1	49	269	5.8	-	1,382	3.3	4	4
RI	17	0.3	-	0.0	17	0.3	627	0.2	37	13	0.3	-	56	0.1	3	-
SC	43	0.6	-	0.0	43	0.6	5,272	1.4	123	39	0.8	1	14	0.0	0	-
SD	12	0.2	-	0.0	12	0.2	538	0.1	45	10	0.2	-	148	0.3	12	-
TN	96	1.4	1	5.0	95	1.4	6,631	1.8	69	64	1.4	2	1,060	2.5	11	-
TX	494	7.4	1	5.0	493	7.4	40,601	11.1	82	343	7.4	2	4,524	10.7	9	1
UT	36	0.5	-	0.0	36	0.5	2,883	0.8	80	29	0.6	-	49	0.1	1	1
VT	27	0.4	-	0.0	27	0.4	654	0.2	24	13	0.3	-	113	0.3	4	-
VA	91	1.4	-	0.0	91	1.4	7,042	1.9	77	73	1.6	-	41	0.1	0	-
WA	139	2.1	-	0.0	139	2.1	5,112	1.4	37	91	2.0	-	2,250	5.3	16	1
WV	58	0.9	-	0.0	58	0.9	4,870	1.3	84	46	1.0	-	28	0.1	0	-
WI	137	2.1	1	5.0	136	2.0	2,554	0.7	19	83	1.8	2	814	1.9	6	-
WY	60	0.9	1	5.0	59	0.9	2,757	0.8	46	36	0.8	-	717	1.7	12	-
Tot.	6,664	100	20	100	6,644	100	365,606	100	55	4,642	100	29	42,449	100	6	28

TABLE 4-4 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY ACTIVITY, 2002

Activity	Total		Days Absent		Absent Cases		Term./	Days		Hazmat
	Cnt	%	Cnt	%	Cnt	%	Trans.	Cnt	%	Exp. Cnt
Adjusting coupler	24	0.4	1,285	0.4	16	0.3	-	133	0.3	1
Adjusting drawbar	22	0.3	1,464	0.4	18	0.4	-	166	0.4	-
Adjusting, other	49	0.7	2,004	0.5	32	0.7	-	184	0.4	-
Applying rail anchor/fastener	16	0.2	1,198	0.3	9	0.2	1	53	0.1	-
Bending, stooping	126	1.9	4,444	1.2	77	1.7	-	972	2.3	-
Carrying	45	0.7	2,657	0.7	32	0.7	1	403	0.9	-
Chaining, cabling car or locomotive	2	0.0	255	0.1	2	0.0	-	0	0.0	-
Cleaning	97	1.5	2,907	0.8	58	1.2	1	472	1.1	4
Climbing over/on	131	2.0	7,533	2.1	97	2.1	1	1,185	2.8	-
Closing	111	1.7	3,472	0.9	68	1.5	-	413	1.0	-
Coupling electric cables	8	0.1	489	0.1	6	0.1	-	43	0.1	-
Coupling steam hose	1	0.0	14	0.0	1	0.0	-	0	0.0	-
Coupling air hose	63	0.9	3,207	0.9	41	0.9	-	350	0.8	1
Crossing over	26	0.4	1,444	0.4	22	0.5	-	195	0.5	-
Crossing or crawling under	2	0.0	365	0.1	1	0.0	-	0	0.0	-
Crossing between	11	0.2	684	0.2	9	0.2	-	109	0.3	-
Cutting rail	9	0.1	253	0.1	4	0.1	-	381	0.9	-
Cutting vegetation	18	0.3	522	0.1	9	0.2	-	13	0.0	-
Cutting, other	63	0.9	619	0.2	19	0.4	-	133	0.3	-
Digging, excavating	19	0.3	187	0.1	11	0.2	-	197	0.5	-
Driving (motor vehicle, forklift, flagging)	118	1.8	5,400	1.5	81	1.7	-	702	1.7	-
Flagging	9	0.1	274	0.1	5	0.1	-	93	0.2	-
Fueling	7	0.1	45	0.0	4	0.1	-	13	0.0	-
Getting on	89	1.3	7,997	2.2	73	1.6	-	403	0.9	-
Getting off	219	3.3	15,750	4.3	180	3.9	2	1,334	3.1	-
Grinding	37	0.6	598	0.2	13	0.3	-	108	0.3	-
Handling baggage	38	0.6	2,204	0.6	29	0.6	-	348	0.8	-
Handling car parts	32	0.5	1,612	0.4	15	0.3	-	241	0.6	-
Handling material, general	82	1.2	1,692	0.5	50	1.1	-	393	0.9	-
Handling locomotive parts	25	0.4	1,016	0.3	12	0.3	-	268	0.6	-
Handling wheels/trucks	6	0.1	23	0.0	4	0.1	-	19	0.0	-
Handling, other	97	1.5	3,463	0.9	54	1.2	-	615	1.4	-
Handling other track material/supp	32	0.5	1,176	0.3	17	0.4	-	239	0.6	-
Handling poles	2	0.0	15	0.0	2	0.0	-	0	0.0	-
Handling tie plates	11	0.2	213	0.1	5	0.1	-	21	0.0	-
Handling ties	35	0.5	1,006	0.3	21	0.5	2	96	0.2	-
Handling rail	30	0.5	692	0.2	18	0.4	-	234	0.6	-
Inspecting	49	0.7	917	0.3	30	0.6	-	156	0.4	1
Installing	87	1.3	2,397	0.7	49	1.1	1	262	0.6	-
Jumping from	40	0.6	3,527	1.0	32	0.7	-	267	0.6	-
Jumping onto	1	0.0	0	0.0	-	-	-	0	0.0	-
Laying	6	0.1	666	0.2	3	0.1	-	23	0.1	-
Lifting other material	143	2.1	6,332	1.7	103	2.2	-	777	1.8	-
Lifting equipment (tools, parts, e	124	1.9	4,334	1.2	77	1.7	-	839	2.0	-
Lining switches	210	3.2	15,686	4.3	174	3.7	2	2,390	5.6	-
Lining, other	7	0.1	311	0.1	4	0.1	-	54	0.1	-
Loading/unloading	93	1.4	2,616	0.7	59	1.3	-	562	1.3	-
Maintaining	41	0.6	898	0.2	22	0.5	1	236	0.6	-
Opening	152	2.3	5,445	1.5	119	2.6	-	632	1.5	-
Opening/closing angle cock	23	0.3	941	0.3	19	0.4	-	102	0.2	-
Operating	264	4.0	17,361	4.7	195	4.2	1	837	2.0	4
Pulling pin lifter/operating uncou	80	1.2	6,396	1.7	65	1.4	2	870	2.0	-
Pulling	156	2.3	6,059	1.7	98	2.1	-	1,144	2.7	-
Pushing	59	0.9	3,224	0.9	32	0.7	-	521	1.2	-
Reaching	89	1.3	2,935	0.8	49	1.1	-	450	1.1	-
Removing rail anchors/fasteners	24	0.4	636	0.2	17	0.4	-	80	0.2	-
Repairing	148	2.2	4,721	1.3	78	1.7	-	455	1.1	3

TABLE 4-4 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY ACTIVITY, 2002

Activity	Total		Days Absent		Absent Cases		Term./	Days		Hazmat
	Cnt	%	Cnt	%	Cnt	%	Trans.	Restricted	%	Exp.
Riding	381	5.7	36,006	9.8	294	6.3	3	3,049	7.2	1
Running	22	0.3	1,265	0.3	16	0.3	-	173	0.4	-
Sitting	258	3.9	22,907	6.3	206	4.4	-	1,713	4.0	4
Spiking (installation/removal)	68	1.0	1,721	0.5	34	0.7	1	314	0.7	-
Standing	380	5.7	15,356	4.2	279	6.0	3	2,532	6.0	1
Stepping up	69	1.0	3,252	0.9	48	1.0	-	295	0.7	-
Stepping down	315	4.7	18,096	4.9	255	5.5	1	2,481	5.8	-
Stepping over	43	0.6	2,641	0.7	36	0.8	-	622	1.5	-
Uncoupling air hose	6	0.1	218	0.1	5	0.1	-	0	0.0	-
Uncoupling steam hose	1	0.0	0	0.0	-	-	-	0	0.0	-
Uncoupling electric cables	7	0.1	304	0.1	5	0.1	-	21	0.0	-
Using hand signals	1	0.0	0	0.0	-	-	-	0	0.0	-
Using hand tool	224	3.4	8,279	2.3	116	2.5	1	1,524	3.6	-
Using, other	19	0.3	398	0.1	10	0.2	-	20	0.0	-
Walking	1,031	15.5	71,000	19.4	792	17.1	4	6,920	16.3	7
Welding (includes field welding)	48	0.7	1,201	0.3	22	0.5	-	173	0.4	-
Handbrakes, applying	106	1.6	11,121	3.0	83	1.8	-	292	0.7	1
Handbrakes, releasing	65	1.0	5,961	1.6	50	1.1	-	401	0.9	-
Handbrakes, other	2	0.0	41	0.0	1	0.0	-	18	0.0	-
Derail, applying	8	0.1	398	0.1	3	0.1	-	89	0.2	-
Derail, removing	5	0.1	363	0.1	4	0.1	-	0	0.0	-
Derail, other	1	0.0	0	0.0	-	-	-	0	0.0	-
Other (Narrative must be provided)	95	1.4	1,257	0.3	42	0.9	1	626	1.5	-
Replacing	1	0.0	240	0.1	1	0.0	-	0	0.0	-
Total	6,664	100	365,606	100	4,642	100	29	42,449	100	28

TABLE 4-5 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY EVENT, 2002

Event	Total		Days Absent		Absent Cases		Term./	Days		Hazmat
	Cnt	%	Cnt	%	Cnt	%	Trans.	Restricted	Exp.	Cnt
Aggravated pre-existing condition	86	1.3	5,435	1.5	73	1.6	1	754	1.8	-
Apprehending/removing from property	4	0.1	15	0.0	1	0.0	-	6	0.0	-
Assaulted by other	47	0.7	2,270	0.6	43	0.9	-	138	0.3	-
Assaulted by coworker	8	0.1	467	0.1	4	0.1	-	45	0.1	-
Bitten/stung by bee, spider, other insect	65	1.0	627	0.2	20	0.4	-	107	0.3	-
Bitten by animal	9	0.1	0	0.0	-	-	-	3	0.0	-
Bodily function/sudden movement, e.g., sneez	139	2.1	6,203	1.7	91	2.0	-	873	2.1	-
Caught in/compressed by hand tools	36	0.5	258	0.1	10	0.2	-	65	0.2	-
Caught in/compressed by other machinery	56	0.8	1,168	0.3	24	0.5	-	564	1.3	-
Caught in/crushed by materials	68	1.0	1,521	0.4	36	0.8	-	229	0.5	-
Caught in/crushed in excavation, land slide	1	0.0	253	0.1	1	0.0	-	0	0.0	-
Caught in/compressed by powered hand tools	11	0.2	193	0.1	5	0.1	-	83	0.2	-
Cave in, slide, etc.	5	0.1	401	0.1	3	0.1	-	191	0.4	-
Climatic conditions, other (e.g., high wind	43	0.6	895	0.2	19	0.4	-	0	0.0	-
Climatic condition, exposure to environment	16	0.2	72	0.0	10	0.2	-	16	0.0	-
Collision - between on track equipment	131	2.0	14,449	4.0	109	2.3	2	901	2.1	-
Collision/impact - auto, truck, bus, van, e	187	2.8	9,894	2.7	141	3.0	-	790	1.9	-
Defective/malfunctioning equipment	111	1.7	10,330	2.8	86	1.9	1	1,364	3.2	1
Derailment	96	1.4	9,172	2.5	84	1.8	-	276	0.7	1
Electrical shock while operating welding e	2	0.0	46	0.0	2	0.0	-	34	0.1	-
Electrical shock due to contact with 3rd ra	9	0.1	43	0.0	7	0.2	-	0	0.0	-
Electrical shock, other (explain in narrati	14	0.2	397	0.1	11	0.2	-	8	0.0	-
Electrical shock from hand tool	4	0.1	141	0.0	3	0.1	-	0	0.0	-
Exposure to fumes - inhalation	78	1.2	2,816	0.8	50	1.1	-	18	0.0	12
Exposure to chemicals - external	42	0.6	885	0.2	21	0.5	-	34	0.1	11
Exposure to poisonous plants	2	0.0	2	0.0	1	0.0	-	0	0.0	-
Exposure to noise - single incident	11	0.2	100	0.0	9	0.2	-	0	0.0	-
Exposure to welding light	7	0.1	36	0.0	5	0.1	-	3	0.0	-
Highway-rail collision/impact	111	1.7	13,036	3.6	89	1.9	-	398	0.9	-
Horseplay, practical joke, etc.	6	0.1	48	0.0	3	0.1	1	90	0.2	-
Lost balance	206	3.1	12,017	3.3	159	3.4	1	1,167	2.7	-
Missed handhold, grabiron, step, etc.	57	0.9	4,944	1.4	47	1.0	-	350	0.8	-
Needle puncture/prick/stick	24	0.4	129	0.0	8	0.2	-	119	0.3	2
Other impacts - on track equipment	27	0.4	1,468	0.4	20	0.4	-	397	0.9	-
Overexertion	1,052	15.8	71,430	19.5	813	17.5	3	7,729	18.2	-
Pushed/shoved into/against	35	0.5	2,573	0.7	27	0.6	-	485	1.1	-
Pushed/shoved onto	1	0.0	365	0.1	1	0.0	-	0	0.0	-
Pushed/shoved from	4	0.1	64	0.0	2	0.0	-	14	0.0	-
Ran into on-track equipment	14	0.2	1,292	0.4	10	0.2	2	28	0.1	-
Ran into object/equipment	18	0.3	1,652	0.5	13	0.3	1	128	0.3	-
Repetitive motion - work processes	88	1.3	3,947	1.1	55	1.2	1	1,007	2.4	-
Repetitive motion - typing, keyboard, etc.	4	0.1	17	0.0	2	0.0	-	0	0.0	-
Repetitive motion - tools	38	0.6	1,089	0.3	26	0.6	1	305	0.7	-
Repetitive motion - other (describe in narr	15	0.2	98	0.0	8	0.2	-	99	0.2	-
Rubbed, abraded, etc.	28	0.4	339	0.1	10	0.2	-	17	0.0	-
Shot	5	0.1	208	0.1	4	0.1	-	0	0.0	-
Slack action, draft, compressive buff/coupl	48	0.7	5,479	1.5	38	0.8	1	780	1.8	1
Slipped,fell,stumbled,etc. due to irregular	260	3.9	18,089	4.9	207	4.5	4	2,253	5.3	-
Slipped, fell, stumbled, etc. due to climat	201	3.0	13,182	3.6	161	3.5	1	1,177	2.8	-
Slipped,fell,stumbled,etc. on oil, grease,e	134	2.0	11,468	3.1	105	2.3	-	1,196	2.8	-
Slipped,fell,stumbled,etc. due to object,ba	452	6.8	28,214	7.7	362	7.8	1	3,677	8.7	-
Stabbing, knifing, etc.	8	0.1	11	0.0	3	0.1	-	0	0.0	-
Stepped on object	95	1.4	4,846	1.3	63	1.4	-	1,068	2.5	-
Struck by thrown or propelled object	122	1.8	2,652	0.7	51	1.1	-	279	0.7	-
Struck by object	367	5.5	10,724	2.9	207	4.5	1	1,617	3.8	-

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

TABLE 4-5 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY EVENT, 2002

Event	Total		Days Absent		Absent Cases		Term./	Days		Hazmat
	Cnt	%	Cnt	%	Cnt	%	Trans.	Restricted		Exp.
Struck by on-track equipment	58	0.9	4,649	1.3	44	0.9	2	569	1.3	-
Struck by falling object	153	2.3	4,225	1.2	104	2.2	1	675	1.6	-
Struck against object	309	4.6	10,508	2.9	190	4.1	1	985	2.3	-
Sudden release of air	13	0.2	333	0.1	9	0.2	-	69	0.2	-
Sudden/unexpected movement of material	105	1.6	2,789	0.8	61	1.3	1	659	1.6	-
Sudden/unexpected movement of on-track equ	92	1.4	9,216	2.5	75	1.6	-	382	0.9	-
Sudden/unexpected movement of vehicle	44	0.7	2,572	0.7	33	0.7	-	309	0.7	-
Sustained viewing	1	0.0	0	0.0	-	-	-	0	0.0	-
Caught, crushed, pinched, other	297	4.5	7,502	2.1	180	3.9	1	1,993	4.7	-
On track equipment, other incidents	17	0.3	436	0.1	14	0.3	-	96	0.2	-
Slipped, fell, stumbled, other	376	5.6	29,521	8.1	278	6.0	-	2,598	6.1	-
Sudden, unexpected movement, other	188	2.8	12,087	3.3	127	2.7	-	2,143	5.0	-
Blowing/falling debris	1	0.0	0	0.0	-	-	-	0	0.0	-
Other (describe in narrative)	302	4.5	4,298	1.2	164	3.5	1	1,089	2.6	-
Total	6,664	100	365,606	100	4,642	100	29	42,449	100	28

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

TABLE 4-6 REPORTABLE CONDITIONS TO EMPLOYEES ON DUTY, BY LOCATION, 2002

Location	Total		Days Absent		Absent Cases		Term./	Days		Hazmat
	Cnt	%	Cnt	%	Cnt	%	Trans.	Cnt	%	Exp.
Main/branch	1,994	29.9	125,063	34.2	1,414	30.5	5	11,951	28.2	5
Yard	2,247	33.7	141,961	38.8	1,679	36.2	12	16,953	39.9	14
Siding	191	2.9	11,055	3.0	124	2.7	4	872	2.1	-
Industry	317	4.8	20,905	5.7	220	4.7	4	2,028	4.8	1
Repair	196	2.9	4,939	1.4	98	2.1	1	1,558	3.7	1
Break/lunch room	33	0.5	1,731	0.5	16	0.3	1	34	0.1	-
Freight terminal	16	0.2	1,847	0.5	14	0.3	-	27	0.1	1
Highway/roadway	208	3.1	10,244	2.8	153	3.3	-	875	2.1	-
Loading dock	37	0.6	765	0.2	23	0.5	-	262	0.6	-
Lodging facility	5	0.1	188	0.1	4	0.1	-	27	0.1	-
Office environment	138	2.1	5,791	1.6	76	1.6	-	630	1.5	-
Parking lot	75	1.1	1,789	0.5	44	0.9	-	417	1.0	-
Passenger terminal	386	5.8	10,708	2.9	300	6.5	-	1,672	3.9	1
Repair shop	634	9.5	22,433	6.1	364	7.8	2	3,903	9.2	5
Storage facility	56	0.8	1,288	0.4	33	0.7	-	617	1.5	-
Sidewalk/walkway	31	0.5	2,389	0.7	23	0.5	-	153	0.4	-
Other, (off site location	35	0.5	1,473	0.4	17	0.4	-	58	0.1	-
Other (explain in narrati	30	0.5	419	0.1	21	0.5	-	31	0.1	-
Other location (describe	35	0.5	618	0.2	19	0.4	-	381	0.9	-
Total	6,664	100	365,606	100	4,642	100	29	42,449	100	28

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

TABLE 4-7 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY JOB, 2002

Executives, Officials, and Staff Assistants

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Executives, officials, and staff assistants (miscellaneous)	-	1	-	0	0
Executives and general officers	-	5	-	194	0
Corporate staff managers	-	4	-	17	0
Regional/division officers, assistants and staff assistants	-	8	-	38	5
Transportation officers/managers	-	4	-	215	0
Total	-	22	-	464	5

Professional and Administrative

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Professional and administrative (miscellaneous)	-	1	-	16	0
Professional	-	7	-	33	31
Subprofessionals	-	9	-	66	13
Auditors, traveling auditors or accountants	-	3	1	29	0
General and administrative supervisors	-	12	-	669	6
Sales and traffic representatives and agents	-	15	-	579	385
Freight and other claim agents and investigators	-	1	-	0	0
Lieutenants and sergeants of police	-	13	1	286	143
Police officers, watchmen, guards (except crossing & bridge)	-	30	-	1,037	502
Inspectors, (except MOW & MOE), other investigators, etc	-	-	1	3	0
Buyers, and sales agents	-	-	1	0	0
Clerical technicians and clerical specialists	-	24	-	971	90
Office machine and data equipment operators	-	6	-	979	0
Secretaries, stenographers, and typists	-	8	1	18	1
General/other clerks (except yd clerk and crew dispatcher)	-	68	2	2,755	399
Building and office attendants	-	32	-	518	490
Motor vehicle operators	-	46	-	2,653	96
Total	-	275	7	10,612	2,156

Maintenance of Way and Structures

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Maintenance of way and structures (miscellaneous)	-	22	-	235	95
Supervisors, MOW, structures, communication & signals	-	41	1	711	237
MOW, structures, comm. & signals, & scale inspectors	-	42	1	1,740	245
Bridge and building gang foreman	-	30	1	885	176
Bridge and building carpenters	-	56	1	2,656	506
Bridge and building ironworkers	-	10	-	153	14
Bridge and building painters	-	5	-	26	15
Masons, bricklayers, plasterers, and plumbers	-	88	2	2,577	624
Bridge and building helpers and apprentices	-	20	-	500	67
Bridge/building gang and bridge/building dept laborers	1	54	-	1,310	626
Track gang foremen (extra gang work train laborers)	-	44	2	2,000	436
Gang or section foreman	-	101	3	4,022	655
Extra gang laborers	-	152	3	5,455	754
Section laborers	1	289	8	8,773	3,176
Machine operators	-	242	7	11,923	1,076
Gang foremen, communications and signals	-	28	-	687	92
Signalmen and signal maintainers	-	165	1	6,446	1,140
Linemen and groundmen and communications craftsman	1	67	2	549	605

TABLE 4-7 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY JOB, 2002
Maintenance of Way and Structures

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Assistant signalmen and assistant signal maintainers	-	29	-	892	102
Signal helpers and signal maintainer helpers	-	11	-	415	132
Camp car cooks	-	8	-	734	40
Total	3	1,504	32	52,689	10,813

Maintenance of Equipment and Stores

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Maintenance of equipment and stores (miscellaneous)	-	12	-	31	137
Supervisors and general foremen, maintenance of equipment	-	20	-	337	109
Supervisors and general foremen, materials and stores	-	1	-	17	0
Equipment, shop, electrical inspectors	-	9	-	38	32
Materials and supplies inspectors	-	3	-	161	75
Storekeeper	-	17	-	479	124
Gang foremen, maintenance of equipment	2	30	-	997	74
Blacksmiths	-	2	-	2	9
Boilermakers	-	18	-	850	119
Carmen (freight)	5	298	2	15,408	2,093
Carmen (other)	-	184	1	4,509	1,168
Electrical workers (A)	-	217	-	7,238	1,762
Electrical workers (B)	-	9	-	412	38
Electrical workers (C)	-	2	-	1	0
Machinists	1	270	6	12,791	2,023
Sheet metal workers	-	58	1	2,484	261
Skilled trades, helpers, maintenance of equipment and stores	-	42	-	1,204	292
Apprentices, maintenance of equipment and stores	-	7	-	465	0
Coach cleaners	-	137	2	4,739	607
Laborers: shops, enginehouses and power plants	-	106	2	4,556	674
Gang foremen, materials and stores	-	1	-	0	0
Equipment operators/general laborers, materials and stores	-	16	-	609	66
Stationary engineers	-	1	-	0	0
Stationary firemen	-	1	-	317	0
Total	8	1,461	14	57,645	9,663

Transportation, Other Than Train and Engine

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Transportation, other than train and engine (miscellaneous)	-	2	-	169	30
Transportation supervisor and chief train dispatcher	-	1	-	7	29
Train dispatchers	-	5	-	51	5
Station, freight and passenger agents	-	11	1	42	0
Clerk operators, towerman, train directors	-	7	-	435	0
Baggage, parcel room and station attendants	-	59	-	2,210	501
Gen/asst gnrl foremen,stations,warehouses,grain elev., docks	-	1	-	6	0
Gang foreman, stations, warehouses, grain elevators, docks	-	1	-	0	0
Grain elevator, and dock laborers	-	5	-	251	53
Station, and warehouse laborers	-	7	-	569	18
Truckers (station, warehouse and platforms)	-	4	-	309	3
Waiters and kitchen helpers (restaurant and dining car)	-	6	-	14	3
Chefs and cooks (restaurant and dining car)	-	30	-	1,527	1

TABLE 4-7 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY JOB, 2002

Transportation, Other Than Train and Engine

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Marine officers and workers and shore workers	-	2	-	0	0
Train attendants	-	137	2	6,764	612
Bridge operators and helpers	-	2	-	6	0
Yards clerks	-	23	1	1,588	58
Yardmasters and assistant yardmasters	-	9	-	1,068	21
Total	-	312	4	15,016	1,334

Transportation, Train and Engine

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Transportation, train and engine (miscellaneous)	-	7	-	139	90
Switchtenders	-	21	-	2,619	11
Outside hostlers	-	11	-	845	85
Outside hostler helpers	-	11	-	524	294
Inside hostler	-	1	-	182	2
Road passenger conductors	-	261	8	9,217	834
Assistant road passenger conductors and ticket collectors	-	116	-	4,104	46
Road freight conductors (through freight)	1	490	9	50,651	4,229
Road freight conductors (local and way freight)	1	299	1	20,826	1,915
Road passenger baggage person	-	5	-	3	12
Road Passenger brakemen and flagmen	-	26	-	251	299
Road freight brakemen and flagmen (through freight)	1	32	1	1,434	333
Road freight brakemen and flagmen (local and way freight)	-	203	2	20,886	982
Yard conductors and yard foremen	2	385	8	25,710	3,500
Yard brakemen and yard helpers	1	314	5	24,314	3,097
Road passenger engineers and motormen	-	135	12	5,935	375
Road freight engineers (through freight)	1	309	9	33,378	1,558
Road freight engineers (local and way freight)	2	141	3	12,637	285
Yard engineers	-	170	5	14,873	493
Road passenger firemen and helpers	-	3	-	3	7
Road freight firemen and helpers (through freight)	-	1	-	0	0
Road freight firemen and helpers (local and way freight)	-	3	-	623	0
Yard firemen and helpers	-	6	-	26	31
Total	9	2,950	63	229,180	18,478

TABLE 4-8 OCCUPATIONAL ILLNESSES OF EMPLOYEE ON DUTY, 2002

Illness	Total		Kld	Nonfatal	Days Absent	Absent Cases	Term./ Trans.	Days Restricted	Hazmat Exp.
	Cnt	%							
Dermatitis	1	0.8	-	1	0	-	-	0	1
Rashes	3	2.5	-	3	3	2	-	34	-
Misc. skin diseases/disorders	1	0.8	-	1	2	1	-	3	-
Asbestosis	1	0.8	-	1	0	-	-	0	-
Pharyngitis	1	0.8	-	1	365	1	-	0	1
Rhinitis	2	1.7	-	2	0	-	-	0	-
Misc. respiratory conditions	5	4.2	-	5	16	2	-	0	1
Heat/sun stroke	2	1.7	-	2	17	2	-	0	-
Heat exhaustion	8	6.7	-	8	35	5	-	2	-
Freezing/frostbite	1	0.8	-	1	12	1	-	0	-
Misc. disorders, physical agent	2	1.7	-	2	228	1	-	0	-
Noise induced hearing loss	2	1.7	-	2	20	2	-	0	-
Synovitis	6	5.0	-	6	635	5	-	31	-
Tenosynovitis	7	5.8	-	7	10	2	-	141	-
Bursitis	4	3.3	-	4	166	4	-	14	-
Carpal tunnel syndrome	15	12.5	-	15	420	7	-	92	-
Misc. repeated trauma conditio	23	19.2	-	23	1,799	14	-	714	1
Stress related syndromes	12	10.0	-	12	518	11	-	0	-
Misc. illnesses, unclassified	5	4.2	-	5	395	4	-	3	-
Emotional trauma/nervous shock	19	15.8	-	19	723	16	-	0	-
Total	120	100	-	120	5,364	80	-	1,034	4

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

TABLE 4-9 OCCUPATIONAL ILLNESSES OF EMPLOYEE ON DUTY, BY RAILROAD, 2002

RR	Total		Kld	Nonfatal	Days Absent			Absent Cases		Term./ Trans.	Days Restricted			Hazmat Exp. Cnt
	Cnt	%			Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.	
ATK	17	14.2	-	17	433	8.1	25	12	15.0	-	2	0.2	0	-
BAR	1	0.8	-	1	11	0.2	11	1	1.3	-	11	1.1	11	-
BNSF	39	32.5	-	39	2,616	48.8	67	20	25.0	-	902	87.2	23	3
CSX	3	2.5	-	3	326	6.1	109	3	3.8	-	0	0.0	0	-
DWP	1	0.8	-	1	0	0.0	0	-	-	-	0	0.0	0	-
FEC	1	0.8	-	1	13	0.2	13	1	1.3	-	0	0.0	0	-
GCRX	2	1.7	-	2	3	0.1	2	2	2.5	-	34	3.3	17	-
GTW	2	1.7	-	2	85	1.6	43	2	2.5	-	0	0.0	0	-
IC	2	1.7	-	2	30	0.6	15	1	1.3	-	0	0.0	0	-
KCS	4	3.3	-	4	150	2.8	38	4	5.0	-	0	0.0	0	-
LI	1	0.8	-	1	3	0.1	3	1	1.3	-	0	0.0	0	-
NIRC	3	2.5	-	3	31	0.6	10	3	3.8	-	0	0.0	0	-
NJTR	1	0.8	-	1	38	0.7	38	1	1.3	-	0	0.0	0	-
NS	4	3.3	-	4	274	5.1	69	3	3.8	-	0	0.0	0	-
PATH	8	6.7	-	8	20	0.4	3	7	8.8	-	0	0.0	0	-
SCAX	1	0.8	-	1	0	0.0	0	-	-	-	0	0.0	0	-
SEPA	1	0.8	-	1	3	0.1	3	1	1.3	-	0	0.0	0	-
SOO	2	1.7	-	2	0	0.0	0	-	-	-	61	5.9	31	-
UP	15	12.5	-	15	1,096	20.4	73	11	13.8	-	13	1.3	1	-
WC	3	2.5	-	3	40	0.7	13	2	2.5	-	3	0.3	1	-
XXXX	9	7.5	-	9	192	3.6	21	5	6.3	-	8	0.8	1	1
Tot.	120	100	-	120	5,364	100	45	80	100	-	1,034	100	9	4

1/ The number of cases that resulted in employee being absent for work at least one day

2/ Term = terminated, Trans = transferred

3/ Condition was the result of a hazardous material exposure

CHAPTER 5

TRAIN ACCIDENTS

Collisions, derailments, fires, explosions, acts of God, or other events involving the operation of railroad on-track equipment (standing or moving) and causing reportable damages greater than the reporting threshold for the year in which the accident/incident occurred must be reported using Form FRA F 6180.54. The reporting threshold for calendar years 1992-1996 was \$6,300. The reporting threshold for calendar year 1998 was \$6,600, and in 2002 it was \$6,700.

Reportable damage includes labor costs and all other costs to repair or replace in kind damaged on-track equipment, signals, track, track structures, or roadbed. Reportable damage does not include the cost of clearing a wreck; however, additional damage to the above listed items caused while clearing the wreck is to be included in your damage estimate.

Examples of other costs included in reportable damage are: (1) rental and/or operation of machinery such as cranes, bulldozers, including the services of contractors, to replace or repair the track right-of-way and associated structures; and (2) costs associated with the repair or replacement of roller bearings on units that were derailed or submerged in water. (Replacement costs include the labor costs resulting from a wheel set change out.)

If the property of more than one railroad is involved in an accident/incident, the reporting threshold is calculated by including the damages suffered by all of the railroads involved. When total reportable damage to all railroads directly involved in an accident/incident exceeds the reporting threshold, a report is required even though an individual railroad's damages were below the threshold.

The tables displaying train accidents counts by railroad, are the number of events that a railroad was involved in, regardless of whether or not that railroad's operations were the primary reason the accident occurred. This is done because all railroads are required to report the extent of their involvement in the accident, no matter whether there is agreement on the cause of the accident.

A form must be completed for each consist involved in an accident. The railroad responsible for the on-track equipment at the time of the accident, and only that railroad, will report the consist.

In joint operations, if the railroad having track maintenance responsibility did not also have ontrack rail equipment involved, a report containing the track information must be forwarded.

Track information for accidents occurring on industry track of a non-reporting company is to be reported by the railroad operating the on-track equipment. Damages to industry track and ontrack equipment are included in reportable damage.

A railroad need not report the following:

1. Cars derailed on industry tracks by non-railroad employees or non-railroad employee vandalism, providing there is no involvement of railroad employees;

2. Damage to out-of-service cars resulting from high water or flooding, e.g., empties placed on storage or repair track. This exclusion does not apply if such cars are placed into a moving consist and as a result of this damage, a reportable rail equipment accident results.

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

Car. A unit of on-track equipment, either

- (1) Equipment designed to be hauled by locomotives, or
- (2) Equipment such as a track motorcar, highway-rail vehicle, push car, crane, or ballast tamping machine.

Locomotive. A locomotive is a piece of on-track equipment, other than hi-rail or specialized maintenance equipment,

- (1) With one or more propelling motors designed for moving other equipment;
- (2) With one or more propelling motors designed to carry freight or passenger traffic, or both; or
- (3) Without propelling motors but with one or more control stands.

Motorcar. A self-propelled unit of equipment, designed to carry freight or passenger traffic. (Does not include track motorcars or similar work equipment.)

Train. For purposes of accident/incident reporting, a train is a locomotive or locomotives coupled with or without cars, and with or without markers displayed. This definition includes trains consisting entirely of self-propelled units designed to carry passengers, freight traffic, or both.

Yard switching trains. Those trains operated primarily within yards for the purpose of switching other equipment. Examples include the making up or breaking up of trains, service industrial tracks within yard limits, storing or classifying cars, and other similar operations.

Note: Switching performed by a road crew that is incidental to the road operation is not included.

Work trains are non-revenue trains used for the administration and upkeep service of the railroad. Examples are: official trains; inspection trains; special trains running with company fire apparatus to save the railroad's property from destruction; trains that transport the railroad's employees to and from work when no transportation charge is made; construction and upkeep trains run in connection with maintenance and improvement work; and material and supply trains run in connection with operations.

