



U.S. Department of Transportation
Federal Railroad Administration

Railroad Safety Statistics

2009 Annual Report



always expect a train

A railroad crossing sign, featuring a white 'X' over a black background with the words 'RAILROAD' and 'CROSSING' in white.

FOREWORD

The Federal Railroad Administration (FRA) has established an ultimate goal of “zero tolerance” for rail-related accidents, injuries, and fatalities. In pursuit of that goal, significant progress has been made, particularly over the past 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 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 *Railroad Safety Statistics–Annual Report 2009* is intended as a resource for 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 2009.

Furthermore, selected historical data is included to provide a baseline for understanding the railroad industry’s improving safety performance.

Note: Beginning with 2003, the accident/incident databases will remain open for 5 years after the end of the calendar year. Counts of accidents/incidents are not expected to change much after the publication of the annual report. You are encouraged to visit our safety data Web site located at <http://safetydata.fra.dot.gov/officeofsafety> to obtain current data. The counts in this publication were produced on April 8, 2011, and represent data received through December 2009.

Hopefully, 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.

The completeness and accuracy of the information presented in this bulletin is primarily dependent upon the data collection and reporting processes of the Nation’s railroads. 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 inquiries when information is incomplete or inconsistent.

Railroads are required by law to submit accident/incident reports within 30 days after the month to which they pertain. They are also required to update their report if the original information is incomplete or inaccurate.

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 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:

Federal Railroad Administration
Office of Public Affairs, Mailstop 5
1200 New Jersey Avenue SE
Washington, DC 20590
Phone number: (202) 493-6024

This report and additional information about FRA's various programs are available on our Web site at www.fra.dot.gov.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
1	Overview of Accidents/Incidents and Rates	1
2	Current Year Summary of Accidents/Incidents and Rates	21
3	Casualty Reporting	33
4	Employee-On-Duty Casualties	45
5	Train Accidents	61
6	Train Accidents Involving Consists Transporting Hazardous Materials	83
7	Highway-Rail Incidents	89
8	Highway-Rail Incidents at Public Crossings that Involve Motor Vehicles	101
9	Highway-Rail Grade Crossing Inventory	117
10	Trespassers not at Highway-Rail Grade Crossings	125
APPENDIX		
A	Abbreviations	137
B	2009 Accident Prediction and Resource Allocation Procedure	
	Normalizing Constants	139
C	Accidents/Incidents Reported by Group III Railroads, 2009	141

This page intentionally left blank

CHAPTER 1

OVERVIEW OF ACCIDENTS/INCIDENTS AND RATES

Railroads began reporting accidents to the Federal Government following the passage of the Reports Act of 1910. The current definitions describing reportable events were adopted in 1975 and have remained largely unchanged. A number of modifications to the recordkeeping and reporting requirements were put in place in 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 FRA regulations at Title 49 Code of Federal Regulations Part 225 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. This is the term used to describe the entire list of reportable events. These include (1) collisions, derailments, and other events involving the operation of on-track equipment and causing reportable damage above an established threshold; (2) impacts between railroad on-track equipment and highway users at crossings; and (3) 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:

1. 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 F6180.54, Rail Equipment Accident/Incident Report. (The threshold for 2009 was \$8,900.)
2. 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 F6180.57, Highway-Rail Grade Crossing Accident/Incident Report.
3. 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 F6180.55a, 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 grade crossing incident resulting in reportable injuries. An accident of this type would require the completion of both Form FRA F6180.57 and Form FRA F6180.55a. Form FRA F6180.54 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 F6180.55a, 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 F6180.54. The user of this bulletin can exclude these, if desired, since these numbers 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, and 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 1995. Following this are overall totals for the 5-year period beginning with 2004, including summaries by railroad and States for this timeframe. 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 counts for the Union Pacific Railroad.

CONTENTS**CHAPTER 1****OVERVIEW OF ACCIDENTS/INCIDENTS AND RATES**

Tables	Title	Page
1-1	Accident/Incident Historical Summary, Part I	4
1-2	Accident/Incident Historical Summary, Part II	5
1-3	Summary By Type Incident and Type Person	6
1-4	Total Casualties by Railroad	7
1-5	Total Casualties by State	8
1-6	Total Employee-On-Duty Cases by Railroad	9
1-7	Train Accidents By Railroad, Excluding HRC	10
1-8	Train Accidents By State, Excluding HRC	11
1-9	Consists Transporting Hazmat, by Railroad	12
1-10	Consists Transporting Hazmat, by State	13
1-11	Total Highway-Rail Grade Crossing Incidents by Railroad	14
1-12	Total Highway-Rail Grade Crossing Incidents by State	15
1-13	Highway-Rail Grade Crossing Incident Casualties by Railroad	16
1-14	Total Highway-Rail Grade Crossing Incident Casualties by State	17
1-15	Trespasser Casualties By Railroad, not at HRC	18
1-16	Trespasser Casualties By State, not at HRC	19

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

Category	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
---GRAND TOTAL---												
Accidents/incidents	16,501	16,776	16,919	16,086	14,403	14,370	14,522	14,311	13,796	13,907	12,896	11,142
Rate 1/	24.16	23.55	23.41	22.61	19.77	19.33	18.86	18.14	17.05	17.62	16.76	16.79
Deaths	1,008	932	937	971	951	865	891	884	903	851	804	695
Nonfatal conditions	11,459	11,700	11,643	10,985	11,103	9,264	9,194	9,550	8,794	9,639	9,010	7,925
---TRAIN ACCIDENTS-----												
Rate 2/	3.77	3.89	4.13	4.25	3.76	4.06	4.40	4.14	3.70	3.41	3.21	2.86
Total number	2,575	2,768	2,983	3,023	2,738	3,019	3,385	3,266	2,995	2,692	2,474	1,897
Deaths	4	9	10	6	15	4	13	33	6	9	27	4
Injuries	129	130	275	310	1,884	232	346	787	220	307	324	120
Collisions	168	205	238	220	192	198	237	274	201	210	191	133
Derailments	1,757	1,961	2,112	2,234	1,989	2,133	2,435	2,305	2,194	1,934	1,786	1,358
On main line	934	858	976	1,025	886	976	1,033	1,021	980	854	767	618
On yard track	1,306	1,531	1,619	1,569	1,478	1,676	1,928	1,816	1,581	1,401	1,377	998
Yard track rate 3/	15.60	17.51	18.21	18.30	18.25	20.53	22.97	20.61	17.75	13.47	13.50	12.26
Other track rate 4/	2.12	1.98	2.15	2.32	1.95	2.03	2.12	2.07	1.96	1.88	1.64	1.54
Track caused	900	995	1,035	1,121	941	974	1,055	1,082	1,073	932	858	663
Track caused rate	1.32	1.40	1.43	1.58	1.29	1.31	1.37	1.37	1.33	1.18	1.11	1.00
Human factor caused	971	1,031	1,147	1,035	1,050	1,230	1,353	1,270	1,067	1,046	906	650
Equipment caused	307	321	372	427	367	361	429	369	351	326	319	266
Signal caused	38	49	70	42	50	58	70	64	50	49	52	50
Equip Dmg (millions \$)	162.561	164.654	169.172	200.752	173.982	198.698	225.462	226.048	213.342	217.162	202.233	153.503
Track Dmg (millions \$)	71.337	80.435	94.040	113.713	92.550	99.569	100.482	113.823	109.180	97.563	96.805	68.600
Hazmat												
Consists releasing	42	41	35	32	31	30	31	39	30	46	22	22
Cars releasing	66	75	75	57	56	41	49	52	71	76	38	44
People evacuated	2,058	996	5,258	52,620	5,438	2,260	5,938	7,636	3,682	11,698	4,374	3,160
---HIGHWAY-RAIL-----												
Rate 5/	5.14	4.90	4.84	4.55	4.22	4.00	4.01	3.89	3.63	3.52	3.15	2.90
Incidents	3,508	3,489	3,502	3,237	3,077	2,977	3,085	3,066	2,941	2,776	2,428	1,925
Deaths	431	402	425	421	357	334	371	359	369	339	290	247
Injuries	1,303	1,396	1,219	1,157	999	1,035	1,094	1,053	1,070	1,058	988	738
---OTHER INCIDENTS-----												
Incidents 6/	10,418	10,519	10,434	9,826	8,588	8,374	8,052	7,979	7,860	8,439	7,994	7,320
Deaths	573	521	502	544	579	527	507	492	528	503	487	444
Injuries	10,027	10,174	10,149	9,518	8,220	7,997	7,754	7,710	7,504	8,274	7,698	7,067

1. Total accident/incident rate of all reported events * 1,000,000 / (train miles)
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	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EMPLOYEE COUNTS												
All accidents/incidents												
Rate 1/	3.27	3.39	3.44	3.30	2.94	2.78	2.64	2.44	2.18	2.26	2.10	2.08
Deaths	27	31	24	22	20	19	25	25	16	17	26	16
Nonfatal conditions	8,398	8,622	8,423	7,815	6,644	6,258	6,022	5,822	5,275	5,449	4,989	4,463
Cases with days absent	5,359	5,779	5,788	5,409	4,642	4,401	4,071	3,967	3,496	3,719	3,320	2,995
Percent of total	63.61	66.79	68.52	69.02	69.66	70.11	67.32	67.85	66.07	68.04	66.20	66.87
Sprains/strains	3,945	4,280	4,357	4,025	3,353	3,030	2,848	2,611	2,428	2,558	2,267	2,021
Occupational illnesses	171	141	129	167	120	182	253	287	275	230	273	226
PASSENGERS ON TRAINS												
Rate 2/	3.69	3.33	4.10	4.78	5.83	4.69	4.59	6.17	5.78	8.85	7.40	6.68
Deaths	4	14	4	3	7	3	3	16	2	5	24	3
Injuries	535	481	658	746	877	727	703	957	935	1,517	1,321	1,166
IN TRAIN ACCS/ HIGHWAY-RAIL												
Deaths	2	11	0	1	7	1	1	12	0	0	24	0
Rate	0.01	0.07	0.00	0.01	0.05	0.01	0.01	0.08	0.00	0.00	0.13	0.00
Injuries	30	54	95	149	304	152	117	336	157	253	329	94
TRESPASSER COUNTS												
Rate 3/	1.54	1.30	1.21	1.29	1.28	1.21	1.14	1.11	1.23	1.11	1.16	1.15
Deaths	536	479	463	511	540	498	472	458	511	470	457	417
Injuries	513	445	414	404	395	398	406	420	481	407	433	345
OPERATIONS(millions)												
Total train miles 4/	682.895	712.453	722.877	711.550	728.674	743.331	770.152	789.034	809.223	789.174	769.642	663.633
Yard switching miles 5/	83.692	87.459	88.919	85.747	81.002	81.630	83.935	88.094	89.050	104.040	101.985	81.415
Employee hours 6/	514.870	509.997	490.926	475.120	454.102	451.148	458.399	478.471	485.786	483.565	478.194	429.650
Passengers carried 7/	439.958	464.885	501.750	517.249	503.930	494.264	513.293	523.434	549.346	581.722	600.383	581.653