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CHAPTER 5

TRAIN ACCIDENTS

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TABLE 5-1 TRAIN ACCIDENTS BY RR, TYPE AND MAJOR CAUSE, 2002

Railroad	Total		Type of Accident				Reportable Damage	Casualties		Causes						
	Cnt	%	Coll	Der	HRC	Othr		Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk	
Alton & Southern	15	0.5	3	6	-	6	533,778	-	2	2	-	7	1	-	5	
Alaska RR Corp.	5	0.2	-	3	-	2	89,884	-	2	-	-	4	1	-	-	
Amtrak	143	4.5	4	57	31	51	14,193,397	17	278	17	31	31	22	1	41	
Bangor & Aroostook	2	0.1	-	2	-	-	46,780	-	-	1	-	-	-	-	1	
Bessemer & Lake Erie RR	2	0.1	-	2	-	-	28,538	-	-	-	-	-	-	-	2	
Burlington Northern Santa Fe	587	18.3	19	427	49	92	62,264,887	16	52	94	49	218	67	5	154	
Belt Rwy Of Chicago	18	0.6	3	11	-	4	372,282	-	-	1	-	5	5	-	7	
Conrail Shared Assets	31	1.0	8	18	-	5	600,116	-	-	-	-	20	5	-	6	
CSX Transportation	377	11.8	46	245	23	63	30,039,427	-	17	30	23	167	47	7	103	
Delaware & Hudson	9	0.3	3	6	-	-	1,329,012	-	3	1	-	3	3	-	2	
Dakota,Minnesota & Eastern	16	0.5	-	16	-	-	1,810,136	-	-	1	-	1	-	-	14	
Duluth,Missabe & Iron Range	12	0.4	-	12	-	-	614,646	-	-	7	-	2	-	-	3	
Duluth,Winnipeg & Pacific	3	0.1	1	2	-	-	122,329	-	-	-	-	1	-	-	2	
Elgin, Joliet & Eastern	15	0.5	2	11	-	2	219,173	-	-	-	-	6	1	-	8	
Florida East Coast	12	0.4	-	11	1	-	1,089,552	-	-	2	1	2	1	-	6	
Guilford Rail System	3	0.1	-	1	-	2	39,488	-	-	-	-	2	-	-	1	
Grand Trunk Western RR	16	0.5	1	12	-	3	1,906,016	-	-	-	-	10	2	-	4	
Illinois Central	62	1.9	-	38	2	22	6,222,880	-	2	4	2	25	7	-	24	
Other Railroads	318	9.9	14	242	25	37	17,095,494	4	90	25	25	90	23	1	154	
Indiana Harbor Belt	16	0.5	3	12	-	1	395,500	-	-	1	-	8	2	-	5	
I & M Rail Link, LLC	15	0.5	-	10	-	5	255,670	-	1	3	-	8	1	-	3	
Kansas City Southern	106	3.3	8	58	13	27	7,232,709	1	12	11	13	48	2	1	31	
Long Island Rail Road	15	0.5	2	8	1	4	539,959	-	23	-	1	8	2	-	4	
MD Assn. of Rail Comm	2	0.1	1	-	-	1	2,018,000	-	5	-	-	1	-	-	1	
Metro North Commuter	47	1.5	2	4	1	40	1,372,726	1	3	21	1	7	8	1	9	
Montana Rail Link	17	0.5	1	13	-	3	2,262,972	-	3	3	-	7	2	-	5	
Northeast IL Reg Comm	5	0.2	1	3	1	-	465,208	-	-	-	1	1	2	-	1	
New Jersey Transit Rail	39	1.2	-	22	-	17	3,295,465	-	2	2	-	19	3	-	15	
Norfolk Southern Corp.	251	7.8	27	168	19	37	13,649,559	5	12	35	19	75	36	5	81	
Paducah & Louisville	4	0.1	-	3	-	1	22,297	-	-	1	-	1	-	-	2	
Port Auth Trans Hudson	3	0.1	-	1	-	2	72,012	-	1	1	-	-	2	-	-	
Peninsula Comm San Mateo Cnty	1	0.0	-	1	-	-	28,150	-	-	1	-	-	-	-	-	
Port Terminal RR Assn	15	0.5	6	4	-	5	522,371	-	-	-	-	11	4	-	-	
Southern CA Reg Rail Auth.	13	0.4	1	1	10	1	3,906,627	6	21	-	10	2	1	-	-	
Southeastern PA Trans.	22	0.7	2	2	-	18	686,173	-	1	6	-	3	9	3	1	
Soo Line	23	0.7	1	10	6	6	1,640,783	1	1,446	2	6	9	4	-	2	
Term RR Assn Of St. Louis	14	0.4	-	12	1	1	647,306	-	-	4	1	3	1	-	5	
Econo Rail Corporation	7	0.2	4	3	-	-	205,560	-	-	-	-	5	1	-	1	
Union Pacific	889	27.8	52	648	65	124	93,040,561	10	58	117	65	289	97	28	293	
Union RR (Pittsburgh)	5	0.2	-	4	-	1	106,593	-	-	-	-	1	1	-	3	
Wisconsin Central Ltd.	32	1.0	1	22	1	8	4,806,199	-	3	3	1	14	3	-	11	
Wheeling & Lake Erie	13	0.4	-	11	1	1	307,506	-	-	-	1	6	-	-	6	

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-2 TRAIN ACCIDENTS BY STATE, TYPE AND MAJOR CAUSE, 2002

State	Total		Type of Accident					Reportable Damage		Casualties		Causes						
	Accs	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk		
Alabama	61	2.1	5	37	7	12	5,986,223	2.2	-	9	8	7	15	7	2	22		
Alaska	5	0.2	-	3	-	2	89,884	0.0	-	2	-	-	4	1	-	-		
Arizona	33	1.1	-	31	-	2	4,247,886	1.5	-	-	5	-	10	-	-	18		
Arkansas	79	2.7	3	47	13	16	4,713,950	1.7	-	5	5	13	22	5	8	26		
California	209	7.1	8	145	25	31	25,160,903	9.1	11	48	24	25	78	31	1	50		
Colorado	61	2.1	2	45	5	9	4,200,326	1.5	4	2	12	5	25	3	-	16		
Connecticut	29	1.0	2	5	2	20	1,393,178	0.5	1	1	13	2	4	1	1	8		
Delaware	7	0.2	-	4	-	3	156,174	0.1	-	-	1	-	1	1	-	4		
Dist Of Columbi	8	0.3	-	5	-	3	794,301	0.3	-	-	-	-	6	1	-	1		
Florida	59	2.0	2	42	7	8	11,627,148	4.2	5	143	8	7	20	2	-	22		
Georgia	68	2.3	7	36	7	18	4,766,745	1.7	3	1	6	7	20	11	4	20		
Idaho	27	0.9	-	18	3	6	2,164,318	0.8	1	4	5	3	11	2	-	6		
Illinois	250	8.5	28	167	9	46	15,718,138	5.7	4	83	26	9	109	33	1	72		
Indiana	59	2.0	7	42	5	5	2,787,752	1.0	1	22	3	5	22	9	1	19		
Iowa	91	3.1	-	72	1	18	6,167,575	2.2	-	3	8	1	35	7	-	40		
Kansas	88	3.0	3	66	5	14	13,088,859	4.7	2	3	7	5	27	9	1	39		
Kentucky	45	1.5	5	29	3	8	3,998,544	1.4	-	2	4	3	15	6	1	16		
Louisiana	92	3.1	8	55	13	16	6,195,171	2.2	1	15	7	13	27	4	2	39		
Maine	5	0.2	-	2	-	3	84,280	0.0	-	1	2	-	2	-	-	1		
Maryland	29	1.0	4	19	1	5	4,632,388	1.7	-	84	3	1	12	2	-	11		
Massachusetts	18	0.6	-	10	-	8	1,210,836	0.4	-	-	5	-	8	3	-	2		
Michigan	43	1.5	2	35	2	4	2,974,784	1.1	1	3	3	2	17	3	-	18		
Minnesota	66	2.2	4	49	5	8	3,492,032	1.3	3	2	10	5	22	8	-	21		
Mississippi	43	1.5	1	28	5	9	4,156,171	1.5	3	4	7	5	15	1	1	14		
Missouri	83	2.8	6	60	6	11	13,735,801	5.0	-	8	13	6	30	10	1	23		
Montana	28	1.0	-	25	-	3	5,384,235	2.0	-	2	6	-	7	8	-	7		
Nebraska	94	3.2	3	65	9	17	16,846,650	6.1	3	10	25	9	26	8	7	19		
Nevada	9	0.3	1	7	-	1	892,623	0.3	-	-	-	-	4	2	-	3		
New Hampshire	1	0.0	-	1	-	-	10,188	0.0	-	-	-	-	-	-	-	1		
New Jersey	72	2.4	7	33	1	31	4,525,054	1.6	-	3	6	1	35	11	-	19		
New Mexico	17	0.6	-	10	2	5	1,714,270	0.6	-	2	4	2	9	2	-	-		
New York	107	3.6	8	58	1	40	4,810,186	1.7	-	28	12	1	45	15	-	34		
North Carolina	27	0.9	6	10	6	5	1,734,071	0.6	1	4	1	6	12	3	-	5		
North Dakota	23	0.8	-	18	1	4	2,781,510	1.0	1	1,441	4	1	9	3	1	5		
Ohio	87	3.0	8	62	5	12	4,154,661	1.5	4	2	7	5	32	13	-	30		
Oklahoma	56	1.9	-	41	7	8	5,065,643	1.8	3	6	9	7	12	4	1	23		
Oregon	64	2.2	5	49	5	5	3,472,722	1.3	-	8	4	5	18	6	4	27		
Pennsylvania	102	3.5	6	68	1	27	6,114,365	2.2	-	3	14	1	28	12	4	43		
Rhode Island	1	0.0	-	-	-	1	20,800	0.0	-	-	1	-	-	-	-	-		
South Carolina	26	0.9	2	18	4	2	2,906,685	1.1	-	24	1	4	9	3	-	9		
South Dakota	14	0.5	-	12	1	1	1,727,608	0.6	2	1	-	1	2	1	-	10		
Tennessee	58	2.0	4	40	1	13	4,880,404	1.8	-	3	4	1	26	10	2	15		
Texas	372	12.6	25	265	30	52	42,102,248	15.2	7	35	50	30	123	42	5	122		
Utah	26	0.9	4	17	1	4	2,845,431	1.0	-	2	3	1	13	4	-	5		
Vermont	3	0.1	-	2	1	-	447,880	0.2	-	3	-	1	-	-	-	2		
Virginia	42	1.4	6	30	-	6	4,003,425	1.5	-	4	12	-	14	5	1	10		
Washington	39	1.3	3	20	4	12	2,329,837	0.8	-	3	-	4	18	6	1	10		
West Virginia	20	0.7	2	16	-	2	2,567,036	0.9	-	-	4	-	6	2	-	8		
Wisconsin	56	1.9	3	39	2	12	6,252,401	2.3	-	3	5	2	28	3	-	18		
Wyoming	42	1.4	2	31	-	9	4,964,421	1.8	-	5	10	-	17	7	-	8		
Total	2,944	100	192	1,989	206	557	276,097,721	100.0	61	2,037	367	206	1,050	330	50	941		

TABLE 5-3 TRAIN ACCIDENTS BY MONTH, TYPE AND MAJOR CAUSE, 2002

Day	Total		Type of Accident				Reportable Damage		Casualties		Causes						
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk	
January	243	8.3	14	183	10	36	25,425,341	9.2	3	1,456	28	10	83	37	2	83	
February	234	7.9	12	161	12	49	18,505,458	6.7	1	19	28	12	82	29	4	79	
March	237	8.1	12	156	14	55	18,807,086	6.8	-	17	41	14	78	31	5	68	
April	238	8.1	12	168	15	43	29,113,398	10.5	10	161	26	15	85	18	6	88	
May	237	8.1	16	163	19	39	29,465,666	10.7	8	51	25	19	93	32	2	66	
June	233	7.9	19	135	25	54	25,951,434	9.4	3	129	22	25	91	24	5	66	
July	244	8.3	15	165	19	45	24,646,535	8.9	10	95	33	19	83	21	5	83	
August	271	9.2	19	184	19	49	18,454,811	6.7	3	19	31	19	109	30	5	77	
September	250	8.5	17	160	25	48	26,745,744	9.7	10	19	36	25	83	29	4	73	
October	271	9.2	23	184	17	47	22,933,009	8.3	2	25	41	17	94	25	3	91	
November	222	7.5	12	161	19	30	16,234,994	5.9	4	23	27	19	76	23	5	72	
December	264	9.0	21	169	12	62	19,814,245	7.2	7	23	29	12	93	31	4	95	
Total	2,944	100	192	1,989	206	557	276,097,721	100.0	61	2,037	367	206	1,050	330	50	941	

TABLE 5-4 TRAIN ACCIDENTS BY DAY, TYPE AND MAJOR CAUSE, 2002

Day	Total		Type of Accident				Reportable Damage		Casualties		Causes					
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Sunday	345	11.7	25	239	12	69	37,836,642	13.7	3	30	48	12	128	49	8	100
Monday	448	15.2	21	312	40	75	42,157,460	15.3	10	116	58	40	145	51	6	148
Tuesday	453	15.4	34	289	38	92	47,217,550	17.1	15	80	52	38	158	51	9	145
Wednesday	440	14.9	23	286	37	94	36,969,822	13.4	13	105	49	37	157	41	5	151
Thursday	431	14.6	31	288	30	82	43,961,839	15.9	11	173	49	30	163	37	8	144
Friday	451	15.3	28	311	35	77	35,400,950	12.8	6	1,483	55	35	151	53	7	150
Saturday	376	12.8	30	264	14	68	32,553,458	11.8	3	50	56	14	148	48	7	103
Total	2,944	100	192	1,989	206	557	276,097,721	100.0	61	2,037	367	206	1,050	330	50	941

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-5 TRAIN ACCIDENTS BY TIME OF DAY, TYPE, AND MAJOR CAUSE, 2002

Time			Type of Accident				Reportable Damage		Casualties		Causes						
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk	
AM	1	114	3.9	13	83	1	17	9,409,822	3.4	1	1,448	12	1	54	17	1	29
	2	119	4.0	9	79	2	29	9,915,390	3.6	1	2	12	2	52	16	2	35
	3	114	3.9	7	83	1	23	16,486,906	6.0	-	16	11	1	54	21	1	26
	4	125	4.2	5	92	4	24	15,963,460	5.8	-	3	11	4	56	19	2	33
	5	111	3.8	13	77	2	19	9,744,683	3.5	-	5	20	2	45	9	1	34
	6	109	3.7	4	76	10	19	14,011,544	5.1	2	9	12	10	33	11	6	37
	7	106	3.6	6	60	10	30	10,912,904	4.0	5	15	23	10	31	13	-	29
	8	108	3.7	10	72	13	13	18,729,788	6.8	8	38	16	13	34	9	1	35
	9	137	4.7	8	87	14	28	12,270,118	4.4	5	32	22	14	45	10	2	44
	10	129	4.4	13	82	10	24	8,863,275	3.2	-	14	13	10	51	10	2	43
	11	146	5.0	8	88	23	27	10,275,855	3.7	3	11	22	23	44	9	4	44
	12	94	3.2	5	63	4	22	6,339,621	2.3	-	6	7	4	35	10	2	36
	Sub	1,412	48.0	101	942	94	275	142,923,366	51.8	25	1,599	181	94	534	154	24	425
	PM	1	133	4.5	8	83	15	27	7,622,524	2.8	2	83	11	15	50	17	-
2		127	4.3	3	95	12	17	13,184,742	4.8	5	16	16	12	30	15	3	51
3		139	4.7	10	97	16	16	17,040,259	6.2	2	82	15	16	31	19	1	57
4		149	5.1	7	103	13	26	11,344,876	4.1	7	15	17	13	43	13	3	60
5		139	4.7	5	97	13		20,450,157	7.4	5	150	17	13	49	16	1	43
6		146	5.0	10	94	14	28	9,057,026	3.3	7	24	19	14	56	17	1	39
7		112	3.8	11	75	6	20	7,767,575	2.8	2	9	16	6	38	12	1	39
8		125	4.2	5	85	4	31	5,224,081	1.9	-	6	16	4	45	15	6	39
9		125	4.2	5	92	1	27	11,086,816	4.0	1	4	20	1	41	16	6	41
10		123	4.2	10	88	1	24	13,721,358	5.0	-	12	17	1	57	14	2	32
11		94	3.2	8	72	2	12	8,762,256	3.2	2	1	9	2	33	10	1	39
12		120	4.1	9	66	15	30	7,912,685	2.9	3	36	13	15	43	12	1	36
Sub		1,532	52.0	91	1,047	112	282	133,174,355	48.2	36	438	186	112	516	176	26	516
Total		2,944	100	192	1,989	206	557	276,097,721	100	61	2,037	367	206	1,050	330	50	941

TABLE 5-6 TRAIN ACCIDENTS BY TYPE AND MAJOR CAUSE, 2002

Type Accident	Total		Reportable Damage		Casualties		Causes					
	Cnt	%	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Derailments	1,989	67.6	210,325,825	76.2	7	1,691	294	-	572	205	19	899
Head on collision	13	0.4	12,311,982	4.5	4	95	-	-	13	-	-	-
Rear end collision	20	0.7	6,974,209	2.5	-	31	-	-	19	1	-	-
Side collision	109	3.7	8,745,280	3.2	-	23	1	-	99	7	-	2
Raking collision	46	1.6	2,288,807	0.8	-	1	-	-	32	10	1	3
Broken train coll.	4	0.1	158,016	0.1	-	1	2	-	2	-	-	-
Highway-rail Impact	206	7.0	9,565,687	3.5	46	153	-	206	-	-	-	-
Obstruction impact	60	2.0	4,711,953	1.7	3	19	2	-	15	39	-	4
Explosion/detonation	2	0.1	92,141	0.0	-	2	1	-	-	1	-	-
Fire/violent rupture	24	0.8	6,092,614	2.2	-	-	13	-	-	11	-	-
Other impacts	349	11.9	11,216,804	4.1	1	20	17	-	256	40	27	9
Other events	122	4.1	3,614,403	1.3	-	1	37	-	42	16	3	24
Total	2,944	100	276,097,721	100	61	2,037	367	206	1,050	330	50	941

EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track, HRC = highway-rail crossing

TABLE 5-7 TRAIN ACCIDENTS BY SUBCAUSE AND TYPE, 2002

Causes	Total		Type of Accident				Reportable Damage		Casualties	
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal
Brakes	36	1.2	1	27	-	8	1,679,794	0.6	-	2
Body	22	0.7	-	18	-	4	2,261,770	0.8	-	-
Coupler & Draft System	36	1.2	2	26	-	8	2,956,044	1.1	-	-
Truck Components	95	3.2	-	93	-	2	16,149,783	5.8	-	3
Axles & Journal Bearings	67	2.3	-	62	-	5	23,851,705	8.6	-	-
Wheels	64	2.2	-	62	-	2	10,010,165	3.6	-	3
Locomotives	32	1.1	-	-	-	32	3,550,535	1.3	-	-
Doors	4	0.1	-	4	-	-	293,320	0.1	-	-
Other Mechanical	11	0.4	-	2	-	9	513,232	0.2	-	2
Brakes, Use of	140	4.8	21	45	-	74	5,080,329	1.8	-	6
Employee Physical Condition	5	0.2	1	-	-	4	611,020	0.2	-	-
Flagging, Fixed, Hand & Radio	42	1.4	20	14	-	8	14,720,414	5.3	4	43
General Switching Rules	336	11.4	63	142	-	131	11,110,986	4.0	-	4
Main Track Authority	30	1.0	13	8	-	9	9,074,008	3.3	1	95
Train Handling/Makeup	151	5.1	6	140	-	5	8,479,995	3.1	-	-
Speed	88	3.0	17	35	-	36	5,067,390	1.8	-	17
Switches, Use of	227	7.7	22	174	-	31	7,988,401	2.9	-	14
Miscellaneous Human Factors	31	1.1	2	14	-	15	2,292,625	0.8	-	78
Environmental Conditions	39	1.3	3	27	-	9	8,464,111	3.1	-	-
Loading Procedures	45	1.5	4	33	-	8	7,100,699	2.6	-	-
Highway-Rail Incidents	206	7.0	-	-	206	-	9,565,687	3.5	46	153
Unusual Operational Situations	149	5.1	7	77	-	65	10,628,584	3.8	3	14
Other Miscellaneous Causes	97	3.3	4	68	-	25	9,921,967	3.6	1	1,444
Signal Defects	50	1.7	1	19	-	30	1,133,906	0.4	-	-
Roadbed	32	1.1	-	30	-	2	3,652,286	1.3	1	4
Track Geometry	337	11.4	2	331	-	4	35,951,060	13.0	4	134
Rail, Joint Bar & Anchors	315	10.7	1	314	-	-	50,782,318	18.4	1	18
Frogs, Switches, Appliances	221	7.5	2	213	-	6	11,193,826	4.1	-	2
Other Track Defects	36	1.2	-	11	-	25	2,011,761	0.7	-	1
Total	2,944	100	192	1,989	206	557	276,097,721	100.0	61	2,037

EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track, HRC =highway-rail crossing

TABLE 5-8 TRAIN ACCIDENTS WITH CONTRIBUTING CAUSE, 2002

Contributing Cause	Total		Type of Accident				Type of Track				
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Siding	Industry	Other
Brakes	5	1.5	-	4	-	1	2	2	1	-	-
Body	2	0.6	-	2	-	-	1	1	-	-	-
Coupler & Draft System	1	0.3	-	1	-	-	1	-	-	-	-
Truck Components	9	2.6	-	9	-	-	4	3	-	2	-
Axles & Journal Bearings	1	0.3	-	1	-	-	1	-	-	-	-
Wheels	19	5.5	-	18	-	1	7	7	2	3	-
Other Mechanical	2	0.6	1	-	-	1	2	-	-	-	-
Brakes, Use of	8	2.3	-	4	-	4	1	7	-	-	-
Employee Physical Condition	2	0.6	1	1	-	-	1	1	-	-	-
Flagging, Fixed, Hand & Radio	11	3.2	1	2	-	8	2	8	-	1	-
General Switching Rules	56	16.3	10	24	-	22	6	38	4	8	-
Main Track Authority	3	0.9	2	1	-	-	2	1	-	-	-
Train Handling/Makeup	27	7.9	2	24	-	1	9	13	2	2	1
Speed	11	3.2	2	6	-	3	4	7	-	-	-
Switches, Use of	14	4.1	1	11	-	2	2	9	2	1	-
Miscellaneous Human Factors	10	2.9	2	6	-	2	4	6	-	-	-
Environmental Conditions	5	1.5	-	3	-	2	2	2	-	1	-
Loading Procedures	6	1.7	1	4	-	1	5	-	-	-	1
Highway-Rail Incidents	20	5.8	-	1	19	-	19	-	-	1	-
Unusual Operational Situations	13	3.8	-	9	1	3	4	5	-	4	-
Other Miscellaneous Causes	13	3.8	-	11	-	2	3	4	-	6	-
Roadbed	18	5.2	-	17	-	1	7	7	1	3	-
Track Geometry	42	12.2	-	42	-	-	17	15	2	8	-
Rail, Joint Bar & Anchors	23	6.7	-	23	-	-	10	10	-	2	1
Frogs, Switches, Appliances	22	6.4	-	22	-	-	7	11	2	2	-
Total	343	100	23	246	20	54	123	157	16	44	3

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2002
MAJOR CAUSE= Human Factors

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Bottling the Air	2	0.1	1	-	1	1	1	-	85,405	-	1
Failure to secure engine- rr empl	9	0.3	2	1	6	3	5	1	791,263	-	3
Fail to secure car hnd brk -rr emp	36	1.2	2	15	19	5	22	9	1,025,219	-	-
Fail to release hand brk - rr emp	5	0.2	-	3	2	3	2	-	542,505	-	-
Fail to apply suff. hand brakes -rr emp	51	1.7	9	13	29	1	42	8	1,570,891	-	1
Fail to apply car hnd brks -rr emp	20	0.7	6	5	9	1	17	2	537,810	-	-
Fail to secure equip - not rr emp	5	0.2	1	3	1	1	-	4	89,286	-	-
Fail to ctrl car spd use hnd brk-r emp	7	0.2	-	2	5	1	3	3	255,205	-	-
Use of brakes, other	5	0.2	-	3	2	1	4	-	182,745	-	1
Employee asleep	5	0.2	1	-	4	2	3	-	611,020	-	-
Absence of fixed signal (Blue Signal)	1	0.0	-	1	-	-	-	1	21,190	-	-
Fixed signal, failure to comply	3	0.1	1	2	-	3	-	-	2,921,416	-	13
Flagging signal, failure to comply	1	0.0	-	1	-	-	1	-	15,000	-	-
Hand signal, failure to comply	1	0.0	1	-	-	-	1	-	7,083	-	-
Hand signal, failure to give/receive	1	0.0	-	1	-	-	1	-	47,498	-	-
Radio communication, failure to comply	13	0.4	5	6	2	3	6	4	496,065	1	2
Radio communication, improper	3	0.1	1	1	1	-	2	1	186,150	-	2
Radio comm., failure to give/receive	6	0.2	2	1	3	-	6	-	163,553	-	-
Block signal, failure to comply	9	0.3	8	-	1	9	-	-	10,454,258	3	22
Interlocking signal, failure to comply	2	0.1	1	1	-	2	-	-	374,228	-	4
Fail to obs hand sig at wayside insp	2	0.1	1	-	1	1	1	-	33,973	-	-
Car(s) shoved out & left out of clear	12	0.4	1	2	9	1	11	-	336,576	-	-
Cars left foul	49	1.7	15	7	27	3	42	4	1,271,986	-	-
Derail, failure to apply or remove	40	1.4	-	38	2	2	31	7	2,224,370	-	-
Instruction to trn/rd crew improper	11	0.4	2	4	5	-	10	1	457,352	-	-
Shoving movement, absence of man	89	3.0	21	37	31	5	65	19	3,276,866	-	-
Shoving movement, failure to control	42	1.4	13	15	14	3	36	3	1,397,570	-	1
Skate, failure to remove or place	3	0.1	-	2	1	-	3	-	95,952	-	-
Failure to stretch cars before shoving	5	0.2	2	2	1	2	3	-	218,933	-	-
Failure to couple	16	0.5	-	4	12	-	16	-	382,682	-	-
Moving cars-load ramp,etc, not in pos	2	0.1	-	-	2	-	1	1	18,356	-	-
Passed couplers	28	1.0	-	23	5	-	27	1	610,455	-	-
Retarder, improper manual operation	13	0.4	4	2	7	-	13	-	258,247	-	-
Retarder yard skate improperly applied	1	0.0	-	-	1	-	1	-	35,473	-	-
Other general switching rules	25	0.8	5	6	14	-	23	2	526,168	-	3
Failure to stop train in clear	10	0.3	5	2	3	2	7	1	1,150,819	-	2
Motor car/on-trk rules, fail to comply	4	0.1	2	-	2	4	-	-	228,384	-	4
Movement without authority - rr emp	3	0.1	1	2	-	1	1	1	187,395	-	64
Fail to comply with trn order, etc.	2	0.1	-	1	1	2	-	-	55,873	-	-
Other main track authority causes	11	0.4	5	3	3	5	5	1	7,451,537	1	25
Improper train make-up at init term	1	0.0	-	1	-	1	-	-	42,448	-	-
Improper placement of cars in train	1	0.0	-	-	1	-	1	-	22,000	-	-
Buff/slack action excess, trn handling	37	1.3	-	36	1	14	21	2	1,735,991	-	-
Buff/slack action excess, trn make-up	16	0.5	-	16	-	8	8	-	1,015,011	-	-
Lat DB force on curve xcess trn hndng	11	0.4	-	11	-	1	8	2	342,468	-	-
Lat DB force on curve excess, make-up	4	0.1	-	4	-	2	2	-	580,362	-	-
Lat drawbar force-short/long car combo	4	0.1	-	4	-	-	4	-	71,778	-	-
Improper train make-up	10	0.3	2	8	-	4	5	1	461,540	-	-
Improper train inspection	4	0.1	1	3	-	3	1	-	475,483	-	-
Automatic brake, excessive	3	0.1	-	3	-	1	2	-	43,434	-	-
Automatic brake, other improper use	4	0.1	-	4	-	2	1	1	115,795	-	-
Fail to allow air brks to release	2	0.1	-	2	-	1	1	-	115,000	-	-
Dynamic brake, excessive	2	0.1	-	2	-	-	1	1	35,506	-	-
Dynamic brake, too rapid adjustment	6	0.2	-	6	-	6	-	-	171,552	-	-
Dynamic brake, other improper use	1	0.0	-	1	-	1	-	-	40,844	-	-
Throttle (power), improper use	12	0.4	-	11	1	3	8	1	598,565	-	-
Throttle (power), too rapid adjustment	1	0.0	-	1	-	1	-	-	19,984	-	-

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2002
MAJOR CAUSE= Human Factors

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Excessive horsepower	6	0.2	-	6	-	2	4	-	268,187	-	-
Independent brake, improper use	14	0.5	-	14	-	5	9	-	1,327,935	-	-
Other train handling/makeup	12	0.4	3	7	2	2	10	-	996,112	-	-
Coupling speed excessive	28	1.0	3	11	14	6	19	3	788,380	-	3
Switch movement, excessive speed	11	0.4	1	9	1	-	9	2	377,293	-	-
Train inside yard limits, excess speed	2	0.1	-	2	-	1	1	-	320,439	-	-
Train outside yd limits, excess speed	2	0.1	1	1	-	1	-	1	189,419	-	2
Failure to comply with restricted speed	35	1.2	12	4	19	8	21	6	2,008,918	-	11
Train outside yd limits(nonblk),exc spd	5	0.2	-	4	1	5	-	-	450,740	-	-
Speed, other	5	0.2	-	4	1	3	-	2	932,201	-	1
Spring Swtch not clear before reverse	5	0.2	-	4	1	3	1	1	104,199	-	-
Switch improperly lined	168	5.7	22	118	28	21	125	22	6,372,354	-	14
Switch not latched or locked	11	0.4	-	11	-	1	10	-	247,400	-	-
Switch previously run through	36	1.2	-	35	1	3	29	4	993,035	-	-
Moveable point trk frog improper lined	1	0.0	-	1	-	1	-	-	43,000	-	-
Use of switches, other	6	0.2	-	5	1	2	3	1	228,413	-	-
Human factors - track	5	0.2	2	3	-	4	1	-	226,000	-	73
Human factors - signal	3	0.1	-	1	2	1	2	-	185,059	-	-
Human factors -motive power & equipment	3	0.1	-	1	2	1	1	1	41,000	-	-
Other train operation/human factors	20	0.7	-	9	11	10	6	4	1,840,566	-	5
Total	1,050	35.7	165	572	313	195	726	129	64,425,168	5	257

MAJOR CAUSE= Signal Defects

Causes	Total		Type of Accident			Type of Track		Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard		Kld	Nonfatal
Classyard autocontrol sys switch fail	3	0.1	-	2	1	-	3	27,657	-	-
Class yd auto ctrl sys retarder fail	18	0.6	-	4	14	-	18	380,622	-	-
Interlock sig displayed false proceed	1	0.0	-	1	-	-	1	23,720	-	-
Power device interlocking failure	1	0.0	-	1	-	-	1	14,259	-	-
Power switch failure	5	0.2	-	4	1	2	3	159,475	-	-
Radio communication equipment failure	-	-	-	-	-	-	-	6,000	-	-
Other communication equipment failure	2	0.1	-	2	-	-	2	50,341	-	-
Other signal failures	20	0.7	1	5	14	4	16	471,832	-	-
Total	50	1.7	1	19	30	6	44	1,133,906	-	-

MAJOR CAUSE= Track Defects

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Roadbed settled or soft	16	0.5	-	15	1	7	7	2	644,017	-	-
Washout/rain/slide/etc. dmg -track	13	0.4	-	13	-	10	2	1	2,562,383	1	4
Other roadbed defects	3	0.1	-	2	1	2	1	-	445,886	-	-
Cross level of track irregular(joints)	28	1.0	-	27	1	21	2	5	2,318,473	-	-
Cross level track irreg.(not at joints)	22	0.7	-	22	-	11	5	6	1,980,923	-	-
Deviate frm uniform top of rail profile	2	0.1	-	2	-	2	-	-	77,511	-	-
Insufficient ballast section	1	0.0	-	1	-	-	-	1	7,290	-	-
Superelevation improper, excessive,etc.	6	0.2	-	6	-	4	2	-	515,111	-	-
Trk alignmnt irreg-not buckled/sunkink	24	0.8	-	23	1	10	10	4	2,756,364	-	-
Track alignment irreg(buckled/sunkink)	30	1.0	1	29	-	27	2	1	16,986,093	4	132
Wide gage(defective/missing crossties)	173	5.9	-	173	-	35	97	41	7,067,909	-	1
Wide gage(spikes/other rail fasteners)	24	0.8	-	24	-	3	19	2	1,505,702	-	-

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2002

MAJOR CAUSE= Track Defects

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Wide gage(loose,broke, etc, gage rods)	3	0.1	-	3	-	1	1	1	59,438	-	-
Wide gage (due to worn rails)	9	0.3	-	9	-	1	6	2	275,143	-	-
Other track geometry defects	15	0.5	1	12	2	6	7	2	2,401,103	-	1
Bolt hole crack or break	11	0.4	-	11	-	6	3	2	5,745,168	-	-
Broken base of rail	36	1.2	-	36	-	16	14	6	2,454,051	-	-
Broken weld (plant)	3	0.1	-	3	-	1	2	-	1,789,171	-	-
Broken weld (field)	5	0.2	-	5	-	4	-	1	3,943,116	-	2
Defective or missing crossties	18	0.6	-	18	-	5	10	3	2,200,748	-	-
Defect/missing spike-oth rail fastener	6	0.2	-	6	-	3	3	-	1,542,702	-	-
Detail fracture - shelling/head check	32	1.1	1	31	-	17	12	3	6,037,952	-	1
Engine burn fracture	2	0.1	-	2	-	1	1	-	468,580	-	-
Head and web sep(outside jt bar limit)	22	0.7	-	22	-	9	11	2	3,007,502	-	-
Head & web separation-in jt bar limit	9	0.3	-	9	-	1	8	-	365,974	-	-
Horizontal split head	11	0.4	-	11	-	2	9	-	526,602	-	-
Joint bar broken (compromise)	1	0.0	-	1	-	-	1	-	37,697	-	-
Joint bar broken (insulated)	2	0.1	-	2	-	1	1	-	748,373	-	-
Joint bar broken (noninsulated)	7	0.2	-	7	-	2	4	1	260,583	-	-
Joint bolts, broken, or missing	1	0.0	-	1	-	-	1	-	24,534	-	-
Mismatched rail-head contour	5	0.2	-	5	-	-	3	2	128,551	-	1
Piped rail	5	0.2	-	5	-	2	1	2	448,858	-	-
Rail defect with joint bar repair	-	-	-	-	-	-	-	-	26,600	-	-
Transverse/compound fissure	83	2.8	-	83	-	32	40	11	13,846,652	1	-
Vertical split head	32	1.1	-	32	-	10	13	9	4,420,951	-	-
Worn rail	10	0.3	-	10	-	3	6	1	575,538	-	-
Other rail and joint bar defects	14	0.5	-	14	-	8	5	1	2,182,415	-	14
Derail, defective	-	-	-	-	-	-	-	-	70,258	-	-
Guard rail loose/broken or mislocated	6	0.2	-	6	-	1	3	2	221,897	-	-
Retarder worn, broken, malfunctioning	9	0.3	2	2	5	-	9	-	259,995	-	-
Spring/power swtch mech. malfunction	4	0.1	-	4	-	-	4	-	201,494	-	-
Stock rail worn, broken, disconnected	7	0.2	-	7	-	2	5	-	254,123	-	-
Switch (hand op) stand mechanism defect	9	0.3	-	9	-	-	3	6	393,274	-	-
Swtch connect/operate rod broke/defect	2	0.1	-	2	-	2	-	-	1,025,567	-	-
Switch damaged or out of adjustment	26	0.9	-	26	-	1	15	10	844,059	-	-
Switch lug/crank broken	2	0.1	-	2	-	-	-	2	293,363	-	-
Switch out of adj. insuff. anchoring	3	0.1	-	3	-	-	1	2	32,057	-	-
Switch point worn or broken	85	2.9	-	85	-	8	58	19	3,010,626	-	-
Switch rod worn, bent, broken, etc.	7	0.2	-	6	1	2	4	1	187,980	-	-
Turnout frog(self guarded)-worn/broken	2	0.1	-	2	-	-	2	-	71,110	-	-
Turnout frog (spring) worn, or broken	1	0.0	-	1	-	-	1	-	46,435	-	-
Switch pt gap(btw swt pt & stock rail)	38	1.3	-	38	-	3	25	10	1,816,045	-	2
Oth frog, switch, trk appliance defect	20	0.7	-	20	-	5	14	1	2,465,543	-	-
Bridge misalignment or failure	3	0.1	-	3	-	2	1	-	967,010	-	-
Flangeway clogged	3	0.1	-	3	-	-	2	1	39,299	-	-
Engineering design or construction	2	0.1	-	2	-	-	1	1	53,628	-	-
Other way and structure defect	28	1.0	-	3	25	23	5	-	951,824	-	1
Total	941	32.0	5	899	37	312	462	167	103,591,251	6	159

MAJOR CAUSE= Mechanical/Electrical

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Air hose uncoupled or burst	4	0.1	-	4	-	4	-	-	113,700	-	-
Broken brake pipe or connections	4	0.1	-	3	1	2	2	-	93,398	-	-
Oth brk component dmg,worn,broke,etc.	6	0.2	-	5	1	2	4	-	514,994	-	1

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2002

MAJOR CAUSE= Mechanical/Electrical

Causes	Total		Type of Accident			Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	Othr	Main	Yard	Other		Kld	Nonfatal
Brk valve malf.(undesire emerg)-Loco	1	0.0	-	1	-	1	-	-	44,166	-	-
Rigging down or dragging	11	0.4	-	11	-	5	6	-	562,175	-	-
Hand brk broken or defective	3	0.1	-	-	3	-	2	1	36,480	-	-
Hand brake broken or defective (LOCO)	1	0.0	-	1	-	-	-	1	143,081	-	-
Other brake defects, cars	4	0.1	1	1	2	1	3	-	98,050	-	1
Hnd brk link and/or connect defect	2	0.1	-	1	1	-	1	1	73,750	-	-
Center sill broken or bent	7	0.2	-	6	1	5	2	-	1,082,654	-	-
Draft sill broken or bent	2	0.1	-	2	-	1	1	-	167,567	-	-
Center plate broken or defective	1	0.0	-	1	-	-	-	1	10,172	-	-
Ctr plate disengaged from truck	3	0.1	-	3	-	1	2	-	68,886	-	-
Side sill broken	2	0.1	-	1	1	1	1	-	69,011	-	-
Other body defects, (CAR)	7	0.2	-	5	2	4	3	-	863,480	-	-
Knuckle broken or defective	2	0.1	1	1	-	1	1	-	107,494	-	-
Coupler drawhead broken or defective	1	0.0	1	-	-	1	-	-	50,316	-	-
Coupler drawhead broke/defect-loco	1	0.0	-	1	-	1	-	-	30,094	-	-
Coupler retainer pin/cross key missing	6	0.2	-	6	-	6	-	-	941,275	-	-
Draft gear/mechanism broke/defective	6	0.2	-	6	-	2	4	-	72,726	-	-
Coupler shank broken/defective	2	0.1	-	2	-	2	-	-	65,078	-	-
Oth coupler/draft system defects-car	17	0.6	-	9	8	4	13	-	621,495	-	-
Oth coupler/draft sys defects-loco	1	0.0	-	1	-	1	-	-	1,067,566	-	-
Side bearing clearance insufficient	24	0.8	-	24	-	13	7	4	3,049,531	-	2
Side bearing clearance excessive	10	0.3	-	10	-	5	5	-	1,404,210	-	-
Truck bolster broken	6	0.2	-	4	2	6	-	-	2,095,023	-	-
Side frame broken	3	0.1	-	3	-	2	-	1	1,003,199	-	-
Truck bolster stiff	27	0.9	-	27	-	13	9	5	4,179,961	-	1
Truck bolster stiff (LOCO)	5	0.2	-	5	-	-	5	-	265,520	-	-
Defective snubbing	4	0.1	-	4	-	3	1	-	895,902	-	-
Broken, missing, or defective springs	1	0.0	-	1	-	1	-	-	29,883	-	-
Other truck component defects, (CAR)	6	0.2	-	6	-	4	2	-	831,359	-	-
Truck hunting	9	0.3	-	9	-	7	2	-	2,395,195	-	-
Broken/bent axle between wheel seats	13	0.4	-	13	-	13	-	-	6,649,345	-	-
Broke/bent axle btwn wheel seats-loco	1	0.0	-	-	1	1	-	-	9,016	-	-
Journal (plain) failure from overheat	5	0.2	-	5	-	5	-	-	584,505	-	-
Journal (roller bearing) overheating	41	1.4	-	37	4	41	-	-	13,844,581	-	-
Journal fractured, new cold break	4	0.1	-	4	-	4	-	-	109,072	-	-
Journal-cold brk, previously overheated	1	0.0	-	1	-	1	-	-	210,715	-	-
Oth axle/journal bearing defect-car	1	0.0	-	1	-	1	-	-	2,435,221	-	-
Oth axle/journal bearing defect-loco	1	0.0	-	1	-	1	-	-	9,250	-	-
Broken flange	3	0.1	-	2	1	3	-	-	1,466,636	-	-
Broken rim	12	0.4	-	11	1	12	-	-	2,091,228	-	-
Broken plate	8	0.3	-	8	-	7	1	-	1,415,169	-	-
Broken hub	1	0.0	-	1	-	1	-	-	93,330	-	-
Worn Flange	6	0.2	-	6	-	1	5	-	110,315	-	-
Worn flange (LOCO)	10	0.3	-	10	-	4	5	1	2,244,087	-	2
Damaged flange or tread (flat)	1	0.0	-	1	-	1	-	-	10,934	-	-
Damaged flange or tread (build up)	12	0.4	-	12	-	9	3	-	442,390	-	-
Loose wheel	2	0.1	-	2	-	2	-	-	410,603	-	-
Other wheel defects (CAR)	5	0.2	-	5	-	4	1	-	1,013,475	-	1
Other wheel defects (LOCO)	2	0.1	-	2	-	-	2	-	326,382	-	-
Thermal crack, flange or tread	2	0.1	-	2	-	2	-	-	385,616	-	-
Traction motor failure (LOCO)	4	0.1	-	-	4	4	-	-	71,492	-	-
Oil or fuel fire (LOCO)	2	0.1	-	-	2	2	-	-	262,000	-	-
Electrically caused fire (LOCO)	6	0.2	-	-	6	6	-	-	2,918,740	-	-
Current collector system (LOCO)	8	0.3	-	-	8	8	-	-	116,232	-	-
Other LOCO defects	12	0.4	-	-	12	9	3	-	182,071	-	-
Bottom outlet car door open	3	0.1	-	3	-	1	1	1	45,982	-	-
Other car door defects	1	0.0	-	1	-	1	-	-	247,338	-	-

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2002

MAJOR CAUSE= Mechanical/Electrical

Causes	Total		Type of Accident				Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Other		Kld	Nonfatal
Other mechanical/electrical failures	8	0.3	-	1	7	5	3	-	-	216,119	-	2
Other mechanical/electrical fail(LOCO)	3	0.1	-	1	2	3	-	-	-	297,113	-	-
Total	367	12.5	3	294	70	251	100	16	61,266,348	-	-	10

MAJOR CAUSE= Miscellaneous

Causes	Total		Type of Accident				Type of Track			Reportable Damage	Casualties	
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Other		Kld	Nonfatal
Snow,ice,mud,gravel,coal,etc. on trk	7	0.2	-	7	-	-	-	3	4	121,194	-	-
Extreme environmental - FLOOD	5	0.2	1	4	-	-	4	1	-	5,363,418	-	-
Extreme wind velocity	20	0.7	2	12	-	6	8	8	4	2,286,305	-	-
Other extreme environmental conditions	7	0.2	-	4	-	3	3	3	1	693,194	-	-
Load shifted	6	0.2	-	5	-	1	2	3	1	203,464	-	-
Load fell from car	2	0.1	1	1	-	-	1	1	-	841,625	-	-
Overloaded car	3	0.1	-	2	-	1	1	2	-	51,042	-	-
Improperly loaded car	19	0.6	-	17	-	2	13	3	3	4,699,085	-	-
Oversized load, misrouted	5	0.2	3	1	-	1	2	3	-	202,928	-	-
Improperly loaded contain/trail on car	1	0.0	-	1	-	-	1	-	-	670,021	-	-
Miscellaneous loading procedures	9	0.3	-	6	-	3	2	1	6	432,534	-	-
Hwy user impairment-drug/alcohol use	1	0.0	-	-	1	-	1	-	-	12,000	-	-
Highway user inattentiveness	84	2.9	-	-	84	-	79	1	4	4,357,521	23	67
Hwy user misjudgement	26	0.9	-	-	26	-	25	-	1	806,932	8	15
Highway user cited for violation	45	1.5	-	-	45	-	43	1	1	2,854,487	1	44
Hwy user unaware,environmental factor	1	0.0	-	-	1	-	1	-	-	6,750	-	-
Highway user unable to stop, weather	1	0.0	-	-	1	-	1	-	-	12,500	-	2
Other causes (highway-rail collisions)	48	1.6	-	-	48	-	46	1	1	1,515,497	14	25
Object/equipment (mtr veh) on track	16	0.5	1	-	-	15	15	1	-	1,426,231	3	7
Livestock on track	1	0.0	-	-	-	1	1	-	-	7,810	-	-
Obj/equip on/fouling track, other	26	0.9	1	6	-	19	17	8	1	1,795,148	-	7
Harmonic rock off, etc.	56	1.9	-	55	-	1	20	28	8	5,112,451	-	-
Fire, other than vandalism	11	0.4	-	-	-	11	9	1	1	985,289	-	-
Auto hump retarder failed to slow car	14	0.5	1	4	-	9	-	14	-	344,553	-	-
Yard skate slid and failed to stop car	16	0.5	4	4	-	8	-	16	-	611,880	-	-
Lading chains/straps fouling switches	7	0.2	-	6	-	1	-	7	-	286,950	-	-
Lading chains or straps fouling wheels	2	0.1	-	2	-	-	-	2	-	58,272	-	-
Interference(not vandals)with RR op.	18	0.6	1	14	-	3	3	3	12	4,194,994	-	1
Vandalism of on-track equipment	14	0.5	-	10	-	4	3	5	6	963,281	-	-
Vandalism of track or track appliances	24	0.8	-	24	-	-	3	19	2	1,249,050	-	-
Fail by non-rr empto control spd of car	12	0.4	1	9	-	2	2	2	8	600,927	-	1
Cause under investigation	1	0.0	-	1	-	-	1	-	-	1,195,830	1	1,441
Other miscellaneous causes	28	1.0	2	10	-	16	11	12	5	1,717,885	-	1
Total	536	18.2	18	205	206	107	318	149	69	45,681,048	50	1,611

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-10 TRAIN ACCIDENTS BY TYPE TRACK AND CLASS, 2002

Track & Class		Total		Type of Accident				Reportable Damage			Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount			Kld	Nonfatal	HRC	Hmn	Othr	Sig
Main	1	163	5.5	6	125	7	25	9,960,751	1	41	17	7	50	17	1	71
	2	161	5.5	7	116	21	17	18,096,406	3	30	29	21	29	22	2	58
	3	242	8.2	9	159	30	44	50,427,781	6	1,488	69	30	44	32	2	65
	4	373	12.7	13	190	104	66	93,961,813	39	335	100	104	57	43	-	69
	5	101	3.4	4	53	31	13	32,138,121	12	33	28	31	14	7	1	20
	6	11	0.4	-	-	-	11	370,621	-	-	6	-	-	1	-	4
	?	3	0.1	-	-	-	3	107,700	-	-	-	-	-	-	-	3
	X	28	1.0	-	24	3	1	802,449	-	-	2	3	1	-	-	22
	-Sub	1,082	36.8	39	667	196	180	205,865,642	61	1,928	251	196	195	122	6	312
Yard	1	1,327	45.1	120	920	2	285	45,946,077	-	21	90	2	651	134	36	414
	2	82	2.8	11	48	1	22	2,889,502	-	6	4	1	38	9	7	23
	3	12	0.4	2	9	-	1	986,384	-	64	1	-	4	1	-	6
	4		0.0	-	-	-	1	57,850	-	-	-	-	1	-	-	-
	5	1	0.0	-	1	-	-	8,835	-	-	-	-	-	-	-	1
	?	3	0.1	-	2	-	1	50,765	-	1	-	-	2	-	-	1
	X	55	1.9	7		-	7	1,773,366	-	1	5	-	30	2	1	17
	-Sub	1,481	50.3	140	1,021	3	317	51,712,779	-	93	100	3	726	146	44	462
Siding	1	52	1.8	1	42	-	9	2,430,249	-	-	3	-	23	5	-	21
	2	11	0.4	1	7	-	3	1,635,202	-	3	-	-	4	3	-	4
	3	9	0.3	-	7	1	1	1,578,450	-	3	1	1	3	-	-	4
	4	2	0.1	-	2	-	-	38,831	-	-	-	-	1	1	-	-
	X	6	0.2	-	3	-	3	153,147	-	-	-	-	3	1	-	2
	-Sub	80	2.7	2	61	1	16	5,835,879	-	6	4	1	34	10	-	31
	1	246	8.4	9	196	5	36	9,832,193	-	7	9	5	75	42	-	115
	2	11	0.4	-	10	-	1	710,686	-	-	1	-	3	4	-	3
	3	1	0.0	-	1	-	-	8,544	-	-	-	-	-	1	-	-
	?	3	0.1	-	3	-	-	32,809	-	-	-	-	2	-	-	1
	X	23	0.8	-	16	1	6	587,546	-	3	2	1	8	2	-	10
	-Sub	284	9.6	9	226		43	11,171,778	-	10	12	6	88	49	-	129
Other	?	17	0.6	2	14	-	1	1,511,643	-	-	-	-	7	3	-	7
	-Sub	17	0.6	2	14	-	1	1,511,643	-	-	-	-	7	3	-	7
Total		2,944	100	192	1,989	206	557	276,097,721	61	2,037	367	206	1,050	330	50	941

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-11 TRAIN ACCIDENTS BY TYPE TRACK AND CONSIST SPEED, 2002

Track - Spd Rng		Total		Type of Accident				Reportable	Casualties		Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Main	?	33	1.1	-	6	1	26	4,008,746	-	2	17	1	2	9	1	3
	1 - 9	208	7.1	6	165	12	25	14,190,023	-	6	22	12	84	12	3	75
	10-19	203	6.9	11	159	12	21	21,871,586	2	60	34	12	49	26	-	82
	20-29	174	5.9	9	134	19	12	43,658,664	6	44	51	19	21	20	1	62
	30-39	153	5.2	9	94	31	19	45,131,949	1	36	49	31	24	14	1	34
	40-49	144	4.9	1	72	49	22	35,250,831	18	1,481	48	49	6	14	-	27
	50-59	77	2.6	-	30	33	14	24,725,348	17	232	17	33	5	11	-	11
	60-69	39	1.3	2	7	15	15	14,095,000	7	23	6	15	3	6	-	9
	>= 70	51	1.7	1	-	24	26	2,933,495	10	44	7	24	1	10	-	9
	-Sub	1,082	36.8	39	667	196	180	205,865,642	61	1,928	251	196	195	122	6	312
Yard	?	19	0.6	2	7	-	10	962,289	-	-	1	-	9	7	-	2
	1 - 9	1,291	43.9	128	891	3	269	41,326,981	-	20	89	3	638	119	39	403
	10-19	162	5.5	10	120	-	32	8,241,049	-	72	9	-	76	19	4	54
	20-29	7	0.2	-	2	-	5	1,145,365	-	1	1	-	2	1	1	2
	30-39	1	0.0	-	-	-	1	28,260	-	-	-	-	1	-	-	-
	>= 70	1	0.0	-	1	-	-	8,835	-	-	-	-	-	-	-	1
	-Sub	1,481	50.3	140	1,021	3	317	51,712,779	-	93	100	3	726	146	44	462
Siding	?	5	0.2	-	2	-	3	232,858	-	-	-	-	-	4	-	1
	1 - 9	53	1.8	1	44	-	8	2,585,220	-	-	2	-	25	2	-	24
	10-19	14	0.5	1	10	-	3	626,307	-	4	1	-	7	2	-	4
	20-29	5	0.2	-	3	-	2	577,638	-	-	1	-	1	2	-	1
	30-39	3	0.1	-	2	1	-	1,813,856	-	2	-	1	1	-	-	1
	-Sub	80	2.7	2	61	1	16	5,835,879	-	6	4	1	34	10	-	31
Industry	?	3	0.1	-	3	-	-	49,266	-	-	-	-	1	1	-	1
	1 - 9	252	8.6	7	203	5	37	9,765,809	-	6	10	5	77	40	-	120
	10-19	23	0.8	1	16	1	5	1,247,225	-	1	1	1	7	7	-	7
	20-29	5	0.2	1	3	-	1	89,439	-	3	1	-	2	1	-	1
	30-39	1	0.0	-	1	-	-	20,039	-	-	-	-	1	-	-	-
	-Sub	284	9.6	9	226	6	43	11,171,778	-	10	12	6	88	49	-	129
Other	1 - 9	14	0.5	2	12	-	-	1,271,188	-	-	-	-	6	3	-	5
	10-19	3	0.1	-	2	-	1	240,455	-	-	-	-	1	-	-	2
	-Sub	17	0.6	2	14	-	1	1,511,643	-	-	-	-	7	3	-	7
Total		2,944	100	192	1,989	206	557	276,097,721	61	2,037	367	206	1,050	330	50	941

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track

TABLE 5-12 TRAIN ACCIDENTS BY WEATHER CONDITION, 2002

Conditions		Total		Type of Accident				Reportable Damage	Casualties		Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Dawn	Clear	69	2.3	7	45	5	12	6,236,904	-	5	12	5	17	5	2	28
	Cloudy	27	0.9	1	17	2	7	4,308,912	1	1	2	2	10	3	1	9
	Rain	6	0.2	-	5	-	1	566,700	-	-	1	-	3	1	-	1
	Fog	3	0.1	-	2	1	-	1,263,395	-	2	-	1	-	-	-	2
	Snow	2	0.1	-	2	-	-	302,047	-	-	-	-	1	-	-	1
	-- Sub	107	3.6	8	71	8	20	12,677,958	1	8	15	8	31	9	3	41
Day	Clear	1,057	35.9	60	687	117	193	98,124,454	45	453	129	117	342	110	13	346
	Cloudy	345	11.7	23	237	35	50	35,997,664	5	34	50	35	103	25	7	125
	Rain	64	2.2	8	38	5	13	4,498,484	-	12	5	5	19	9	1	25
	Fog	10	0.3	1	5	3	1	893,322	-	1	3	3	2	1	-	1
	Sleet	1	0.0	-	1	-	-	80,226	-	-	-	-	1	-	-	-
	Snow	14	0.5	-	10	1	3	1,941,763	-	1	2	1	6	2	-	3
-- Sub	1,491	50.6	92	978	161	260	141,535,913	50	501	189	161	473	147	21	500	
Dusk	Clear	73	2.5	1	51	5	16	5,817,065	-	2	9	5	30	11	1	17
	Cloudy	34	1.2	2	22	1	9	2,293,265	-	3	9	1	12	3	-	9
	Rain	11	0.4	1	6	1	3	690,952	-	3	-	1	2	4	-	4
	Sleet	1	0.0	1	-	-	-	47,000	-	-	-	-	1	-	-	-
	Snow	1	0.0	-	1	-	-	16,540	-	-	-	-	-	-	-	1
	-- Sub	120	4.1	5	80	7	28	8,864,822	-	8	18	7	45	18	1	31
Dark	Clear	761	25.8	55	532	20	154	61,246,022	6	46	101	20	324	80	15	221
	Cloudy	309	10.5	23	219	9	58	36,777,871	2	1,469	28	9	126	38	10	98
	Rain	98	3.3	5	68	1	24	9,549,324	-	5	10	1	30	23	-	34
	Fog	20	0.7	3	12	-	5	1,751,388	-	-	1	-	10	3	-	6
	Sleet	3	0.1	-	3	-	-	75,736	-	-	-	-	1	-	-	2
	Snow	35	1.2	1	26	-	8	3,618,687	2	-	5	-	10	12	-	8
-- Sub	1,226	41.6	87	860	30	249	113,019,028	10	1,520	145	30	501	156	25	369	
Total		2,944	100	192	1,989	206	557	276,097,721	61	2,037	367	206	1,050	330	50	941

TABLE 5-13 TRAIN ACCIDENTS BY CONSIST LENGTH, 2002

Length	Consists		Type of Accident				Equipment Damage		Causes						
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Eqp	HRC	Hmn	Othr	Sig	Trk	
???	1	0.0	-	1	-	-	7,000	0.0	-	-	1	-	-	-	-
1	192	5.7	39	54	3	96	5,258,810	2.9	13	3	107	27	17	25	
2-5	407	12.1	58	165	27	157	11,115,879	6.1	24	27	228	45	21	62	
6-10	309	9.2	30		18	124	9,530,043	5.3	35	18	144	36	5	71	
11-15	186	5.6	18	103	19	46	5,267,197	2.9	10	19	78	15	5	59	
16-20	152	4.5	21	84	9	38	4,130,986	2.3	10	9	67	20	4	42	
21-25	150	4.5	21	100	10	19	3,271,351	1.8	6	10	72	15	2	45	
26-30	174	5.2	12	113	10	39	4,223,740	2.3	10	10	71	17	3	63	
31-35	143	4.3	13	100	9	21	4,182,638	2.3	12	9	54	17	1	50	
36-40	120	3.6	18	65	10	27	5,437,480	3.0	7	10	50	11	1	41	
41-45	102	3.0	10	74	5	13	9,652,046	5.3	7	5	37	11	1	41	
46-50	96	2.9	11	68	4	13	3,934,166	2.2	8	4	34	12	-	38	
51-60	207	6.2	17	151	12	27	9,991,413	5.5	23	12	80	12	2	78	
61-70	171	5.1	16	126	13	16	9,115,074	5.0	24	13	61	10	3	60	
71-80	188	5.6	13	135	14	26	16,889,536	9.3	23	14	59	18	4	70	
81-90	125	3.7	11	98	8	8	10,451,831	5.8	21	8	33	24	1	38	
91-100	142	4.2	13	111	12	6	15,132,719	8.3	21	12	39	19	-	51	
101-110	161	4.8	9	135	8	9	15,440,957	8.5	34	8	36	17	1		
111-120	125	3.7	8	97	5	15	19,477,867	10.7	40	5	29	15	2	34	
121-130	80	2.4	9	58	3	10	6,388,313	3.5	19	3	25	11	-	22	
131-140	74	2.2	2	61	7	4	6,940,624	3.8	15	7	19	8	-	25	
141-150	24	0.7	2	21	-	1	3,877,256	2.1	9	-	9	3	-	3	
>= 151	21	0.6	1	19	1	-	1,647,052	0.9	3	1	10	1	-	6	
Total	3,350	100	352	2,076	207	715	181,363,978	100.0	374	207	1,343	364	73	989	

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track
 Counts are higher since multiple consists may be involved.

TABLE 5-14 TRAIN ACCIDENTS BY TYPE TRACK AND CONSIST, 2002

Track - Equipment		Consists		Avg Len.	Type of Accident					Primary Cause						
		Cnt	%		Coll	Der	HRC	Othr	Eqp	HRC	Hmn	Othr	Sig	Trk		
Main	Freight Train	859	25.6	79	22	591	131	50	202	131	127	69	2	263		
	Psgr Train	140	4.2	10	6	6	18	73	28	18	10	24	3	20		
	Commuter Train	37	1.1	7	-	3	9	17	4	9	2	7	-	7		
	Work Train	8	0.2	41	-	5	-	2	-	-	6	-	-	-		
	Single Car	3	0.1	1	-	-	-	2	-	-	1	1	-	-		
	Cut of Cars	12	0.4	33	-	1	-	2	1	-	2	-	-	-		
	Yard/ Switch	30	0.9	54	1	19	2	3	-	2	12	2	-	9		
	Light loco(s)	23	0.7	6	2	4	6	8	1	6	9	2	-	2		
	Maint/ Insp car	29	0.9	1	5	2	3	12	3	3	11	4	-	1		
	-Sub total	1,141	34.1	63	36	631	169	169	239	169	180	109	5	303		
Yard	Freight Train	477	14.2	67	24	340	2	47	31	2	153	39	2	186		
	Psgr Train	17	0.5	16	-	10	-	5	4	-	4	2	1	4		
	Commuter Train	13	0.4	8	1	8	-	1	-	-	6	1	-	3		
	Work Train	6	0.2	42	-	6	-	-	-	-	3	1	-	2		
	Single Car	96	2.9	1	8	17	-	33	4	-	28	9	9	8		
	Cut of Cars	151	4.5	18	12	32	-	47	3	-	54	17	7	10		
	Yard/ Switch	912	27.2	34	76	518	1	161	51	1	395	73	24	-		
	Light loco(s)	120	3.6	2	16	51	-	22	4	-	64	3	1	17		
	Maint/ Insp car	1	0.0	1	-	-	-	-	-	-	-	-	-	-		
	-Sub total	1,793	53.5	37	137	982	3	316	97	3	707	145	44	442		
	Freight Train	64	1.9	55	2	45	1	6	3	1	20	5	-	25		
		1	0.0	6	-	1	-	-	-	-	1	-	-	-		
	Work Train	2	0.1	42	-	1	-	1	-	-	2	-	-	-		
	Cut of Cars	8	0.2	38	-	3	-	4	-	-	3	4	-	-		
		7	0.2	11	-	3	-	2	-	-	3	-	-	2		
	Light loco(s)	3		2	-	1	-	1	1	-	1	-	-	-		
	Maint/ Insp car	3	0.1	1		1	-	2	-	-	2	1	-	-		
	-Sub total	88	2.6	46	2	55		16	4	1	32	10	-	27		
	Industry	Freight Train	154	4.6	53	1	121	2	23		2	38	22	-	77	
Work Train		1	0.0	26	-	-	-	1	-	-		1	-	-		
Single Car		7	0.2	1	2	-	-	2	-	-	2	2	-	-		
Cut of Cars		28	0.8	16	3	13	-	4	-	-	9	7	-	4		
Yard/ Switch		112	3.3	25	3	87	4	11	4	4	34	16	-	47		
Light loco(s)		4	0.1	2	-	2	-	2	-	-	3	-	-	1		
Maint/ Insp car		1		1	-	-	-	-	-	-	-	-	-	-		
-Sub total		307	9.2	37		223	6	43	12	6	86	48	-	129		
Other		Freight Train	8	0.2	83	2	6		-	-	-	3	3	-	2	
	Single Car	1	0.0	1	-	1	-	-	-	-	1	-	-	-		
	Cut of Cars	2	0.1	36	-	-	-	1	-	-		-	-	-		
	Yard/ Switch	10	0.3	45	-	7	-	-	-	-	2	-		5		
	-Sub total	21	0.6	57	2	14	-	1	-	-	7	3	-	7		
		3,350	100	46	186	1,905	179	545	352	179	1,012	315	49	908		

Coll = collision, Der = derailment, HRC = highway-rail crossing, Othr = other
 EQP = equipment(ontrack), HMN = human factor, SIG = signal, TRK = track
 Counts are higher since multiple consists may be involved.

TABLE 5-15 TRAIN ACCIDENTS BY CONSIST LENGTH AND TYPE CONSIST, 2002

Length	Freight Train	Psg Train	Commuter Train	Work Train	Single Car	Cut of Cars	Yard/ Switch	Light loco(s)	Maint/ Insp car
???	-	-	-	-	-	-	-	1	-
1	-	1	-	-	106	-	3	51	31
2-5	23	37	17	2	1	83	149	92	3
6-10	39	71	27	1	-	28	138	5	-
11-15	57	21	6	-	-	12	90	-	-
16-20	49	8	-	1	-	16	78	-	-
21-25	59	8	-	-	-	7	76	-	-
26-30	65	6	-	2	-	10	91	-	-
31-35	59	2	-	2	-	7	73	-	-
36-40	62	1	-	-	-	9	48	-	-
41-45	49	1	-	-	-	3	49	-	-
46-50	48	-	-	2	-	5	41	-	-
51-60	147	-	-	3	-	3	54	-	-
61-70	119	2	-	3	-	6	41	-	-
71-80	144	-	-	1	-	3	40	-	-
81-90	96	-	-	-	-	4	25	-	-
91-100	116	-	-	-	-	2	23	1	-
101-110	135	-	-	-	-	1	25	-	-
111-120	109	-	-	-	-	-	16	-	-
121-130	76	-	-	-	-	2	2	-	-
131-140	68	-	-	-	-	-	6	-	-
141-150	23	-	-	-	-	-	1	-	-
>= 151	19	-	-	-	-	-	2	-	-
Total	1,562	158	50	17	107	201	1,071	150	34

TABLE 5-16 INVOLVEMENT IN TRAIN ACCIDENTS BY TYPE CONSIST, 2002

Type Equipment	Total		Type of Accident				Type of Track					Causes						
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Siding	Industry	Other	Eqp	HRC	Hmn	Othr	Sig	Trk	
Freight Train	1,523	47.5	73	1,169	142	139	836	463	62	154	8	252	142	388	146	5	590	
Psgr Train	152	4.7	6	23	36	87	134	17	1	-	-	32	36	17	34	5	28	
Commuter Train	45	1.4	3	12	12	18	34	11	-	-	-	4	12	10	8	-	11	
Work Train	17	0.5	1	12	-	4	8	6	2	1	-	-	-	12	2	-	3	
Single Car	100	3.1	18	26	-	56	3	89	-	7	1	6	-	51	18	14	11	
Cut of Cars	196	6.1	32	73	-	91	11	147	8	28	2	5	-	120	36	11	24	
Yard/ Switch	1,007	31.4	109	672	7	219	29	849	7	112	10	58	7	525	99	32	286	
Light loco(s)	135	4.2	26	64	6	39	22	106	3	4	-	7	6	92	6	1	23	
Maint/ Insp car	31	1.0	6	5	3	17	26	1	3	1	-	4	3	18	5	-	1	
Total	3,206	100	274	2,056	206	670	1,103	1,689	86	307	21	368	206	1,233	354	68	977	

TABLE 5-17 DAMAGE BY TRACK TYPE, 2002

Track	Total Damage		Equip Damage		Track Damage	
	Amount	Avg	Amount	Avg	Amount	Avg
Main	205,865,642	160,082	134,308,820	104,439	71,556,822	55,643
Yard	51,712,779	27,818	35,552,984	19,125	16,159,795	8,693
Siding	5,835,879	58,948	3,481,818	35,170	2,354,061	23,778
Industry	11,171,778	35,693	7,668,324	24,499	3,503,454	11,193
Other	1,511,643	43,190	352,032	10,058	1,159,611	33,132
Total	276,097,721	76,865	181,363,978	50,491	94,733,743	26,374

TABLE 5-18 DAMAGE BY CONSIST TYPE, 2002

Type Equipment	Total Damage		Equip Damage		Track Damage	
	Amount	Avg	Amount	Avg	Amount	Avg
Freight Train	202,423,943	129,593	127,806,826	81,823	74,617,117	47,770
Psgr Train	14,832,693	93,878	14,539,121	92,020	293,572	1,858
Commuter Train	7,269,834	145,397	6,783,317	135,666	486,517	9,730
Work Train	603,541	35,502	385,991	22,705	217,550	12,797
Single Car	1,157,581	10,819	1,011,849	9,457	145,732	1,362
Cut of Cars	5,187,390	25,808	4,835,883	24,059	351,507	1,749
Yard/ Switch	30,417,371	28,401	19,576,230	18,278	10,841,141	10,122
Light loco(s)	3,755,704	25,038	3,371,432	22,476	384,272	2,562
Maint/ Insp car	3,179,941	93,528	3,053,329	89,804	126,612	3,724
Other	7,269,723	30,040	0	0	7,269,723	30,040
Total	276,097,721	76,865	181,363,978	50,491	94,733,743	26,374

CHAPTER 6

TRAIN ACCIDENTS INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIAL

Hazardous Material is any substance or material, including a hazardous substance, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, or property when transported in commerce, and which has been so designated.

An incident resulting in damage to cars transporting hazardous material, or causing a release of the hazardous material, is not of and by itself a basis for reporting to FRA under the accident/incident rules. First, the incident must satisfy the criteria for train accident reporting described in the previous chapter. Namely, there must be total reportable damage to the rail equipment and track above the threshold. In 1998 the threshold was \$6,600, and in 2002 it was \$6,700.

All evacuations, including precautionary ones, in response to a potential release of hazardous material are required to be reported even if an actual release did not occur.

Additional information concerning any unintentional release of hazardous material during transportation by rail or other modes, is available through the Research and Special Programs Administration within the U. S. Department of Transportation.

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CHAPTER 6

TRAIN ACCIDENTS/INVOLVING CONSISTS TRANSPORTING HAZARDOUS MATERIALS

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TABLE 6-1 CONSISTS TRANSPORTING HAZMAT, BY RAILROAD, 2002

Railroad	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Alton & Southern	2	2	-	96	3	3	-	-	-
Alaska RR Corp.	1	-	-	5	5	-	-	-	-
Burlington Northern Santa Fe	218	102	5	12,362	1,994	225	11	1	40
Belt Rwy Of Chicago	2	1	-	160	22	1	-	-	-
Conrail Shared Assets	10	6	-	321	93	15	-	-	-
CSX Transportation	98	47	4	5,930	700	86	4	-	-
Delaware & Hudson	7	5	1	330	75	7	1	-	-
Duluth, Winnipeg & Pacific	3	1	-	260	52	7	-	-	-
Elgin, Joliet & Eastern	2	1	-	57	6	1	-	-	-
Florida East Coast	2	2	-	107	11	3	-	-	-
Grand Trunk Western RR	8	5	1	683	95	27	2	2	1,004
Illinois Central	23	15	2	1,599	325	59	4	1	600
Other Railroads	42	21	2	1,874	456	55	4	1	4
Indiana Harbor Belt	2	1	-	99	24	1	-	-	-
I & M Rail Link, LLC	1	1	-	62	1	1	-	-	-
Kansas City Southern	59	33	1	3,047	515	75	1	-	-
Montana Rail Link	5	3	1	369	69	16	3	-	-
Norfolk Southern Corp.	48	27	6	2,735	354	116	7	3	3,760
Port Terminal RR Assn	7	5	-	230	25	7	-	-	-
Soo Line	5	2	1	261	58	16	11	-	-
Econo Rail Corporation	4	4	-	154	67	14	-	-	-
Union Pacific	176	99	7	10,740	1,885	213	8	1	30
Wisconsin Central Ltd.	10	5	-	924	157	22	-	-	-
Wheeling & Lake Erie	2	1	-	103	30	2	-	-	-
Total	737	389	31	42,508	7,022	972	56	9	5,438

TABLE 6-2 CONSISTS TRANSPORTING HAZMAT, BY STATE, 2002

States	Hazmat Consists				Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing	Total Cars In Consist	Cnt	Damaged	Releasing	Cnt	People
Alabama	13	7	1	864	205	46	1	-	-
Alaska	1	-	-	5	5	-	-	-	-
Arizona	14	8	1	909	231	23	1	-	-
Arkansas	18	10	1	968	105	20	1	-	-
California	64	29	1	3,113	561	57	1	-	-
Colorado	7	4	-	535	195	13	-	-	-
Connecticut	1	1	-	8	1	1	-	-	-
Delaware	3	2	-	59	42	11	-	-	-
Florida	13	7	-	486	67	12	-	-	-
Georgia	16	8	1	881	94	11	1	1	200
Idaho	8	1	-	567	88	1	-	-	-
Illinois	65	34	1	4,576	501	75	1	-	-
Indiana	13	5	1	836	63	6	1	-	-
Iowa	18	9	-	1,173	81	13	-	-	-
Kansas	23	13	2	1,472	201	51	8	-	-
Kentucky	11	8	-	652	97	27	-	-	-
Louisiana	41	29	4	1,806	484	67	5	1	603
Maryland	10	6	1	573	69	8	1	-	-
Michigan	14	8	1	997	181	33	2	2	1,004
Minnesota	16	6	-	953	143	15	-	-	-
Mississippi	17	12	1	1,067	200	60	2	1	60
Missouri	21	6	-	1,342	150	14	-	-	-
Montana	11	6	1	789	156	22	3	-	-
Nebraska	7	4	-	396	47	6	-	-	-
Nevada	2	1	-	155	11	1	-	-	-
New Jersey	8	3	-	404	92	9	-	-	-
New Mexico	7	4	-	333	43	6	-	-	-
New York	9	5	1	340	78	7	1	-	-
North Carolina	10	3	-	578	64	11	-	-	-
North Dakota	6	6	1	278	47	20	11	-	-
Ohio	20	10	-	1,146	137	15	-	-	-
Oklahoma	21	8	-	1,184	112	10	-	-	-
Oregon	9	3	-	650	68	10	-	-	-
Pennsylvania	20	7	-	1,253	116	14	-	-	-
South Carolina	6	4	1	223	36	5	1	-	-
South Dakota	2	1	-	174	3	1	-	-	-
Tennessee	23	11	4	1,478	245	37	5	1	3,500
Texas	131	82	5	7,096	1,694	189	8	2	31
Utah	2	2	-	174	4	4	-	-	-
Virginia	4	3	1	32	10	6	1	-	-
Washington	9	2	1	482	50	3	1	1	40
West Virginia	3	2	-	109	31	2	-	-	-
Wisconsin	11	5	-	950	136	22	-	-	-
Wyoming	9	4	-	442	78	8	-	-	-
Total	737	389	31	42,508	7,022	972	56	9	5,438

TABLE 6-3 CONSISTS TRANSPORTING HAZMAT, BY SUBCAUSE, 2002

Causes	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Brakes	14	6	1	1,172	71	9	1	-	-
Body	11	7	-	698	93	7	-	-	-
Coupler & Draft System	10	2	-	737	69	3	-	-	-
Truck Components	32	19	2	2,228	398	79	3	-	-
Axles & Journal Bearings	23	7	1	2,015	315	19	2	-	-
Wheels	16	6	2	1,335	229	6	2	-	-
Locomotives	2	-	-	148	6	-	-	-	-
Doors	1	-	-	106	1	-	-	-	-
Other Mechanical	1	1	-	61	60	30	-	-	-
Brakes, Use of	43	30	1	947	174	55	1	1	60
Employee Physical Condition	1	-	-	112	14	-	-	-	-
Flagging, Fixed, Hand & Radio	10	2	-	713	31	2	-	-	-
General Switching Rules	103	72	4	3,513	614	132	4	1	40
Main Track Authority	4	1	-	287	30	1	-	-	-
Train Handling/Makeup	54	22	2	4,793	578	77	4	1	1
Speed	17	5	-	697	91	9	-	-	-
Switches, Use of	54	30	1	2,536	491	61	1	-	-
Miscellaneous Human Factors	4	1	-	224	14	1	-	-	-
Environmental Conditions	8	5	-	507	16	5	-	-	-
Loading Procedures	10	4	-	811	177	11	-	-	-
Highway-Rail Incidents	42	6	-	2,340	406	12	-	-	-
Unusual Operational Situations	31	18	2	2,311	427	47	2	1	200
Other Miscellaneous Causes	15	9	2	879	115	28	12	-	-
Signal Defects	14	10	-	467	47	20	-	-	-
Roadbed	14	9	-	737	135	23	-	1	5
Track Geometry	75	45	6	4,556	1,091	131	8	1	30
Rail, Joint Bar & Anchors	76	44	6	4,760	866	148	14	2	1,602
Frogs, Switches, Appliances	49	26	1	2,621	452	52	2	1	3,500
Other Track Defects	3	2	-	197	11	4	-	-	-
Total	737	389	31	42,508	7,022	972	56	9	5,438

TABLE 6-4 CONSISTS TRANSPORTING HAZMAT, BY ACCIDENT TYPE, 2002

Type Accident	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Derailments	512	280	27	33,514	5,636	776	52	6	5,138
Head on collision	4	-	-	336	10	-	-	-	-
Rear end collision	5	-	-	269	59	-	-	-	-
Side collision	42	21	1	1,795	224	32	1	-	-
Raking collision	13	9	1	483	100	15	1	-	-
Broken train coll.	4	1	-	172	41	2	-	-	-
Highway-rail Impact	42	6	-	2,340	406	12	-	-	-
Obstruction impact	5	1	-	386	56	4	-	-	-
Explosion/detonation	1	1	1	2	2	2	1	-	-
Fire/violent rupture	3	-	-	220	9	-	-	-	-
Other impacts	89	61	-	2,412	305	109	-	-	-
Other events	17	9	1	579	174	20	1	3	300
Total	737	389	31	42,508	7,022	972	56	9	5,438

CHAPTER 7

HIGHWAY-RAIL INCIDENTS

Any impact, regardless of severity, between a railroad on-track equipment consist and any user of a public or private crossing site, is to be reported on Form FRA F 6180.57. The crossing site includes sidewalks and pathways at, or associated with, the crossing.

In addition, whenever a highway-rail grade crossing accident/incident results in reportable damages greater than the current reporting threshold used for Rail Equipment Accident/Incident reporting, a Form FRA F 6180.54 must be completed. The reporting threshold for accidents for 1998 was \$6,600, and in 2002 it was \$6,700.

Highway users include but are not limited to: automobiles, buses, trucks, motorcycles, bicycles, recreational vehicles, farm vehicles, construction vehicles, roadway maintenance vehicles, and pedestrians.

Suicides or attempted suicides, as determined by a coroner or other public authority, at highway-rail crossing sites are not reportable. However, the event may be reportable under other criteria. For example, reportable conditions to others must be recorded on Form FRA F 6180.55a, e.g., the engineer sustained a fractured arm. Likewise, if the event caused reportable damage above the current monetary threshold for Rail Equipment Accidents/Incidents, a Form FRA F 6180.54 must be prepared. In these situations, the type of accident is coded as an "Obstruction".

Incidents involving highway users who have unsuccessfully attempted to avoid striking or being struck by a railroad consist at a crossing site are to be reported, regardless of where the actual impact between the consist and the highway user occurred.

Each reportable casualty resulting from a highway-rail crossing impact must also be reported on Form FRA F 6180.55a.

If the accident/incident satisfies the reporting requirements for rail equipment accidents (e.g., reportable railroad damage exceeds threshold), Form FRA F 6180.54 must also be completed by all railroads involved, including the railroad with track maintenance responsibility.