1. Total accident/incident rate of all reported events * 1,000,000 / (train miles)
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 1-3 SUMMARY BY TYPE INCIDENT AND TYPE PERSON

Train Accidents Excluding Highway-Rail Crossing (HRC) Incidents

Type Person	Fatalities					Nonfatal Conditions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
A - Worker on duty(rr empl)	7	-	6	2	2	125	103	91	91	64
B - Employee not on duty	-	-	-	-	-	9	-	-	-	1
C - Passenger on train	12	-	-	24	-	303	62	181	228	34
D - Nontrespasser	1	-	1	-	1	1	2	2	1	17
E - Trespasser	4	4	2	1	1	1	4	3	1	-
F - Worker on duty(contractor)	-	2	-	-	-	5	4	1	-	1
G - Contractor(other)	-	-	-	-	-	-	-	3	2	-
J - Nontrespasser, off rr prop	9	-	-	-	-	343	45	26	1	3
--Total...	33	6	9	27	4	787	220	307	324	120

Highway-Rail Crossing (HRC) Incidents

Type Person	Fatalities					Nonfatal Conditions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
A - Worker on duty(rr empl)	2	4	1	3	-	111	96	105	75	71
B - Employee not on duty	-	-	-	-	-	3	2	1	1	-
C - Passenger on train	-	-	-	-	-	33	95	72	101	60
D - Nontrespasser	226	233	183	154	113	633	635	562	527	361
E - Trespasser	130	130	154	133	132	267	226	280	268	235
F - Worker on duty(contractor)	-	-	-	-	-	-	-	5	-	2
G - Contractor(other)	-	-	-	-	-	2	-	25	3	1
J - Nontrespasser, off rr prop	1	2	1	-	2	4	16	8	13	8
--Total...	359	369	339	290	247	1,053	1,070	1,058	988	738

Other Incidents, Excluding HRC

Type Person	Fatalities					Nonfatal Conditions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
A - Worker on duty(rr empl)	16	12	10	21	14	5,586	5,076	5,253	4,823	4,328
B - Employee not on duty	-	-	-	-	-	160	167	176	159	147
C - Passenger on train	4	2	5	-	3	621	778	1,264	992	1,072
D - Nontrespasser	12	2	12	5	7	482	575	745	844	805
E - Trespasser	454	507	468	456	416	419	477	404	432	345
F - Worker on duty(contractor)	2	2	-	3	1	175	194	202	199	141
G - Contractor(other)	3	3	5	2	3	233	209	208	234	212
H - Worker on duty(volunteer)	-	-	-	-	-	1	3	6	4	5
I - Volunteer(other)	-	-	-	-	-	-	3	2	3	1
J - Nontrespasser, off rr prop	1	-	3	-	-	33	22	14	8	11
--Total...	492	528	503	487	444	7,710	7,504	8,274	7,698	7,067

GRAND TOTAL

Type Person	Fatalities					Nonfatal Conditions				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
A - Worker on duty(rr empl)	25	16	17	26	16	5,822	5,275	5,449	4,989	4,463
B - Employee not on duty	-	-	-	-	-	172	169	177	160	148
C - Passenger on train	16	2	5	24	3	957	935	1,517	1,321	1,166
D - Nontrespasser	239	235	196	159	121	1,116	1,212	1,309	1,372	1,183
E - Trespasser	588	641	624	590	549	687	707	687	701	580
F - Worker on duty(contractor)	2	4	-	3	1	180	198	208	199	144
G - Contractor(other)	3	3	5	2	3	235	209	236	239	213
H - Worker on duty(volunteer)	-	-	-	-	-	1	3	6	4	5
I - Volunteer(other)	-	-	-	-	-	-	3	2	3	1
J - Nontrespasser, off rr prop	11	2	4	-	2	380	83	48	22	22
--Total...	884	903	851	804	695	9,550	8,794	9,639	9,010	7,925

TABLE 1-4 TOTAL CASUALTIES BY RAILROAD

Railroads	Fatalities					Nonfatal				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Alaska RR Corp.	1	-	-	1	3	29	23	31	73	81
Amtrak	122	118	129	119	139	1,245	1,327	1,590	1,539	1,427
Burlington Northern Santa Fe	151	144	123	104	123	1,289	1,170	1,244	1,212	996
Buffalo & Pittsburg	-	1	-	1	-	4	5	5	-	-
Belt Rwy Of Chicago	-	-	-	-	-	11	15	12	10	15
Canadian National	24	27	20	32	13	294	259	293	246	201
Canadian Pacific	14	6	14	6	9	156	135	182	142	150
Conrail Shared Assets	1	1	-	-	1	28	36	40	37	30
CSX Transportation	116	140	130	122	101	793	758	649	658	527
Florida East Coast	26	18	20	12	11	21	19	36	16	15
Guilford Rail System	2	2	1	-	3	15	12	25	11	11
Other Railroads	35	32	33	38	27	886	869	817	788	636
Indiana Harbor Belt	1	1	1	-	-	17	18	14	18	7
Kansas City Southern	13	13	17	12	15	141	118	120	97	87
Long Island Rail Road	9	3	9	8	6	312	372	534	523	517
MD Assn. of Rail Comm	1	2	1	1	1	8	8	19	29	34
Mass Bay Transit Auth.	5	9	12	9	5	94	137	81	251	172
Metro North Commuter	3	2	9	2	5	293	262	256	236	274
Montana Rail Link	3	-	-	1	2	40	48	35	33	35
Northern IN Comm Trans	-	-	4	-	2	17	20	22	13	17
Northeast IL Reg Comm	16	8	15	19	10	439	276	318	255	274
New Jersey Transit Rail	9	10	14	13	21	201	219	174	210	213
Norfolk Southern Corp.	139	118	112	131	83	982	623	648	581	534
Port Auth Trans Hudson	-	-	-	-	-	158	145	205	145	122
Peninsula Comm San Mateo Cnty	4	9	3	4	4	26	26	33	39	27
Port Terminal RR Assn	-	-	-	-	-	28	10	47	23	6
Southern CA Reg Rail Auth.	17	9	9	30	3	103	21	25	78	29
Southeastern PA Trans.	5	2	2	4	4	343	351	576	366	404
Term RR Assn Of St. Louis	-	-	-	-	-	2	3	2	3	7
Union Pacific	167	227	172	134	103	1,538	1,489	1,580	1,367	1,063
Union RR (Pittsburgh)	-	-	-	-	-	17	9	5	7	7
Wheeling & Lake Erie	-	1	1	1	1	20	11	21	4	7
Total	884	903	851	804	695	9,550	8,794	9,639	9,010	7,925

TABLE 1-5 TOTAL CASUALTIES BY STATE

States	Fatalities					Nonfatal					5 year Total	
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Kld	Nonf
Alabama	25	21	20	17	12	152	158	143	130	105	95	688
Alaska	1	-	-	1	3	55	40	51	89	104	5	339
Arizona	23	27	12	14	14	116	119	113	115	83	90	546
Arkansas	15	15	18	10	9	214	150	170	139	117	67	790
California	120	122	125	111	76	704	574	650	702	508	554	3,138
Colorado	9	17	5	14	3	167	157	134	124	125	48	707
Connecticut	6	2	8	6	4	105	114	115	87	104	26	525
Delaware	2	2	2	1	2	61	62	55	55	38	9	271
Dist Of Columbia	2	-	-	1	1	107	153	108	104	79	4	551
Florida	51	38	54	51	29	227	199	244	166	166	223	1,002
Georgia	27	16	33	23	16	166	178	175	148	154	115	821
Idaho	2	5	3	3	4	54	54	58	54	39	17	259
Illinois	54	53	64	71	41	988	833	1,071	873	814	283	4,579
Indiana	36	23	34	28	27	194	207	204	192	168	148	965
Iowa	10	8	12	7	10	166	124	153	160	101	47	704
Kansas	10	24	14	14	8	170	150	186	154	111	70	771
Kentucky	14	20	16	12	6	120	127	107	110	87	68	551
Louisiana	30	23	22	22	21	178	210	180	159	132	118	859
Maine	-	5	1	-	1	20	24	31	16	12	7	103
Maryland	12	11	10	8	5	71	74	106	108	89	46	448
Massachusetts	7	16	15	16	12	168	186	139	331	238	66	1,062
Michigan	11	23	11	11	20	122	142	129	137	111	76	641
Minnesota	11	20	12	11	16	152	139	176	175	122	70	764
Mississippi	22	17	9	18	14	106	86	83	119	82	80	476
Missouri	21	20	12	20	20	224	163	197	177	162	93	923
Montana	9	5	3	5	4	89	103	120	131	126	26	569
Nebraska	17	8	8	3	11	191	200	198	197	159	47	945
Nevada	5	6	4	4	-	30	44	30	33	19	19	156
New Hampshire	-	-	-	1	-	4	6	4	4	3	1	21
New Jersey	17	20	16	21	25	393	388	403	409	363	99	1,956
New Mexico	12	9	16	12	15	73	61	63	59	52	64	308
New York	27	16	24	24	29	770	847	993	968	970	120	4,548
North Carolina	24	29	27	27	23	105	114	96	125	111	130	551
North Dakota	8	2	4	3	3	55	51	56	74	59	20	295
Ohio	23	41	31	27	32	258	217	238	173	135	154	1,021
Oklahoma	11	21	13	12	11	102	100	114	87	64	68	467
Oregon	4	8	7	8	5	106	109	118	94	75	32	502
Pennsylvania	27	21	28	32	33	604	593	834	617	641	141	3,289
Rhode Island	-	2	2	1	3	13	18	12	16	6	8	65
South Carolina	29	21	17	14	12	370	80	77	52	56	93	635
South Dakota	3	2	1	1	4	31	34	24	31	25	11	145
Tennessee	18	22	13	25	6	139	118	108	118	107	84	590
Texas	72	93	83	53	56	683	669	689	555	478	357	3,074
Utah	3	2	-	2	3	54	42	59	44	45	10	244
Vermont	-	-	-	-	2	21	14	23	30	19	2	107
Virginia	5	7	5	9	11	154	132	133	135	128	37	682
Washington	20	21	16	14	17	214	170	196	174	179	88	933
West Virginia	6	9	7	6	9	71	60	62	66	89	37	348
Wisconsin	19	10	8	9	4	138	114	120	100	101	50	573
Wyoming	4	-	6	1	3	74	85	91	94	64	14	408
Total	884	903	851	804	695	9,549	8,792	9,639	9,010	7,925	4,137	44,915