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TABLE 7-1 TOTAL HIGHWAY-RAIL INCIDENTS BY RAILROAD, 2002

Railroads				At Public Crossing						At Private Crossing					
	Totals			Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Alaska RR Corp.	4	-	1	4	-	1	-	-	-	-	-	-	-	-	-
Amtrak	142	42	93	107	29	48	11	5	4	24	8	41	-	-	-
Bangor & Aroostook	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe	462	69	169	377	50	147	31	11	9	54	8	13	-	-	-
Belt Rwy Of Chicago	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Conrail Shared Assets	21	-	4	21	-	4	-	-	-	-	-	-	-	-	-
CSX Transportation	536	39	142	454	29	120	27	5	15	52	5	7	3	-	-
Delaware & Hudson	3	-	-	3	-	-	-	-	-	-	-	-	-	-	-
Dakota,Minnesota & Eastern	10	-	2	8	-	2	1	-	-	1	-	-	-	-	-
Duluth,Missabe & Iron Range	2	-	-	1	-	-	1	-	-	-	-	-	-	-	-
Duluth,Winnipeg & Pacific	2	-	1	2	-	1	-	-	-	-	-	-	-	-	-
Elgin, Joliet & Eastern	9	-	2	5	-	1	1	-	1	3	-	-	-	-	-
Florida East Coast	18	8	5	16	6	5	2	2	-	-	-	-	-	-	-
Guilford Rail System	5	-	1	5	-	1	-	-	-	-	-	-	-	-	-
Grand Trunk Western RR	19	5	1	17	5	1	-	-	-	2	-	-	-	-	-
Illinois Central	77	7	34	66	7	30	-	-	-	11	-	4	-	-	-
Other Railroads	358	17	98	312	15	86	5	2	2	40	-	9	1	-	1
Indiana Harbor Belt	4	-	1	3	-	1	-	-	-	1	-	-	-	-	-
I & M Rail Link, LLC	16	-	6	14	-	5	-	-	-	2	-	1	-	-	-
Kansas City Southern	104	11	45	85	8	28	6	1	7	12	2	10	1	-	-
Long Island Rail Road	7	2	-	5	-	-	2	2	-	-	-	-	-	-	-
MD Assn. of Rail Comm	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-
Mass Bay Transit Auth.	4	4	1	1	2	-	3	2	1	-	-	-	-	-	-
Metro North Commuter	4	1	2	2	-	-	-	-	-	2	1	2	-	-	-
Montana Rail Link	12	-	1	10	-	1	-	-	-	2	-	-	-	-	-
Northern IN Comm Trans	8	-	7	7	-	7	-	-	-	1	-	-	-	-	-
Northeast IL Reg Comm	19	6	5	13	4	2	5	2	3	1	-	-	-	-	-
New Jersey Transit Rail	16	4	8	12	-	7	4	4	1	-	-	-	-	-	-
Norfolk Southern Corp.	528	58	96	433	47	68	16	2	6	74	9	22	5	-	-
Paducah & Louisville	8	-	4	8	-	4	-	-	-	-	-	-	-	-	-
Peninsula Comm San Mateo Cnty	2	-	2	-	-	-	1	-	1	1	-	1	-	-	-
Port Terminal RR Assn	11	-	-	4	-	-	-	-	-	7	-	-	-	-	-
Southern CA Reg Rail Auth.	17	5	10	14	3	7	1	1	-	2	1	3	-	-	-
Southeastern PA Trans.	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Soo Line	42	6	28	36	4	25	3	1	3	2	-	-	1	1	-
Term RR Assn Of St. Louis	4	-	-	4	-	-	-	-	-	-	-	-	-	-	-
Econo Rail Corporation	4	-	-	-	-	-	-	-	-	4	-	-	-	-	-
Union Pacific	532	69	208	466	59	183	13	4	6	51	5	19	2	1	-
Wisconsin Central Ltd.	53	4	20	49	3	20	1	1	-	3	-	-	-	-	-
Wheeling & Lake Erie	8	-	1	8	-	1	-	-	-	-	-	-	-	-	-
Total	3,077	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-2 TOTAL HIGHWAY-RAIL INCIDENTS BY STATE, 2002

States	Totals			At Public Crossing						At Private Crossing					
				Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Alabama	118	13	32	102	11	23	5	1	1	11	1	8	-	-	-
Alaska	4	-	1	4	-	1	-	-	-	-	-	-	-	-	-
Arizona	19	-	5	17	-	5	-	-	-	2	-	-	-	-	-
Arkansas	84	14	29	81	13	28	2	1	1	1	-	-	-	-	-
California	140	30	55	102	19	35	15	7	8	23	4	12	-	-	-
Colorado	38	6	12	32	2	9	1	1	-	5	3	3	-	-	-
Connecticut	5	2	1	1	-	-	1	1	-	3	1	1	-	-	-
Delaware	6	2	1	4	2	1	-	-	-	1	-	-	1	-	-
Florida	99	16	32	82	10	26	4	3	1	12	3	5	1	-	-
Georgia	142	5	13	126	3	11	2	2	-	14	-	2	-	-	-
Idaho	20	1	7	17	1	7	1	-	-	2	-	-	-	-	-
Illinois	172	24	67	137	15	57	18	7	8	17	2	2	-	-	-
Indiana	175	17	44	153	15	37	9	1	7	12	1	-	1	-	-
Iowa	69	4	28	61	4	27	2	-	-	6	-	1	-	-	-
Kansas	71	9	26	66	7	25	2	1	1	2	-	-	1	1	-
Kentucky	85	5	24	69	3	19	3	-	2	13	2	3	-	-	-
Louisiana	149	12	65	130	11	52	6	1	6	12	-	7	1	-	-
Maine	6	-	1	5	-	1	-	-	-	1	-	-	-	-	-
Maryland	11	-	4	9	-	2	1	-	1	1	-	1	-	-	-
Massachusetts	12	4	1	9	2	-	3	2	1	-	-	-	-	-	-
Michigan	97	7	34	88	7	30	3	-	2	6	-	2	-	-	-
Minnesota	76	11	30	68	9	30	4	1	-	3	-	-	1	1	-
Mississippi	97	14	31	84	11	26	2	1	-	11	2	5	-	-	-
Missouri	76	14	26	59	11	22	5	3	-	12	-	4	-	-	-
Montana	25	2	6	23	2	6	-	-	-	2	-	-	-	-	-
Nebraska	55	13	20	46	11	18	3	1	1	6	1	1	-	-	-
Nevada	2	1	1	1	-	-	-	-	-	1	1	1	-	-	-
New Hampshire	1	-	2	-	-	-	-	-	-	1	-	2	-	-	-
New Jersey	33	4	13	28	-	12	4	4	1	1	-	-	-	-	-
New Mexico	17	1	4	12	1	1	2	-	2	3	-	1	-	-	-
New York	39	3	10	28	-	5	3	2	1	8	1	4	-	-	-
North Carolina	78	2	20	56	2	8	5	-	5	16	-	7	1	-	-
North Dakota	25	-	13	20	-	9	2	-	2	3	-	2	-	-	-
Ohio	141	26	35	119	21	32	8	-	2	13	5	1	1	-	-
Oklahoma	69	20	27	61	18	25	4	2	-	4	-	2	-	-	-
Oregon	35	-	14	23	-	5	1	-	1	9	-	7	2	-	1
Pennsylvania	73	6	12	58	5	9	1	-	1	13	1	2	1	-	-
South Carolina	66	9	42	60	7	19	1	-	2	5	2	21	-	-	-
South Dakota	21	-	5	19	-	5	1	-	-	1	-	-	-	-	-
Tennessee	82	8	14	73	8	14	2	-	-	6	-	-	1	-	-
Texas	325	37	125	272	32	109	5	-	2	48	5	14	-	-	-
Utah	21	3	6	15	-	6	1	1	-	5	2	-	-	-	-
Vermont	5	-	3	4	-	-	-	-	-	1	-	3	-	-	-
Virginia	39	1	12	24	-	6	-	-	-	14	1	6	1	-	-
Washington	35	2	8	24	1	6	1	1	-	10	-	2	-	-	-
West Virginia	30	1	6	21	1	6	-	-	-	9	-	-	-	-	-
Wisconsin	83	7	31	78	6	31	1	1	-	4	-	-	-	-	-
Wyoming	6	1	1	4	-	1	-	-	-	2	1	-	-	-	-
Total	3,077	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-3 TOTAL HRC CASUALTIES BY STATE AND AGE GROUP, 2002

States	Deaths						Nonfatal Cases					
	Age Group				Total		Age Group				Total	
	Unk	< 16	16-21	> 21	Cnt	%	Unk	< 16	16-21	> 21	Cnt	%
Alabama	-	3	2	8	13	3.6	-	2	3	27	32	3.2
Alaska	-	-	-	-	0	0.0	-	-	-	1	1	0.1
Arizona	-	-	-	-	0	0.0	1	-	-	4	5	0.5
Arkansas	3	-	3	8	14	3.9	2	2	2	23	29	2.9
California	4	2	1	23	30	8.4	10	3	4	38	55	5.5
Colorado	-	-	-	6	6	1.7	-	-	3	9	12	1.2
Connecticut	-	-	-	2	2	0.6	-	-	-	1	1	0.1
Delaware	-	-	-	2	2	0.6	-	-	-	1	1	0.1
Florida	-	1	1	14	16	4.5	4	2	9	17	32	3.2
Georgia	-	-	-	5	5	1.4	-	1	4	8	13	1.3
Idaho	-	-	-	1	1	0.3	-	-	1	6	7	0.7
Illinois	-	5	2	17	24	6.7	3	4	11	49	67	6.7
Indiana	-	1	2	14	17	4.8	1	4	12	27	44	4.4
Iowa	-	-	1	3	4	1.1	2	-	6	20	28	2.8
Kansas	-	-	-	9	9	2.5	5	2	-	19	26	2.6
Kentucky	-	-	-	5	5	1.4	3	2	2	17	24	2.4
Louisiana	-	1	4	7	12	3.4	6	6	11	42	65	6.5
Maine	-	-	-	0	0	0.0	-	-	-	1	1	0.1
Maryland	-	-	-	-	0	0.0	1	-	1	2	4	0.4
Massachusetts	-	-	-	4	4	1.1	-	-	-	1	1	0.1
Michigan	1	-	1	5	7	2.0	2	2	3	27	34	3.4
Minnesota	-	3	3	5	11	3.1	3	3	6	18	30	3.0
Mississippi	-	1	1	12	14	3.9	1	3	6	21	31	3.1
Missouri	-	1	1	12	14	3.9	3	4	3	16	26	2.6
Montana	-	-	-	2	2	0.6	4	-	-	2	6	0.6
Nebraska	-	-	1	12	13	3.6	3	-	2	15	20	2.0
Nevada	-	-	1	-	1	0.3	-	-	1	-	1	0.1
New Hampshire	-	-	-	-	0	0.0	-	-	-	2	2	0.2
New Jersey	1	-	-	3	4	1.1	1	-	-	12	13	1.3
New Mexico	-	-	-	1	1	0.3	-	-	-	4	4	0.4
New York	1	-	-	2	3	0.8	-	1	2	7	10	1.0
North Carolina	-	-	-	2	2	0.6	-	1	5	14	20	2.0
North Dakota	-	-	-	-	0	0.0	1	2	5	5	13	1.3
Ohio	-	4	6	16	26	7.3	-	6	7	22	35	3.5
Oklahoma	-	1	2	17	20	5.6	3	2	4	18	27	2.7
Oregon	-	-	-	0	0	0.0	2	-	-	12	14	1.4
Pennsylvania	-	2	2	2	6	1.7	-	1	3	8	12	1.2
South Carolina	-	-	2	7	9	2.5	3	-	9	30	42	4.2
South Dakota	-	-	-	-	0	0.0	1	-	-	4	5	0.5
Tennessee	-	-	1	7	8	2.2	-	1	3	10	14	1.4
Texas	-	9	4	24	37	10.4	11	13	15	86	125	12.5
Utah	-	-	2	1	3	0.8	-	-	1	5	6	0.6
Vermont	-	-	-	-	0	0.0	-	-	-	3	3	0.3
Virginia	-	-	-	1	1	0.3	2	-	2	8	12	1.2
Washington	-	-	-	2	2	0.6	2	-	2	4	8	0.8
West Virginia	-	-	1	-	1	0.3	2	1	2	1	6	0.6
Wisconsin	-	-	3	4	7	2.0	-	1	6	24	31	3.1
Wyoming	-	-	-	1	1	0.3	-	-	1	-	1	0.1
Total	10	34	47	266	357	100.0	82	69	157	691	999	100.0

TABLE 7-4 TOTAL HIGHWAY-RAIL INCIDENTS BY MONTH, 2002

Railroads				At Public Crossing						At Private Crossing					
	Totals			Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
January	271	28	67	230	20	57	7	4	2	33	4	8	1	-	-
February	225	28	61	188	20	50	13	6	5	23	2	6	1	-	-
March	281	26	92	242	21	70	12	1	8	26	4	14	1	-	-
April	220	21	73	176	17	58	6	1	5	36	3	9	2	-	1
May	239	34	107	201	22	79	16	6	3	21	5	25	1	1	-
June	263	25	96	217	23	77	17	2	13	28	-	6	1	-	-
July	273	49	102	232	41	81	14	2	7	27	6	14	-	-	-
August	295	38	101	242	28	86	13	6	3	39	4	12	1	-	-
September	236	27	70	192	19	58	7	2	2	36	6	10	1	-	-
October	264	28	90	216	16	64	16	9	10	29	2	16	3	1	-
November	266	24	80	228	19	70	6	2	1	31	3	9	1	-	-
December	244	29	60	211	25	57	7	4	-	26	-	3	-	-	-
Total	3,077	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-5 TOTAL HIGHWAY-RAIL INCIDENTS BY DAY, 2002

Rail Equip Struck Highway User

Day	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Sunday	231	7.51	50	81	197	43	68	12	5	5	20	1	8	2	1	-
Monday	373	12.12	48	88	308	34	77	20	10	2	42	4	9	3	-	-
Tuesday	370	12.02	41	141	293	28	81	11	3	10	64	9	50	2	1	-
Wednesday	352	11.44	39	118	300	32	103	13	4	4	39	3	11	-	-	-
Thursday	373	12.12	47	103	310	31	83	19	8	5	41	8	14	3	-	1
Friday	400	13.00	50	137	314	31	106	26	11	14	58	8	17	2	-	-
Saturday	270	8.77	39	78	210	29	61	17	4	10	43	6	7	-	-	-
Total	2,369	76.99	314	746	1,932	228	579	118	45	50	307	39	116	12	2	1

Highway User Struck Rail Equip

Day	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Sunday	73	2.37	6	41	65	6	34	2	-	1	6	-	6	-	-	-
Monday	112	3.64	4	34	101	4	30	3	-	2	8	-	2	-	-	-
Tuesday	110	3.57	7	30	97	7	27	2	-	1	10	-	2	1	-	-
Wednesday	101	3.28	7	35	91	7	32	2	-	2	8	-	1	-	-	-
Thursday	113	3.67	3	39	106	3	36	3	-	3	4	-	-	-	-	-
Friday	107	3.48	5	39	99	5	37	1	-	-	7	-	2	-	-	-
Saturday	92	2.99	11	35	84	11	32	3	-	-	5	-	3	-	-	-
Total	708	23.01	43	253	643	43	228	16	-	9	48	-	16	1	-	-

Grand Total

Day	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Sunday	304	9.88	56	122	262	49	102	14	5	6	26	1	14	2	1	-
Monday	485	15.76	52	122	409	38	107	23	10	4	50	4	11	3	-	-
Tuesday	480	15.60	48	171	390	35	108	13	3	11	74	9	52	3	1	-
Wednesday	453	14.72	46	153	391	39	135	15	4	6	47	3	12	-	-	-
Thursday	486	15.79	50	142	416	34	119	22	8	8	45	8	14	3	-	1
Friday	507	16.48	55	176	413	36	143	27	11	14	65	8	19	2	-	-
Saturday	362	11.76	50	113	294	40	93	20	4	10	48	6	10	-	-	-
Total	3,077	100.0	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-6 TOTAL HIGHWAY-RAIL INCIDENTS BY HOUR OF DAY, 2002

Hour of Day	Total Incidents		At Public Crossing												At Private Crossing					
			Total				Motor Vehicle			Other					Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal				
AM 1	96	3.12	10	34	80	9	31	2	1	1	13	-	2	1	-	-				
2	77	2.50	11	22	69	9	19	5	2	2	3	-	1	-	-	-				
3	58	1.88	5	22	54	4	21	2	1	1	2	-	-	-	-	-				
4	50	1.62	4	13	40	4	5	-	-	-	10	-	8	-	-	-				
5	56	1.82	4	10	52	3	9	-	-	-	4	1	1	-	-	-				
6	80	2.60	6	23	66	5	22	2	-	1	12	1	-	-	-	-				
7	98	3.18	17	37	77	13	31	7	3	1	14	1	5	-	-	-				
8	150	4.87	17	56	120	11	43	8	2	5	21	4	8	1	-	-				
9	174	5.65	18	67	133	16	41	8	1	1	31	1	25	2	-	-				
10	173	5.62	16	50	133	10	37	11	3	6	29	3	7	-	-	-				
11	200	6.50	15	63	179	13	56	2	-	1	19	2	6	-	-	-				
12	97	3.15	4	25	85	2	22	6	2	2	6	-	1	-	-	-				
Total	1,309	42.54	127	422	1,088	99	337	53	15	21	164	13	64	4	-	-				
PM 1	178	5.78	15	44	148	8	35	14	4	8	14	2	1	2	1	-				
2	185	6.01	29	68	152	20	48	6	2	5	25	6	15	2	1	-				
3	187	6.08	25	67	154	19	52	6	3	3	26	3	12	1	-	-				
4	172	5.59	19	76	143	17	64	8	-	4	19	2	8	2	-	-				
5	176	5.72	30	66	151	21	58	9	5	4	16	4	4	-	-	-				
6	148	4.81	24	60	127	19	51	5	3	2	15	2	6	1	-	1				
7	128	4.16	14	48	112	9	40	6	4	1	10	1	7	-	-	-				
8	91	2.96	12	20	74	9	16	5	2	-	11	1	4	1	-	-				
9	108	3.51	7	14	87	4	11	6	2	2	15	1	1	-	-	-				
10	99	3.22	11	27	82	9	21	8	2	5	9	-	1	-	-	-				
11	93	3.02	6	28	80	3	25	4	2	1	9	1	2	-	-	-				
12	203	6.60	38	59	177	34	49	4	1	3	22	3	7	-	-	-				
Total	1,768	57.46	230	577	1,487	172	470	81	30	38	191	26	68	9	2	1				
Total	3,077	100.0	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1				

TABLE 7-7 TOTAL HIGHWAY-RAIL INCIDENTS BY TYPE HIGHWAY USER, 2002

Rail Equip Struck Highway User

Highway User	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Car	1,087	35.33	153	318	988	134	296	-	-	-	99	19	22	-	-	-
Truck	266	8.64	32	87	216	25	68	-	-	-	50	7	19	-	-	-
Trk& Trail	397	12.90	7	141	305	4	79	-	-	-	92	3	62	-	-	-
Pickup Trk	351	11.41	48	108	303	40	98	-	-	-	48	8	10	-	-	-
Van	96	3.12	21	32	87	20	30	-	-	-	9	1	2	-	-	-
Bus	2	0.06	-	-	2	-	-	-	-	-	-	-	-	-	-	-
School Bus	2	0.06	-	2	2	-	2	-	-	-	-	-	-	-	-	-
Motorcycle	2	0.06	-	-	1	-	-	-	-	-	1	-	-	-	-	-
Oth Mtr V.	36	1.17	6	7	28	5	6	-	-	-	8	1	1	-	-	-
Pedestrian	68	2.21	35	27	-	-	-	68	35	27	-	-	-	-	-	-
Other	62	2.01	12	24	-	-	-	50	10	23	-	-	-	12	2	1
Total	2,369	76.99	314	746	1,932	228	579	118	45	50	307	39	116	12	2	1

Highway User Struck Rail Equip

Highway User	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Car	362	11.76	23	129	345	23	123	-	-	-	17	-	6	-	-	-
Truck	72	2.34	1	16	63	1	14	-	-	-	9	-	2	-	-	-
Trk& Trail	55	1.79	3	18	45	3	16	-	-	-	10	-	2	-	-	-
Pickup Trk	139	4.52	8	57	133	8	52	-	-	-	6	-	5	-	-	-
Van	45	1.46	5	18	43	5	18	-	-	-	2	-	-	-	-	-
Bus	2	0.06	-	-	1	-	-	-	-	-	1	-	-	-	-	-
School Bus	1	0.03	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Motorcycle	6	0.19	1	2	6	1	2	-	-	-	-	-	-	-	-	-
Oth Mtr V.	9	0.29	2	4	6	2	3	-	-	-	3	-	1	-	-	-
Pedestrian	3	0.10	-	2	-	-	-	3	-	2	-	-	-	-	-	-
Other	14	0.45	-	7	-	-	-	13	-	7	-	-	-	1	-	-
Total	708	23.01	43	253	643	43	228	16	-	9	48	-	16	1	-	-

Grand Total

Highway User	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Car	1,449	47.09	176	447	1,333	157	419	-	-	-	116	19	28	-	-	-
Truck	338	10.98	33	103	279	26	82	-	-	-	59	7	21	-	-	-
Trk& Trail	452	14.69	10	159	350	7	95	-	-	-	102	3	64	-	-	-
Pickup Trk	490	15.92	56	165	436	48	150	-	-	-	54	8	15	-	-	-
Van	141	4.58	26	50	130	25	48	-	-	-	11	1	2	-	-	-
Bus	4	0.13	-	-	3	-	-	-	-	-	1	-	-	-	-	-
School Bus	3	0.10	-	2	3	-	2	-	-	-	-	-	-	-	-	-
Motorcycle	8	0.26	1	2	7	1	2	-	-	-	1	-	-	-	-	-
Oth Mtr V.	45	1.46	8	11	34	7	9	-	-	-	11	1	2	-	-	-
Pedestrian	71	2.31	35	29	-	-	-	71	35	29	-	-	-	-	-	-
Other	76	2.47	12	31	-	-	-	63	10	30	-	-	-	13	2	1
Total	3,077	100.0	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-8 HIGHWAY-RAIL INCIDENTS BY USERS, 2002
Rail Equip Struck Highway User

Highway User	Total		Freight Train	Psgr Train	Commuter Train	Work Train	Single Car	Yard/ Switch	Light loco(s)	Maint Insp car
	Cnt	%								
Car	1,087	35.3	833	71	23	9	3	75	53	20
Truck	266	8.6	203	17	1	2	-	18	23	2
Trk& Trail	397	12.9	300	18	8	3	-	48	20	-
Pickup Trk	351	11.4	271	23	4	4	-	22	19	8
Van	96	3.1	65	6	7	1	-	4	9	4
Bus	2	0.1	1	-	-	-	-	1	-	-
School Bus	2	0.1	2	-	-	-	-	-	-	-
Motorcycle	2	0.1	1	-	-	-	-	-	1	-
Oth Mtr V.	36	1.2	25	3	1	-	-	3	4	-
Pedestrian	68	2.2	44	11	11	-	-	2	-	-
Other	62	2.0	52	4	2	-	-	1	3	-
Total	2,369	77.0	1,797	153	57	19	3	174	132	34

Highway User Struck Rail Equip

Highway User	Total		Freight Train	Psgr Train	Commuter Train	Work Train	Single Car	Cut of Cars	Yard/ Switch	Light loco(s)	Maint Insp car
	Cnt	%									
Car	362	11.8	239	18	7	1	-	2	51	25	19
Truck	72	2.3	54	1	-	-	-	-	6	9	2
Trk& Trail	55	1.8	44	-	-	-	-	-	8	2	1
Pickup Trk	139	4.5	92	7	-	4	1	1	18	7	9
Van	45	1.5	31	-	-	-	-	-	6	7	1
Bus	2	0.1	1	-	-	-	-	-	1	-	-
School Bus	1	0.0	1	-	-	-	-	-	-	-	-
Motorcycle	6	0.2	4	-	-	-	-	-	2	-	-
Oth Mtr V.	9	0.3	4	-	-	-	1	-	3	-	1
Pedestrian	3	0.1	2	-	-	-	-	-	-	1	-
Other	14	0.5	12	2	-	-	-	-	-	-	-
Total	708	23.0	484	28	7	5	2	3	95	51	33

Grand Total

Highway User	Total		Freight Train	Psgr Train	Commuter Train	Work Train	Single Car	Cut of Cars	Yard/ Switch	Light loco(s)	Maint Insp car
	Cnt	%									
Car	1,449	47.1	1,072	89	30	10	3	2	126	78	39
Truck	338	11.0	257	18	1	2	-	-	24	32	4
Trk& Trail	452	14.7	344	18	8	3	-	-	56	22	1
Pickup Trk	490	15.9	363	30	4	8	1	1	40	26	17
Van	141	4.6	96	6	7	1	-	-	10	16	5
Bus	4	0.1	2	-	-	-	-	-	2	-	-
School Bus	3	0.1	3	-	-	-	-	-	-	-	-
Motorcycle	8	0.3	5	-	-	-	-	-	2	1	-
Oth Mtr V.	45	1.5	29	3	1	-	1	-	6	4	1
Pedestrian	71	2.3	46	11	11	-	-	-	2	1	-
Other	76	2.5	64	6	2	-	-	-	1	3	-
Total	3,077	100.0	2,281	181	64	24	5	3	269	183	67

TABLE 7-9 TOTAL HIGHWAY-RAIL INCIDENTS BY WARNING DEVICE, 2002

Warning	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Unknown	83	2.70	9	22	14	1	3	-	-	-	66	7	19	3	1	-
Other	12	0.39	-	4	4	-	1	-	-	-	7	-	2	1	-	1
Cross bucks	1,021	33.18	128	383	867	113	312	29	1	13	120	14	58	5	-	-
Stop signs	415	13.49	55	155	280	38	101	9	2	6	124	14	48	2	1	-
Special warning	42	1.36	1	12	31	-	10	-	-	-	11	1	2	-	-	-
HWTS,WW,Bells	28	0.91	2	6	24	2	5	2	-	1	2	-	-	-	-	-
Flashing lights	634	20.60	54	187	598	46	173	22	7	11	14	1	3	-	-	-
Gates	842	27.36	108	230	757	71	202	72	35	28	11	2	-	2	-	-
Total	3,077	100.0	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

TABLE 7-10 TOTAL HIGHWAY-RAIL INCIDENTS BY WEATHER, 2002
Rail Equip Struck Highway User

Type Weather	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Clear	1,657	53.85	244	556	1,331	179	420	88	32	40	228	31	95	10	2	1
Cloudy	496	16.12	57	154	413	38	130	28	13	10	53	6	14	2	-	-
Rain	146	4.74	10	23	125	8	17	1	-	-	20	2	6	-	-	-
Fog	23	0.75	1	3	20	1	3	-	-	-	3	-	-	-	-	-
Sleet	4	0.13	-	1	4	-	1	-	-	-	-	-	-	-	-	-
Snow	43	1.40	2	9	39	2	8	1	-	-	3	-	1	-	-	-
Total	2,369	76.99	314	746	1,932	228	579	118	45	50	307	39	116	12	2	1

Highway User Struck Rail Equip

Type Weather	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Clear	486	15.79	30	170	442	30	154	10	-	7	33	-	9	1	-	-
Cloudy	124	4.03	10	42	112	10	37	3	-	1	9	-	4	-	-	-
Rain	56	1.82	-	23	50	-	19	2	-	1	4	-	3	-	-	-
Fog	21	0.68	1	14	21	1	14	-	-	-	-	-	-	-	-	-
Sleet	2	0.06	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Snow	19	0.62	2	4	16	2	4	1	-	-	2	-	-	-	-	-
Total	708	23.01	43	253	643	43	228	16	-	9	48	-	16	1	-	-

Grand total

Type Weather	Total Incidents		Total		At Public Crossing						At Private Crossing					
					Motor Vehicle			Other			Motor Vehicle			Other		
	Cnt	%	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal	Cnt	Kld	Nonfatal
Clear	2,143	69.65	274	726	1,773	209	574	98	32	47	261	31	104	11	2	1
Cloudy	620	20.15	67	196	525	48	167	31	13	11	62	6	18	2	-	-
Rain	202	6.56	10	46	175	8	36	3	-	1	24	2	9	-	-	-
Fog	44	1.43	2	17	41	2	17	-	-	-	3	-	-	-	-	-
Sleet	6	0.19	-	1	6	-	1	-	-	-	-	-	-	-	-	-
Snow	62	2.01	4	13	55	4	12	2	-	-	5	-	1	-	-	-
Total	3,077	100.0	357	999	2,575	271	807	134	45	59	355	39	132	13	2	1

CHAPTER 8

HIGHWAY-RAIL INCIDENTS AT PUBLIC CROSSINGS THAT INVOLVE MOTOR VEHICLES

FRA's reporting rules define any contact between a rail and highway user at a crossing site as a highway-rail incident. The following are situations that occur at or near crossing locations that do not qualify as highway-rail crossing incidents, but may require reporting under other provisions of the rule, e.g., train accident or casualty reporting.

- Q1. A man driving a truck did not see a train occupying a highway-rail crossing and lost control of his vehicle when he slammed on the brakes to avoid a collision. His truck ended up in the ditch with considerable damage, and he broke his arm. What reports are required?
- A1. Since an impact did not occur between a highway and a rail user, you do not need to prepare a highway-rail accident/incident report (form 6180.57). The motorist did sustain a reportable injury arising from the operation of a railroad. Therefore, an injury report (form 6180.55a) must be completed. If the motorist had struck the consist, a form 6180.57 would be required even if the impact did not occur on the crossing site.
- Q2. A highway user hits a signal stand at a highway crossing and was injured, but there was no on-track equipment present, nor were railroad employees in the vicinity. Is this reportable?
- A2. No. The regulation exempts the reporting of motor vehicle accidents at highway-rail crossing sites when they do not involve the presence of on-track equipment or railroad employees.
- Q3. A motorist in an off-road vehicle was waiting behind several automobiles at a crossing site where the gates were down and a standing train was occupying the track. He apparently became impatient and drove his vehicle off the highway and parallel to the track to a point where he could cross over the track behind the train. His vehicle stalled on a parallel set of tracks, and he was unable to start it. He exited his truck just before a train on the adjacent track hit it. Should this be reported as a highway-rail accident/incident or any other type?
- A3. An event such as this would not qualify as a highway-rail crossing collision since the motor vehicle operator had left the highway of his own choosing and his vehicle was struck at a location other than a designated crossing site. The event would be reportable as an obstruction accident on form 6180.54 if reportable damage was in excess of the threshold. If the motorist or employees were hurt in connection with this event, then an injury report (form 6180.55a) would need to be completed.

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TABLE 8-1 RATES FOR MOTOR VEHICLE INCIDENTS AT PUBLIC CROSSINGS BY STATE, 2002

States	Accidents				Deaths				Nonfatal			
	Cnt	Per 100 Xings	Per 100K Vehicles	Per 100K ADT	Cnt	Per 100 Xings	Per 100K Vehicles	Per 100K ADT	Cnt	Per 100 Xings	Per 100K Vehicles	Per 100K ADT
Alabama	102	2.99	2.38	1.48	11	0.32	0.26	0.16	23	0.67	5.36	0.03
Alaska	4	1.79	0.65	0.83	.	.	.	.	1	0.45	1.63	0.02
Arizona	17	1.81	0.41	0.57	.	.	.	.	5	0.53	1.20	0.02
Arkansas	81	2.56	4.28	2.10	13	0.41	0.69	0.34	28	0.88	14.79	0.07
California	102	1.30	0.35	0.25	19	0.24	0.06	0.05	35	0.45	1.20	0.01
Colorado	32	1.64	0.66	0.80	2	0.10	0.04	0.05	9	0.46	1.86	0.02
Connecticut	1	0.27	0.03	0.08	.	.	.	.	.	.	.	.
Delaware	4	1.31	0.60	0.37	2	0.65	0.30	0.19	1	0.33	1.50	0.01
Dist Of Columbia	.	.	.	.	.	.	.	.	.	.	.	.
Florida	82	2.07	0.56	0.43	10	0.25	0.07	0.05	26	0.66	1.78	0.01
Georgia	126	2.14	1.70	1.38	3	0.05	0.04	0.03	11	0.19	1.49	0.01
Hawaii	.	.	.	.	.	.	.	.	.	.	.	.
Idaho	17	1.28	1.25	0.98	1	0.08	0.07	0.06	7	0.53	5.14	0.04
Illinois	137	1.67	1.35	0.64	15	0.18	0.15	0.07	57	0.70	5.63	0.03
Indiana	153	2.42	2.66	1.15	15	0.24	0.26	0.11	37	0.58	6.43	0.03
Iowa	61	1.26	1.76	1.23	4	0.08	0.12	0.08	27	0.56	7.81	0.05
Kansas	66	1.00	2.77	1.38	7	0.11	0.29	0.15	25	0.38	10.49	0.05
Kentucky	69	2.75	1.88	1.73	3	0.12	0.08	0.08	19	0.76	5.17	0.05
Louisiana	130	3.74	3.55	1.85	11	0.32	0.30	0.16	52	1.50	14.21	0.07
Maine	5	0.60	0.48	0.25	.	.	.	.	1	0.12	0.95	0.01
Maryland	9	1.29	0.23	0.36	.	.	.	.	2	0.29	0.50	0.01
Massachusetts	9	0.81	0.17	0.22	2	0.18	0.04	0.05	.	.	.	.
Michigan	88	1.64	1.02	0.59	7	0.13	0.08	0.05	30	0.56	3.47	0.02
Minnesota	68	1.34	0.15	1.00	9	0.18	0.02	0.13	30	0.59	0.66	0.04
Mississippi	84	3.07	4.24	1.73	11	0.40	0.56	0.23	26	0.95	13.13	0.05
Missouri	59	1.25	1.38	1.19	11	0.23	0.26	0.22	22	0.46	5.15	0.04
Montana	23	1.54	2.17	1.75	2	0.13	0.19	0.15	6	0.40	5.66	0.05
Nebraska	46	1.21	2.78	1.89	11	0.29	0.66	0.45	18	0.47	10.87	0.07
Nevada	1	0.33	0.08	0.11	.	.	.	.	.	.	.	.
New Hampshire	.	.	.	.	.	.	.	.	.	.	.	.
New Jersey	28	1.84	0.42	0.31	.	.	.	.	12	0.79	1.79	0.01
New Mexico	12	1.55	0.82	1.31	1	0.13	0.07	0.11	1	0.13	0.69	0.01
New York	28	0.95	0.27	0.36	.	.	.	.	5	0.17	0.48	0.01
North Carolina	56	1.24	0.89	0.61	2	0.04	0.03	0.02	8	0.18	1.28	0.01
North Dakota	20	0.47	2.76	1.58	.	.	.	.	9	0.21	12.40	0.07
Ohio	119	1.86	1.10	0.83	21	0.33	0.19	0.15	32	0.50	2.96	0.02
Oklahoma	61	1.44	1.82	1.32	18	0.43	0.54	0.39	25	0.59	7.44	0.05
Oregon	23	0.99	0.74	0.51	.	.	.	.	5	0.22	1.61	0.01
Pennsylvania	58	1.13	0.59	0.36	5	0.10	0.05	0.03	9	0.17	0.91	0.01
Rhode Island	.	.	.	.	.	.	.	.	.	.	.	.
South Carolina	60	2.04	1.88	0.86	7	0.24	0.22	0.10	19	0.65	5.94	0.03
South Dakota	19	0.89	2.28	1.49	.	.	.	.	5	0.23	5.99	0.04
Tennessee	73	2.26	1.40	1.08	8	0.25	0.15	0.12	14	0.43	2.68	0.02
Texas	272	2.35	1.87	0.95	32	0.28	0.22	0.11	109	0.94	7.48	0.04
Utah	15	1.60	0.84	0.84	.	.	.	.	6	0.64	3.35	0.03
Vermont	4	0.81	0.72	0.54	.	.	.	.	.	.	.	.
Virginia	24	1.17	0.38	0.41	.	.	.	.	6	0.29	0.96	0.01
Washington	24	0.88	0.45	0.47	1	0.04	0.02	0.02	6	0.22	1.13	0.01
West Virginia	21	1.32	1.42	1.18	1	0.06	0.07	0.06	6	0.38	4.05	0.03
Wisconsin	78	1.87	1.67	0.82	6	0.14	0.13	0.06	31	0.74	6.62	0.03
Wyoming	4	1.02	0.67	1.16	.	.	.	.	1	0.25	1.68	0.03
Total...	2,575	1.69	0.93	0.78	271	0.18	0.10	0.08	807	0.53	2.93	0.02

TABLE 8-2 RATES FOR MOTOR VEHICLE INCIDENTS AT PUBLIC CROSSINGS BY WARNING DEVICE, 2002

Type Warning	Accidents			Deaths			Nonfatal			Number of Crossings
	Cnt	Per 100 Xings	Per 100K ADT	Cnt	Per 100 Xings	Per 100K ADT	Cnt	Per 100 Xings	Per 100K ADT	
Unknown	14	0.28	0.21	1	0.02	0.02	3	0.06	0.05	5,002
Other	4	0.64	0.53	.	.	.	1	0.16	0.13	627
Cross bucks	867	1.24	1.71	113	0.16	0.22	312	0.45	0.61	69,930
Stop signs	280	2.81	5.01	38	0.38	0.68	101	1.01	1.81	9,975
Special warning	31	0.90	0.26	.	.	.	10	0.29	0.08	3,458
HWTS,WW,Bells	24	2.02	0.47	2	0.17	0.04	5	0.42	0.10	1,188
Flashing lights	598	2.31	0.60	46	0.18	0.05	173	0.67	0.17	25,841
Gates	757	2.08	0.51	71	0.19	0.05	202	0.55	0.14	36,432
Total	2,575	1.69	0.78	271	0.18	0.08	807	0.53	0.24	152,453

**TABLES 8-3 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS
BY RAILROAD AND TYPE WARNING, 2002**

Railroads	Types of Warning								Type Incident	
	Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	Other	None	Rail Equip Struck Highway User	Highway User Struck Rail Equip
Alaska RR Corp.	1	-	-	1	1	1	-	-	4	-
Amtrak	49	20	1	-	11	26	-	-	89	18
Bangor & Aroostook	-	2	-	-	-	-	-	-	2	-
Burlington Northern Santa Fe	121	72	3	3	21	153	1	3	275	102
Conrail Shared Assets	3	11	-	-	2	4	-	1	11	10
CSX Transportation	143	122	5	5	54	124	-	1	350	104
Delaware & Hudson	1	1	-	-	-	1	-	-	3	-
Dakota,Minnesota & Eastern	-	3	-	-	2	3	-	-	5	3
Duluth,Missabe & Iron Range	-	-	-	-	1	-	-	-	-	1
Duluth,Winnipeg & Pacific	-	1	-	-	1	-	-	-	1	1
Elgin, Joliet & Eastern	2	-	-	-	-	3	-	-	2	3
Florida East Coast	15	-	1	-	-	-	-	-	11	5
Guilford Rail System	1	3	-	1	-	-	-	-	3	2
Grand Trunk Western RR	3	6	-	-	8	-	-	-	13	4
Illinois Central	12	24	1	1	6	22	-	-	52	14
Other Railroads	44	77	3	4	38	143	-	3	186	126
Indiana Harbor Belt	1	2	-	-	-	-	-	-	-	3
I & M Rail Link, LLC	1	5	2	-	1	5	-	-	9	5
Kansas City Southern	6	24	2	-	4	49	-	-	65	20
Long Island Rail Road	5	-	-	-	-	-	-	-	5	-
MD Assn. of Rail Comm	1	-	-	-	-	-	-	-	1	-
Mass Bay Transit Auth.	1	-	-	-	-	-	-	-	-	1
Metro North Commuter	1	1	-	-	-	-	-	-	2	-
Montana Rail Link	5	-	-	-	1	4	-	-	6	4
Northern IN Comm Trans	4	-	1	-	2	-	-	-	4	3
Northeast IL Reg Comm	13	-	-	-	-	-	-	-	11	2
New Jersey Transit Rail	12	-	-	-	-	-	-	-	9	3
Norfolk Southern Corp.	140	115	3	5	45	119	3	3	355	78
Paducah & Louisville	-	4	-	2	-	2	-	-	8	-
Port Terminal RR Assn	1	-	-	-	-	3	-	-	4	-
Southern CA Reg Rail Auth.	13	1	-	-	-	-	-	-	13	1
Soo Line	10	3	-	1	12	10	-	-	25	11
Term RR Assn Of St. Louis	2	-	-	-	-	-	-	2	4	-
Union Pacific	142	89	2	5	59	168	-	1	365	101
Wisconsin Central Ltd.	8	10	-	-	11	20	-	-	33	16
Wheeling & Lake Erie	-	1	-	-	-	7	-	-	6	2
Total	761	597	24	28	280	867	4	14	1,932	643