TABLE 1-6 TOTAL EMPLOYEE-ON-DUTY CASES BY RAILROAD

Railroads	2005		2006		2007		2008		2009	
	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate
Alaska RR Corp.	29	3.65	22	2.70	30	3.74	73	9.15	81	10.99
Amtrak	651	3.54	594	3.29	487	2.68	530	2.88	441	2.32
Burlington Northern Santa Fe	775	1.89	664	1.54	854	2.03	845	2.05	763	2.10
Buffalo & Pittsburg	2	0.97	3	1.44	5	2.25	-	-	-	-
Belt Rwy Of Chicago	8	1.57	14	2.92	12	2.61	9	1.95	14	3.54
Canadian National	240	2.81	196	2.36	219	2.73	178	2.20	143	2.13
Canadian Pacific	124	2.57	107	2.30	146	3.14	123	2.65	119	2.91
Conrail Shared Assets	11	0.94	13	1.16	19	1.74	17	1.51	15	1.50
CSX Transportation	608	1.79	521	1.51	424	1.27	407	1.27	337	1.22
Florida East Coast	10	1.23	5	0.61	14	1.78	2	0.30	9	1.67
Guilford Rail System	12	1.33	12	1.39	23	2.61	10	1.15	10	1.29
Other Railroads	693	19.35	676	18.73	622	6.09	600	14.52	477	12.62
Indiana Harbor Belt	15	1.83	14	1.77	12	1.48	16	1.74	7	1.17
Kansas City Southern	80	2.23	53	1.56	57	1.64	39	1.09	51	1.65
Long Island Rail Road	219	3.48	181	2.81	170	2.52	159	2.22	188	2.65
MD Assn. of Rail Comm	6	2.37	2	0.75	1	0.37	1	0.37	1	0.38
Mass Bay Transit Auth.	75	3.84	74	4.25	59	3.02	73	3.61	83	4.19
Metro North Commuter	202	3.38	187	3.06	179	2.96	133	2.12	172	2.73
Montana Rail Link	34	3.38	45	4.34	31	3.00	32	2.96	31	3.18
Northern IN Comm Trans	15	4.82	3	0.97	5	1.60	7	2.17	5	1.56
Northeast IL Reg Comm	78	1.84	91	2.26	101	2.45	85	2.04	82	1.81
New Jersey Transit Rail	147	3.22	154	3.30	117	2.44	124	2.48	131	2.69
Norfolk Southern Corp.	398	1.24	339	1.06	377	1.18	302	0.95	299	1.09
Port Auth Trans Hudson	86	8.55	89	8.74	114	11.02	99	9.11	90	7.97
Peninsula Comm San Mateo Cnty	9	2.36	8	2.09	12	3.00	16	3.74	12	2.79
Port Terminal RR Assn	28	8.13	9	2.80	22	6.23	22	6.59	6	2.24
Southern CA Reg Rail Auth.	18	5.32	7	2.11	4	1.22	4	1.16	6	1.67
Southeastern PA Trans.	185	11.40	195	11.43	271	15.82	192	11.00	206	11.58
Term RR Assn Of St. Louis	2	0.68	3	1.01	2	0.74	1	0.39	7	3.49
Union Pacific	1,060	2.15	993	1.96	1,065	2.09	907	1.85	681	1.60
Union RR (Pittsburgh)	17	4.32	9	2.27	5	1.17	7	1.74	7	2.12
Wheeling & Lake Erie	10	2.23	8	1.79	7	1.68	2	0.49	5	1.38

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

TABLE 1-7 TRAIN ACCIDENTS BY RAILROAD, EXCLUDING HRC

Railroads	2005		2006		2007		2008		2009	
	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate	Cnt	Rate
Alaska RR Corp.	2	1.15	1	0.65	1	0.66	2	1.39	7	4.93
Amtrak	112	2.96	103	2.70	84	2.12	95	2.39	86	2.07
Burlington Northern Santa Fe	677	3.50	659	3.29	628	3.30	600	3.22	407	2.60
Buffalo & Pittsburg	6	16.17	3	6.47	4	8.24	1	2.16	4	10.25
Belt Rwy Of Chicago	23	44.39	20	39.95	15	30.98	13	27.44	12	33.16
Canadian National	83	3.63	108	4.85	110	5.20	93	4.51	67	4.15
Canadian Pacific	94	6.28	56	3.68	61	4.12	59	4.11	39	3.25
Conrail Shared Assets	42	13.62	29	9.76	40	13.29	25	8.32	32	12.08
CSX Transportation	495	4.53	408	3.73	346	3.14	324	3.02	264	2.97
Florida East Coast	15	5.81	12	4.52	11	4.65	2	0.88	1	0.55
Guilford Rail System	6	4.22	10	6.87	3	1.88	4	2.73	4	3.33
Other Railroads	356	33.94	393	39.22	374	20.65	318	36.32	291	29.56
Indiana Harbor Belt	19	12.69	14	9.69	13	8.74	18	12.29	9	8.47
Kansas City Southern	124	14.18	86	7.40	90	7.90	69	6.07	48	4.74
Long Island Rail Road	12	1.46	9	1.07	5	0.59	13	1.51	15	1.75
MD Assn. of Rail Comm	2	1.66	3	2.51	-	-	3	2.50	2	1.74
Mass Bay Transit Auth.	-	-	1	0.25	4	0.99	3	0.71	1	0.24
Metro North Commuter	40	4.46	52	5.60	39	4.09	23	2.36	24	2.44
Montana Rail Link	15	3.90	22	5.37	11	2.77	27	6.72	8	2.42
Northern IN Comm Trans	-	-	2	2.65	3	3.92	2	2.61	-	-
Northeast IL Reg Comm	6	0.65	4	0.42	10	1.04	6	0.63	5	0.55
New Jersey Transit Rail	30	3.17	34	3.57	38	3.80	29	2.71	37	3.51
Norfolk Southern Corp.	335	3.29	258	2.45	250	2.44	253	2.50	225	2.63
Port Auth Trans Hudson	3	1.38	1	0.47	7	3.45	2	0.99	3	1.51
Peninsula Comm San Mateo Cnty	3	2.17	3	2.11	2	1.40	1	0.69	1	0.70
Port Terminal RR Assn	5	3.91	7	5.47	8	6.25	3	2.34	4	3.13
Southern CA Reg Rail Auth.	8	3.72	2	0.87	-	-	5	2.04	1	0.40
Southeastern PA Trans.	9	1.76	9	1.72	17	3.28	7	1.34	13	2.46
Term RR Assn Of St. Louis	17	23.94	14	20.37	8	12.23	6	9.75	3	7.35
Union Pacific	975	4.87	903	4.42	737	3.77	648	3.54	449	3.00
Union RR (Pittsburgh)	3	24.46	5	39.31	2	14.73	-	-	6	59.57
Wheeling & Lake Erie	14	11.95	16	12.19	12	9.39	15	14.31	6	6.39