**TABLES 8-4 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS
BY STATE AND TYPE WARNING, 2002**

States	Type of Warning							
	Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	Other	None
Alabama	13	32	1	1	26	29	-	-
Alaska	1	-	-	1	1	1	-	-
Arizona	6	9	1	-	1	-	-	-
Arkansas	13	14	-	1	10	43	-	-
California	74	12	-	1	1	13	-	1
Colorado	9	4	1	-	9	9	-	-
Connecticut	-	1	-	-	-	-	-	-
Delaware	1	3	-	-	-	-	-	-
Florida	53	8	2	-	4	15	-	-
Georgia	51	19	-	1	28	27	-	-
Idaho	1	4	-	-	11	1	-	-
Illinois	58	28	-	1	3	45	-	2
Indiana	43	46	3	-	25	35	-	1
Iowa	7	19	1	1	4	28	1	-
Kansas	9	9	-	2	3	43	-	-
Kentucky	14	38	-	3	4	9	-	1
Louisiana	26	40	2	1	15	46	-	-
Maine	-	5	-	-	-	-	-	-
Maryland	3	3	1	-	-	2	-	-
Massachusetts	4	4	-	1	-	-	-	-
Michigan	18	29	-	2	22	15	1	1
Minnesota	8	16	2	-	21	21	-	-
Mississippi	8	35	1	-	10	30	-	-
Missouri	10	16	-	1	2	28	-	2
Montana	10	1	-	-	-	12	-	-
Nebraska	11	1	-	-	8	26	-	-
Nevada	1	-	-	-	-	-	-	-
New Jersey	15	7	-	-	2	4	-	-
New Mexico	2	3	-	-	1	6	-	-
New York	15	2	1	1	1	7	-	1
North Carolina	19	9	1	1	-	26	-	-
North Dakota	8	-	-	1	-	11	-	-
Ohio	43	12	1	1	2	59	1	-
Oklahoma	9	7	-	-	2	43	-	-
Oregon	8	1	-	-	11	3	-	-
Pennsylvania	17	10	-	-	6	23	1	1
South Carolina	16	18	-	2	5	19	-	-
South Dakota	1	8	-	-	-	10	-	-
Tennessee	23	18	3	-	5	24	-	-
Texas	91	59	1	2	15	104	-	-
Utah	6	2	-	-	4	3	-	-
Vermont	1	2	-	-	-	1	-	-
Virginia	7	11	1	-	-	5	-	-
Washington	7	3	1	-	2	8	-	3
West Virginia	6	10	-	-	-	4	-	1
Wisconsin	12	19	-	3	16	28	-	-
Wyoming	3	-	-	-	-	1	-	-
Total	761	597	24	28	280	867	4	14

**TABLE 8-5 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSING,
BY TYPE CONSIST AND CONSIST SPEED, 2002**

Rail Equip Struck Highway User

Consist Speed								Whistle Ban?		
	Total	Freight Train	Psg Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	Yes	No	Unk
1-9	345	177	2	6	20	93	47	19	303	23
10-19	224	154	6	5	10	23	26	11	207	6
20-29	306	260	18	2	4	8	14	17	283	6
30-39	356	323	18	2	-	3	10	15	330	11
40-49	389	366	13	2	-	2	6	11	365	13
50-59	179	163	14	-	-	-	2	4	172	3
>= 60	133	54	79	-	-	-	-	6	120	7
Total	1,932	1,497	150	17	34	129	105	83	1,780	69

Highway User Struck Rail Equip

Consist Speed								Whistle Ban?		
	Total	Freight Train	Psg Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	Yes	No	Unk
Unknown	61	38	-	-	9	14	-	1	54	6
1-9	174	81	-	3	15	52	23	9	160	5
10-19	112	80	3	-	8	11	10	7	100	5
20-29	103	90	6	1	1	1	4	1	94	8
30-39	68	57	4	1	-	-	6	2	65	1
40-49	72	69	1	-	1	-	1	3	67	2
50-59	30	24	5	-	-	-	1	2	27	1
>= 60	23	10	13	-	-	-	-	-	23	-
Total	643	449	32	5	34	78	45	25	590	28

Grand Total

Consist Speed								Whistle Ban?		
	Total	Freight Train	Psg Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	Yes	No	Unk
Unknown	61	38	-	-	9	14	-	1	54	6
1-9	519	258	2	9	35	145	70	28	463	28
10-19	336	234	9	5	18	34	36	18	307	11
20-29	409	350	24	3	5	9	18	18	377	14
30-39	424	380	22	3	-	3	16	17	395	12
40-49	461	435	14	2	1	2	7	14	432	15
50-59	209	187	19	-	-	-	3	6	199	4
>= 60	156	64	92	-	-	-	-	6	143	7
Total	2,575	1,946	182	22	68	207	150	108	2,370	97

**TABLE 8-6 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS
BY TYPE WARNING, MOTORIST ACTION, AND WARNING LOCATION, 2002**

Rail Equip Struck Highway User

Type Warning	Total		Motorist					Warning Location			
	Cnt	%	Drove around thru gate	Stopped then proceed	Did not stop	Other	Unknown	Not reported	Both sides	Veh Apr	Opp. Veh Apr
Gates	608	23.6	164	17	48	287	92	-	592	12	4
Flashing lights	405	15.7	-	40	223	126	16	-	397	6	2
HWTs,WW,Bells	15	0.6	-	3	6	5	1	-	15	-	-
Watchman	19	0.7	-	3	12	4	-	-	18	-	1
Stop signs	234	9.1	-	37	131	59	7	-	222	10	2
Cross bucks	636	24.7	-	50	419	147	20	-	620	15	1
Other	4	0.2	-	-	1	3	-	-	4	-	-
None	11	0.4	-	-	3	7	1	11	-	-	-
Total	1,932	75.0	164	150	843	638	137	11	1,868	43	10

Highway User Struck Rail Equip

Type Warning	Total		Motorist					Warning Location			
	Cnt	%	Drove around thru gate	Stopped then proceed	Did not stop	Other	Unknown	Not reported	Both sides	Veh Apr	Opp. Veh Apr
Gates	153	5.9	88	6	49	2	8	-	142	9	2
Flashing lights	192	7.5	-	14	170	1	7	-	187	4	1
HWTs,WW,Bells	9	0.3	-	1	8	-	-	-	8	1	-
Watchman	9	0.3	-	-	9	-	-	-	8	1	-
Stop signs	46	1.8	-	4	41	-	1	-	43	3	-
Cross bucks	231	9.0	-	12	216	-	3	-	224	7	-
None	3	0.1	-	-	3	-	-	1	2	-	-
Total	643	25.0	88	37	496	3	19	1	614	25	3

Grand Total

Type Warning	Total		Motorist					Warning Location			
	Cnt	%	Drove around thru gate	Stopped then proceed	Did not stop	Other	Unknown	Not reported	Both sides	Veh Apr	Opp. Veh Apr
Gates	761	29.6	252	23	97	289	100	-	734	21	6
Flashing lights	597	23.2	-	54	393	127	23	-	584	10	3
HWTs,WW,Bells	24	0.9	-	4	14	5	1	-	23	1	-
Watchman	28	1.1	-	3	21	4	-	-	26	1	1
Stop signs	280	10.9	-	41	172	59	8	-	265	13	2
Cross bucks	867	33.7	-	62	635	147	23	-	844	22	1
Other	4	0.2	-	-	1	3	-	-	4	-	-
None	14	0.5	-	-	6	7	1	12	2	-	-
Total	2,575	100.0	252	187	1,339	641	156	12	2,482	68	13

**TABLE 8-7 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS
BY TYPE VEHICLE, VEHICLE SPEED AND DRIVER GENDER, 2002**

Rail Equip Struck Highway User

Vehicle Speed									Driver Gender	
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	95	52	19	15	5	1	3	7	57	31
Stopped	726	410	175	104	28	2	7	29	500	197
1-9	474	216	127	99	19	-	13	12	351	111
10-19	322	154	91	57	16	1	3	8	243	71
20-29	176	83	60	19	11	-	3	4	119	53
30-39	78	42	24	8	4	-	-	-	60	18
40-49	34	15	15	2	2	-	-	1	26	7
50-59	21	14	6	1	-	-	-	-	15	6
>= 60	6	2	2	-	2	-	-	-	5	1
Total	1,932	988	519	305	87	4	29	61	1,376	495

Highway User Struck Rail Equip

Vehicle Speed									Driver Gender	
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	30	12	9	4	4	-	1	4	20	6
Stopped	7	4	1	1	-	-	1	-	7	-
1-9	157	86	43	14	9	2	3	3	115	39
10-19	144	85	41	9	6	-	3	6	114	24
20-29	109	59	33	6	11	-	-	3	82	24
30-39	90	49	32	2	6	-	1	1	73	16
40-49	53	27	19	4	2	-	1	1	37	15
50-59	38	18	15	2	3	-	-	1	29	8
>= 60	15	5	3	3	2	-	2	-	11	4
Total	643	345	196	45	43	2	12	19	488	136

Grand Total

Vehicle Speed									Driver Gender	
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	125	64	28	19	9	1	4	11	77	37
Stopped	733	414	176	105	28	2	8	29	507	197
1-9	631	302	170	113	28	2	16	15	466	150
10-19	466	239	132	66	22	1	6	14	357	95
20-29	285	142	93	25	22	-	3	7	201	77
30-39	168	91	56	10	10	-	1	1	133	34
40-49	87	42	34	6	4	-	1	2	63	22
50-59	59	32	21	3	3	-	-	1	44	14
>= 60	21	7	5	3	4	-	2	-	16	5
Total	2,575	1,333	715	350	130	6	41	80	1,864	631

**TABLE 8-8 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY VEHICLE SPEED, WEATHER AND CONDITION OF DRIVER, 2002****Rail Equip Struck Highway User**

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	95	60	22	11	-	-	2	-	1	14	80
Stopped	726	482	154	60	13	2	15	-	23	65	638
1-9	474	345	91	24	4	2	8	-	53	106	315
10-19	322	220	76	18	2	-	6	-	36	68	218
20-29	176	122	42	5	-	-	7	-	23	55	98
30-39	78	60	12	5	-	-	1	1	5	17	55
40-49	34	23	10	1	-	-	-	-	6	11	17
50-59	21	15	5	1	-	-	-	-	6	7	8
>= 60	6	4	1	-	1	-	-	-	-	2	4
Total	1,932	1,331	413	125	20	4	39	1	153	345	1,433

Highway User Struck Rail Equip

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	30	21	3	6	-	-	-	-	1	10	19
Stopped	7	6	1	-	-	-	-	-	1	2	4
1-9	157	114	22	10	6	-	5	-	3	31	123
10-19	144	97	24	13	3	-	7	-	4	37	103
20-29	109	71	24	8	2	1	3	-	5	22	82
30-39	90	53	20	10	5	1	1	-	3	24	63
40-49	53	40	8	2	3	-	-	-	5	20	28
50-59	38	30	6	1	1	-	-	1	9	12	16
>= 60	15	10	4	-	1	-	-	-	4	7	4
Total	643	442	112	50	21	2	16	1	35	165	442

Grand Total

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	125	81	25	17	-	-	2	-	2	24	99
Stopped	733	488	155	60	13	2	15	-	24	67	642
1-9	631	459	113	34	10	2	13	-	56	137	438
10-19	466	317	100	31	5	-	13	-	40	105	321
20-29	285	193	66	13	2	1	10	-	28	77	180
30-39	168	113	32	15	5	1	2	1	8	41	118
40-49	87	63	18	3	3	-	-	-	11	31	45
50-59	59	45	11	2	1	-	-	1	15	19	24
>= 60	21	14	5	-	2	-	-	-	4	9	8
Total	2,575	1,773	525	175	41	6	55	2	188	510	1,875

**TABLE 8-9 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY DRIVER AGE, GENDER, AND TYPE VEHICLE, 2002**

Age	Total		Type Vehicle										Driver Gender		
	Cnt	%	Car	Truck	Trk& Trail	Pickup Trk	Van	Bus	School Bus	Motorcycle	Oth Mtr V.	?	M	F	
Unknown	323	12.5	189	32	41	45	14	-	-	-	2	76	190	57	
11-15	4	0.2	4	-	-	-	-	-	-	-	-	-	3	1	
16-20	255	9.9	180	21	2	43	4	-	-	1	4	2	171	82	
21-25	371	14.4	226	43	27	58	11	1	-	2	3	-	275	96	
26-30	238	9.2	105	30	35	46	17	-	-	2	3	-	185	53	
31-35	222	8.6	108	28	38	38	9	-	-	-	1	-	179	43	
36-40	231	9.0	86	33	39	51	19	-	-	-	3	1	175	55	
41-45	220	8.5	90	18	50	39	19	1	-	1	2	-	163	57	
46-50	177	6.9	69	24	36	32	12	-	-	1	3	-	138	39	
51-55	159	6.2	64	15	38	27	9	-	1	-	5	1	122	36	
56-60	110	4.3	44	12	24	20	6	-	1	-	3	-	86	24	
61-65	73	2.8	36	8	10	12	5	-	-	-	2	-	52	21	
66-70	51	2.0	22	5	7	13	1	-	1	-	2	-	40	11	
Other	141	5.5	110	10	3	12	4	1	-	-	1	-	85	56	
Total	2,575	100.0	1,333	279	350	436	130	3	3	7	34	80	1,864	631	

**TABLE 8-10 MOTOR VEHICLES THAT STRUCK CONSIST AT PUBLIC CROSSINGS,
BY CONSIST LENGTH, PORTION OF TRAIN STRUCK AND WARNING TYPE, 2002**

Consist Length	Position of Consist Struck						Type of Warning							
	Total	1st car/ loco	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	None	
1	51	51	-	-	-	-	20	14	1	1	4	11	-	
2-5	93	73	-	4	7	9	19	28	4	2	5	35	-	
6-10	58	41	3	6	2	6	15	14	2	3	3	21	-	
11-15	40	23	4	2	4	7	3	15	-	2	1	18	1	
16-20	31	16	8	-	1	6	7	6	-	-	1	16	1	
21-25	15	9	3	2	1	-	2	5	-	-	1	6	1	
26-30	18	9	2	1	3	3	4	5	-	-	2	7	-	
31-35	31	16	4	1	4	6	3	6	1	1	3	17	-	
36-40	17	10	4	2	-	1	2	4	-	-	1	10	-	
41-45	19	10	6	1	1	1	7	8	-	-	1	3	-	
46-50	16	8	3	1	3	1	4	6	-	-	1	5	-	
51-60	35	19	8	-	4	4	7	13	1	-	5	9	-	
61-70	40	18	8	4	2	8	9	15	-	-	1	15	-	
71-80	32	12	6	6	2	6	10	10	-	-	1	11	-	
81-90	28	12	5	6	2	3	12	8	-	-	3	5	-	
91-100	32	13	10	2	3	4	4	11	-	-	4	13	-	
> 100	87	30	25	6	13	13	25	24	-	-	9	29	-	
-Total	643	370	99	44	52	78	153	192	9	9	46	231	3	

**TABLE 8-11 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY CONSIST LENGTH, TYPE CONSIST, AND DRIVER GENDER, 2002**

Rail Equip Struck Highway User

Consist Length								Driver Gender		
	Total	Freight Train	Psg Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	?	M	F
1	78	-	2	1	33	-	42	1	54	23
2-5	236	71	52	1	1	49	62	5	170	61
6-10	159	85	38	5	-	30	1	2	110	47
11-15	98	52	28	1	-	17	-	9	71	18
16-20	74	53	12	3	-	6	-	3	43	28
21-25	85	69	6	1	-	9	-	-	68	17
26-30	67	55	8	-	-	4	-	6	46	15
31-35	66	51	3	3	-	9	-	4	44	18
36-40	56	54	1	1	-	-	-	3	36	17
41-45	69	67	-	-	-	2	-	1	45	23
46-50	62	62	-	-	-	-	-	1	43	18
51-60	130	126	-	1	-	3	-	7	87	36
61-70	130	130	-	-	-	-	-	1	95	34
71-80	116	116	-	-	-	-	-	5	83	28
81-90	101	101	-	-	-	-	-	4	79	18
91-100	123	123	-	-	-	-	-	1	97	25
> 100	282	282	-	-	-	-	-	8	205	69
Total	1,932	1,497	150	17	34	129	105	61	1,376	495

Highway User Struck Rail Equip

Consist Length								Driver Gender		
	Total	Freight Train	Psg Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	?	M	F
1	51	-	-	-	30	-	21	2	33	16
2-5	93	28	13	3	3	23	23	2	65	26
6-10	58	30	12	1	-	14	1	2	44	12
11-15	40	24	3	-	1	12	-	1	36	3
16-20	31	26	1	-	-	4	-	1	21	9
21-25	15	11	-	-	-	4	-	-	9	6
26-30	18	15	2	-	-	1	-	-	15	3
31-35	31	27	-	-	-	4	-	1	25	5
36-40	17	15	1	-	-	1	-	1	11	5
41-45	19	17	-	-	-	2	-	-	18	1
46-50	16	16	-	-	-	-	-	2	11	3
51-60	35	34	-	-	-	1	-	2	26	7
61-70	40	35	-	1	-	4	-	1	29	10
71-80	32	29	-	-	-	3	-	1	24	7
81-90	28	27	-	-	-	1	-	1	22	5
91-100	32	30	-	-	-	2	-	-	30	2
> 100	87	85	-	-	-	2	-	2	69	16
Total	643	449	32	5	34	78	45	19	488	136

**TABLE 8-12 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
FY TYPE CONSIST, NUMBER OF PEOPLE ON TRAIN, AND TYPE PERSON HURT, 2002**

Consist	People on Train		Total		Hwy User		RR Employees		Others	
	Total	Avg	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal
Freight Train	4,307	2	224	624	224	587	0	37	0	0
Psgr Train	15,835	116	30	53	30	40	0	10	0	3
Commuter Train	8,574	186	8	18	8	15	0	1	0	2
Work Train	48	2	-	5	0	5	0	0	0	0
Single Car	4	1	-	1	0	1	0	0	0	0
Cut of Cars	7	2	-	3	0	3	0	0	0	0
Yard/ Switch	557	3	2	47	2	39	0	8	0	0
Light loco(s)	354	2	6	37	6	36	0	1	0	0
Maint Insp car	71	1	1	19	1	18	0	1	0	0
Total	29,757	12	271	807	271	744	0	58	0	5

**TABLE 8-13 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE VEHICLE, NUMBER OF OCCUPANTS, AND VEHICLE DAMAGE, 2002**

Vehicle	People in Vehicles		Reported Vehicle Damage		Total		Hwy User		RR Employees		Others	
	Total	Avg	Total	Avg	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal
Car	1,570	1	4,546,945	3,411	157	419	157	410	0	6	0	3
Truck	289	1	1,901,095	6,814	26	82	26	71	0	9		2
Trk& Trail	340	1	4,506,535	12,876	7	95	7	57	0		0	0
Pickup Trk	496	1	1,840,641	4,222	48	150	48	147		3	0	0
Van	174	1	544,041	4,185	25	48	25		0	1	0	0
Bus	6	2	1,100	367	-	-		0	0	0	0	0
School Bus	3	1	4,000	1,333	-		0	1	0	1	0	
Motorcycle	7	1		2,429	1	2	1	2	0	0	0	0
Oth Mtr V.	43		410,500	12,074	7	9	7	9	0	0	0	0
Total		1	13,771,857	5,348	271	807	271	744	0	58	0	5

**TABLE 8-14 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE WARNING POSITION ON CROSSING AND IF HAZMAT WAS RELEASED, 2002**

Rail Equip Struck Highway User

Type Warning	Total		Position on Crossing				Hazmat Released By			
	Cnt	%	Stalled	Stopped	Moving	Trapped	Hwy User	Rail User	Both	Neither
Gates	608	23.6	120	228	226	34	2	158	1	447
Flashing lights	405	15.7	33	99	267	6	2	93	2	308
HWTS,WW,Bells	15	0.6	1	5	9	-	1	3	-	11
Watchman	19	0.7	-	4	15	-	-	2	1	16
Stop signs	234	9.1	14	52	166	2	3	57	2	172
Cross bucks	636	24.7	32	129	470	5	6	146	3	481
Other	4	0.2	1	2	1	-	-	-	-	4
None	11	0.4	2	5	4	-	-	2	-	9
Total	1,932	75.0	203	524	1,158	47	14	461	9	1,448

Highway User Struck Rail Equip

Type Warning	Total		Position on Crossing				Hazmat Released By		
	Cnt	%	Stalled	Stopped	Moving	Trapped	Hwy User	Rail User	Neither
Gates	153	5.9	1	4	148	-	-	36	117
Flashing lights	192	7.5	-	2	189	1	2	38	152
HWTS,WW,Bells	9	0.3	-	-	9	-	-	2	7
Watchman	9	0.3	-	-	9	-	-	1	8
Stop signs	46	1.8	-	-	46	-	-	13	33
Cross bucks	231	9.0	-	-	231	-	-	39	192
None	3	0.1	-	-	3	-	-	1	2
Total	643	25.0	1	6	635	1	2	130	511

Grand Total

Type Warning	Total		Position on Crossing				Hazmat Released By			
	Cnt	%	Stalled	Stopped	Moving	Trapped	Hwy User	Rail User	Both	Neither
Gates	761	29.6	121	232	374	34	2	194	1	564
Flashing lights	597	23.2	33	101	456	7	4	131	2	460
HWTS,WW,Bells	24	0.9	1	5	18	-	1	5	-	18
Watchman	28	1.1	-	4	24	-	-	3	1	24
Stop signs	280	10.9	14	52	212	2	3	70	2	205
Cross bucks	867	33.7	32	129	701	5	6	185	3	673
Other	4	0.2	1	2	1	-	-	-	-	4
None	14	0.5	2	5	7	-	-	3	-	11
Total	2,575	100.0	204	530	1,793	48	16	591	9	1,959

**TABLE 8-15 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS
BY TYPE VEHICLE AND WARNING, 2002**

Rail Equip Struck Highway User

Type Vehicle	Total		Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	Other	None
	Cnt	%								
Car	988	38.4	351	215	9	10	101	292	3	7
Truck	216	8.4	46	50	1	2	39	78	-	-
Trk& Trail	305	11.8	94	50	1	1	42	113	1	3
Pickup Trk	303	11.8	82	56	3	3	36	122	-	1
Van	87	3.4	28	25	-	1	8	25	-	-
Bus	2	0.1	1	1	-	-	-	-	-	-
School Bus	2	0.1	-	2	-	-	-	-	-	-
Motorcycle	1	0.0	-	1	-	-	-	-	-	-
Oth Mtr V.	28	1.1	6	5	1	2	8	6	-	-
Total	1,932	75.0	608	405	15	19	234	636	4	11

Highway User Struck Rail Equip

Type Vehicle	Total		Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	None
	Cnt	%							
Car	345	13.4	93	104	5	6	20	116	1
Truck	63	2.4	14	17	1	-	6	25	-
Trk& Trail	45	1.7	13	14	-	-	-	18	-
Pickup Trk	133	5.2	23	35	2	3	12	57	1
Van	43	1.7	8	17	1	-	4	12	1
Bus	1	0.0	-	1	-	-	-	-	-
School Bus	1	0.0	-	-	-	-	1	-	-
Motorcycle	6	0.2	-	3	-	-	2	1	-
Oth Mtr V.	6	0.2	2	1	-	-	1	2	-
Total	643	25.0	153	192	9	9	46	231	3

Grand Total

Type Vehicle	Total		Gates	Flashing lights	HWTS,WW,Bells	Watchman	Stop signs	Cross bucks	Other	None
	Cnt	%								
Car	1,333	51.8	444	319	14	16	121	408	3	8
Truck	279	10.8	60	67	2	2	45	103	-	-
Trk& Trail	350	13.6	107	64	1	1	42	131	1	3
Pickup Trk	436	16.9	105	91	5	6	48	179	-	2
Van	130	5.0	36	42	1	1	12	37	-	1
Bus	3	0.1	1	2	-	-	-	-	-	-
School Bus	3	0.1	-	2	-	-	1	-	-	-
Motorcycle	7	0.3	-	4	-	-	2	1	-	-
Oth Mtr V.	34	1.3	8	6	1	2	9	8	-	-
Total	2,575	100.0	761	597	24	28	280	867	4	14

**TABLE 8-16 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSING,
BY WARNING STATUS FOR ACCIDENTS OCCURRING AT CROSSINGS
WITH TRAIN ACTIVATED DEVICES BY TYPE VEHICLE, 2002**

Rail Equip Struck Highway User

Type Vehicle	Status of Warning System								
	Total	Unknown	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm > 60 Secs.	Confirm < 20 Secs.	Confirm No Warning
Car	575	2	549	11	4	2	1	1	5
Truck	97	1	94	2	-	-	-	-	-
Trk& Trail	145	1	141	1	1	-	1	-	-
Pickup Trk	141	-	128	6	1	1	1	-	4
Van	53	-	49	1	-	1	1	-	1
Bus	2	-	2	-	-	-	-	-	-
School Bus	2	-	2	-	-	-	-	-	-
Motorcycle	1	-	1	-	-	-	-	-	-
Oth Mtr V.	12	-	12	-	-	-	-	-	-
Total	1,028	4	978	21	6	4	4	1	10

Highway User Struck Rail Equip

Type Vehicle	Status of Warning System								
	Total	Unknown	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm > 60 Secs.	Confirm < 20 Secs.	Confirm No Warning
Car	202	1	189	2	-	3	1	2	4
Truck	32	-	32	-	-	-	-	-	-
Trk& Trail	27	-	24	1	1	-	-	-	1
Pickup Trk	60	-	54	1	-	1	2	-	2
Van	26	1	22	2	-	-	1	-	-
Bus	1	-	1	-	-	-	-	-	-
Motorcycle	3	-	3	-	-	-	-	-	-
Oth Mtr V.	3	-	2	-	-	1	-	-	-
Total	354	2	327	6	1	5	4	2	7

Grand Total

Type Vehicle	Status of Warning System								
	Total	Unknown	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm > 60 Secs.	Confirm < 20 Secs.	Confirm No Warning
Car	777	3	738	13	4	5	2	3	9
Truck	129	1	126	2	-	-	-	-	-
Trk& Trail	172	1	165	2	2	-	1	-	1
Pickup Trk	201	-	182	7	1	2	3	-	6
Van	79	1	71	3	-	1	2	-	1
Bus	3	-	3	-	-	-	-	-	-
School Bus	2	-	2	-	-	-	-	-	-
Motorcycle	4	-	4	-	-	-	-	-	-
Oth Mtr V.	15	-	14	-	-	1	-	-	-
Total	1,382	6	1,305	27	7	9	8	3	17

CHAPTER 9

HIGHWAY-RAIL CROSSING INVENTORY

The Federal-Aid Highway Act of 1973 (Section 203) required that each State highway agency maintain an inventory of all crossings. According to the implementing instructions contained in the Federal-Aid Policy Guide, maintaining the National Inventory will satisfy the legislative requirement for a State Inventory. A primary purpose of the National Inventory is to provide for the existence of a uniform inventory database, which can be merged with accident/incident files and used to analyze information for planning and implementation of crossing improvement programs.

Railroads, with direction and guidance from the Association of American Railroads and the American Short Line Association, were assigned the responsibility for making a site-specific inventory of each highway-rail crossing and for installing a unique identifying number at each location. The railroads were also identified as being responsible for periodic updating of certain inventory information and maintenance of the crossing number.

The State highway-departments assisted in the project by providing site-specific highway location and use data. State public utility commissions and other State and local governmental agencies also participated in the project. The responsibility for the updating of certain highway information data items was determined to be the responsibility of the State and/or local governmental agencies.

The Inventory Data File is a record of grade crossing location, physical, and operational characteristics to provide information for the administration and statistical analysis of crossings. This information is reported on a voluntary basis to the FRA on the U.S. DOT-AAR Crossing Inventory Form.

The information contained on highway-rail incident reports is routinely merged with inventory data and the consolidated file is used for the development of Federal programs, funding alternatives for crossing improvement, studies related to railroad safety programs, effectiveness of warning device, and for other safety programs and issues.

Although the inventory contains information on grade separated crossings, the counts appearing in this section are only for at-grade crossings, i.e., the locations where the potential exists for an impact between a rail and a highway user.

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TABLE 9-1 AT-GRADE HIGHWAY-RAIL CROSSINGS BY RAILROAD, 2002

Railroads	Total		Pedestrian		Private Vehicle		Public Vehicle	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alton & Southern	45	0.0	-	-	28	0.0	17	0.0
Alaska RR Corp.	338	0.1	8	0.0	110	0.0	220	0.1
Amtrak	294	0.1	13	0.0	61	0.0	220	0.1
Bangor & Aroostook	504	0.2	5	0.0	342	0.1	157	0.1
Bessemer & Lake Erie RR	236	0.1	2	0.0	96	0.0	138	0.1
Burlington Northern Santa Fe	34,770	13.8	256	0.1	13,520	5.4	20,994	8.3
Belt Rwy Of Chicago	126	0.0	-	-	82	0.0	44	0.0
Consolidated Rail Corp.	2,466	1.0	35	0.0	823	0.3	1,608	0.6
Conrail Shared Assets	859	0.3	2	0.0	217	0.1	640	0.3
CSX Transportation	30,230	12.0	324	0.1	10,316	4.1	19,590	7.8
Delaware & Hudson	667	0.3	4	0.0	388	0.2	275	0.1
Dakota,Minnesota & Eastern	1,367	0.5	2	0.0	554	0.2	811	0.3
Duluth,Missabe & Iron Range	270	0.1	1	0.0	129	0.1	140	0.1
Duluth,Winnipeg & Pacific	101	0.0	-	-	20	0.0	81	0.0
Elgin, Joliet & Eastern	269	0.1	8	0.0	78	0.0	183	0.1
Florida East Coast	851	0.3	11	0.0	110	0.0	730	0.3
Other Railroads	71,221	28.2	554	0.2	28,860	11.4	41,807	16.6
Guilford Rail System	1,720	0.7	13	0.0	598	0.2	1,109	0.4
Grand Trunk Western RR	1,010	0.4	8	0.0	243	0.1	759	0.3
Gateway Western	572	0.2	4	0.0	246	0.1	322	0.1
Illinois Central	5,497	2.2	67	0.0	2,057	0.8	3,373	1.3
Indiana Harbor Belt	122	0.0	2	0.0	46	0.0	74	0.0
I & M Rail Link, LLC	198	0.1	-	-	130	0.1	68	0.0
Kansas City Southern	4,247	1.7	10	0.0	1,642	0.7	2,595	1.0
Long Island Rail Road	397	0.2	10	0.0	84	0.0	303	0.1
Mass Bay Transit Auth.	93	0.0	1	0.0	16	0.0	76	0.0
Metro North Commuter	174	0.1	3	0.0	80	0.0	91	0.0
Montana Rail Link	1,160	0.5	3	0.0	707	0.3	450	0.2
Northern IN Comm Trans	150	0.1	7	0.0	24	0.0	119	0.0
Northeast IL Reg Comm	181	0.1	16	0.0	25	0.0	140	0.1
New Jersey Transit Rail	472	0.2	27	0.0	92	0.0	353	0.1
Norfolk Southern Corp.	33,390	13.2	146	0.1	12,995	5.2	20,249	8.0
Paducah & Louisville	451	0.2	3	0.0	186	0.1	262	0.1
Port Auth Trans Hudson	2	0.0	-	-	2	0.0	-	-
Port Terminal RR Assn	166	0.1	1	0.0	100	0.0	65	0.0
Southern CA Reg Rail Auth.	393	0.2	17	0.0	46	0.0	330	0.1
Southeastern PA Trans.	276	0.1	8	0.0	46	0.0	222	0.1
Soo Line	2,909	1.2	25	0.0	1,465	0.6	1,419	0.6
Term RR Assn Of St. Louis	125	0.0	-	-	11	0.0	114	0.0
Econo Rail Corporation	2	0.0	-	-	2	0.0	-	-
Union Pacific	48,927	19.4	318	0.1	19,298	7.7	29,311	11.6
Union RR (Pittsburgh)	59	0.0	6	0.0	39	0.0	14	0.0
Wisconsin Central Ltd.	3,943	1.6	49	0.0	1,473	0.6	2,421	1.0
Wheeling & Lake Erie	971	0.4	9	0.0	403	0.2	559	0.2
Total	252,221	100.0	1,978	0.8	97,790	38.8	152,453	60.4

TABLE 9-2 AT-GRADE HIGHWAY-RAIL CROSSINGS BY STATE, 2002

States	Total		Pedestrian		Private Vehicle		Public Vehicle	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alabama	5,307	2.1	20	0.0	1,876	0.7	3,411	1.4
Alaska	342	0.1	8	0.0	110	0.0	224	0.1
Arizona	1,642	0.7	7	0.0	695	0.3	940	0.4
Arkansas	4,675	1.9	9	0.0	1,501	0.6	3,165	1.3
California	12,784	5.1	160	0.1	4,777	1.9	7,847	3.1
Colorado	3,296	1.3	21	0.0	1,327	0.5	1,948	0.8
Connecticut	657	0.3	9	0.0	278	0.1	370	0.1
Delaware	456	0.2	2	0.0	148	0.1	306	0.1
Dist Of Columbia	40	0.0	10	0.0	22	0.0	8	0.0
Florida	5,325	2.1	59	0.0	1,301	0.5	3,965	1.6
Georgia	8,433	3.3	39	0.0	2,517	1.0	5,877	2.3
Hawaii	8	0.0	-	-	-	-	8	0.0
Idaho	2,529	1.0	14	0.0	1,191	0.5	1,324	0.5
Illinois	13,240	5.2	277	0.1	4,767	1.9	8,196	3.2
Indiana	8,808	3.5	67	0.0	2,409	1.0	6,332	2.5
Iowa	8,706	3.5	45	0.0	3,805	1.5	4,856	1.9
Kansas	10,759	4.3	32	0.0	4,124	1.6	6,603	2.6
Kentucky	5,065	2.0	39	0.0	2,516	1.0	2,510	1.0
Louisiana	6,683	2.6	42	0.0	3,163	1.3	3,478	1.4
Maine	1,682	0.7	9	0.0	834	0.3	839	0.3
Maryland	1,394	0.6	7	0.0	692	0.3	695	0.3
Massachusetts	1,642	0.7	18	0.0	514	0.2	1,110	0.4
Michigan	7,939	3.1	65	0.0	2,492	1.0	5,382	2.1
Minnesota	8,174	3.2	52	0.0	3,045	1.2	5,077	2.0
Mississippi	4,727	1.9	16	0.0	1,979	0.8	2,732	1.1
Missouri	8,083	3.2	72	0.0	3,275	1.3	4,736	1.9
Montana	3,520	1.4	16	0.0	2,011	0.8	1,493	0.6
Nebraska	6,583	2.6	16	0.0	2,752	1.1	3,815	1.5
Nevada	574	0.2	3	0.0	270	0.1	301	0.1
New Hampshire	637	0.3	10	0.0	224	0.1	403	0.2
New Jersey	2,100	0.8	46	0.0	530	0.2	1,524	0.6
New Mexico	1,350	0.5	-	-	576	0.2	774	0.3
New York	5,944	2.4	77	0.0	2,933	1.2	2,934	1.2
North Carolina	7,831	3.1	55	0.0	3,254	1.3	4,522	1.8
North Dakota	6,285	2.5	19	0.0	1,988	0.8	4,278	1.7
Ohio	9,679	3.8	37	0.0	3,236	1.3	6,406	2.5
Oklahoma	5,845	2.3	14	0.0	1,603	0.6	4,228	1.7
Oregon	5,240	2.1	91	0.0	2,836	1.1	2,313	0.9
Pennsylvania	8,392	3.3	115	0.0	3,130	1.2	5,147	2.0
Rhode Island	190	0.1	1	0.0	71	0.0	118	0.0
South Carolina	4,248	1.7	12	0.0	1,299	0.5	2,937	1.2
South Dakota	3,495	1.4	6	0.0	1,349	0.5	2,140	0.8
Tennessee	5,112	2.0	25	0.0	1,858	0.7	3,229	1.3
Texas	17,802	7.1	32	0.0	6,190	2.5	11,580	4.6
Utah	1,666	0.7	3	0.0	727	0.3	936	0.4
Vermont	1,176	0.5	44	0.0	636	0.3	496	0.2
Virginia	4,866	1.9	44	0.0	2,770	1.1	2,052	0.8
Washington	5,716	2.3	60	0.0	2,923	1.2	2,733	1.1
West Virginia	3,601	1.4	57	0.0	1,959	0.8	1,585	0.6
Wisconsin	6,803	2.7	94	0.0	2,532	1.0	4,177	1.7
Wyoming	1,170	0.5	2	0.0	775	0.3	393	0.2
Total	252,221	100.0	1,978	0.8	97,790	38.8	152,453	60.4