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

TABLE 1-8 TRAIN ACCIDENTS BY STATE, EXCLUDING HRC

States	2005		2006		2007		2008		2009		5 year Total	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alabama	72	2.2	82	2.7	70	2.6	66	2.7	52	2.7	342	2.6
Alaska	2	0.1	1	0.0	1	0.0	2	0.1	7	0.4	13	0.1
Arizona	35	1.1	36	1.2	23	0.9	30	1.2	17	0.9	141	1.1
Arkansas	86	2.6	78	2.6	58	2.2	65	2.6	43	2.3	330	2.5
California	199	6.1	191	6.4	155	5.8	120	4.9	100	5.3	765	5.7
Colorado	65	2.0	64	2.1	74	2.7	45	1.8	35	1.8	283	2.1
Connecticut	37	1.1	34	1.1	21	0.8	15	0.6	17	0.9	124	0.9
Delaware	6	0.2	7	0.2	7	0.3	4	0.2	4	0.2	28	0.2
Dist Of Columbia	13	0.4	13	0.4	8	0.3	20	0.8	7	0.4	61	0.5
Florida	62	1.9	46	1.5	46	1.7	22	0.9	14	0.7	190	1.4
Georgia	97	3.0	91	3.0	63	2.3	56	2.3	66	3.5	373	2.8
Idaho	29	0.9	31	1.0	18	0.7	25	1.0	16	0.8	119	0.9
Illinois	248	7.6	236	7.9	219	8.1	189	7.6	179	9.4	1,071	8.0
Indiana	95	2.9	65	2.2	78	2.9	67	2.7	42	2.2	347	2.6
Iowa	76	2.3	82	2.7	73	2.7	68	2.7	50	2.6	349	2.6
Kansas	109	3.3	99	3.3	87	3.2	90	3.6	60	3.2	445	3.3
Kentucky	49	1.5	48	1.6	43	1.6	39	1.6	29	1.5	208	1.6
Louisiana	86	2.6	92	3.1	92	3.4	74	3.0	46	2.4	390	2.9
Maine	5	0.2	13	0.4	9	0.3	6	0.2	6	0.3	39	0.3
Maryland	41	1.3	32	1.1	19	0.7	27	1.1	28	1.5	147	1.1
Massachusetts	22	0.7	19	0.6	16	0.6	18	0.7	16	0.8	91	0.7
Michigan	36	1.1	41	1.4	37	1.4	34	1.4	16	0.8	164	1.2
Minnesota	67	2.1	57	1.9	63	2.3	65	2.6	44	2.3	296	2.2
Mississippi	50	1.5	36	1.2	37	1.4	34	1.4	22	1.2	179	1.3
Missouri	73	2.2	63	2.1	63	2.3	81	3.3	51	2.7	331	2.5
Montana	36	1.1	42	1.4	24	0.9	52	2.1	14	0.7	168	1.3
Nebraska	122	3.7	92	3.1	101	3.8	93	3.8	72	3.8	480	3.6
Nevada	14	0.4	19	0.6	7	0.3	13	0.5	5	0.3	58	0.4
New Hampshire	2	0.1	-	-	1	0.0	-	-	1	0.1	4	0.0
New Jersey	77	2.4	53	1.8	76	2.8	48	1.9	64	3.4	318	2.4
New Mexico	42	1.3	30	1.0	21	0.8	22	0.9	15	0.8	130	1.0
New York	106	3.2	100	3.3	80	3.0	76	3.1	66	3.5	428	3.2
North Carolina	29	0.9	31	1.0	26	1.0	27	1.1	25	1.3	138	1.0
North Dakota	25	0.8	21	0.7	28	1.0	25	1.0	19	1.0	118	0.9
Ohio	119	3.6	91	3.0	99	3.7	98	4.0	76	4.0	483	3.6
Oklahoma	69	2.1	63	2.1	71	2.6	63	2.5	41	2.2	307	2.3
Oregon	69	2.1	64	2.1	39	1.4	31	1.3	24	1.3	227	1.7
Pennsylvania	108	3.3	102	3.4	83	3.1	75	3.0	79	4.2	447	3.4
Rhode Island	1	0.0	3	0.1	1	0.0	5	0.2	3	0.2	13	0.1
South Carolina	26	0.8	17	0.6	21	0.8	22	0.9	18	0.9	104	0.8
South Dakota	25	0.8	10	0.3	15	0.6	14	0.6	9	0.5	73	0.5
Tennessee	69	2.1	70	2.3	60	2.2	68	2.7	53	2.8	320	2.4
Texas	395	12.1	357	11.9	326	12.1	266	10.8	196	10.3	1,540	11.6
Utah	31	0.9	37	1.2	37	1.4	20	0.8	15	0.8	140	1.1
Vermont	7	0.2	3	0.1	2	0.1	3	0.1	2	0.1	17	0.1
Virginia	55	1.7	53	1.8	41	1.5	40	1.6	32	1.7	221	1.7
Washington	67	2.1	59	2.0	55	2.0	50	2.0	37	2.0	268	2.0
West Virginia	42	1.3	30	1.0	24	0.9	24	1.0	17	0.9	137	1.0
Wisconsin	31	0.9	30	1.0	27	1.0	35	1.4	19	1.0	142	1.1
Wyoming	39	1.2	61	2.0	47	1.7	42	1.7	28	1.5	217	1.6
Total	3,266	100.0	2,995	100.0	2,692	100.0	2,474	100.0	1,897	100.0	13,324	100.0

TABLE 1-9 CONSISTS TRANSPORTING HAZMAT, BY RAILROAD

Railroads	2005			2006			2007			2008			2009		
	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls
Alaska RR Corp.	2	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Amtrak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burlington Northern Santa Fe	318	133	10	312	141	7	270	108	10	316	121	6	190	72	7
Buffalo & Pittsburg	1	1	-	1	-	-	1	-	-	-	-	-	2	1	-
Belt Rwy Of Chicago	1	-	-	7	4	1	2	2	-	4	4	-	2	2	-
Canadian National	21	15	2	43	30	1	47	25	3	49	22	-	35	21	3
Canadian Pacific	21	6	-	20	6	1	11	7	-	14	4	1	13	7	-
Conrail Shared Assets	4	2	-	3	-	-	8	6	-	6	4	-	8	5	1
CSX Transportation	157	54	5	141	58	6	127	57	14	129	44	2	105	42	-
Florida East Coast	3	-	-	6	1	-	3	-	-	1	-	-	2	1	1
Guilford Rail System	5	5	-	6	1	-	1	1	-	2	1	1	-	-	-
Other Railroads	58	29	4	70	46	2	59	34	5	38	24	-	46	32	3
Indiana Harbor Belt	4	1	-	4	1	-	3	2	-	8	3	-	3	1	-
Kansas City Southern	51	22	-	20	10	-	40	21	1	11	8	-	13	6	-
Long Island Rail Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD Assn. of Rail Comm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass Bay Transit Auth.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metro North Commuter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana Rail Link	7	2	-	7	5	1	4	4	-	7	4	1	3	-	-
Northern IN Comm Trans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northeast IL Reg Comm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey Transit Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norfolk Southern Corp.	59	24	5	49	16	6	37	16	7	31	9	5	34	18	4
Port Auth Trans Hudson	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peninsula Comm San Mateo Cnty	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Port Terminal RR Assn	1	-	-	1	-	-	4	2	-	-	-	-	3	1	-
Southern CA Reg Rail Auth.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southeastern PA Trans.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Term RR Assn Of St. Louis	1	1	-	2	2	-	-	-	-	1	1	-	1	-	-
Union Pacific	221	99	12	200	87	5	199	87	6	190	75	5	149	50	3
Union RR (Pittsburgh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheeling & Lake Erie	3	1	1	5	3	-	4	-	-	3	2	1	-	-	-
Total	938	396	39	897	411	30	820	372	46	810	326	22	610	260	22

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

TABLE 1-10 CONSISTS TRANSPORTING HAZMAT, BY STATE

States	2005			2006			2007			2008			2009		
	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls	Cnt	Dmg	Rls
Alabama	20	6	-	38	18	3	22	10	2	27	10	1	18	11	-
Alaska	2	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Arizona	18	6	-	24	13	2	14	9	2	12	8	-	10	3	-
Arkansas	33	12	3	25	11	-	17	8	-	22	10	1	13	2	-
California	37	19	2	44	24	3	41	24	4	44	18	1	43	19	1
Colorado	17	14	-	17	10	1	18	6	1	18	6	-	10	5	1
Connecticut	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-
Dist Of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Florida	13	4	1	12	4	-	11	5	1	4	3	-	8	3	1
Georgia	21	7	1	23	10	2	18	4	2	19	6	2	25	11	1
Idaho	6	-	-	11	6	-	8	4	-	8	5	-	5	1	-
Illinois	61	23	3	72	29	2	55	16	1	66	28	-	53	28	4
Indiana	16	10	1	11	3	1	19	6	1	25	6	-	8	2	-
Iowa	22	6	-	9	1	-	21	9	-	18	4	-	24	8	1
Kansas	33	14	1	43	18	2	43	18	1	37	11	2	10	4	-
Kentucky	9	4	-	12	1	-	11	5	4	9	5	-	4	1	-
Louisiana	43	19	1	44	25	1	53	26	1	39	19	1	19	8	1
Maine	5	3	1	11	5	-	3	-	-	5	1	-	3	2	1
Maryland	6	4	-	7	3	-	3	1	-	1	-	-	8	4	-
Massachusetts	3	2	-	5	4	-	2	1	-	2	1	1	2	-	-
Michigan	8	4	-	7	5	-	6	3	-	5	2	-	4	-	-
Minnesota	29	10	-	17	8	1	21	6	1	26	14	2	14	7	1
Mississippi	25	13	1	11	7	-	21	9	1	14	5	-	7	6	-
Missouri	24	10	1	16	8	-	20	8	2	15	5	1	15	5	1
Montana	14	4	-	22	10	1	7	5	-	17	7	1	5	1	-
Nebraska	27	14	-	10	5	-	14	5	-	28	13	-	23	8	-
Nevada	3	3	-	2	2	-	2	1	-	4	1	-	5	3	-
New Hampshire	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	6	2	-	4	2	-	10	7	-	7	4	-	7	4	1
New Mexico	31	18	1	12	5	-	11	5	-	13	8	1	8	4	-
New York	28	14	3	25	8	-	19	13	2	27	11	-	9	5	-
North Carolina	16	3	-	11	1	-	7	3	1	13	4	1	12	8	2
North Dakota	11	5	-	6	3	-	8	4	-	9	4	1	9	4	1
Ohio	32	10	1	28	16	2	23	11	4	24	8	2	14	6	-
Oklahoma	21	9	2	35	9	-	28	12	1	23	10	2	16	3	-
Oregon	9	7	1	16	7	-	10	2	-	8	5	-	9	3	-
Pennsylvania	22	8	1	20	8	4	12	7	1	7	3	1	15	10	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	12	2	1	3	3	-	8	3	-	6	3	-	9	3	-
South Dakota	2	-	-	2	1	-	3	2	-	1	-	-	1	-	-
Tennessee	28	6	1	34	14	1	25	9	3	32	14	-	21	8	1
Texas	160	70	9	138	71	4	149	77	6	120	43	-	95	37	3
Utah	4	3	1	5	3	-	7	4	-	5	3	-	4	3	-
Vermont	2	-	-	1	1	-	2	2	2	-	-	-	-	-	-
Virginia	2	1	-	10	2	-	6	3	1	3	1	1	6	4	-
Washington	31	13	1	34	17	-	20	10	-	23	10	-	18	9	-
West Virginia	2	2	-	1	1	-	3	3	-	2	1	-	3	-	-
Wisconsin	10	3	-	10	4	-	7	2	-	14	3	-	10	2	-
Wyoming	10	5	1	8	4	-	12	4	1	8	3	-	6	4	1
Total	938	396	39	897	411	30	820	372	46	810	326	22	610	260	22

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

Railroads	At Public Crossing					At Private Crossing				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Alaska RR Corp.	2	1	1	1	4	-	-	-	-	-
Amtrak	108	110	118	118	115	22	23	18	19	14
Burlington Northern Santa Fe	383	337	292	256	207	78	57	61	46	50
Buffalo & Pittsburg	4	2	2	3	-	-	1	2	1	-
Belt Rwy Of Chicago	-	-	-	-	-	1	1	1	-	-
Canadian National	163	131	128	156	97	25	22	18	20	8
Canadian Pacific	54	53	51	47	39	12	6	12	4	6
Conrail Shared Assets	31	26	22	19	17	1	-	-	1	2
CSX Transportation	456	429	397	322	286	63	67	67	71	46
Florida East Coast	29	33	36	10	10	-	-	-	-	-
Guilford Rail System	-	-	1	6	1	-	-	-	1	1
Other Railroads	300	290	302	257	234	47	59	52	34	43
Indiana Harbor Belt	11	4	4	7	2	-	1	2	1	1
Kansas City Southern	100	99	68	76	48	9	5	12	5	6
Long Island Rail Road	14	10	11	11	14	-	-	-	-	1
MD Assn. of Rail Comm	-	-	2	1	3	-	-	-	-	-
Mass Bay Transit Auth.	3	6	3	2	1	1	-	-	1	-
Metro North Commuter	2	2	1	3	1	-	1	1	1	1
Montana Rail Link	4	4	6	3	3	3	5	1	5	2
Northern IN Comm Trans	8	5	6	5	4	-	-	-	-	-
Northeast IL Reg Comm	22	23	16	17	13	-	2	-	-	1
New Jersey Transit Rail	7	8	10	9	14	-	2	-	-	1
Norfolk Southern Corp.	423	394	362	341	232	78	86	87	67	45
Peninsula Comm San Mateo Cnty	2	11	7	7	10	-	1	-	1	1
Port Terminal RR Assn	-	2	3	3	-	4	-	3	2	1
Southern CA Reg Rail Auth.	17	18	17	13	9	-	1	1	-	-
Southeastern PA Trans.	3	1	4	-	5	-	-	-	-	-
Term RR Assn Of St. Louis	-	3	2	4	2	-	-	-	-	-
Union Pacific	482	502	460	379	264	78	85	85	60	55
Union RR (Pittsburgh)	-	-	-	-	-	-	-	1	-	-
Wheeling & Lake Erie	15	12	20	9	5	1	-	-	3	-
Total	2,643	2,516	2,352	2,085	1,640	423	425	424	343	285

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

States	At Public Crossing					At Private Crossing					At Public Crossing			At Private Crossing		
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Cnt	Kld	Nonf	Cnt	Kld	Nonf
Alabama	105	114	95	78	60	8	13	9	7	10	452	54	185	47	3	10
Alaska	2	1	1	1	4	-	-	-	-	-	9	1	-	-	-	-
Arizona	34	45	32	22	18	5	3	6	-	2	151	9	39	16	3	4
Arkansas	61	75	64	64	40	12	5	8	5	4	304	40	131	34	5	9
California	133	143	142	125	103	18	27	26	23	13	646	146	284	107	14	26
Colorado	32	35	22	27	20	4	10	9	4	4	136	27	57	31	-	16
Connecticut	6	6	2	3	4	-	2	1	1	-	21	4	7	4	-	3
Delaware	8	5	5	-	3	-	2	1	1	1	21	1	11	5	-	1
Dist Of Columbia	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-
Florida	89	106	81	63	40	14	12	9	12	10	379	72	116	57	10	60
Georgia	110	119	114	89	95	21	16	24	21	12	527	49	166	94	2	18
Idaho	21	19	20	18	8	2	3	1	2	2	86	9	21	10	-	3
Illinois	144	152	133	131	82	36	22	27	22	24	642	124	312	131	6	38
Indiana	166	134	148	130	87	11	6	16	11	11	665	83	186	55	4	15
Iowa	70	60	74	64	46	7	9	8	8	6	314	27	113	38	1	10
Kansas	56	53	49	37	39	8	6	8	6	7	234	37	94	35	5	14
Kentucky	66	55	60	40	53	20	12	15	12	5	274	25	94	64	5	20
Louisiana	119	126	95	98	71	12	18	27	15	13	509	63	231	85	5	33
Maine	4	7	6	6	4	1	-	-	-	-	27	2	9	1	-	-
Maryland	13	15	13	11	11	6	9	3	7	2	63	1	19	27	2	7
Massachusetts	10	10	7	7	2	1	1	2	1	2	36	3	40	7	1	2
Michigan	88	74	62	53	46	9	8	5	6	3	323	31	79	31	3	19
Minnesota	59	53	48	54	36	6	8	11	3	4	250	35	88	32	3	10
Mississippi	73	77	64	68	39	6	5	5	2	3	321	47	177	21	1	16
Missouri	54	48	34	39	32	10	12	9	7	7	207	43	96	45	6	22
Montana	15	12	15	12	10	5	7	3	7	5	64	7	16	27	2	6
Nebraska	44	28	41	40	35	6	9	11	8	6	188	30	85	40	5	11
Nevada	4	2	1	3	3	-	2	-	3	1	13	1	2	6	-	3
New Hampshire	2	1	1	2	2	-	1	1	1	-	8	-	3	3	-	-
New Jersey	41	34	26	30	37	3	9	4	3	4	168	19	58	23	-	5
New Mexico	17	8	11	9	11	3	2	3	1	2	56	13	26	11	7	4
New York	36	24	39	39	22	7	8	10	1	9	160	31	38	35	7	10
North Carolina	56	57	57	60	50	11	18	11	9	5	280	33	128	54	3	17
North Dakota	16	12	11	13	14	2	-	2	1	1	66	14	23	6	2	1
Ohio	128	113	114	82	55	10	16	6	14	8	492	47	166	54	7	14
Oklahoma	60	66	55	56	42	4	4	4	2	6	279	42	153	20	1	7
Oregon	19	19	19	12	7	8	9	7	1	2	76	5	16	27	1	4
Pennsylvania	68	51	56	48	35	12	11	25	14	11	258	19	78	73	2	14
Rhode Island	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
South Carolina	71	39	58	53	36	4	8	8	10	5	257	36	85	35	4	9
South Dakota	16	15	12	13	16	2	1	-	-	1	72	9	39	4	-	-
Tennessee	68	56	63	55	52	11	12	10	8	4	294	23	105	45	5	7
Texas	266	297	258	191	150	59	42	38	37	28	1,162	121	511	204	20	100
Utah	15	11	16	13	13	3	3	1	1	-	68	4	23	8	-	1
Vermont	3	2	3	2	7	1	1	1	1	2	17	2	7	6	-	2
Virginia	28	26	19	28	23	23	18	16	16	12	124	5	32	85	4	23
Washington	43	37	38	24	17	14	13	10	12	15	159	18	34	64	7	18
West Virginia	24	18	13	9	15	11	14	13	7	8	79	9	20	53	1	14
Wisconsin	77	52	53	60	43	7	6	9	9	3	285	23	78	34	2	7
Wyoming	1	3	2	3	2	-	1	1	1	2	11	1	3	5	-	2
Total	2,642	2,515	2,352	2,085	1,640	423	425	424	343	285	11,234	1445	4284	1,900	159	635

TABLE 1-13 HIGHWAY-RAIL GRADE CROSSING INCIDENT CASUALTIES BY RAILROAD

Railroads	Fatalities					Nonfatal				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Alaska RR Corp.	-	-	-	-	1	-	-	-	-	-
Amtrak	45	49	60	47	51	86	99	113	172	109
Burlington Northern Santa Fe	71	58	47	43	38	232	182	143	129	104
Buffalo & Pittsburg	-	-	-	-	-	1	1	-	-	-
Canadian National	12	18	8	17	6	47	43	63	62	38
Canadian Pacific	12	2	7	2	4	29	20	21	20	18
Conrail Shared Assets	-	-	-	-	-	6	6	4	5	5
CSX Transportation	48	54	48	41	30	93	141	153	171	105
Florida East Coast	10	4	3	1	2	2	6	11	7	4
Other Railroads	16	20	16	18	17	91	76	87	67	64
Indiana Harbor Belt	1	-	-	-	-	-	2	1	2	-
Kansas City Southern	7	4	9	5	11	38	46	36	39	17
Long Island Rail Road	8	2	2	2	4	4	1	1	2	2
MD Assn. of Rail Comm	-	-	-	-	1	-	-	1	1	10
Mass Bay Transit Auth.	1	2	-	1	-	3	28	-	1	-
Metro North Commuter	-	-	-	-	-	1	1	4	1	-
Montana Rail Link	-	-	-	-	-	1	2	1	1	-
Northern IN Comm Trans	-	-	3	-	2	1	3	1	-	2
Northeast IL Reg Comm	8	5	5	4	4	28	26	6	4	5
New Jersey Transit Rail	1	3	3	1	4	-	5	1	3	11
Norfolk Southern Corp.	55	42	42	56	23	144	148	133	126	94
Peninsula Comm San Mateo Cnty	-	5	1	2	3	-	2	-	3	1
Port Terminal RR Assn	-	-	-	-	-	1	1	25	1	-
Southern CA Reg Rail Auth.	1	4	5	3	2	1	3	5	-	-
Southeastern PA Trans.	-	-	2	-	-	-	-	12	-	6
Term RR Assn Of St. Louis	-	-	-	-	-	-	-	-	2	-
Union Pacific	63	96	77	46	43	235	225	223	167	141
Wheeling & Lake Erie	-	1	1	1	1	9	3	13	2	2
Total	359	369	339	290	247	1,053	1,070	1,058	988	738