TABLE 9-3 PUBLIC AT GRADE BY WARNING DEVICE AND RAILROAD, 2002

Railroads	Total									
	Cnt	%	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates
Alton & Southern	17	0.01	-	-	5	-	-	-	7	5
Alaska RR Corp.	220	0.14	8	2	97	25	7	-	30	51
Amtrak	220	0.14	4	3	4	4	5	-	4	196
Bangor & Aroostook	157	0.10	-	-	58	3	5	-	86	5
Bessemer & Lake Erie RR	138	0.09	2	-	59	-	1	-	32	44
Burlington Northern Santa Fe	20,994	13.77	421	28	11,181	893	174	116	2,537	5,644
Belt Rwy Of Chicago	44	0.03	5	-	14	-	1	-	8	16
Consolidated Rail Corp.	1,608	1.05	248	119	408	28	366	49	279	111
Conrail Shared Assets	640	0.42	46	-	114	8	65	2	329	76
CSX Transportation	19,590	12.85	468	11	5,881	1,512	427	85	4,227	6,979
Delaware & Hudson	275	0.18	4	-	38	1	1	3	37	191
Dakota,Minnesota & Eastern	811	0.53	31	-	604	42	-	3	101	30
Duluth,Missabe & Iron Range	140	0.09	1	3	72	32	2	-	15	15
Duluth,Winnipeg & Pacific	81	0.05	-	-	42	14	1	-	9	15
Elgin, Joliet & Eastern	183	0.12	-	-	18	2	6	1	37	119
Florida East Coast	730	0.48	9	-	46	3	27	-	31	614
Other Railroads	41,807	27.42	1,519	244	23,999	3,102	1,236	413	7,130	4,164
Guilford Rail System	1,109	0.73	48	2	258	33	189	24	318	237
Grand Trunk Western RR	759	0.50	4	-	44	170	20	-	129	392
Gateway Western	322	0.21	-	-	185	10	-	10	89	28
Illinois Central	3,373	2.21	144	50	1,603	83	49	9	783	652
Indiana Harbor Belt	74	0.05	2	-	5	-	15	-	20	32
I & M Rail Link, LLC	68	0.04	-	-	46	-	-	-	16	6
Kansas City Southern	2,595	1.70	112	11	1,498	117	2	7	446	402
Long Island Rail Road	303	0.20	-	1	8	-	-	-	-	294
Mass Bay Transit Auth.	76	0.05	2	-	3	-	8	3	14	46
Metro North Commuter	91	0.06	2	-	3	-	1	1	44	40
Montana Rail Link	450	0.30	6	-	267	44	-	1	64	68
Northern IN Comm Trans	119	0.08	1	-	6	24	-	7	41	40
Northeast IL Reg Comm	140	0.09	1	-	3	1	-	-	11	124
New Jersey Transit Rail	353	0.23	7	-	28	1	11	1	79	226
Norfolk Southern Corp.	20,249	13.28	674	94	7,416	1,514	484	84	3,769	6,214
Paducah & Louisville	262	0.17	3	1	122	8	1	3	104	20
Port Terminal RR Assn	65	0.04	5	-	24	1	-	-	10	25
Southern CA Reg Rail Auth.	330	0.22	-	-	31	4	-	-	20	275
Southeastern PA Trans.	222	0.15	45	10	27	9	17	21	52	41
Soo Line	1,419	0.93	41	-	670	191	14	2	173	328
Term RR Assn Of St. Louis	114	0.07	1	-	11	2	41	-	17	42
Union Pacific	29,311	19.23	1,137	48	13,682	1,718	262	329	3,985	8,150
Union RR (Pittsburgh)	14	0.01	-	-	-	-	-	10	1	3
Wisconsin Central Ltd.	2,421	1.59	22	-	1,080	354	19	2	615	329
Wheeling & Lake Erie	559	0.37	8	-	270	22	1	2	142	114
Total	152,453	100.0	5,031	627	69,930	9,975	3,458	1,188	25,841	36,403

TABLE 9-4 PUBLIC AT GRADE BY WARNING DEVICE AND STATE, 2002

States	Total		Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates	AADT
	Cnt	%									
Alabama	3,411	2.24	108	9	1,508	616	26	14	608	522	6,893,451
Alaska	224	0.15	9	2	100	25	7	-	30	51	479,358
Arizona	940	0.62	24	-	348	101	11	5	66	385	2,993,991
Arkansas	3,165	2.08	123	1	1,929	193	68	29	430	392	3,861,286
California	7,847	5.15	174	19	2,867	313	42	274	998	3,160	41,033,353
Colorado	1,948	1.28	66	3	929	229	31	38	240	412	4,003,464
Connecticut	370	0.24	13	-	28	48	29	5	142	105	1,299,187
Delaware	306	0.20	15	-	42	4	21	1	174	49	1,071,492
Dist Of Columbia	8	0.01	-	-	-	2	4	-	2	-	144,200
Florida	3,965	2.60	55	5	845	136	90	10	557	2,267	19,132,259
Georgia	5,877	3.85	169	7	2,535	1,001	111	14	307	1,733	9,127,980
Hawaii	8	0.01	-	1	7	-	-	-	-	-	27,000
Idaho	1,324	0.87	8	-	448	543	1	2	174	148	1,740,442
Illinois	8,196	5.38	203	3	3,220	58	118	14	2,174	2,406	21,319,602
Indiana	6,332	4.15	119	7	2,155	911	74	83	1,478	1,505	13,295,493
Iowa	4,856	3.19	66	1	2,708	339	38	29	945	730	4,978,889
Kansas	6,603	4.33	115	12	4,535	226	69	44	581	1,021	4,791,842
Kentucky	2,510	1.65	118	1	1,073	52	51	15	789	411	3,989,785
Louisiana	3,478	2.28	212	15	1,760	192	36	16	637	610	7,013,279
Maine	839	0.55	7	-	274	11	69	4	394	80	1,995,525
Maryland	695	0.46	28	1	262	33	27	23	213	108	2,471,228
Massachusetts	1,110	0.73	49	2	188	7	174	26	399	265	4,050,781
Michigan	5,382	3.53	149	7	1,806	997	94	27	1,361	941	14,849,305
Minnesota	5,077	3.33	97	3	2,970	668	17	11	552	759	6,788,296
Mississippi	2,732	1.79	174	123	1,477	120	47	8	518	265	4,859,873
Missouri	4,736	3.11	211	4	2,637	132	93	52	892	715	4,948,438
Montana	1,493	0.98	51	-	991	80	10	3	162	196	1,311,667
Nebraska	3,815	2.50	111	10	2,565	210	4	9	259	647	2,438,483
Nevada	301	0.20	5	-	132	9	1	1	23	130	894,522
New Hampshire	403	0.26	2	2	110	39	80	10	125	35	1,039,669
New Jersey	1,524	1.00	53	-	315	17	125	14	603	397	8,975,590
New Mexico	774	0.51	8	4	411	18	1	6	104	222	915,086
New York	2,934	1.92	89	20	589	16	167	35	446	1,572	7,705,432
North Carolina	4,522	2.97	191	7	1,967	58	148	17	704	1,430	9,204,449
North Dakota	4,278	2.81	148	-	3,507	64	1	-	58	500	1,265,777
Ohio	6,406	4.20	81	10	2,646	159	71	28	1,117	2,294	14,253,143
Oklahoma	4,228	2.77	68	7	2,710	115	63	22	594	649	4,627,128
Oregon	2,313	1.52	123	43	868	431	90	44	136	578	4,537,462
Pennsylvania	5,147	3.38	426	269	1,711	87	559	93	1,230	772	16,102,664
Rhode Island	118	0.08	22	1	7	4	22	22	24	16	547,375
South Carolina	2,937	1.93	20	-	1,053	399	112	4	460	889	6,985,432
South Dakota	2,140	1.40	75	-	1,815	28	-	1	200	21	1,271,486
Tennessee	3,229	2.12	197	2	1,540	158	174	16	700	442	6,748,271
Texas	11,580	7.60	466	9	5,539	276	97	69	1,397	3,727	28,698,067
Utah	936	0.61	65	5	387	45	79	6	156	193	1,795,233
Vermont	496	0.33	6	-	196	25	42	3	193	31	736,535
Virginia	2,052	1.35	46	4	415	8	117	-	425	1,037	5,840,731
Washington	2,733	1.79	266	2	1,367	94	40	27	383	554	5,109,082
West Virginia	1,585	1.04	129	6	715	23	17	5	464	226	1,772,977
Wisconsin	4,177	2.74	59	-	1,597	649	89	8	1,141	634	9,563,609
Wyoming	393	0.26	12	-	126	6	1	1	76	171	344,265
Total	152,453	100.0	5,031	627	69,930	9,975	3,458	1,188	25,841	36,403	329,843,934

TABLE 9-5 PRIVATE/PEDESTRIAN AT GRADE BY DEVELOPMENT AND RAILROAD,2002

Railroads	Total		Not reported	Farm	Residential	Recreational	Industrial
	Cnt	%					
Alton & Southern	28	0.03	-	8	5	-	15
Alaska RR Corp.	110	0.11	-	4	15	5	86
Amtrak	61	0.06	-	31	11	2	17
Bangor & Aroostook	342	0.35	-	148	33	45	116
Bessemer & Lake Erie RR	96	0.10	-	38	12	2	44
Burlington Northern Santa Fe	13,519	13.82	3	9,405	963	151	2,997
Belt Rwy Of Chicago	82	0.08	-	-	-	-	82
Consolidated Rail Corp.	823	0.84	-	360	91	32	340
Conrail Shared Assets	217	0.22	-	42	19	5	151
CSX Transportation	10,323	10.55	394	5,519	1,833	191	2,386
Delaware & Hudson	388	0.40	-	257	52	24	55
Dakota,Minnesota & Eastern	554	0.57	-	477	8	1	68
Duluth,Missabe & Iron Range	129	0.13	-	24	17	1	87
Duluth,Winnipeg & Pacific	20	0.02	-	4	4	7	5
Elgin, Joliet & Eastern	78	0.08	1	23	1	-	53
Florida East Coast	112	0.11	85	4	3	-	20
Other Railroads	28,875	29.52	190	17,615	3,743	628	6,699
Guilford Rail System	599	0.61	-	195	63	23	318
Grand Trunk Western RR	243	0.25	-	173	16	4	50
Gateway Western	246	0.25	-	216	2	1	27
Illinois Central	2,057	2.10	1	1,369	228	13	446
Indiana Harbor Belt	46	0.05	1	-	2	-	43
I & M Rail Link, LLC	130	0.13	-	123	-	-	7
Kansas City Southern	1,642	1.68	-	1,086	199	10	347
Long Island Rail Road	84	0.09	1	68	4	3	8
Mass Bay Transit Auth.	16	0.02	-	11	1	1	3
Metro North Commuter	80	0.08	-	19	10	9	42
Montana Rail Link	707	0.72	-	490	63	16	138
Northern IN Comm Trans	24	0.02	-	8	1	-	15
Northeast IL Reg Comm	25	0.03	-	10	7	1	7
New Jersey Transit Rail	92	0.09	-	35	18	4	35
Norfolk Southern Corp.	12,994	13.28	903	7,091	2,340	203	2,457
Paducah & Louisville	186	0.19	-	118	30	1	37
Port Auth Trans Hudson	2	0.00	-	1	-	-	1
Port Terminal RR Assn	100	0.10	-	1	-	-	99
Southern CA Reg Rail Auth.	46	0.05	-	13	6	3	24
Southeastern PA Trans.	46	0.05	-	19	12	2	13
Soo Line	1,465	1.50	-	1,179	68	13	205
Term RR Assn Of St. Louis	11	0.01	-	3	-	-	8
Econo Rail Corporation	2	0.00	-	-	-	-	2
Union Pacific	19,299	19.73	183	12,453	1,519	207	4,937
Union RR (Pittsburgh)	39	0.04	-	-	-	-	39
Wisconsin Central Ltd.	1,473	1.51	-	854	152	45	422
Wheeling & Lake Erie	403	0.41	-	216	36	6	145
Total	97,814	100.0	1,762	59,710	11,587	1,659	23,096

TABLE 9-6 PRIVATE/PEDESTRIAN AT GRADE BY TYPE DEVELOPMENT AND STATE, 2002

States	Total		Not reported	Farm	Residential	Recreational	Industrial
	Cnt	%					
Alabama	1,876	1.92	5	1,072	322	31	446
Alaska	110	0.11	-	4	15	5	86
Arizona	695	0.71	1	401	24	11	258
Arkansas	1,501	1.53	-	987	223	20	271
California	4,778	4.88	10	2,101	339	122	2,206
Colorado	1,327	1.36	2	809	242	16	258
Connecticut	278	0.28	3	55	39	33	148
Delaware	148	0.15	-	82	37	4	25
Dist Of Columbia	30	0.03	2	-	1	-	27
Florida	1,310	1.34	215	422	185	25	463
Georgia	2,517	2.57	-	1,378	603	32	504
Idaho	1,192	1.22	1	779	43	9	360
Illinois	4,767	4.87	4	3,100	420	67	1,176
Indiana	2,408	2.46	10	1,580	292	29	497
Iowa	3,805	3.89	1	2,797	326	48	633
Kansas	4,124	4.22	-	3,507	197	7	413
Kentucky	2,516	2.57	-	1,462	681	17	356
Louisiana	3,163	3.23	-	1,726	486	21	930
Maine	834	0.85	-	348	114	72	300
Maryland	692	0.71	-	394	72	16	210
Massachusetts	514	0.53	-	168	63	38	245
Michigan	2,492	2.55	4	1,267	371	122	728
Minnesota	3,045	3.11	1	2,178	244	52	570
Mississippi	1,979	2.02	2	1,304	394	7	272
Missouri	3,275	3.35	1	2,327	342	24	581
Montana	2,011	2.06	-	1,576	107	25	303
Nebraska	2,752	2.81	-	2,430	83	13	226
Nevada	270	0.28	183	33	3	7	44
New Hampshire	225	0.23	2	112	32	23	56
New Jersey	530	0.54	1	188	60	10	271
New Mexico	576	0.59	-	426	28	2	120
New York	2,941	3.01	5	1,913	353	151	519
North Carolina	3,254	3.33	1	1,608	828	30	787
North Dakota	1,988	2.03	-	1,771	25	10	182
Ohio	3,236	3.31	4	2,100	280	36	816
Oklahoma	1,602	1.64	1	1,197	149	10	245
Oregon	2,837	2.90	-	1,352	335	41	1,109
Pennsylvania	3,131	3.20	5	1,339	469	147	1,171
Rhode Island	71	0.07	-	7	18	9	37
South Carolina	1,299	1.33	-	655	304	20	320
South Dakota	1,349	1.38	-	1,126	81	4	138
Tennessee	1,858	1.90	1	1,077	391	25	364
Texas	6,190	6.33	3	4,138	515	33	1,501
Utah	727	0.74	-	471	35	15	206
Vermont	636	0.65	-	441	63	27	105
Virginia	2,767	2.83	1,288	965	188	17	309
Washington	2,923	2.99	3	1,411	372	51	1,086
West Virginia	1,959	2.00	1	856	597	44	461
Wisconsin	2,532	2.59	-	1,645	184	80	623
Wyoming	774	0.79	2	625	12	1	134
Total	97,814	100.0	1,762	59,710	11,587	1,659	23,096

CHAPTER 10

TRESPASSERS, NOT AT HIGHWAY-RAIL CROSSINGS

A “trespasser” is defined as any person who is on that part of railroad property used in railroad operation and whose presence is prohibited, forbidden, or unlawful. Employees who are trespassing on railroad property are to be reported as “Trespassers” (Class E).

A person on a highway-rail crossing should not be classified as a trespasser unless the crossing is protected by gates, or other similar barriers that were closed when the person went on the crossing, or unless the person attempted to pass over, under, or between cars or locomotives of a consist occupying the crossing. Although these individuals are identified as “trespassers” on form FRA F 6180.55a, they are excluded from this chapter because the incident is defined as a highway-rail incident. These casualties can be found in Chapters 7 and 8 that summarize highway-rail crossing incidents.

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TABLE 10-1 REPORTABLE CONDITIONS TO TRESPASSERS NOT AT HRC, 2002

Condition		Age of Trespasser														
		Tot	Unk	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	> 60
Bruise/contusion	41	8	-	-	2	4	7	3	6	4	2	2	2	-	1	
Other	3	-	-	-	-	1	2	-	-	-	-	-	-	-	-	
Sprain/Str.,leg/foot	3	-	-	-	-	-	-	1	1	-	1	-	-	-	-	
Sprain/Str.,head/fac	3	1	-	-	-	-	1	-	-	-	1	-	-	-	-	
Sprain/Str.,torso	8	-	-	-	-	5	1	-	-	1	-	-	-	-	1	
Cut/abrasion	72	2	2	1	6	6	10	2	7	9	11	4	7	3	2	
Puncture wound	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
Electric shock/burn	7	1	-	-	-	5	1	-	-	-	-	-	-	-	-	
Dislocation	2	-	-	-	-	-	-	-	1	-	-	1	-	-	-	
Fracture,arm/hand	21	1	-	1	2	-	3	1	5	3	3	1	-	-	1	
Fracture,leg/foot	29	2	1	-	2	3	6	1	6	3	2	3	-	-	-	
Fracture,head/face	8	-	-	-	-	3	-	-	2	-	1	-	2	-	-	
Fracture,torso	10	-	-	-	-	1	2	1	3	-	1	-	-	1	1	
Fracture,multiple	2	-	-	-	-	1	-	-	-	-	1	-	-	-	-	
Dental related	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Amputation,arm/hand	15	1	-	-	1	-	3	4	1	3	-	1	-	-	1	
Amputation,leg/foot	78	6	-	6	6	9	4	8	8	11	8	8	3	1	-	
Fatality	540	60	2	3	15	51	64	60	56	53	63	38	29	16	30	
Concussion	9	-	-	-	1	1	-	1	-	-	1	-	1	-	4	
Internal injury	16	-	-	1	1	2	3	1	3	1	3	-	1	-	-	
Unspecified injury	66	5	-	-	2	8	8	9	11	8	3	3	3	2	4	
Total	935	88	5	12	38	100	115	92	110	96	101	61	48	24	45	

TABLE 10-2 TRESPASSERS KILLED, BY RAILROAD AND AGE, NOT AT HRC,2002

Railroads	Tot	Age of Trespasser														
		Unk	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	> 60	
Amtrak	78	12	-	-	4	12	4	6	7	9	8	5	6	-	5	
Burlington Northern Santa Fe	64	23	-	-	1	5	3	3	1	4	8	8	2	2	4	
Conrail Shared Assets	2	-	-	-	-	-	-	1	-	-	-	-	1	-	-	
CSX Transportation	77	-	2	-	2	10	25	5	9	6	7	6	3	2	-	
Delaware & Hudson	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Duluth,Winnipeg & Pacific	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	
Florida East Coast	16	1	-	-	1	2	1	2	2	2	2	2	-	1	-	
Grand Trunk Western RR	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-	
Illinois Central	11	-	-	-	2	-	3	1	2	-	1	1	1	-	-	
Kansas City Southern	10	2	-	1	-	1	-	-	2	1	2	1	-	-	-	
Long Island Rail Road	5	3	-	-	-	1	-	-	-	1	-	-	-	-	-	
Mass Bay Transit Auth.	11	2	-	-	-	1	4	-	1	-	2	-	-	-	1	
Metro North Commuter	4	-	-	-	-	-	-	1	-	1	1	-	-	-	1	
Montana Rail Link	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Northeast IL Reg Comm	9	-	-	-	-	1	1	1	2	-	2	1	-	-	1	
New Jersey Transit Rail	12	2	-	-	-	1	2	1	1	2	1	-	-	2	-	
Norfolk Southern Corp.	63	-	-	-	1	4	7	10	8	6	11	6	4	3	3	
Paducah & Louisville	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Peninsula Comm San Mateo Cnty	5	3	-	-	1	-	-	-	-	-	-	-	-	-	1	
Southern CA Reg Rail Auth.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Southeastern PA Trans.	3	1	-	-	-	-	-	-	-	-	-	-	-	-	2	
Soo Line	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Union Pacific	146	9	-	2	3	11	13	28	19	17	15	5	9	5	10	
Wisconsin Central Ltd.	3	-	-	-	-	-	1	1	-	1	-	-	-	-	-	
Wheeling & Lake Erie	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Other Railroads	12	2	-	-	-	1	-	-	1	2	1	2	1	1	1	
Total	540	60	2	3	15	51	64	60	56	53	63	38	29	16	30	

TABLE 10-3 TRESPASSERS KILLED, BY STATE AND AGE, NOT AT HRC, 2002

States		Age of Trespasser														> 60
		Tot	Unk	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	
Alabama	5	1	-	-	-	-	-	1	-	-	-	-	1	1	1	
Arizona	14	2	-	-	-	-	1	6	2	2	1	-	-	-	-	
Arkansas	12	-	-	-	2	2	-	3	-	1	4	-	-	-	-	
California	90	16	-	-	1	4	5	16	8	10	9	6	5	3	7	
Colorado	4	-	-	-	-	-	-	-	-	1	1	1	1	-	-	
Connecticut	4	-	-	-	-	1	-	-	-	1	1	1	-	-	-	
Delaware	4	2	-	-	1	-	-	1	-	-	-	-	-	-	-	
Dist Of Columbia	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Florida	33	1	-	-	1	4	9	3	4	3	3	2	1	1	1	
Georgia	14	-	-	-	-	1	5	1	2	1	2	-	1	1	-	
Idaho	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Illinois	32	-	-	-	-	2	4	3	7	3	4	3	1	2	3	
Indiana	8	-	-	-	-	-	1	-	3	2	1	1	-	-	-	
Iowa	16	9	-	1	-	2	1	1	1	-	-	1	-	-	-	
Kansas	4	-	-	-	1	-	1	-	-	-	1	1	-	-	-	
Kentucky	5	-	-	-	1	2	-	-	-	2	-	-	-	-	-	
Louisiana	16	-	-	1	3	1	-	-	1	2	2	-	2	2	2	
Maryland	9	-	1	-	-	-	-	-	1	-	3	2	2	-	-	
Massachusetts	11	2	-	-	-	1	3	-	1	-	2	1	-	-	1	
Michigan	4	-	-	-	-	-	-	-	-	-	2	2	-	-	-	
Minnesota	6	1	-	-	-	2	-	-	-	-	1	2	-	-	-	
Mississippi	10	1	-	-	1	-	4	1	1	-	1	1	-	-	-	
Missouri	5	2	-	-	-	1	-	-	1	1	-	-	-	-	-	
Montana	3	2	-	-	-	-	-	-	-	-	-	-	-	-	1	
Nebraska	3	-	-	-	-	-	1	-	-	-	2	-	-	-	-	
Nevada	3	-	-	-	-	-	-	-	1	-	1	-	-	-	1	
New Jersey	18	2	-	-	-	1	3	2	1	2	2	1	2	2	-	
New Mexico	10	6	-	-	-	1	-	1	-	-	-	-	-	1	1	
New York	23	3	-	-	2	6	4	3	1	2	1	-	-	-	1	
North Carolina	20	1	-	-	-	3	3	2	4	2	4	-	-	1	-	
North Dakota	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
Ohio	20	-	-	-	-	3	4	3	2	2	1	3	2	-	-	
Oklahoma	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
Oregon	7	1	-	-	-	-	-	-	-	-	2	-	3	1	-	
Pennsylvania	22	1	1	-	-	3	1	3	2	3	2	1	2	-	3	
Rhode Island	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
South Carolina	13	-	-	-	-	1	3	-	1	2	2	2	-	1	1	
South Dakota	3	-	-	-	-	1	-	-	-	-	-	1	-	-	1	
Tennessee	7	-	-	-	-	-	1	1	1	2	1	-	1	-	-	
Texas	44	2	-	1	1	5	7	5	6	6	3	2	3	-	3	
Utah	2	-	-	-	-	-	-	-	-	1	1	-	-	-	-	
Virginia	11	-	-	-	-	1	1	-	3	-	1	3	-	-	2	
Washington	13	5	-	-	-	2	-	2	1	1	-	1	1	-	-	
West Virginia	2	-	-	-	1	-	-	1	-	-	-	-	-	-	-	
Wisconsin	5	-	-	-	-	1	1	1	1	1	-	-	-	-	-	
Total	540	60	2	3	15	51	64	60	56	53	63	38	29	16	30	

TABLE 10-4 TRESPASSERS INJURED, BY RAILROAD AND AGE, NOT AT HRC, 2002

Railroads	Cnt	%	Age of Trespasser														> 60
			Unk	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60		
Amtrak	28	7.1	7	-	-	1	4	3	1	1	7	2	-	-	-	2	
Burlington Northern Santa Fe	52	13.2	11	2	-	1	7	4	8	6	1	5	3	3	1	-	
Conrail Shared Assets	6	1.5	-	-	-	1	1	1	-	-	1	2	-	-	-	-	
CSX Transportation	54	13.7	-	-	2	3	4	12	3	9	7	6	3	1	2	2	
Delaware & Hudson	1	0.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dakota,Minnesota & Eastern	1	0.3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Florida East Coast	6	1.5	-	-	-	-	-	3	1	-	1	-	1	-	-	-	
Grand Trunk Western RR	3	0.8	-	-	-	1	1	-	-	-	-	1	-	-	-	-	
Illinois Central	5	1.3	-	-	-	1	-	-	-	2	1	-	1	-	-	-	
Indiana Harbor Belt	1	0.3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Kansas City Southern	9	2.3	1	-	-	2	-	-	-	3	-	1	1	1	-	-	
Long Island Rail Road	3	0.8	3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mass Bay Transit Auth.	2	0.5	1	-	-	-	1	-	-	-	-	-	-	-	-	-	
Northeast IL Reg Comm	7	1.8	-	-	-	-	1	-	2	1	-	-	-	-	1	2	
New Jersey Transit Rail	5	1.3	-	1	-	1	1	-	-	-	-	-	1	1	-	-	
Norfolk Southern Corp.	50	12.7	-	-	1	1	8	4	2	6	6	10	5	5	1	1	
Port Auth Trans Hudson	1	0.3	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Peninsula Comm San Mateo Cnty	3	0.8	1	-	-	-	-	-	-	-	1	1	-	-	-	-	
Southern CA Reg Rail Auth.	2	0.5	-	-	-	1	-	-	-	-	-	-	-	-	1	-	
Southeastern PA Trans.	1	0.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Soo Line	4	1.0	-	-	-	-	-	1	-	-	1	2	-	-	-	-	
Union Pacific	133	33.7	-	-	5	8	17	19	14	24	16	6	7	8	2	7	
Wheeling & Lake Erie	2	0.5	-	-	-	-	1	-	-	-	1	-	-	-	-	-	
Other Railroads	16	4.1	2	-	1	1	3	3	1	1	-	2	1	-	-	1	
Total	395	100	28	3	9	23	49	51	32	54	43	38	23	19	8	15	

TABLE 10-5 TRESPASSERS INJURED, BY STATE AND AGE, NOT AT HRC, 2002

States	Cnt	%	Age of Trespasser														> 60
			Unk	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60		
Alabama	4	1.0	-	-	-	-	-	1	-	-	-	1	2	-	-	-	
Arizona	11	2.8	-	-	-	-	2	1	1	3	2	-	-	2	-	-	
Arkansas	9	2.3	1	-	-	-	2	-	1	-	-	3	1	-	-	1	
California	43	10.9	6	-	-	2	4	6	2	5	6	4	2	1	2	3	
Colorado	1	0.3	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
Connecticut	1	0.3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Dist Of Columbia	1	0.3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Florida	15	3.8	-	-	-	-	1	7	1	2	1	1	2	-	-	-	
Georgia	13	3.3	-	-	1	-	-	1	2	2	1	3	-	1	2	-	
Idaho	1	0.3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Illinois	26	6.6	2	-	-	4	2	-	4	5	-	2	1	1	2	3	
Indiana	4	1.0	-	-	-	1	-	-	-	2	-	-	-	-	-	1	
Iowa	4	1.0	-	-	1	-	-	-	1	-	-	-	-	1	-	-	
Kansas	3	0.8	-	-	-	-	-	2	-	-	-	-	1	-	-	-	
Kentucky	5	1.3	-	-	1	-	-	1	1	1	-	1	-	-	-	-	
Louisiana	13	3.3	-	-	1	4	1	-	-	2	2	1	1	1	-	-	
Maryland	3	0.8	-	-	-	-	-	-	-	1	1	-	-	1	-	-	
Massachusetts	4	1.0	1	-	-	-	1	-	1	-	-	-	-	-	-	1	
Michigan	6	1.5	-	-	-	1	1	-	-	1	1	1	1	-	-	-	
Minnesota	3	0.8	2	-	-	-	-	-	-	-	-	1	-	-	-	-	
Mississippi	4	1.0	-	-	-	1	-	-	-	-	1	-	1	1	-	-	
Missouri	14	3.5	-	-	-	2	1	2	1	2	2	3	-	1	-	-	
Montana	1	0.3	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Nebraska	1	0.3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Nevada	2	0.5	1	-	-	-	-	-	-	-	1	-	-	-	-	-	
New Hampshire	1	0.3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
New Jersey	7	1.8	-	1	-	1	1	-	-	-	1	1	1	1	-	-	
New Mexico	6	1.5	1	-	-	1	1	3	-	-	-	-	-	-	-	-	
New York	10	2.5	4	-	-	1	-	1	-	3	1	-	-	-	-	-	
North Carolina	6	1.5	-	-	-	-	1	1	-	1	1	2	-	-	-	-	
Ohio	10	2.5	-	-	-	-	2	3	-	-	3	1	-	-	-	1	
Oklahoma	7	1.8	1	-	-	-	1	-	1	2	1	-	1	-	-	-	
Oregon	11	2.8	1	-	-	-	1	1	2	4	-	-	1	-	-	1	
Pennsylvania	22	5.6	1	-	2	1	9	3	1	-	1	2	1	-	-	1	
South Carolina	8	2.0	-	-	-	-	1	2	1	1	1	-	-	1	-	-	
South Dakota	1	0.3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Tennessee	18	4.6	2	-	-	-	2	1	-	1	4	2	4	2	-	-	
Texas	68	17.2	2	2	2	3	9	10	8	11	7	6	3	3	-	2	
Utah	2	0.5	-	-	1	-	-	-	-	-	-	-	-	-	1	-	
Vermont	1	0.3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
Virginia	8	2.0	-	-	-	-	-	-	1	2	2	1	-	1	1	-	
Washington	8	2.0	2	-	-	-	2	1	2	1	-	-	-	-	-	-	
West Virginia	5	1.3	1	-	-	-	1	-	-	1	-	1	-	1	-	-	
Wisconsin	4	1.0	-	-	-	1	-	2	-	-	1	-	-	-	-	-	
Total	395	100	28	3	9	23	49	51	32	54	43	38	23	19	8	15	

TABLE 10-6 TRESPASSERS NOT AT HRC BY STATE AND AGE GROUP, 2002

States	Deaths				Total Killed		Nonfatal Cases				Total Injured	
	Age Group						Age Group					
	Unk	< 16	16-21	> 21	Cnt	%	Unk	< 16	16-21	> 21	Cnt	%
Alabama	1	-	-	4	5	0.9	-	-	1	3	4	1.0
Arizona	2	-	-	12	14	2.6	-	-	2	9	11	2.8
Arkansas	-	2	2	8	12	2.2	1	-	2	6	9	2.3
California	16	1	6	67	90	16.7	6	2	4	31	43	10.9
Colorado	-	-	-	4	4	0.7	-	-	-	1	1	0.3
Connecticut	-	-	1	3	4	0.7	-	-	-	1	1	0.3
Delaware	2	1	-	1	4	0.7	-	-	-	-	0	0.0
Dist Of Columbia	-	-	-	1	1	0.2	-	-	-	1	1	0.3
Florida	1	1	12	19	33	6.1	-	-	3	12	15	3.8
Georgia	-	-	3	11	14	2.6	-	1	-	12	13	3.3
Idaho	-	-	-	1	1	0.2	-	-	1	-	1	0.3
Illinois	-	-	5	27	32	5.9	2	4	2	18	26	6.6
Indiana	-	-	-	8	8	1.5	-	1	-	3	4	1.0
Iowa	9	1	2	4	16	3.0	-	1	-	3	4	1.0
Kansas	-	1	1	2	4	0.7	-	-	1	2	3	0.8
Kentucky	-	1	2	2	5	0.9	-	1	1	3	5	1.3
Louisiana	-	4	1	11	16	3.0	-	5	1	7	13	3.3
Maryland	-	1	-	8	9	1.7	-	-	-	3	3	0.8
Massachusetts	2	-	3	6	11	2.0	1	-	1	2	4	1.0
Michigan	-	-	-	4	4	0.7	-	1	1	4	6	1.5
Minnesota	1	-	2	3	6	1.1	2	-	-	1	3	0.8
Mississippi	1	1	-	8	10	1.9	-	1	-	3	4	1.0
Missouri	2	-	1	2	5	0.9	-	2	1	11	14	3.5
Montana	2	-	-	1	3	0.6	-	-	-	1	1	0.3
Nebraska	-	-	-	3	3	0.6	-	-	-	1	1	0.3
Nevada	-	-	-	3	3	0.6	1	-	-	1	2	0.5
New Hampshire	-	-	-	-	0	0.0	-	-	1	-	1	0.3
New Jersey	2	-	1	15	18	3.3	-	2	1	4	7	1.8
New Mexico	6	-	1	3	10	1.9	1	1	2	2	6	1.5
New York	3	2	7	11	23	4.3	4	1	-	5	10	2.5
North Carolina	1	-	3	16	20	3.7	-	-	1	5	6	1.5
North Dakota	-	-	-	1	1	0.2	-	-	-	-	0	0.0
Ohio	-	-	5	15	20	3.7	-	-	4	6	10	2.5
Oklahoma	-	-	-	1	1	0.2	1	-	1	5	7	1.8
Oregon	1	-	-	6	7	1.3	1	-	1	9	11	2.8
Pennsylvania	1	1	4	16	22	4.1	1	3	11	7	22	5.6
Rhode Island	-	-	-	1	1	0.2	-	-	-	-	0	0.0
South Carolina	-	-	4	9	13	2.4	-	-	1	7	8	2.0
South Dakota	-	-	1	2	3	0.6	-	-	-	1	1	0.3
Tennessee	-	-	1	6	7	1.3	2	-	3	13	18	4.6
Texas	2	2	8	32	44	8.1	2	7	11	48	68	17.2
Utah	-	-	-	2	2	0.4	-	1	-	1	2	0.5
Vermont	-	-	-	-	0	0.0	-	-	1	-	1	0.3
Virginia	-	-	1	10	11	2.0	-	-	-	8	8	2.0
Washington	5	-	2	6	13	2.4	2	-	2	4	8	2.0
West Virginia	-	1	-	1	2	0.4	1	-	1	3	5	1.3
Wisconsin	-	-	2	3	5	0.9	-	1	1	2	4	1.0
Total	60	20	81	379	540	100.0	28	35	63	269	395	100.0

TABLE 10-7 TRESPASSERS CASUALTIES, BY MONTH AND DAY, NOT AT HRC, 2002

Cond Month		Total		Day Of The Week							Age of Person				
		Cnt	%	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Unk	< 16	16-21	> 21	
Kld	January	49	5.2	4	4	13	7	8	7	6	10	1	6	32	
	February	36	3.9	6	4	7	7	5	2	5	3	-	4	29	
	March	47	5.0	8	7	5	6	7	4	10	6	2	6	33	
	April	44	4.7	7	4	8	6	7	5	7	5	4	9	26	
	May	46	4.9	7	7	6	4	10	6	6	3	-	9	34	
	June	51	5.5	8	7	8	4	5	6	13	4	1	6	40	
	July	49	5.2	6	6	8	6	13	3	7	6	1	11	31	
	August	50	5.3	8	5	3	8	8	7	11	-	3	7	40	
	September	39	4.2	12	5	3	1	3	12	3	3	2	7	27	
	October	55	5.9	6	15	7	6	9	7	5	13	3	8	31	
	November	35	3.7	4	1	3	5	7	7	8	2	-	4	29	
	December	39	4.2	7	3	5	6	5	4	9	5	3	4	27	
	Total	540	57.8	83	68	76	66	87	70	90	60	20	81	379	
Nonfatal	January	30	3.2	9	4	2	4	2	4	5	3	2	6	19	
	February	21	2.2	3	2	3	4	4	4	1	-	2	3	16	
	March	27	2.9	6	1	1	4	4	7	4	-	4	6	17	
	April	35	3.7	6	5	8	4	5	2	5	3	3	5	24	
	May	48	5.1	11	4	5	4	9	9	6	6	6	3	33	
	June	45	4.8	6	5	8	3	7	4	12	4	4	10	27	
	July	30	3.2	5	6	2	7	3	3	4	2	-	5	23	
	August	49	5.2	4	4	11	4	10	5	11	5	2	7	35	
	September	32	3.4	4	7	5	4	3	4	5	2	4	6	20	
	October	39	4.2	4	5	4	6	3	8	9	1	4	8	26	
	November	19	2.0	1	4	5	3	3	1	2	1	3	1	14	
	December	20	2.1	2	2	4	2	4	4	2	1	1	3	15	
	Total	395	42.2	61	49	58	49	57	55	66	28	35	63	269	
Total		935	100	144	117	134	115	144	125	156	88	55	144	648	

TABLE 10-8 TRESPASSERS CASUALTIES, BY TIME AND DAY, NOT AT HRC, 2002

Time	Total	Day Of The Week														
		Sun		Mon		Tue		Wed		Thu		Fri		Sat		
		Cnt	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal
AM	1	52	7	4	1	2	8	3	2	2	8	2	2	2	7	2
	2	51	8	6	1	1	2	2	7	1	6	2	2	1	6	6
	3	33	5	3	2	2	3	1	1	2	4	-	2	1	4	3
	4	31	2	4	-	2	-	4	2	1	1	4	4	-	3	4
	5	22	4	1	1	1	2	2	1	1	2	1	1	1	4	-
	6	15	3	1	2	-	1	-	-	2	2	-	2	1	1	-
	7	40	2	2	4	1	9	5	2	1	4	3	2	3	2	-
	8	22	3	-	2	-	2	1	-	-	2	3	2	3	3	1
	9	20	1	-	1	2	3	-	2	-	4	1	1	3	2	-
	10	21	1	2	-	1	-	2	4	1	-	3	1	1	2	3
	11	41	3	-	3	2	3	4	4	4	3	5	1	2	4	3
	12	53	11	5	7	1	5	2	2	1	5	-	1	4	3	6
Total	401	50	28	24	15	38	26	27	16	41	24	21	22	41	28	
PM	1	30	3	1	2	1	3	2	2	2	3	-	4	1	4	2
	2	30	1	4	1	-	3	2	2	2	2	2	4	-	4	3
	3	54	5	-	13	3	5	3	4	2	3	4	3	2	7	-
	4	46	2	2	8	4	-	6	5	2	2	4	4	-	2	5
	5	48	3	3	1	5	6	2	2	4	3	4	6	4	3	2
	6	60	4	3	6	4	2	4	4	4	9	2	6	8	1	3
	7	36	2	4	3	3	-	1	-	3	2	5	3	3	5	2
	8	43	2	3	3	1	3	2	1	2	4	3	3	5	4	7
	9	52	2	3	4	3	6	5	5	5	9	-	2	3	3	2
	10	53	3	1	3	6	2	3	4	1	4	3	6	5	4	8
	11	39	3	2	-	3	5	-	5	1	2	4	5	1	6	2
	12	43	3	7	-	1	3	2	5	5	3	2	3	1	6	2
Total	534	33	33	44	34	38	32	39	33	46	33	49	33	49	38	
Total	935	83	61	68	49	76	58	66	49	87	57	70	55	90	66	