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

States	Fatalities					Nonfatal					5 year Total	
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Kld	Nonf
Alabama	17	11	15	10	4	45	49	38	34	27	57	193
Alaska	-	-	-	-	1	-	-	-	-	-	1	-
Arizona	2	6	-	1	3	5	11	9	13	5	12	43
Arkansas	8	9	12	7	9	40	27	35	21	17	45	140
California	23	36	47	25	29	62	39	78	97	33	160	309
Colorado	6	10	2	8	1	18	33	10	3	9	27	73
Connecticut	3	-	-	-	1	2	3	4	1	-	4	10
Delaware	1	-	-	-	-	3	4	3	-	2	1	12
Florida	17	10	20	25	10	21	35	66	30	24	82	176
Georgia	12	8	17	8	6	26	37	46	38	36	51	183
Idaho	1	3	3	2	-	6	2	5	4	7	9	24
Illinois	31	25	29	27	18	83	74	69	74	50	130	350
Indiana	21	13	19	20	14	32	37	48	46	38	87	201
Iowa	6	6	7	5	4	32	20	27	25	19	28	123
Kansas	7	15	9	9	2	31	27	18	16	15	42	107
Kentucky	7	9	9	4	1	26	28	21	17	22	30	114
Louisiana	20	8	14	15	11	44	81	57	46	36	68	264
Maine	-	1	1	-	-	2	2	1	-	4	2	9
Maryland	1	1	1	-	-	1	7	5	4	9	3	26
Massachusetts	1	2	-	1	-	6	30	2	3	1	4	42
Michigan	5	10	3	4	12	14	30	19	21	14	34	98
Minnesota	9	12	5	6	6	28	17	18	20	14	38	97
Mississippi	10	13	3	14	8	30	37	23	79	24	48	193
Missouri	17	7	7	10	8	32	26	26	17	17	49	118
Montana	3	1	2	2	1	4	7	4	4	3	9	22
Nebraska	12	5	8	2	8	22	19	17	20	18	35	96
Nevada	1	-	-	-	-	-	1	-	3	1	1	5
New Hampshire	-	-	-	-	-	-	1	-	1	-	-	2
New Jersey	2	9	3	1	4	11	11	4	19	18	19	63
New Mexico	4	5	7	1	3	7	6	7	4	5	20	29
New York	13	5	5	6	9	10	10	12	13	3	38	48
North Carolina	6	8	6	8	8	38	23	19	31	34	36	145
North Dakota	8	-	4	1	3	4	4	4	5	5	16	22
Ohio	8	17	8	12	9	46	38	40	35	21	54	180
Oklahoma	6	16	9	8	4	34	36	36	31	23	43	160
Oregon	1	1	1	2	1	4	9	4	1	2	6	20
Pennsylvania	5	4	5	6	1	22	13	28	12	17	21	92
South Carolina	9	12	7	6	6	17	14	30	17	16	40	94
South Dakota	2	2	1	1	3	9	7	3	9	11	9	39
Tennessee	7	8	6	5	2	28	20	21	26	17	28	112
Texas	23	44	34	17	23	144	150	140	97	79	141	610
Utah	2	-	-	-	2	9	3	7	4	1	4	24
Vermont	-	-	-	-	2	3	2	-	2	2	2	9
Virginia	2	-	-	4	3	13	7	12	14	9	9	55
Washington	6	7	6	4	2	14	11	15	6	5	25	51
West Virginia	1	4	-	2	3	4	9	4	9	8	10	34
Wisconsin	13	6	3	1	2	20	12	22	14	17	25	85
Wyoming	-	-	1	-	-	1	1	1	2	-	1	5
Total	359	369	339	290	247	1,053	1,070	1,058	988	738	1,604	4,907

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

Railroads	Fatalities					Nonfatal					5 year Total	
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Kld	Nonf
Alaska RR Corp.	1	-	-	-	2	-	-	1	-	-	3	1
Amtrak	71	67	64	70	84	28	26	20	35	30	356	139
Burlington Northern Santa Fe	73	82	66	59	77	66	98	84	61	45	357	354
Buffalo & Pittsburg	-	1	-	1	-	-	-	-	-	-	2	-
Belt Rwy Of Chicago	-	-	-	-	-	-	-	-	1	1	-	2
Canadian National	8	9	10	14	5	9	9	9	6	5	46	38
Canadian Pacific	2	3	7	4	3	2	5	6	1	6	19	20
Conrail Shared Assets	1	1	-	-	1	1	4	3	1	1	3	10
CSX Transportation	63	86	80	76	69	58	60	53	67	66	374	304
Florida East Coast	16	14	17	11	9	6	6	10	4	2	67	28
Guilford Rail System	2	2	1	-	3	3	-	2	1	1	8	7
Other Railroads	14	11	13	17	9	11	21	13	11	8	64	64
Indiana Harbor Belt	-	1	-	-	-	1	2	1	-	-	1	4
Kansas City Southern	5	9	8	7	4	10	11	9	11	8	33	49
Long Island Rail Road	1	-	6	6	2	4	-	3	6	7	15	20
MD Assn. of Rail Comm	1	2	1	1	-	-	1	-	-	-	5	1
Mass Bay Transit Auth.	3	6	9	8	5	-	-	1	5	3	31	9
Metro North Commuter	3	1	9	2	4	3	4	1	5	3	19	16
Montana Rail Link	3	-	-	-	2	3	1	-	1	1	5	6
Northern IN Comm Trans	-	-	1	-	-	-	-	2	-	-	1	2
Northeast IL Reg Comm	6	2	5	13	6	5	7	11	6	8	32	37
New Jersey Transit Rail	7	6	11	9	16	5	9	3	3	2	49	22
Norfolk Southern Corp.	72	75	67	73	59	71	65	53	74	50	346	313
Port Auth Trans Hudson	-	-	-	-	-	3	-	-	-	-	-	3
Peninsula Comm San Mateo Cnty	4	4	2	2	1	4	3	2	3	2	13	14
Southern CA Reg Rail Auth.	5	5	4	2	1	3	-	1	1	1	17	6
Southeastern PA Trans.	2	2	-	4	3	-	1	1	2	3	11	7
Union Pacific	95	122	89	78	52	124	148	117	128	92	436	609
Wheeling & Lake Erie	-	-	-	-	-	-	-	1	-	-	-	1
Total	458	511	470	457	417	420	481	407	433	345	2,313	2,086

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

States	Fatalities					Nonfatal					5 year Total	
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Kld	Nonf
Alabama	6	10	5	6	7	12	11	5	12	6	34	46
Alaska	1	-	-	-	2	-	-	1	-	-	3	1
Arizona	21	20	10	13	8	15	22	14	16	12	72	79
Arkansas	4	6	6	3	-	7	7	4	6	7	19	31
California	82	81	71	60	47	66	61	41	49	41	341	258
Colorado	3	7	2	5	2	13	12	14	13	3	19	55
Connecticut	3	2	8	6	3	1	3	3	4	4	22	15
Delaware	1	2	2	1	2	2	1	-	4	-	8	7
Dist Of Columbia	1	-	-	1	1	-	1	-	1	2	3	4
Florida	33	28	33	26	19	22	20	16	14	8	139	80
Georgia	15	8	14	15	10	14	17	12	8	14	62	65
Idaho	1	2	-	1	2	1	-	2	-	4	6	7
Illinois	19	25	26	39	20	20	29	35	26	23	129	133
Indiana	14	10	14	7	13	7	13	13	14	13	58	60
Iowa	2	-	4	2	3	2	2	3	5	4	11	16
Kansas	2	9	5	4	4	7	12	8	9	8	24	44
Kentucky	7	11	5	8	5	6	9	4	9	7	36	35
Louisiana	10	14	8	6	10	11	17	11	10	5	48	54
Maine	-	4	-	-	1	-	-	1	1	-	5	2
Maryland	10	10	9	7	5	10	2	2	5	3	41	22
Massachusetts	5	13	11	15	12	5	1	3	10	4	56	23
Michigan	5	12	6	7	8	3	2	4	3	4	38	16
Minnesota	2	6	6	5	9	3	6	11	5	5	28	30
Mississippi	8	4	6	4	6	8	7	6	3	5	28	29
Missouri	4	12	5	9	12	11	11	9	5	7	42	43
Montana	6	4	1	2	3	4	5	4	3	1	16	17
Nebraska	5	3	-	1	3	1	5	5	4	6	12	21
Nevada	4	6	4	4	-	4	8	2	6	2	18	22
New Hampshire	-	-	-	1	-	-	-	-	-	-	1	-
New Jersey	13	10	13	16	20	7	9	6	6	9	72	37
New Mexico	8	4	8	11	10	7	8	4	6	4	41	29
New York	14	9	18	17	18	12	6	10	13	21	76	62
North Carolina	18	21	21	17	15	12	14	16	19	14	92	75
North Dakota	-	2	-	2	-	2	1	1	3	-	4	7
Ohio	14	24	20	15	22	16	15	17	14	7	95	69
Oklahoma	4	5	4	3	7	4	6	7	5	4	23	26
Oregon	2	7	6	6	4	8	3	8	10	5	25	34
Pennsylvania	15	17	23	25	30	11	18	18	16	15	110	78
Rhode Island	-	2	2	-	3	-	1	-	1	-	7	2
South Carolina	10	9	10	8	6	7	11	2	7	3	43	30
South Dakota	1	-	-	-	1	-	3	-	-	2	2	5
Tennessee	11	13	7	20	4	8	6	3	9	8	55	34
Texas	44	49	47	31	31	40	70	47	50	31	202	238
Utah	-	1	-	2	1	2	-	4	4	1	4	11
Vermont	-	-	-	-	-	1	1	-	-	-	-	2
Virginia	3	7	5	5	7	3	9	6	8	7	27	33
Washington	14	13	10	10	14	14	10	17	7	7	61	55
West Virginia	5	5	7	4	5	5	1	3	8	4	26	21
Wisconsin	6	4	4	7	1	4	5	4	-	4	22	17
Wyoming	2	-	4	-	1	2	-	1	2	1	7	6
Total	458	511	470	457	417	420	481	407	433	345	2,313	2,086

This page intentionally left blank

CHAPTER 2

CURRENT YEAR SUMMARY OF ACCIDENTS/INCIDENTS AND RATES

FRA's regulations on reporting railroad accidents/incidents are found primarily at 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 to determine 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 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 that 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.
 - 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 runs on rails or electromagnetic guide ways, 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 terms do not include rapid transit operations within an urban area that are not connected to the general railroad system of transportation.

Approximately 750 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 I railroads, and those railroads reporting that annual employees worked in excess of 400,000 hours.

Railroads have been assigned to one of three groups in this bulletin. Group 1 corresponds to the railroads that have been defined as Class I; 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.

CONTENTS**CHAPTER 2****CURRENT YEAR SUMMARY OF ACCIDENTS/INCIDENTS AND RATES**

Tables	Title	Page
2-1	Accidents/Incidents, by Month, 2009	24
2-2	Accident/Incident Rates, by Month, 2009	24
2-3	Accidents/Incidents, by Railroad Groups, 2009	25
2-4	Operational Data, by Railroad Groups, 2009	25
2-5	Accident/Incident Rates, by Railroad Groups, 2009	25
2-6	Accidents/Incidents, by Railroad, 2009	26
2-7	Accident/Incident Rates, by Railroad, 2009	27
2-8	Railroad Rankings, 2009	28
2-9	Operational Data, by Railroad, 2009	29
2-10	Operational Data, by Month, 2009	30
2-11	Summary of Accidents/Incidents, by State, 2009	31

TABLE 2-1 ACCIDENTS/INCIDENTS, BY MONTH, 2009

Months	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
January	1,035	40	703	198	-	28	220	18	72	617	22	603
February	835	48	560	156	-	5	154	13	56	525	35	499
March	940	57	665	160	-	5	177	20	83	603	37	577
April	879	53	640	133	-	19	142	18	40	604	35	581
May	888	57	641	147	-	7	142	18	56	599	39	578
June	923	55	680	155	1	16	160	21	71	608	33	593
July	1,043	85	757	164	2	5	158	33	67	721	50	685
August	1,011	60	733	169	-	8	144	18	50	698	42	675
September	936	73	676	161	-	5	128	22	46	647	51	625
October	924	55	669	144	-	7	171	20	76	609	35	586
November	767	52	537	125	-	12	150	19	45	492	33	480
December	961	60	664	185	1	3	179	27	76	597	32	585
Total	11,142	695	7,925	1,897	4	120	1,925	247	738	7,320	444	7,067

TABLE 2-2 ACCIDENT/INCIDENT RATES, BY MONTH, 2009

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	17.94	3.43	2.08	3.81	10.69	0.59	6.93	0.91	12.44	2.12
February	15.61	2.92	1.84	2.88	9.82	0.90	5.51	1.07	12.74	1.52
March	16.27	2.77	1.91	3.06	10.44	1.26	7.45	1.31	10.72	1.62
April	16.16	2.45	2.17	2.61	11.11	1.01	6.74	1.10	10.61	1.28
May	16.42	2.72	1.94	2.63	11.08	1.29	7.20	0.79	12.51	1.35
June	17.07	2.87	2.09	2.96	11.24	1.31	6.72	1.02	12.93	1.45
July	18.84	2.96	2.29	2.85	13.02	1.52	7.98	0.99	12.76	1.60
August	17.74	2.97	2.47	2.53	12.25	1.35	5.99	0.87	13.41	1.55
September	17.28	2.97	2.27	2.36	11.95	1.48	7.41	0.85	15.67	1.20
October	15.98	2.49	2.04	2.96	10.53	1.05	6.06	0.56	10.77	1.36
November	14.13	2.30	1.87	2.76	9.06	1.09	4.86	0.84	10.67	1.17
December	17.96	3.46	2.03	3.34	11.15	0.93	7.13	1.41	12.02	2.28
Total	16.79	2.86	2.08	2.90	11.03	1.15	6.68	0.97	12.26	1.54

1. Total accident/incident rate of all reported events * 1,000,000 /train miles
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
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 2-3 ACCIDENTS/INCIDENTS BY RAILROAD GROUPS, 2009

Groups	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
I	7,480	586	4,985	1,459	3	84	1,518	206	626	4,503	377	4,275
II	2,583	82	2,319	193	1	35	142	24	56	2,248	57	2,228
III	1,079	27	621	245	-	1	265	17	56	569	10	564
All	11,142	695	7,925	1,897	4	120	1,925	247	738	7,320	444	7,067

TABLE 2-4 OPERATIONAL DATA BY RAILROAD GROUPS, 2009

Groups	Train Miles	Freight Train Miles	Passenger Train Miles	Yard Switching Train Miles	Other Train Miles	Employee Hours	Passengers Carried
I	560,687,589	453,717,155	39,514,000	64,574,351	2,882,083	333,286,750	27,279,224
II	71,051,223	8,976,746	52,574,705	8,819,978	679,794	71,360,981	504,128,146
III	31,894,626	12,891,630	10,849,427	8,021,051	132,518	25,002,255	50,246,122
All	663,633,438	475,585,531	102,938,132	81,415,380	3,694,395	429,649,986	581,653,492

TABLE 2-5 ACCIDENT/INCIDENT RATES BY RAILROAD GROUPS, 2009

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	13.34	2.60	1.70	2.71	8.03	1.17	11.13	1.27	12.70	1.29
II	36.35	2.72	3.29	2.00	31.64	1.27	4.42	0.89	10.66	1.59
III	33.83	7.68	3.77	8.31	17.84	0.53	4.36	0.28	10.47	6.74
Tot	16.79	2.86	2.08	2.90	11.03	1.15	6.68	0.97	12.26	1.54

TABLE 2-6 ACCIDENTS/INCIDENTS BY RAILROAD, 2009

Group - Railroads		Total			Train Accidents			HRC Incidents			Other Incidents		
		Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
1	Amtrak	1,555	139	1,427	86	-	26	129	51	109	1,340	88	1,292
	Burlington Northern Santa Fe	1,602	123	996	407	-	12	257	38	104	938	85	880
	Canadian National	320	13	201	67	1	15	105	6	38	148	6	148
	Canadian Pacific	215	9	150	39	2	2	45	4	18	131	3	130
	CSX Transportation	1,066	101	527	264	-	8	332	30	105	470	71	414
	Kansas City Southern	173	15	87	48	-	-	54	11	17	71	4	70
	Norfolk Southern Corp.	979	83	534	225	-	10	277	23	94	477	60	430
	Union Pacific	1,696	103	1,063	449	-	11	319	43	141	928	60	911
2	Alaska RR Corp.	94	3	81	7	-	-	4	1	-	83	2	81
	Buffalo & Pittsburg	4	-	-	4	-	-	-	-	-	-	-	-
	Belt Rwy Of Chicago	27	-	15	12	-	-	-	-	-	15	-	15
	Conrail Shared Assets	75	1	30	32	-	1	19	-	5	24	1	24
	Florida East Coast	30	11	15	1	-	1	10	2	4	19	9	10
	Guilford Rail System	20	3	11	4	-	-	2	-	-	14	3	11
	Other Railroads	34	-	15	15	-	-	12	-	8	7	-	7
	Indiana Harbor Belt	19	-	7	9	-	-	3	-	-	7	-	7
	Long Island Rail Road	545	6	517	15	-	2	15	4	2	515	2	513
	MD Assn. of Rail Comm	29	1	34	2	-	-	3	1	10	24	-	24
	Mass Bay Transit Auth.	161	5	172	1	-	-	1	-	-	159	5	172
	Metro North Commuter	305	5	274	24	-	-	2	-	-	279	5	274
	Montana Rail Link	50	2	35	8	-	-	5	-	-	37	2	35
	Northern IN Comm Trans	19	2	17	-	-	-	4	2	2	15	-	15
	Northeast IL Reg Comm	285	10	274	5	-	1	14	4	5	266	6	268
	New Jersey Transit Rail	265	21	213	37	1	1	15	4	11	213	16	201
	Port Auth Trans Hudson	123	-	122	3	-	2	-	-	-	120	-	120
	Peninsula Comm San Mateo Cnty	39	4	27	1	-	-	11	3	1	27	1	26
	Port Terminal RR Assn	11	-	6	4	-	-	1	-	-	6	-	6
	Southern CA Reg Rail Auth.	38	3	29	1	-	-	9	2	-	28	1	29
	Southeastern PA Trans.	389	4	404	13	-	27	5	-	6	371	4	371
	Term RR Assn Of St. Louis	12	-	7	3	-	-	2	-	-	7	-	7
	Union RR (Pittsburgh)	13	-	7	6	-	-	-	-	-	7	-	7
	Wheeling & Lake Erie	16	1	7	6	-	-	5	1	2	5	-	5
3	Other Railroads	1,110	27	621	276	-	1	265	17	56	569	10	564