TABLE 10-9 TRESPASSERS CASUALTIES, BY LOCATION, NOT AT HRC, 2002

Location	Total		Fatal		Nonfatal		Age of Person				
	Cnt	%	Cnt	%	Cnt	%	Unk	< 16	16-21	> 21	
Alongside of on-track equipment	74	7.9	23	4.3	51	12.9	5	5	12	52	
At work station	1	0.1	-	0.0	1	0.3	-	-	-	1	
Beside track	134	14.3	56	10.4	78	19.7	10	9	27	88	
Between tracks	155	16.6	103	19.1	52	13.2	12	3	13	127	
Between cars/locomotives	35	3.7	9	1.7	26	6.6	-	2	6	27	
In cab or on walkways of locomotive	2	0.2	1	0.2	1	0.3	-	-	-	2	
In car	24	2.6	20	3.7	4	1.0	15	-	1	8	
In/operating vehicle	16	1.7	6	1.1	10	2.5	4	2	1	9	
In tunnel	2	0.2	1	0.2	1	0.3	-	-	-	2	
On bridge/trestle	26	2.8	14	2.6	12	3.0	2	3	7	14	
On highway-rail crossing	6	0.6	4	0.7	2	0.5	-	-	2	4	
On side of car	13	1.4	3	0.6	10	2.5	-	3	2	8	
On track	411	44.0	287	53.1	124	31.4	36	22	63	290	
On end of car	5	0.5	-	0.0	5	1.3	-	1	2	2	
On pole/signal mast	2	0.2	1	0.2	1	0.3	-	-	2	-	
On platform	3	0.3	2	0.4	1	0.3	2	-	-	1	
Under car	11	1.2	4	0.7	7	1.8	2	3	2	4	
Under locomotive	1	0.1	-	0.0	1	0.3	-	-	-	1	
Other location	14	1.5	6	1.1	8	2.0	-	2	4	8	
Total	935	100	540	100	395	100	88	55	144	648	

TABLE 10-10 TRESPASSERS CASUALTIES, BY EVENT, NOT AT HRC, 2002

Location	Total		Fatal		Nonfatal		Age of Person				
	Cnt	%	Cnt	%	Cnt	%	Unk	<	16-21	>	
								16	21	21	
Assaulted by other	2	0.2	-	0.0	2	0.5	-	-	-	2	
Bodily function/sudden movement, e.g.,sneezing,t	1	0.1	1	0.2	-	0.0	-	-	-	1	
Caught in/crushed by materials	6	0.6	6	1.1	-	0.0	5	-	-	1	
Climatic condition, exposure to environmental co	1	0.1	1	0.2	-	0.0	-	-	-	1	
Collision - between on track equipment	2	0.2	1	0.2	1	0.3	-	-	-	2	
Collision/impact - auto, truck, bus, van, etc.	11	1.2	4	0.7	7	1.8	-	4	1	6	
Derailment	1	0.1	1	0.2	-	0.0	1	-	-	-	
Electrical shock due to contact with 3rd rail, c	9	1.0	3	0.6	6	1.5	2	-	7	-	
Electrical shock, other (explain in narrative)	2	0.2	1	0.2	1	0.3	-	-	1	1	
Exposure to noise over time	1	0.1	1	0.2	-	0.0	-	-	-	1	
Horseplay, practical joke, etc.	6	0.6	4	0.7	2	0.5	-	2	2	2	
Lost balance	39	4.2	17	3.1	22	5.6	-	4	4	31	
Missed handhold, grabiron, step, etc.	4	0.4	-	0.0	4	1.0	-	-	3	1	
Other impacts - on track equipment	9	1.0	1	0.2	8	2.0	-	-	-	9	
Pushed/shoved onto	1	0.1	-	0.0	1	0.3	1	-	-	-	
Ran into on-track equipment	6	0.6	2	0.4	4	1.0	3	-	1	2	
Ran into object/equipment	4	0.4	1	0.2	3	0.8	-	-	1	3	
Shot	2	0.2	2	0.4	-	0.0	-	-	-	2	
Slipped,fell,stumbled,etc. due to irregular surf	2	0.2	-	0.0	2	0.5	-	-	-	2	
Slipped,fell,stumbled,etc. due to object,ballast	3	0.3	-	0.0	3	0.8	1	-	-	2	
Struck by thrown or propelled object	4	0.4	-	0.0	4	1.0	-	2	-	2	
Struck by object	5	0.5	2	0.4	3	0.8	-	-	1	4	
Struck by on-track equipment	707	75.6	447	82.8	260	65.8	61	34	101	511	
Struck against object	6	0.6	1	0.2	5	1.3	1	-	2	3	
Sudden/unexpected movement of on-track equipmen	5	0.5	2	0.4	3	0.8	-	2	-	3	
Sudden/unexpected movement of vehicle	10	1.1	2	0.4	8	2.0	-	-	6	4	
Thrill seeking	5	0.5	2	0.4	3	0.8	-	1	3	1	
Caught, crushed, pinched, other	10	1.1	6	1.1	4	1.0	-	-	1	9	
On track equipment, other incidents	12	1.3	11	2.0	1	0.3	10	-	1	1	
Slipped, fell, stumbled, other	28	3.0	7	1.3	21	5.3	1	3	6	18	
Sudden, unexpected movement, other	2	0.2	1	0.2	1	0.3	-	-	-	2	
Other (describe in narrative)	29	3.1	13	2.4	16	4.1	2	3	3	21	
Total	935	100	540	100	395	100	88	55	144	648	

APPENDIX A**ABBREVIATIONS**

%	Percent of total
AADT	Average annual daily traffic
Acc	Accident, events reported on form 6180-54 (Chapter 6)
Avg	Average
Chg	Change
Cls	Class
Cnt	Count
Coll	Collision between on-track equipment
Comm	Commuter
Der	Derailment
EOD	Railroad employee on duty
Eqp	Equipment
Exp	Exposure
Ftl	Fatality
HRC	Highway-rail crossing
HWTS	Highway traffic signals
Hmn	Human factor
Incs	Incidents
Len	Length
Loco	Locomotive
Mtr V	Motor vehicle
Nonf	Nonfatal cases (injuries and occupational illnesses)
Othr	Other
Psgr	Passenger on train
RR	Railroad
Rng	Range
Sig	Signal
Spd	Speed
Term	Terminated
Trans	Transferred
Tres	Trespasser
Trk	Track
Trn	Train
Unk	Unknown
Veh	Vehicle
WW	Wiwags
w/o	Without

APPENDIX B

2003 ACCIDENT PREDICTION AND RESOURCE ALLOCATION PROCEDURE NORMALIZING CONSTANTS

The U.S. DOT Highway-Rail Crossing Resource Allocation Procedure, as described in the *Rail-Highway Crossing Resource Allocation Procedure User's Guide, Third Edition*, August 1987, DOT/FRA/OS-87/10, uses three "normalizing constants" in the accident prediction formula, Formula A, Section 3.2.4, Page 17. These constants need to be adjusted periodically in order to keep the procedure matched with the current accident trends. The last recalculation and adjustment was made for Calendar Year 1998 and published in the Appendix for the *Railroad Safety Statistics Annual Report* starting for year 1999.

Using the accident data for Calendar Years 1997 to 2001 (to predict 2002), the process of determining the three (3) new "normalizing constants" for 2003 is performed such that the sum of the 2002 accident prediction values of all currently open public at-grade crossings is made to equal the sum of the *observed* number of accidents that occurred for those same crossings. This process is performed for each of the respective three formulae for the three types of warning device categories, (1) passive, (2) flashing lights, and (3) gates. This process normalizes the calculated prediction for the current trend in accident data (downward) for each category and relative to each of the three types of warning device categories.

The *observed* accidents are those accident records that are in the data file. While mismatched data records caused by inaccurate accident/inventory reporting (e.g., where warning devices do not match) were included, those accidents which occurred prior to the date of a warning device change at those crossings which had a warning device category change during the period from 1997 to 2001 were excluded. This means that the number of *observed* accidents will not necessarily be equal to the actual number of accidents which are reported in the annual Bulletin.

These constants were redetermined for the "national" model using the crossings in the National Inventory File as of July 2003. Those using the "DOT Model" should update their models by replacing the old constants with the new recalculated values. These "normalizing constants" are located in the computer program ACPD.NEW as shown in the *User's Guide Third Edition* at the top of Page A-4, Appendix A1 and in RESAL.NEW on Page B-3, Appendix B1.

As of November 2003, these new constants will be in the 2003 PCAPS Computer Program and Internet version WBAPS on the FRA Website at <http://safetydata.fra.dot.gov/officeofsafety/>. The table below lists the new and prior constants.

ACCIDENT PREDICTION AND RESOURCE ALLOCATION PROCEDURE NORMALIZING CONSTANTS

WARNING DEVICE GROUPS	NEW	PRIOR YEARS				
	2003	1998	1992	1990	1988	1986
(1) Passive	.6500	.7159	.8239	.9417	.8778	.8644
(2) Flashing Lights	.5001	.5292	.6935	.8345	.8013	.8887
(3) Gates	.5725	.4921	.6714	.8901	.8911	.8131

\\wpdata\rxiprog\acpd\ACPD Constants 2003.wpd

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002
Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
AN Rwy LLC [AN]	1	-	-	1	-	-	-	-	-	-	-	-
Aberdeen & Rockfish RR Co. [AR]	3	-	1	-	-	-	2	-	-	1	-	1
Aberdeen, Carolina & Western RR [ACWR]	-	-	-	-	-	-	-	-	-	-	-	-
Abilene & Smokey Valley RR [AVSX]	-	-	-	-	-	-	-	-	-	-	-	-
Acadiana Rwy Co. [AKDN]	2	-	1	1	-	-	-	-	-	1	-	1
Adirondack Scenic RR [ADCX]	5	-	4	1	-	-	2	-	2	2	-	2
Adrian & Blissfield RR [ADBF]	2	-	2	-	-	-	1	-	1	1	-	1
Akron Barberton Cluster Rwy Co. [AB]	-	-	-	-	-	-	-	-	-	-	-	-
Alabama & Florida Rwy Co. [AF]	-	-	-	-	-	-	-	-	-	-	-	-
Alabama & Gulf Coast Rwy LLC [AGR]	3	-	1	2	-	-	-	-	-	1	-	1
Alabama RR Co., Inc. [ALAB]	1	-	1	-	-	-	-	-	-	1	-	1
Alameda Belt Line [ABL]	-	-	-	-	-	-	-	-	-	-	-	-
Alamo Gulf Coast RR Co. [AGCR]	1	-	-	1	-	-	-	-	-	-	-	-
Albany & Eastern RR Co. [AERC]	5	-	2	-	-	-	3	-	-	2	-	2
Albany Port RR [APRR]	2	-	2	-	-	-	-	-	-	2	-	2
Alexander RR Co. [ARC]	1	-	1	-	-	-	-	-	-	1	-	1
Algers, Winslow & Western Rwy Co. [AWW]	1	-	1	-	-	-	-	-	-	1	-	1
Aliquippa & Ohio River RR Co. [AOR]	-	-	-	-	-	-	-	-	-	-	-	-
Aliquippa & Southern RR Co. [ALQS]	-	-	-	-	-	-	-	-	-	-	-	-
Allegheny And Eastern RR [ALY]	3	-	1	-	-	-	2	-	-	1	-	1
Allegheny Valley RR Co. [AVR]	3	1	-	2	-	-	-	-	-	1	1	-
Almanor RR Co. [AL]	-	-	-	-	-	-	-	-	-	-	-	-
Altamont Commuter Express Authority [ACEX]	2	-	2	-	-	-	-	-	-	2	-	2
Amador Foothills RR [AFR]	-	-	-	-	-	-	-	-	-	-	-	-
Ameritrac Rail Services [AMTZ]	-	-	-	-	-	-	-	-	-	-	-	-
Amicor Switching Operation [AMIX]	-	-	-	-	-	-	-	-	-	-	-	-
Angelina & Neches River RR Co. [ANR]	2	-	1	-	-	-	1	-	-	1	-	1
Ann Arbor RR [AA]	1	-	1	-	-	-	-	-	-	1	-	1
Apache Rwy Co. [APA]	2	-	1	1	-	-	-	-	-	1	-	1
Appanoose County Community RR Co. [APNC]	-	-	-	-	-	-	-	-	-	-	-	-
Arcade & Attica RR Corp. [ARA]	-	-	-	-	-	-	-	-	-	-	-	-
Arizona & California RR Co. [ARZC]	1	-	-	1	-	-	-	-	-	-	-	-
Arizona Central RR, Inc. [AZCR]	1	-	1	-	-	-	-	-	-	1	-	1
Arizona Eastern RR [AZER]	9	-	3	6	-	-	-	-	-	3	-	3
Arkansas & Missouri RR Co. [AM]	19	2	13	2	-	-	8	1	4	9	1	9
Arkansas Louisiana & Mississippi RR Co. [ALM]	4	-	1	-	-	-	3	-	-	1	-	1
Arkansas Midland RR Co., Inc. [AKMD]	4	-	2	2	-	-	-	-	-	2	-	2
Arkansas-Oklahoma RR Inc. [AOK]	1	-	-	1	-	-	-	-	-	-	-	-
Ashland Rwy Inc. [ASRY]	3	-	3	-	-	-	-	-	-	3	-	3
Ashtubula, Carson & Jefferson RR [ACJR]	-	-	-	-	-	-	-	-	-	-	-	-
Athens Line LLC, The [ABR]	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic & Western Rwy, L.P. [ATW]	1	-	1	-	-	-	-	-	-	1	-	1
Austin & Texas Central RR [ATCX]	-	-	-	-	-	-	-	-	-	-	-	-
Austin Area Term. RR [AUAR]	7	-	5	1	-	-	2	-	1	4	-	4
Austin, Todd & Ladd RR Co. [ATLT]	-	-	-	-	-	-	-	-	-	-	-	-
B&H Rail Corp [BHX]	-	-	-	-	-	-	-	-	-	-	-	-
Ballard Term. RR Co LLC [BDTL]	-	-	-	-	-	-	-	-	-	-	-	-
Batten Kill RR [BKRR]	-	-	-	-	-	-	-	-	-	-	-	-
Battleground, Yacolt & Chelatchie Prarie RR [BYCX]	-	-	-	-	-	-	-	-	-	-	-	-
Bauxite & Northern Rwy Co. [BXN]	-	-	-	-	-	-	-	-	-	-	-	-
Bay Colony RR [BCLR]	4	-	3	-	-	-	1	-	-	3	-	3
Bay Line RR, L.L.C., The [BAYL]	-	-	-	-	-	-	-	-	-	-	-	-
Beaufort & Morehead Rwy Inc. [BMH]	-	-	-	-	-	-	-	-	-	-	-	-
Belfast & Moosehead Lake RR Co. [BML]	2	-	2	-	-	-	-	-	-	2	-	2

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Bellefonte Historical RR Society [BHRX]	-	-	-	-	-	-	-	-	-	-	-	-
Big South Fork Scenic Rwy [BSFX]	-	-	-	-	-	-	-	-	-	-	-	-
Bighorn Divide & Wyoming RR, Inc. [BDW]	-	-	-	-	-	-	-	-	-	-	-	-
Birmingham Southern RR Co. [BS]	15	-	10	5	-	-	-	-	-	10	-	10
Black Hills Central RR [BHC]	-	-	-	-	-	-	-	-	-	-	-	-
Black River & Western RR [BRW]	-	-	-	-	-	-	-	-	-	-	-	-
Blacklands RR, The [BLR]	-	-	-	-	-	-	-	-	-	-	-	-
Bloomer Shippers Connecting RR Co. [BLOL]	1	-	-	1	-	-	-	-	-	-	-	-
Blue Rock Transportation Co. [BRTR]	-	-	-	-	-	-	-	-	-	-	-	-
Boone Scenic Valley [BSV]	1	-	1	-	-	-	-	-	-	1	-	1
Border Pacific RR [BOP]	-	-	-	-	-	-	-	-	-	-	-	-
Brandon Corp. [BRAN]	-	-	-	-	-	-	-	-	-	-	-	-
Brandywine Valley RR Co. [BVRY]	2	-	1	1	-	-	-	-	-	1	-	1
Brownsville & Rio Grande International RR [BRG]	7	-	5	2	-	-	-	-	-	5	-	5
Buckeye Central Scenic RR [BCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Buckingham Branch RR Co. [BB]	-	-	-	-	-	-	-	-	-	-	-	-
Buffalo & Pittsburgh RR, Inc. [BPRR]	10	-	4	2	-	-	5	-	1	3	-	3
Buffalo Southern RR, Inc. [BSOR]	-	-	-	-	-	-	-	-	-	-	-	-
Burlington Junction Rwy [BJRY]	-	-	-	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe Suburban Operations [	35	2	95	1	-	64	1	-	-	33	2	31
C & NC RR Corp. [CNUR]	1	-	1	-	-	-	1	-	1	-	-	-
C&S RR Corp. [CSKR]	-	-	-	-	-	-	-	-	-	-	-	-
CMC RR Inc. [CMC]	5	-	3	2	-	-	-	-	-	3	-	3
Caddo Valley RR Co. [CVYR]	2	-	2	-	-	-	-	-	-	2	-	2
Caldwell County RR Co. [CWCY]	-	-	-	-	-	-	-	-	-	-	-	-
California Northern RR Co. [CFNR]	5	1	1	1	-	-	3	1	-	1	-	1
California State RR Museum [CSRM]	-	-	-	-	-	-	-	-	-	-	-	-
California Western RR [CWR]	1	-	1	-	-	-	-	-	-	1	-	1
Camas Prairie Railnet Inc [CSP]	2	-	3	-	-	-	-	-	-	2	-	3
Camp Chase Industrial RR Corp [CCRA]	1	-	1	-	-	-	-	-	-	1	-	1
Canadian American RR Co. [CDAC]	2	-	2	1	-	1	-	-	-	1	-	1
Canadian Pacific Rwy [CPRS]	4	-	-	4	-	-	-	-	-	-	-	-
Caney Fork & Western RR [CFWR]	-	-	-	-	-	-	-	-	-	-	-	-
Canon City And Royal Gorge RR, LLC [CRRX]	7	-	7	-	-	-	-	-	-	7	-	7
Canton RR Co. [CTN]	2	-	-	2	-	-	-	-	-	-	-	-
Cape Cod Central [CCCX]	1	-	-	-	-	-	1	-	-	-	-	-
Cape Fear Rwy, Inc. [CF]	-	-	-	-	-	-	-	-	-	-	-	-
Cape May Seashore Lines, Inc. [CMSX]	1	-	-	-	-	-	1	-	-	-	-	-
Carolina Coastal Rwy, Inc. [CLNA]	-	-	-	-	-	-	-	-	-	-	-	-
Carolina Rail Services Co. [CRIJ]	-	-	-	-	-	-	-	-	-	-	-	-
Carolina Southern RR Co., The [CALA]	-	-	-	-	-	-	-	-	-	-	-	-
Carrizo Gorge Rwy Inc. [CZRY]	-	-	-	-	-	-	-	-	-	-	-	-
Carthage, Knightstown & Shirley RR [CKSI]	-	-	-	-	-	-	-	-	-	-	-	-
Cascade & Columbia River RR [CSCD]	1	-	1	-	-	-	-	-	-	1	-	1
Cass Scenic [CASS]	5	-	5	-	-	-	-	-	-	5	-	5
Catskill Mountain RR [CMRR]	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Rapids & Iowa City Rwy Co. [CIC]	9	-	5	2	-	-	4	-	2	3	-	3
Central California Traction Co. [CCT]	6	-	4	2	-	-	-	-	-	4	-	4
Central Columbiana & Pennsylvania Rwy Inc. [CQPA]	-	-	-	-	-	-	-	-	-	-	-	-
Central Indiana & Western RR Co. [CEIW]	-	-	-	-	-	-	-	-	-	-	-	-
Central Michigan Rwy Co. [CMGN]	10	-	6	4	-	-	-	-	-	6	-	6
Central Montana RR [CM]	1	-	1	-	-	-	-	-	-	1	-	1
Central Oregon & Pacific RR, Inc. [CORP]	12	-	2	7	-	-	5	-	2	-	-	-
Central RR Co. Of Indiana [CIND]	2	-	2	-	-	-	-	-	-	2	-	2

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002**Railroads whose employees worked < 400,000 hours**

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Central RR Co. Of Indianapolis [CERA]	-	-	-	-	-	-	-	-	-	-	-	-
Chattahoochee Industrial RR [CIRR]	-	-	-	-	-	-	-	-	-	-	-	-
Chattooga & Chickamauga RR [CCKY]	-	-	-	-	-	-	-	-	-	-	-	-
Chehalis & Centralia RR Association [CHCX]	-	-	-	-	-	-	-	-	-	-	-	-
Chesapeake & Albemarle RR Co. [CA]	-	-	-	-	-	-	-	-	-	-	-	-
Chestnut Ridge Rwy Co. [CHR]	1	-	1	-	-	-	-	-	-	1	-	1
Chicago Rail Link [CRL]	9	-	7	2	-	-	-	-	-	7	-	7
Chicago Short Line Rwy Co. [CSL]	-	-	-	-	-	-	-	-	-	-	-	-
Chicago-Chemung RR Corp. [CCUO]	-	-	-	-	-	-	-	-	-	-	-	-
Chillicothe-Brunswick Rail Maintenance Authority [	-	-	-	-	-	-	-	-	-	-	-	-
Cimarron Valley RR L C [CVR]	4	-	3	-	-	-	1	-	-	3	-	3
Cincinnati Rwy Co., The [CNRX]	-	-	-	-	-	-	-	-	-	-	-	-
City Of Prineville Rwy [COP]	-	-	-	-	-	-	-	-	-	-	-	-
Claremont Concord RR Corp. [CCRR]	2	-	2	-	-	-	-	-	-	2	-	2
Clarendon & Pittsford RR Co. [CLP]	-	-	-	-	-	-	-	-	-	-	-	-
Cleveland Works Rwy Co. [CWRO]	10	1	6	-	-	-	3	-	-	7	1	6
Clinton Term. RR Co. [CTR]	-	-	-	-	-	-	-	-	-	-	-	-
Cloquet Term. RR Co., Inc. [CTRR]	4	-	4	-	-	-	-	-	-	4	-	4
Coe Rail Inc. [CRLE]	-	-	-	-	-	-	-	-	-	-	-	-
Colorado & Wyoming Rwy Co. [CW]	12	-	8	4	-	-	-	-	-	8	-	8
Colorado Central RR [CCEX]	-	-	-	-	-	-	-	-	-	-	-	-
Colorado Kansas and Pacific [CKP]	-	-	-	-	-	-	-	-	-	-	-	-
Columbia & Cowlitz Rwy Co. [CLC]	2	-	2	-	-	-	-	-	-	2	-	2
Columbia Basin RR Co. Inc. [CBRW]	3	-	3	-	-	-	-	-	-	3	-	3
Columbia Business Center [CBCX]	-	-	-	-	-	-	-	-	-	-	-	-
Columbia Term. RR Co. [CT]	2	-	2	-	-	-	-	-	-	2	-	2
Columbus & Greenville Rwy Co. [CAGY]	12	-	6	1	-	-	5	-	-	6	-	6
Columbus & Ohio River RR [CUOH]	-	-	-	-	-	-	-	-	-	-	-	-
Commonwealth Rwy, Inc. [CWRY]	-	-	-	-	-	-	-	-	-	-	-	-
Conecuh Valley RR [COEH]	-	-	-	-	-	-	-	-	-	-	-	-
Conemaugh & Black Lick RR Co. [CBL]	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut Department Of Transportation [CDOT]	3	-	3	-	-	-	-	-	-	3	-	3
Connecticut Southern RR Inc. [CSO]	4	-	3	-	-	-	1	-	-	3	-	3
Connotton Valley Rwy, Inc. [CVRI]	-	-	-	-	-	-	-	-	-	-	-	-
Consolidated Grain & Barge Co. [CGBX]	-	-	-	-	-	-	-	-	-	-	-	-
Conway Scenic RR [CONW]	3	-	3	-	-	-	-	-	-	3	-	3
Coopersville & Marne RR [CMRX]	-	-	-	-	-	-	-	-	-	-	-	-
Copper Basin Rwy, Inc. [CBRY]	1	-	1	-	-	-	-	-	-	1	-	1
Cornhusker Rail Car Services, Inc. [CRCX]	-	-	-	-	-	-	-	-	-	-	-	-
Corpus Christi Term. RR Inc. [CCPN]	-	-	-	-	-	-	-	-	-	-	-	-
Corydon 1883 Scenic RR [CSRX]	-	-	-	-	-	-	-	-	-	-	-	-
Council Bluffs Rwy Co. [CBGR]	-	-	-	-	-	-	-	-	-	-	-	-
Crab Orchard & Egyptian RR [COER]	1	-	-	1	-	-	-	-	-	-	-	-
Cumbres & Toltec Scenic RR [CTSR]	9	-	9	-	-	-	-	-	-	9	-	9
Cuyahoga Valley Rwy Co. [CUVA]	-	-	-	-	-	-	-	-	-	-	-	-
Cuyahoga Valley Scenic Rwy [CVSX]	1	-	-	-	-	-	1	-	-	-	-	-
D & I RR Co. [DAIR]	2	-	-	1	-	-	1	-	-	-	-	-
Dakota Southern Rwy Co. [DSRC]	-	-	-	-	-	-	-	-	-	-	-	-
Dakota, Missouri Valley & Western RR, Inc. [DMVW]	13	-	8	2	-	-	3	-	-	8	-	8
Dallas, Garland & Northeastern RR [DGNO]	15	-	1	8	-	1	7	-	-	-	-	-
Dardanelle & Russellville RR [DR]	-	-	-	-	-	-	-	-	-	-	-	-
DeQueen & Eastern RR Co. [DQE]	1	-	1	-	-	-	-	-	-	1	-	1
Decatur Junction Rwy Co. [DT]	-	-	-	-	-	-	-	-	-	-	-	-
Delaware Lackawanna RR [DL]	-	-	-	-	-	-	-	-	-	-	-	-

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002
Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Delray Connecting RR Co. [DC]	5	-	5	-	-	-	-	-	-	5	-	5
Delta Southern RR Co. [DSRR]	-	-	-	-	-	-	-	-	-	-	-	-
Delta Valley & Southern Rwy Co. [DVS]	-	-	-	-	-	-	-	-	-	-	-	-
Denver Rock Island RR [DRIR]	-	-	-	-	-	-	-	-	-	-	-	-
Depew, Lancaster & Western RR Co., Inc. [DLWR]	-	-	-	-	-	-	-	-	-	-	-	-
Dubois County RR [DCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Duluth & Northeastern RR Co. [DNE]	-	-	-	-	-	-	-	-	-	-	-	-
Durango & Silverton Narrow Gauge RR Co. [DSNG]	15	-	15	-	-	-	-	-	-	15	-	15
East Camden & Highland RR Co. [EACH]	3	-	3	-	-	-	-	-	-	3	-	3
East Cooper & Berkeley RR [ECBR]	1	-	1	-	-	-	-	-	-	1	-	1
East Erie Commercial RR [EEC]	2	-	2	-	-	-	-	-	-	2	-	2
East Jersey RR & Term. Co. [EJR]	1	-	1	-	-	-	-	-	-	1	-	1
East Penn Rwy, Inc. [EPRY]	-	-	-	-	-	-	-	-	-	-	-	-
East Tennessee Rwy, L.P. [ETRY]	1	-	-	-	-	-	1	-	-	-	-	-
Eastern Alabama Rwy Co. [EARY]	2	-	1	1	-	-	-	-	-	1	-	1
Eastern Idaho RR [EIRR]	5	1	-	1	-	-	4	1	-	-	-	-
Eastern Illinois RR Co. [EIRC]	1	-	-	-	-	-	1	-	-	-	-	-
Eastern Maine RR Co. [EMRY]	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Shore RR Inc. [ESHR]	2	-	2	-	-	-	-	-	-	2	-	2
Effingham RR Co. [EFRR]	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado & Wesson Rwy Co. [EDW]	-	-	-	-	-	-	-	-	-	-	-	-
Elk River RR, Inc. [ELKR]	-	-	-	-	-	-	-	-	-	-	-	-
Ellis & Eastern Co. [EERZ]	-	-	-	-	-	-	-	-	-	-	-	-
Erie Western Rwy [EWR]	2	-	1	-	-	-	1	-	-	1	-	1
Escalante Western Rwy [ESWR]	-	-	-	-	-	-	-	-	-	-	-	-
Escanaba & Lake Superior RR Co. [ELS]	19	-	16	1	-	-	3	-	1	15	-	15
Eureka Springs & North Arkansas RR [EKNA]	-	-	-	-	-	-	-	-	-	-	-	-
Everett RR Co. [EV]	-	-	-	-	-	-	-	-	-	-	-	-
Falls Road RR Co. Inc. [FRR]	2	-	1	-	-	-	1	-	-	1	-	1
Farmrail Corp. [FMRC]	1	-	-	1	-	-	-	-	-	-	-	-
Fillmore And Western [FMWX]	-	-	-	-	-	-	-	-	-	-	-	-
Finger Lakes Rwy Corp. [FGLK]	8	-	6	2	-	-	1	-	1	5	-	5
Flats Industrial RR [FIR]	-	-	-	-	-	-	-	-	-	-	-	-
Florida Central RR Co. [FCEN]	3	-	1	-	-	-	2	-	-	1	-	1
Florida Midland RR Co., Inc. [FMID]	-	-	-	-	-	-	-	-	-	-	-	-
Florida Northern RR Co., Inc. [FNOR]	2	-	2	-	-	-	-	-	-	2	-	2
Florida West Coast Rwy [FWCR]	-	-	-	-	-	-	-	-	-	-	-	-
Fordyce & Princeton RR Co. [FP]	1	-	1	-	-	-	1	-	1	-	-	-
Fore River Transportation Corp. [FRVT]	1	-	1	-	-	-	-	-	-	1	-	1
Fort Smith RR Co. [FSR]	2	-	1	1	-	-	-	-	-	1	-	1
Fort Worth & Western RR [FWWR]	20	-	9	7	-	-	5	-	1	8	-	8
Fremont & Elkhorn Valley RR [FEVR]	-	-	-	-	-	-	-	-	-	-	-	-
Fremont, West Point & Pacific Rwy [FWPP]	-	-	-	-	-	-	-	-	-	-	-	-
Galveston RR, L.P. [GVSR]	1	-	-	1	-	-	-	-	-	-	-	-
Garden City Western Rwy Co. [GCW]	-	-	-	-	-	-	-	-	-	-	-	-
Gateway Eastern RR Co. [GWWE]	-	-	-	-	-	-	-	-	-	-	-	-
Georgetown RR Co. [GRR]	-	-	-	-	-	-	-	-	-	-	-	-
Georgia & Florida Railnet [GFRR]	7	-	2	3	-	-	2	-	-	2	-	2
Georgia Central Rwy, L.P. [GC]	2	-	-	-	-	-	2	-	-	-	-	-
Georgia Northeastern RR Co. [GNRR]	-	-	-	-	-	-	-	-	-	-	-	-
Georgia Southwestern RR Division [GSWR]	1	1	1	1	1	1	-	-	-	-	-	-
Georgia Woodlands RR [GWRC]	-	-	-	-	-	-	-	-	-	-	-	-
Gettysburg and Northern RR [GET]	1	-	1	-	-	-	-	-	-	1	-	1
Gloster Southern RR [GLSR]	-	-	-	-	-	-	-	-	-	-	-	-

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002**Railroads whose employees worked < 400,000 hours**

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Golden Isles Term. RR, Inc. [GITM]	-	-	-	-	-	-	-	-	-	-	-	-
Golden Triangle RR Co. [GTRA]	-	-	-	-	-	-	-	-	-	-	-	-
Grainbelt Corp. [GNBC]	1	-	1	-	-	-	-	-	-	1	-	1
Grand Rapids Eastern RR Inc. [GR]	1	-	-	-	-	-	1	-	-	-	-	-
Great Miami & Scioto Rwy Co. [GMRY]	-	-	-	-	-	-	-	-	-	-	-	-
Great River RR [GTR]	-	-	-	-	-	-	-	-	-	-	-	-
Great Smoky Mountains Rwy, The [GSM]	-	-	-	-	-	-	-	-	-	-	-	-
Great Walton RR Co. [GRWR]	1	-	-	-	-	-	1	-	-	-	-	-
Great Western Rwy Co. [GWR]	-	-	-	-	-	-	-	-	-	-	-	-
Green Mountain RR Corp. [GMRC]	3	-	2	-	-	-	1	-	-	2	-	2
Gulf, Colorado San Saba Rwy Corp. [GCSR]	3	-	-	2	-	-	1	-	-	-	-	-
H & S RR Co., Inc. [HS]	-	-	-	-	-	-	-	-	-	-	-	-
Hampton & Branchville RR Co. [HB]	1	-	1	-	-	-	-	-	-	1	-	1
Hardin Southern RR, Inc. [HSRR]	-	-	-	-	-	-	-	-	-	-	-	-
Hartwell RR Co. [HRT]	-	-	-	-	-	-	-	-	-	-	-	-
Hawaiian Rwy Society [HRSX]	-	-	-	-	-	-	-	-	-	-	-	-
Heart of Georgia RR, Inc. [HOG]	2	-	2	-	-	-	-	-	-	2	-	2
Heber Valley RR Utah [HVRX]	-	-	-	-	-	-	-	-	-	-	-	-
High Point, Thomasville & Denton RR Co. [HPTD]	1	-	-	-	-	-	1	-	-	-	-	-
Hollis & Eastern RR Co. [HE]	-	-	-	-	-	-	-	-	-	-	-	-
Honey Creek RR, Inc. [HCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Hoosier Southern RR [HOS]	-	-	-	-	-	-	-	-	-	-	-	-
Housatonic RR Co., Inc. [HRRC]	8	-	7	1	-	-	-	-	-	7	-	7
Huntsville & Madison county RR Authority [HMCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Huron & Eastern Rwy [HESR]	3	-	3	1	-	1	-	-	-	2	-	2
Hutchinson & Northern Rwy Co. [HN]	-	-	-	-	-	-	-	-	-	-	-	-
ITS Technologies & Logistics, LLC [ISLZ]	2	-	2	-	-	-	-	-	-	2	-	2
Idaho Northern & Pacific RR Co. [INPR]	6	-	4	-	-	-	3	-	1	3	-	3
Illinois & Midland RR Inc. [IMRR]	5	2	1	2	-	-	2	2	-	1	-	1
Illinois Railnet Inc. [IR]	2	-	1	1	-	-	1	-	1	-	-	-
Illinois Rwy Museum [IRYM]	-	-	-	-	-	-	-	-	-	-	-	-
Illinois Western RR Co. [ILW]	-	-	-	-	-	-	-	-	-	-	-	-
In-Term. Services Corp. [ISCZ]	1	-	1	-	-	-	-	-	-	1	-	1
Indian Creek RR Co. [ICRK]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana & Ohio Central RR, Inc. [IOCR]	2	-	-	2	-	-	-	-	-	-	-	-
Indiana & Ohio Rwy [IORY]	7	-	1	-	-	-	6	-	-	1	-	1
Indiana Northeastern RR Co., Incorporated [IN]	2	-	2	-	-	-	-	-	-	2	-	2
Indiana Rail Road Co. [INRD]	5	-	1	1	-	-	3	-	-	1	-	1
Indiana Rwy Museum [IRM]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana Southern RR Co., Inc. [ISRR]	3	1	-	1	-	-	2	1	-	-	-	-
Indiana Southwestern Rwy Co. [ISW]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana Transportation Museum [ITMZ]	-	-	-	-	-	-	-	-	-	-	-	-
Intermodal Transfer, LLC [RSIX]	1	1	1	-	-	-	1	1	1	-	-	-
Iowa Interstate RR [IAIS]	15	-	7	5	-	-	3	-	-	7	-	7
Iowa Northern Rwy Co. [IANR]	7	-	2	4	-	-	1	-	-	2	-	2
Iowa Traction RR Co. [IATR]	-	-	-	-	-	-	-	-	-	-	-	-
Iss Rail, Inc. [ISSR]	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson Warrior RR [JEFW]	1	-	1	-	-	-	-	-	-	1	-	1
Joppa & Eastern RR Co. [JERX]	-	-	-	-	-	-	-	-	-	-	-	-
Juniata Valley RR Co. [JVRR]	-	-	-	-	-	-	-	-	-	-	-	-
K.W.T. Rwy, Inc. [KWT]	-	-	-	-	-	-	-	-	-	-	-	-
Kankakee, Beaverville & Southern RR Co. [KBSR]	2	-	-	-	-	-	2	-	-	-	-	-
Kansas City Term. Rwy Co. [KCT]	3	-	-	3	-	-	-	-	-	-	-	-
Kansas and Oklahoma RR [KO]	17	-	9	7	-	-	1	-	-	9	-	9

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	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Kendallville Term. Rwy Co. [KTR]	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky & Tennessee Rwy [KT]	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky Rwy Museum [KRM]	1	-	2	-	-	-	1	-	2	-	-	-
Keokuk Junction Rwy [KJRY]	2	-	2	-	-	-	-	-	-	2	-	2
Kern Valley RR [KVR]	-	-	-	-	-	-	-	-	-	-	-	-
Kiamichi RR Co. LLC [KRR]	9	-	4	1	-	-	4	-	-	4	-	4
Kiski Junction RR [KJR]	-	-	-	-	-	-	-	-	-	-	-	-
Klamath Northern Rwy Co. [KNOR]	-	-	-	-	-	-	-	-	-	-	-	-
Knox & Kane RR Co. [KKRR]	-	-	-	-	-	-	-	-	-	-	-	-
Knoxville & Holston River RR Co., Inc. [KXHR]	-	-	-	-	-	-	-	-	-	-	-	-
Kyle RR Co. [KYLE]	6	1	3	2	-	-	3	1	2	1	-	1
Lahaina Kaanapoli And Pacific [LKP]	-	-	-	-	-	-	-	-	-	-	-	-
Lake County RR [LCR]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Shore Rwy [LSRX]	1	-	1	-	-	-	-	-	-	1	-	1
Lake State Rwy Co. [LSRC]	22	-	17	3	-	-	4	-	2	15	-	15
Lake Superior & Ishpeming RR Co. [LSI]	10	-	7	3	-	-	-	-	-	7	-	7
Lake Superior & Mississippi RR [LSMR]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Superior RR Museum [LSMT]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Term. RR Co. [LT]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Whatcom Rwy [LWAT]	-	-	-	-	-	-	-	-	-	-	-	-
Lancaster & Chester Rwy Co. [LC]	1	-	-	1	-	-	-	-	-	-	-	-
Landisville Term. & Transfer Co. [LNVT]	-	-	-	-	-	-	-	-	-	-	-	-
Laona & Northern Rwy [LNO]	-	-	-	-	-	-	-	-	-	-	-	-
Laurinburg & Southern RR Co. [LRS]	1	-	-	-	-	-	1	-	-	-	-	-
Leadville, Colorado & Southern RR, Co. [LCSR]	-	-	-	-	-	-	-	-	-	-	-	-
Lewis & Clark RR Co. [LINC]	-	-	-	-	-	-	-	-	-	-	-	-
Lexington & Ohio RR Co. Inc [LXOH]	-	-	-	-	-	-	-	-	-	-	-	-
Litchfield Industrial RR [LFIZ]	-	-	-	-	-	-	-	-	-	-	-	-
Little Kanawha River Rail [LKRR]	-	-	-	-	-	-	-	-	-	-	-	-
Little River RR [LRR]	-	-	-	-	-	-	-	-	-	-	-	-
Little Rock & Western Rwy, L.P. [LRWN]	4	-	-	3	-	-	1	-	-	-	-	-
Little Rock Port RR Co. [LRPA]	1	-	-	1	-	-	-	-	-	-	-	-
Livonia, Avon & Lakeville RR Corp. [LAL]	-	-	-	-	-	-	-	-	-	-	-	-
Logansport & Eel River Short Line Co., Inc. [LER]	-	-	-	-	-	-	-	-	-	-	-	-
Longview Switching [LS]	1	-	1	-	-	-	1	-	1	-	-	-
Los Angeles Junction Rwy Co. [LAJ]	1	-	-	1	-	-	-	-	-	-	-	-
Louisiana & Delta RR [LDRR]	5	-	1	1	-	-	4	-	1	-	-	-
Louisiana & North West RR Co. [LNW]	5	-	5	-	-	-	-	-	-	5	-	5
Louisville & Indiana RR Co. [LIRC]	8	-	3	2	-	-	3	-	-	3	-	3
Louisville & Wadley Rwy Co. [LW]	-	-	-	-	-	-	-	-	-	-	-	-
Louisville, New Albany & Corydon RR [LNAL]	-	-	-	-	-	-	-	-	-	-	-	-
Lowville & Beaver River RR Co. [LBR]	-	-	-	-	-	-	-	-	-	-	-	-
Luxapalila Valley RR Inc. [LXVR]	-	-	-	-	-	-	-	-	-	-	-	-
Luzerne & Susquehanna Rwy Co. [LSX]	-	-	-	-	-	-	-	-	-	-	-	-
Lycoming Valley RR Co. [LVRR]	4	-	2	2	-	-	-	-	-	2	-	2
M & B RR LLC [MNBR]	1	-	1	-	-	-	-	-	-	1	-	1
Madison RR Division [CMPA]	-	-	-	-	-	-	-	-	-	-	-	-
Magma Arizona RR Co. [MAA]	-	-	-	-	-	-	-	-	-	-	-	-
Mahoning Valley RR Co. [MVRY]	-	-	-	-	-	-	-	-	-	-	-	-
Manufacturers' Junction Rwy Co. [MJ]	-	-	-	-	-	-	-	-	-	-	-	-
Manufacturers' Rwy Co. [MRS]	3	-	3	-	-	-	-	-	-	3	-	3
Maryland & Delaware RR Co. [MDDE]	2	-	2	-	-	-	1	-	1	1	-	1
Maryland Midland Rwy, Inc. [MMID]	1	-	-	1	-	-	-	-	-	-	-	-
Massachusetts Central RR Corp. [MCER]	3	-	2	1	-	-	-	-	-	2	-	2

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	Total			Train			HRC			Incidents		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Massena Term. RR Co. [MSTR]	1	-	1	-	-	-	-	-	-	1	-	1
Maumee & Western RR Corp. [MAW]	1	-	-	-	-	-	1	-	-	-	-	-
Mccloud Rwy Co. [MCR]	-	-	-	-	-	-	-	-	-	-	-	-
Mckeesport Connecting RR Co. [MKC]	-	-	-	-	-	-	-	-	-	-	-	-
Meeker Southern RR [MSN]	-	-	-	-	-	-	-	-	-	-	-	-
Meridian Southern Rwy LLC [MDS]	-	-	-	-	-	-	-	-	-	-	-	-
Michigan Shore RR [MS]	-	-	-	-	-	-	-	-	-	-	-	-
Michigan Southern RR Co., Inc. [MSO]	3	-	3	-	-	-	-	-	-	3	-	3
Michigan State Trust For Rwy Preservation [MSTP]	-	-	-	-	-	-	-	-	-	-	-	-
Mid-Continent Rwy [MCRY]	-	-	-	-	-	-	-	-	-	-	-	-
Mid-Michigan RR Co. [MMRR]	1	-	-	-	-	-	1	-	-	-	-	-
Middletown & Hummelstown RR Co. [MIDH]	1	-	1	-	-	-	-	-	-	1	-	1
Middletown & New Jersey Rwy Co., Inc. [MNJ]	-	-	-	-	-	-	-	-	-	-	-	-
Midland Term. Co. [MDLR]	7	-	7	-	-	-	-	-	-	7	-	7
Midlands Rwy [MDRY]	1	-	1	-	-	-	-	-	-	1	-	1
Minnesota & Manitoba RR [MMR]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota Commercial Rwy [MNNR]	20	-	12	3	-	-	6	-	1	11	-	11
Minnesota Northern RR Inc. [MNN]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota Prairie Line, Inc. [MPLI]	1	-	-	-	-	-	1	-	-	-	-	-
Minnesota Southern Rwy, Inc. [MSWY]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota Transportation Museum [MNTM]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota Zephyr, Limited [MZL]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota, Dakota & Western Rwy Co. [MDW]	2	-	1	-	-	-	1	-	-	1	-	1
Mississippi & Skuna Valley RR Co. [MSV]	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi & Tennessee Railnet RR [MT]	1	-	1	-	-	-	-	-	-	1	-	1
Mississippi Central RR Co. [MSCI]	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi Export RR Co. [MSE]	4	-	3	1	-	-	-	-	-	3	-	3
Mississippian Rwy Cooperative, Inc. [MSRW]	-	-	-	-	-	-	-	-	-	-	-	-
Missouri & Northern Arkansas RR Co., Inc. [MNA]	11	-	3	3	-	-	8	-	3	-	-	-
Missouri Central RR [MOC]	-	-	-	-	-	-	-	-	-	-	-	-
Modesto & Empire Traction Co. [MET]	5	-	5	-	-	-	-	-	-	5	-	5
Mohawk, Adirondack & Northern RR Corp. [MHWA]	1	-	1	-	-	-	-	-	-	1	-	1
Monongahela Connecting RR Co. [MCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Montana Western Rwy Co. [MWRR]	3	-	3	-	-	-	-	-	-	3	-	3
Monticello Rwy Museum [MRMZ]	-	-	-	-	-	-	-	-	-	-	-	-
Morristown & Erie Rwy, Inc. [ME]	-	-	-	-	-	-	-	-	-	-	-	-
Moscow, Camden & San Augustine RR [MCSA]	-	-	-	-	-	-	-	-	-	-	-	-
Mount Hood Rwy Co. [MH]	1	-	1	-	-	-	1	-	1	-	-	-
Mount Rainier Scenic RR [MRSR]	1	-	1	-	-	-	-	-	-	1	-	1
Mount Vernon Term. Rwy, Inc. [MVT]	-	-	-	-	-	-	-	-	-	-	-	-
Municipality Of East Troy [METW]	-	-	-	-	-	-	-	-	-	-	-	-
N C Transportation Museum Foundation [NCMX]	-	-	-	-	-	-	-	-	-	-	-	-
Napa Valley RR [NVRN]	14	-	13	-	-	-	1	-	-	13	-	13
Nash County RR [NCYR]	-	-	-	-	-	-	-	-	-	-	-	-
Nashville & Eastern RR [NERR]	5	-	4	-	-	-	1	-	-	4	-	4
Nashville & Western RR Corp. [NWR]	-	-	-	-	-	-	-	-	-	-	-	-
Nebkota Rwy, Inc. [NRI]	1	-	1	-	-	-	-	-	-	1	-	1
Nebraska Central RR [NCRC]	6	3	2	1	-	-	3	3	-	2	-	2
Nebraska Northeastern Rwy Co. [NENE]	1	-	-	1	-	-	-	-	-	-	-	-
Nebraska, Kansas, Colorado Railnet [NKCR]	3	-	-	3	-	-	-	-	-	-	-	-
Nevada Northern Rwy [NNRX]	1	-	1	-	-	-	-	-	-	1	-	1
New Castle Industrial RR [NCIR]	-	-	-	-	-	-	-	-	-	-	-	-
New England Central RR [NECR]	12	-	8	3	-	-	1	-	-	8	-	8
New England Southern RR Co., Inc. [NEGS]	-	-	-	-	-	-	-	-	-	-	-	-

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Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
New Hampshire Central RR, Inc. [NHCR]	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire North Coast RR [NHN]	1	-	1	-	-	-	-	-	-	1	-	1
New Hope & Ivyland Rail Road [NHRR]	-	-	-	-	-	-	-	-	-	-	-	-
New Orleans & Gulf Coast Rwy Co. Inc. [NOGC]	4	-	1	1	-	-	3	-	1	-	-	-
New Orleans Public Belt RR [NOPB]	11	-	10	1	-	-	-	-	-	10	-	10
New York & Atlantic Rwy Co. [NYA]	9	-	7	1	-	-	1	-	-	7	-	7
New York & Lake Erie [NYLE]	-	-	-	-	-	-	-	-	-	-	-	-
New York & Ogdensburg Rwy Co. Inc. [NYOG]	1	-	-	-	-	-	1	-	-	-	-	-
New York, Susquehanna & Western RR Co. [NYSW]	6	-	4	1	-	-	1	-	-	4	-	4
Newburgh & South Shore RR [NSR]	-	-	-	-	-	-	-	-	-	-	-	-
Niles Canyon Rwy [NICX]	-	-	-	-	-	-	-	-	-	-	-	-
Nimishillen & Tuscarawas, LLC [NTRY]	8	-	8	-	-	-	-	-	-	8	-	8
Nittany & Bald Eagle [NBER]	2	-	1	-	-	-	1	-	-	1	-	1
Norfolk & Portsmouth Belt Line RR Co. [NPB]	4	-	1	2	-	-	1	-	-	1	-	1
North Carolina & Virginia RR Co. [NCVA]	1	-	3	-	-	-	1	-	3	-	-	-
North Shore RR [NSHR]	-	-	-	-	-	-	-	-	-	-	-	-
North Shore Scenic RR [NSSR]	-	-	-	-	-	-	-	-	-	-	-	-
Northern Ohio & Western Rwy, LTD. [NOW]	-	-	-	-	-	-	-	-	-	-	-	-
Northern Plains RR, Inc. [NPR]	2	-	1	1	-	-	-	-	-	1	-	1
Northwestern Oklahoma RR Co. [NOKL]	-	-	-	-	-	-	-	-	-	-	-	-
Oakland Term. Rwy [OTR]	-	-	-	-	-	-	-	-	-	-	-	-
Ogeechee Rwy Co. [OGEE]	-	-	-	-	-	-	-	-	-	-	-	-
Ohio & Pennsylvania RR Co. [OHPA]	-	-	-	-	-	-	-	-	-	-	-	-
Ohio Central RR Co. [OHCR]	1	-	1	-	-	-	-	-	-	1	-	1
Ohio Rwy Museum [ORY]	-	-	-	-	-	-	-	-	-	-	-	-
Ohio Southern RR Co. [OSRR]	1	-	-	1	-	-	-	-	-	-	-	-
Oil Creek & Titusville Lines [OCTL]	2	-	2	-	-	-	-	-	-	2	-	2
Old Augusta RR Co. [OAR]	-	-	-	-	-	-	-	-	-	-	-	-
Omaha, Lincoln & Beatrice Rwy Co. [OLB]	-	-	-	-	-	-	-	-	-	-	-	-
OmniTrax Switching Services [OMTX]	1	-	-	-	-	-	1	-	-	-	-	-
Ontario Central RR Corp. [ONCT]	-	-	-	-	-	-	-	-	-	-	-	-
Ontario Midland RR Corp. [OMID]	-	-	-	-	-	-	-	-	-	-	-	-
Oregon Eastern RR [OERR]	-	-	-	-	-	-	-	-	-	-	-	-
Oregon Pacific RR Co. [OPR]	-	-	-	-	-	-	-	-	-	-	-	-
Orlando & Mount Dora Rwy Co. [OMDX]	2	-	-	-	-	-	2	-	-	-	-	-
Otter Tail Valley RR Co., Inc. [OTVR]	-	-	-	-	-	-	-	-	-	-	-	-
Ouachita RR [OUCH]	-	-	-	-	-	-	-	-	-	-	-	-
Owego & Harford Rwy, Inc. [OHRY]	-	-	-	-	-	-	-	-	-	-	-	-
Pacific & Arctic RR & Navigation Co. [PARN]	17	-	17	-	-	-	-	-	-	17	-	17
Pacific Harbor Line Inc. [PHL]	10	-	4	4	-	-	2	-	-	4	-	4
Pacific SW Rwy Museum [PSRM]	-	-	-	-	-	-	-	-	-	-	-	-
Paducah & Illinois RR Co. [PI]	1	-	-	-	-	-	1	-	-	-	-	-
Palouse River & Coulee City RR Inc. [PCC]	8	-	4	4	-	-	-	-	-	4	-	4
Panhandle Northern RR Co. [PNR]	5	-	3	2	-	1	1	-	-	2	-	2
Parr Term. RR [PRT]	-	-	-	-	-	-	-	-	-	-	-	-
Patapsco & Back Rivers RR Co. [PBR]	16	-	15	1	-	-	1	-	1	14	-	14
Pearl River Valley RR Co. [PRV]	-	-	-	-	-	-	-	-	-	-	-	-
Pecos Valley Southern Rwy Co. [PVS]	-	-	-	-	-	-	-	-	-	-	-	-
Pend Oreille Valley RR, Inc. [POVA]	1	-	1	-	-	-	-	-	-	1	-	1
Peninsula Term. Co. [PT]	-	-	-	-	-	-	-	-	-	-	-	-
Penn Eastern Rail Lines Inc. [PRL]	-	-	-	-	-	-	-	-	-	-	-	-
Penn Jersey Rail Lines Inc. [PJRL]	-	-	-	-	-	-	-	-	-	-	-	-
Peoria & Pekin Union Rwy Co. [PPU]	11	-	9	2	-	-	-	-	-	9	-	9
Peoria, Peoria Heights & Western RR [PPHW]	-	-	-	-	-	-	-	-	-	-	-	-

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002**Railroads whose employees worked < 400,000 hours**

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Philadelphia, Bethlehem & New England RR [PBNE]	3	-	2	1	-	-	-	-	-	2	-	2
Pickens Rwy Co. [PICK]	-	-	-	-	-	-	-	-	-	-	-	-
Pioneer Industrial Rwy Co. [PRY]	2	-	1	-	-	-	1	-	-	1	-	1
Pioneer Valley RR Co., Inc. [PVRR]	2	-	2	-	-	-	-	-	-	2	-	2
Pittsburg & Shawmut RR Co. [PS]	3	-	1	-	-	-	2	-	-	1	-	1
Pittsburgh & Conneaut Dock Co., The [PCDX]	-	-	-	-	-	-	-	-	-	-	-	-
Pittsburgh & Ohio Central RR Co., The [POHC]	1	-	-	1	-	-	-	-	-	-	-	-
Pittsburgh, Allegheny & McKees Rocks RR [PAM]	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth & Lincoln [PLL]	-	-	-	-	-	-	-	-	-	-	-	-
Point Comfort & Northern Rwy Co. [PCN]	2	-	2	-	-	-	-	-	-	2	-	2
Port Bienville RR [PBVR]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Catoosa Term. RR [POCA]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Manatee [MAUP]	1	-	1	-	-	-	-	-	-	1	-	1
Port Of Palm Beach Term. [PPBD]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Tillamook Bay RR [POTB]	1	-	1	-	-	-	-	-	-	1	-	1
Port Royal RR [PRYL]	1	-	1	-	-	-	-	-	-	1	-	1
Port Term. RR Of South Carolina [PTR]	-	-	-	-	-	-	-	-	-	-	-	-
Port Utilities Commission Of Charleston, S.C. [PUC]	1	-	1	-	-	-	-	-	-	1	-	1
Portland & Western RR, Inc. [PNWR]	9	-	2	2	-	-	6	-	1	1	-	1
Portland Term. [PTO]	-	-	-	-	-	-	-	-	-	-	-	-
Potomac Eagle Scenic Rail Excursion [PEX]	-	-	-	-	-	-	-	-	-	-	-	-
Prescott & Northwestern RR Co. [PNW]	-	-	-	-	-	-	-	-	-	-	-	-
Progressive Rail Inc [PGR]	2	-	-	-	-	-	2	-	-	-	-	-
Providence & Worcester RR Co. [PW]	12	-	6	5	-	-	1	-	-	6	-	6
Puget Sound & Pacific RR Co. [PSAP]	5	-	3	-	-	-	3	-	1	2	-	2
Quincy RR Co. [QRR]	-	-	-	-	-	-	-	-	-	-	-	-
R. J. Corman RR Co./Pennsylvania Lines, Inc. [RJCP]	-	-	-	-	-	-	-	-	-	-	-	-
R. J. Corman RR Corp./Bardstown Line [RJCR]	1	-	-	-	-	-	1	-	-	-	-	-
R. J. Corman, Western Ohio Line [RJCW]	1	-	-	-	-	-	1	-	-	-	-	-
RTD Denver Union Station [DUT]	-	-	-	-	-	-	-	-	-	-	-	-
Rail Serve [RASX]	4	-	2	1	-	-	1	-	-	2	-	2
Rail Tours, Inc. [RTI]	-	-	-	-	-	-	-	-	-	-	-	-
Railroad Switching Service Of Missouri, Inc. [RSM]	-	-	-	-	-	-	-	-	-	-	-	-
Railtown 1897 RR [RTRX]	-	-	-	-	-	-	-	-	-	-	-	-
Raritan Central Rwy LLC [RCRY]	-	-	-	-	-	-	-	-	-	-	-	-
Rarus Rwy Co. [RARW]	2	-	2	-	-	-	-	-	-	2	-	2
Reading Blue Mountain & Northern RR Commision [RBM]	14	-	10	1	-	-	4	-	1	9	-	9
Red River Valley & Western RR [RRVW]	10	-	6	2	-	-	3	-	1	5	-	5
Redmont Rwy Co. [RRC]	-	-	-	-	-	-	-	-	-	-	-	-
Richmond Pacific RR Corp. [RPRC]	2	-	2	-	-	-	-	-	-	2	-	2
Rio Valley Switching Co. [RVSC]	17	-	11	1	-	-	7	-	2	9	-	9
River Term. Rwy Co. [RT]	-	-	-	-	-	-	-	-	-	-	-	-
Rochester Southern RR, Inc. [RSR]	3	-	1	1	-	-	1	-	-	1	-	1
Rock & Rail Inc [RRRR]	1	-	1	-	-	-	-	-	-	1	-	1
Rockdale, Sandow & Southern RR Co. [RSS]	-	-	-	-	-	-	-	-	-	-	-	-
SCTRR, LLC [SCTR]	5	-	2	-	-	-	3	-	-	2	-	2
SF&L Rwy, Inc. [SFLR]	1	-	-	1	-	-	-	-	-	-	-	-
SMS Rail Service, Inc. [SLRS]	-	-	-	-	-	-	-	-	-	-	-	-
Sabine River & Northern RR Co. [SRN]	1	-	1	-	-	-	-	-	-	1	-	1
Safe Handling Rail Inc. [SRP]	2	-	2	-	-	-	-	-	-	2	-	2
Saginaw Valley Rwy Co., Inc. [SGVY]	-	-	-	-	-	-	-	-	-	-	-	-
Salt Lake City Southern RR Co., Inc. [SL]	-	-	-	-	-	-	-	-	-	-	-	-
Salt Lake, Garfield & Western Rwy Co. [SLGW]	-	-	-	-	-	-	-	-	-	-	-	-
San Diego & Imperial Valley [SDIY]	1	-	2	-	-	-	1	-	2	-	-	-

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002**Railroads whose employees worked < 400,000 hours**

	Total			Train			HRC			Other		
				Accidents			Incidents			Incidents		
	Cnt	Kld	Inj	Kld	Inj		Cnt	Kld	Inj	Cnt	Kld	Inj
San Diego Northern Rwy [SDNX]	10	5	4	2	-	-	-	-	-	8	5	4
San Francisco Belt RR [SFBR]	-	-	-	-	-	-	-	-	-	-	-	-
San Joaquin Valley RR Co. [SJVR]	6	2	2	1	-	-	2	1	-	3	1	2
San Luis Central RR Co. [SLC]	1	-	1	-	-	-	-	-	-	1	-	1
San Manuel Arizona RR Co. [SMA]	-	-	-	-	-	-	-	-	-	-	-	-
San Pedro & Southwestern Rwy Co. [SWKR]	-	-	-	-	-	-	-	-	-	-	-	-
Sand Springs Rwy Co. [SS]	3	-	3	-	-	-	-	-	-	3	-	3
Sandersville RR Co. [SAN]	5	-	4	-	-	-	1	-	-	4	-	4
Santa Cruz, Big Tree & Pacific RR [SCBG]	-	-	-	-	-	-	-	-	-	-	-	-
Santa Fe Southern Rwy, Inc. [SFS]	2	-	-	-	-	-	2	-	-	-	-	-
Santa Maria Valley RR Co. [SMV]	-	-	-	-	-	-	-	-	-	-	-	-
Saracuse Binghampton And New York RR [SBNX]	-	-	-	-	-	-	-	-	-	-	-	-
Savannah Port Term. RR, Inc. [SAPT]	3	-	-	-	-	-	3	-	-	-	-	-
Seminole Gulf RR [SGLR]	12	-	4	6	-	-	3	-	1	3	-	3
Semo Port RR, Inc. [SE]	-	-	-	-	-	-	-	-	-	-	-	-
Sequatchie Valley RR [SQVR]	-	-	-	-	-	-	-	-	-	-	-	-
Shamokin Valley RR Co. [SVRR]	-	-	-	-	-	-	-	-	-	-	-	-
Shawnee Term. Rwy Co. [STR]	-	-	-	-	-	-	-	-	-	-	-	-
Shelbyville Industrial RR [SVIZ]	-	-	-	-	-	-	-	-	-	-	-	-
Sidney & Lowe RR Inc. [SLGG]	-	-	-	-	-	-	-	-	-	-	-	-
Sierra Northern Rwy [SERA]	1	-	1	-	-	-	-	-	-	1	-	1
Sisseton Milbank RR [SMRR]	1	-	-	-	-	-	1	-	-	-	-	-
Ski Train RR [SKTX]	-	-	-	-	-	-	-	-	-	-	-	-
Smokey Hill Rwy [SHRX]	-	-	-	-	-	-	-	-	-	-	-	-
Snoqualmie Valley RR [SNVX]	-	-	-	-	-	-	-	-	-	-	-	-
Somerset RR Co. [SOM]	-	-	-	-	-	-	-	-	-	-	-	-
Sounder Commuter Rail [SCR]	2	-	2	-	-	-	-	-	-	2	-	2
South Branch Valley RR [SBVR]	1	-	-	1	-	-	-	-	-	-	-	-
South Buffalo Rwy Co. [SB]	10	-	4	5	-	-	1	-	-	4	-	4
South Carolina Central RR Co., Inc. [SCRF]	5	-	1	1	-	-	3	-	-	1	-	1
South Carolina RR Museum, The [SCMZ]	-	-	-	-	-	-	-	-	-	-	-	-
South Central Florida Express, Inc. [SCXF]	10	-	9	1	-	-	3	-	3	6	-	6
South Chicago & Indiana Harbor Rwy Co. [SCIH]	-	-	-	-	-	-	-	-	-	-	-	-
South Kansas & Oklahoma RR Co. [SKOL]	23	-	3	14	-	-	7	-	1	2	-	2
South Plains Lamesa RR, Ltd. [SLAL]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Electric RR [SERX]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Freight Logistics, Inc. [SFLX]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Indiana Rwy, Inc. [SIND]	1	-	-	-	-	-	1	-	-	-	-	-
Southern Michigan RR Society [SMRS]	-	-	-	-	-	-	-	-	-	-	-	-
Southern New Jersey Lite Rail System [SNJX]	8	-	8	-	-	-	-	-	-	8	-	8
Southern RR Co. Of New Jersey [SRNJ]	1	-	-	-	-	-	1	-	-	-	-	-
Southern Switching Co. [SSC]	-	-	-	-	-	-	-	-	-	-	-	-
Southwest Pennsylvania RR Co. [SWP]	2	-	-	1	-	-	1	-	-	-	-	-
Southwestern RR Co., Inc. [SW]	2	-	2	-	-	-	-	-	-	2	-	2
St. Croix Valley RR Co. [SCXY]	-	-	-	-	-	-	-	-	-	-	-	-
St. Lawrence & Atlantic RR Co. [SLR]	9	-	9	-	-	-	2	-	2	7	-	7
St. Louis Steam Train Association [SLST]	-	-	-	-	-	-	-	-	-	-	-	-
St. Louis, Iron Mountain, & Southern [SLOI]	-	-	-	-	-	-	-	-	-	-	-	-
St. Maries River RR Co. [STMA]	2	-	1	1	-	-	-	-	-	1	-	1
St. Marys RR Co. [SM]	6	-	4	-	-	-	2	-	-	4	-	4
Steamtown National Historic Site [SNCX]	-	-	-	-	-	-	-	-	-	-	-	-
Steelton & Highspire RR [SH]	-	-	-	-	-	-	-	-	-	-	-	-
Stillwater Central RR Co., Inc. [SLWC]	1	-	-	1	-	-	-	-	-	-	-	-
Stockton Term. & Eastern RR [STE]	2	-	2	-	-	-	-	-	-	2	-	2

Highway-Rail Counts Are Excluded From Other Categories

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	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Stone Mountain Park [SMPX]	1	-	1	-	-	-	-	-	-	1	-	1
Stourbridge RR Co. [SBRR]	-	-	-	-	-	-	-	-	-	-	-	-
Strasburg RR Co. [SRC]	7	-	7	-	-	-	-	-	-	7	-	7
Sumpter Valley RR [SUVX]	-	-	-	-	-	-	-	-	-	-	-	-
Sunflour RR, Inc. [SNR]	-	-	-	-	-	-	-	-	-	-	-	-
Sweetwater Central RR [SWCX]	-	-	-	-	-	-	-	-	-	-	-	-
Tacoma Municipal Belt Line Rwy [TMBL]	17	-	11	-	-	-	6	-	-	11	-	11
Tacoma Rail Mountain Division [TRMW]	-	-	-	-	-	-	-	-	-	-	-	-
Talley Rand Term. RR [TTR]	5	-	1	-	-	-	4	-	-	1	-	1
Tennessee Southern RR Co., Inc. [TSRR]	4	-	4	1	-	-	1	-	2	2	-	2
Tennessee Valley RR [TVRM]	-	-	-	-	-	-	-	-	-	-	-	-
Tennken RR Co. Inc. [TKEN]	2	-	-	-	-	-	2	-	-	-	-	-
Terminal Rwy Alabama State Docks [TASD]	19	-	10	9	-	-	-	-	-	10	-	10
Texas & New Mexico RR Co. [TNMR]	-	-	-	-	-	-	-	-	-	-	-	-
Texas & Northern Rwy Co. [TN]	1	-	1	-	-	-	-	-	-	1	-	1
Texas City Term. Rwy Co. [TCT]	3	-	1	1	-	-	2	-	1	-	-	-
Texas Mexican Rwy Co. [TM]	39	1	22	8	-	-	16	-	8	15	1	14
Texas Northwestern Rwy Co. [TXNW]	-	-	-	-	-	-	-	-	-	-	-	-
Texas Pacifico Transportation Limited [TXPF]	-	-	-	-	-	-	-	-	-	-	-	-
Texas Rock Crusher Rwy Co. [TXR]	-	-	-	-	-	-	-	-	-	-	-	-
Texas South-Eastern RR Co. [TSE]	-	-	-	-	-	-	-	-	-	-	-	-
Texas State RR [TSR]	3	-	3	-	-	-	-	-	-	3	-	3
Texas, Gonzales & Northern Rwy Co. [TXGN]	2	-	-	2	-	-	-	-	-	-	-	-
Texas, Oklahoma & Eastern RR Co [TOE]	2	-	2	-	-	-	-	-	-	2	-	2
The Youngstown Belt RR Co. [YB]	-	-	-	-	-	-	-	-	-	-	-	-
Thermal Belt Rwy [TBRY]	-	-	-	-	-	-	-	-	-	-	-	-
Three Notch RR [TNHR]	1	-	1	-	-	-	1	-	1	-	-	-
Timberrock RR Co., Inc. [TIBR]	4	-	2	-	-	-	2	-	-	2	-	2
Tioga Central RR [TIOC]	-	-	-	-	-	-	-	-	-	-	-	-
Tishomingo RR Co., Inc. [TISH]	-	-	-	-	-	-	-	-	-	-	-	-
Toledo Lake Erie & Western RR [TLEW]	-	-	-	-	-	-	-	-	-	-	-	-
Toledo, Peoria & Western Rwy Corp. [TPW]	6	-	4	2	-	-	1	-	1	3	-	3
Tomahawk Rwy, L.P. [TR]	-	-	-	-	-	-	-	-	-	-	-	-
Toppenish Simcoe & Western [TSWR]	-	-	-	-	-	-	-	-	-	-	-	-
Towanda Monroeton Shippers Lifeline, Inc. [TMSS]	-	-	-	-	-	-	-	-	-	-	-	-
TransitAmerica, LLC [TAMX]	-	-	-	-	-	-	-	-	-	-	-	-
Transkentucky Transportation RR, Inc. [TTIS]	-	-	-	-	-	-	-	-	-	-	-	-
Tri-City RR Co. [TCRY]	2	-	2	-	-	-	-	-	-	2	-	2
Tri-county Commuter Rail Authority [TCCX]	31	-	28	-	-	-	7	-	4	24	-	24
Trinity Industries, Inc./Trinity Rail Svcs [TIIX]	-	-	-	-	-	-	-	-	-	-	-	-
Trinity Rwy Express [TRE]	5	-	3	1	-	-	1	-	-	3	-	3
Trona Rwy Co. [TRC]	1	-	1	-	-	-	-	-	-	1	-	1
Tulsa-Sapulpa Union Rwy Co. LLC [TSU]	2	-	1	1	-	-	-	-	-	1	-	1
Turtle Creek Industrial RR, Inc. [TCKR]	-	-	-	-	-	-	-	-	-	-	-	-
Tuscola & Saginaw Bay RR Co., Inc. [TSBY]	14	-	17	-	-	-	8	-	11	6	-	6
Twin City & Western RR [TCWR]	8	2	7	-	-	-	3	2	2	5	-	5
Union County Industrial RR Co. [UCIR]	-	-	-	-	-	-	-	-	-	-	-	-
Union Pacific Metra [UPME]	59	6	49	-	-	-	6	1	1	53	5	48
Upper Merion & Plymouth RR Co. [UMP]	1	-	1	-	-	-	-	-	-	1	-	1
Utah Central Rwy Co. [UCRY]	1	-	-	-	-	-	1	-	-	-	-	-
Utah Rwy Co. [UTAH]	5	-	4	-	-	-	2	-	1	3	-	3
Utah Transit Authority [UTAX]	6	1	1	1	-	-	5	1	1	-	-	-
V and S Rwy, Inc. [VSR]	-	-	-	-	-	-	-	-	-	-	-	-
Valdosta Rwy, L.P. [VR]	-	-	-	-	-	-	-	-	-	-	-	-

Highway-Rail Counts Are Excluded From Other Categories

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2002

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Valley RR Co. [VALE]	-	-	-	-	-	-	-	-	-	-	-	-
Vandalia RR Co. [VRRC]	-	-	-	-	-	-	-	-	-	-	-	-
Ventura County RR Co. [VCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Vermont Rwy, Inc. [VTR]	21	-	19	1	-	-	1	-	-	19	-	19
Virginia Rwy Express [VREX]	8	-	7	1	-	-	-	-	-	7	-	7
Virginia Southern RR [VSRR]	-	-	-	-	-	-	-	-	-	-	-	-
WFEC RR Co. [WFRX]	-	-	-	-	-	-	-	-	-	-	-	-
Wabash Central RR Corp. [WBCR]	-	-	-	-	-	-	-	-	-	-	-	-
Waccamaw Coast Line RR Co. [WCLR]	-	-	-	-	-	-	-	-	-	-	-	-
Walkersville Southern RR, Inc. [WS]	2	-	2	-	-	-	-	-	-	2	-	2
Walking Horse & Eastern RR Co. [WHOE]	-	-	-	-	-	-	-	-	-	-	-	-
Warren & Saline River RR Co. [WSR]	-	-	-	-	-	-	-	-	-	-	-	-
Warren & Trumbull RR Co., The [WTRM]	-	-	-	-	-	-	-	-	-	-	-	-
Washington County RR Corp. [WACR]	-	-	-	-	-	-	-	-	-	-	-	-
Watco Switch Indiana [WI]	1	-	-	-	-	-	1	-	-	-	-	-
Wctu Rwy Co. [WCTR]	-	-	-	-	-	-	-	-	-	-	-	-
Wellsboro & Corning RR Co. [WCOR]	-	-	-	-	-	-	-	-	-	-	-	-
West Isle Line Inc. [WFS]	-	-	-	-	-	-	-	-	-	-	-	-
West Michigan RR Co. [WMI]	-	-	-	-	-	-	-	-	-	-	-	-
West Tennessee RR Corp. [WTNN]	6	-	4	1	-	1	3	-	1	2	-	2
West Texas And Lubbock RR Co. Inc. [WTLR]	-	-	-	-	-	-	-	-	-	-	-	-
West Texas and Lubbock Rwy Co. [WTLC]	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia Central RR [WVC]	-	-	-	-	-	-	-	-	-	-	-	-
Western Kentucky Rwy, LLC [WKRL]	-	-	-	-	-	-	-	-	-	-	-	-
Western Maryland Scenic RR [WMSR]	-	-	-	-	-	-	-	-	-	-	-	-
Western New York & Pennsylvania RR LLC [WNYP]	-	-	-	-	-	-	-	-	-	-	-	-
Western RR Co. [WRRC]	3	-	3	-	-	-	-	-	-	3	-	3
Western Rwy Museum [WRM]	-	-	-	-	-	-	-	-	-	-	-	-
Weyerhaeuser Woods RRs [WCTX]	3	-	3	-	-	-	-	-	-	3	-	3
Whitewater Valley RR [WVRR]	1	-	10	1	-	10	-	-	-	-	-	-
Wichita Term. Asociation [WTA]	-	-	-	-	-	-	-	-	-	-	-	-
Wichita, Tillman & Jackson Rwy Co., Inc. [WTJR]	1	-	1	-	-	-	-	-	-	1	-	1
Wilkes-Barre Connecting RR Co. [WBC]	-	-	-	-	-	-	-	-	-	-	-	-
Willamette & Pacific RR, Inc. [WPRR]	8	-	2	4	-	-	2	-	-	2	-	2
Willamette Valley Rwy Co. [WVR]	-	-	-	-	-	-	-	-	-	-	-	-
Wilmington & Western RR Co. [WWRC]	1	-	1	-	-	-	-	-	-	1	-	1
Wilmington Term. RR Inc. [WTRY]	-	-	-	-	-	-	-	-	-	-	-	-
Winamac Southern Rwy Co. [WSRY]	-	-	-	-	-	-	-	-	-	-	-	-
Winchester & Western RR Co. [WW]	1	-	-	-	-	-	1	-	-	-	-	-
Winston-Salem Southbound Rwy [WSS]	3	-	2	-	-	-	1	-	-	2	-	2
Wiregrass Central RR Co. [WGCR]	1	-	1	-	-	-	1	-	1	-	-	-
Wisconsin & Southern RR Co. [WSOR]	51	-	37	9	-	-	9	-	3	33	-	34
Wyoming & Colorado RR [WYCO]	-	-	-	-	-	-	-	-	-	-	-	-
Yadkin Valley RR Co. [YVRR]	2	-	1	-	-	-	1	-	-	1	-	1
Yolo Shortline RR Co. [YSLR]	5	-	5	-	-	-	-	-	-	5	-	5
York Rwy Co. [YRC]	4	-	2	-	-	-	3	-	1	1	-	1
Youngstown & Austintown RR [YARR]	-	-	-	-	-	-	-	-	-	-	-	-
Yreka Western RR Co. [YW]	1	-	1	-	-	-	-	-	-	1	-	1

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