Highway-Rail Counts Are Excluded From Other Categories

TABLE 2-7 ACCIDENT/INCIDENT RATES BY RAILROAD, 2009

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	37.38	2.07	2.32	3.10	32.22	2.74	11.13	1.27	10.57	1.62
	Burlington Northern Santa Fe	10.22	2.60	2.10	1.64	5.98	0.78	.	.	18.45	1.17
	Canadian National	19.83	4.15	2.13	6.51	9.17	0.62	.	.	11.58	2.68
	Canadian Pacific	17.90	3.25	2.91	3.75	10.91	0.75	.	.	8.74	2.11
	CSX Transportation	11.97	2.97	1.22	3.73	5.28	1.52	.	.	11.35	1.45
	Kansas City Southern	17.08	4.74	1.65	5.33	7.01	1.18	.	.	14.37	2.44
	Norfolk Southern Corp.	11.45	2.63	1.09	3.24	5.58	1.28	.	.	13.19	1.23
	Union Pacific	11.34	3.00	1.60	2.13	6.21	0.96	.	.	12.77	1.57
2	Alaska RR Corp.	66.25	4.93	10.99	2.82	58.50	1.41	.	.	5.81	4.10
	Buffalo & Pittsburg	10.25	10.25	.	.	.	.	.	.	26.23	3.63
	Belt Rwy Of Chicago	74.60	33.16	3.54	.	41.44	2.76	.	.	29.14	106.53
	Conrail Shared Assets	28.31	12.08	1.50	7.17	9.06	0.75	.	.	12.05	12.11
	Florida East Coast	16.62	0.55	1.67	5.54	10.53	6.09	.	.	.	0.71
	Guilford Rail System	16.67	3.33	1.29	1.67	11.67	3.33	.	.	.	6.40
	Other Railroads	187.27	20.91	8.85	16.73	149.63	.	.	.	47.98	8.20
	Indiana Harbor Belt	17.87	8.47	1.17	2.82	6.58	.	.	.	11.13	2.90
	Long Island Rail Road	63.64	1.75	2.65	1.75	60.14	1.05	4.84	0.47	.	0.93
	MD Assn. of Rail Comm	25.22	1.74	0.38	2.61	20.87	.	6.49	1.85	.	1.74
	Mass Bay Transit Auth.	38.34	0.24	4.19	0.24	37.86	1.91	16.75	.	.	.
	Metro North Commuter	30.96	2.44	2.73	0.20	28.32	0.71	0.95	1.52	.	2.33
	Montana Rail Link	15.13	2.42	3.18	1.51	11.19	0.91	.	.	10.86	1.05
	Northern IN Comm Trans	24.91	.	1.56	5.24	19.66	.	2.29	.	.	.
	Northeast IL Reg Comm	31.18	0.55	1.81	1.53	29.10	1.53	6.69	0.13	1.58	0.38
	New Jersey Transit Rail	25.14	3.51	2.69	1.42	20.21	1.71	1.85	1.46	52.35	1.86
	Port Auth Trans Hudson	61.76	1.51	7.97	.	60.25	.	3.62	0.58	7.70	0.58
	Peninsula Comm San Mateo Cnty	27.43	0.70	2.79	7.74	18.99	2.11	3.62	.	.	0.72
	Port Terminal RR Assn	8.59	3.13	2.24	0.78	4.69	.	.	.	2.34	.
	Southern CA Reg Rail Auth.	15.31	0.40	1.67	3.63	11.28	0.81	0.53	.	.	0.40
	Southeastern PA Trans.	73.48	2.46	11.58	0.94	70.08	1.13	14.66	1.89	.	1.89
	Term RR Assn Of St. Louis	29.42	7.35	3.49	4.90	17.16	.	.	.	4.90	.
	Union RR (Pittsburgh)	129.06	59.57	2.12	.	69.49	.	.	.	39.71	.
	Wheeling & Lake Erie	17.04	6.39	1.38	5.33	5.33	.	.	.	5.46	6.62
3	Other Railroads	34.80	8.65	3.77	8.31	17.84	0.53	4.36	0.28	12.22	7.46

1. Total Accident/incident rate of all reported events * 1,000,000 /train miles

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

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, 2009

Railroads		Train Miles	Hours	Total Rate	Train Acc Rate	EOD Rate	HRC Rate	Other Events	Tres Rate
1	ATK - Amtrak	5	5	37	2	2	3	32	3
	BNSF - Burlington Northern Santa Fe	1	2	10	3	2	2	6	1
	CN - Canadian National	6	6	20	4	2	7	9	1
	CP - Canadian Pacific	7	7	18	3	3	4	11	1
	CSX - CSX Transportation	3	3	12	3	1	4	5	2
	KCS - Kansas City Southern	8	8	17	5	2	5	7	1
	NS - Norfolk Southern Corp.	4	4	11	3	1	3	6	1
	UP - Union Pacific	2	1	11	3	2	2	6	1
2	ARR - Alaska RR Corp.	13	11	66	5	11	3	58	1
	BPRR - Buffalo & Pittsburg	22	23	10	10	0	0	0	0
	BRC - Belt Rwy Of Chicago	23	15	75	33	4	0	41	3
	CRSH - Conrail Shared Assets	8	8	28	12	2	7	9	1
	FEC - Florida East Coast	11	13	17	1	2	6	11	6
	GRS - Guilford Rail System	15	10	17	3	1	2	12	3
	IAIS - Other Railroads	20	22	45	21	2	17	7	0
	IHB - Indiana Harbor Belt	17	12	18	8	1	3	7	0
	LI - Long Island Rail Road	4	1	64	2	3	2	60	1
	MACZ - MD Assn. of Rail Comm	16	21	25	2	0	3	21	0
	MBTA - Mass Bay Transit Auth.	6	5	38	0	4	0	38	2
	MH - Other Railroads	25	25	143	0	7	0	143	0
	MNCW - Metro North Commuter	2	2	31	2	3	0	28	1
	MRL - Montana Rail Link	7	9	15	2	3	2	11	1
	NICD - Northern IN Comm Trans	19	19	25	0	2	5	20	0
	NIRC - Northeast IL Reg Comm	3	4	31	1	2	2	29	2
	NJTR - New Jersey Transit Rail	1	3	25	4	3	1	20	2
	PATH - Port Auth Trans Hudson	10	7	62	2	8	0	60	0
	PCMZ - Peninsula Comm San Mateo Cnty	12	14	27	1	3	8	19	2
	PTRA - Port Terminal RR Assn	14	20	9	3	2	1	5	0
	SCAX - Southern CA Reg Rail Auth.	9	17	15	0	2	4	11	1
	SEPA - Southeastern PA Trans.	5	6	73	2	12	1	70	1
	TRRA - Term RR Assn Of St. Louis	21	24	29	7	3	5	17	0
	URR - Union RR (Pittsburgh)	24	18	129	60	2	0	69	0
	WE - Wheeling & Lake Erie	18	16	17	6	1	5	5	0

TABLE 2-9 OPERATIONAL DATA, BY RAILROAD, 2009

Railroads	Total Train Miles	%	Employee Hours Worked	%	Freight Train Miles	Passenger Train Miles	Yard Switching Miles	Other Train Miles	Psgs Carried	Psgr Miles Millions
ARR	1,418,848	0.21	1,474,199	0.34	539,587	191,293	687,968	-	148,712	18
ATK	41,594,704	6.27	38,024,690	8.85	-	39,514,000	2,080,704	-	27,279,224	5,914
BNSF	156,799,568	23.63	72,778,267	16.94	143,848,655	-	12,950,913	-	-	-
BPRR	390,239	0.06	416,145	0.10	275,853	-	114,386	-	-	-
BRC	361,932	0.05	790,986	0.18	18,774	-	343,158	-	-	-
CN	16,134,751	2.43	13,397,273	3.12	13,424,674	-	2,676,848	33,229	-	-
CP	12,007,830	1.81	8,191,007	1.91	9,948,461	-	2,059,369	-	-	-
CRSH	2,649,560	0.40	1,995,400	0.46	1,238,307	-	1,411,253	-	-	-
CSX	89,035,815	13.42	55,173,530	12.84	75,376,709	-	13,659,106	-	-	-
FEC	1,805,093	0.27	1,078,183	0.25	1,405,456	-	399,637	-	-	-
GRS	1,200,062	0.18	1,549,868	0.36	625,300	-	574,762	-	-	-
IAIS	717,316	0.11	429,862	0.10	482,257	589	229,244	5,226	29,271	0
IHB	1,063,032	0.16	1,192,468	0.28	344,466	-	718,566	-	-	-
KCS	10,128,488	1.53	6,165,129	1.43	8,180,450	-	1,948,038	-	-	-
LI	8,563,558	1.29	14,190,012	3.30	-	8,563,558	-	-	82,954,640	2,230
MACZ	1,150,097	0.17	530,605	0.12	-	1,082,236	3,466	64,395	8,087,535	246
MBTA	4,199,298	0.63	3,965,571	0.92	-	4,199,298	-	-	39,632,281	442
MH	14,019	0.00	30,657	0.01	980	12,794	123	122	46,277	1
MNCW	9,851,207	1.48	12,606,371	2.93	-	9,851,207	-	-	77,975,561	2,311
MRL	3,305,595	0.50	1,950,801	0.45	2,845,206	-	460,389	-	-	-
NICD	762,892	0.11	639,512	0.15	-	762,892	-	-	4,095,867	131
NIRC	9,140,695	1.38	9,054,116	2.11	444,817	7,410,436	1,264,740	20,702	78,245,284	1,764
NJTR	10,541,412	1.59	9,746,938	2.27	-	9,608,239	343,824	589,349	75,398,495	2,107
NS	85,476,857	12.88	54,669,129	12.72	75,466,682	-	10,010,175	-	-	-
PATH	1,991,542	0.30	2,257,651	0.53	-	1,731,781	259,761	-	79,880,592	332
PCMZ	1,421,976	0.21	860,761	0.20	-	1,384,800	37,176	-	11,994,530	249
PTRA	1,279,872	0.19	535,548	0.12	-	-	1,279,872	-	-	-
SCAX	2,481,871	0.37	719,377	0.17	-	2,481,871	-	-	11,020,201	379
SEPA	5,293,711	0.80	3,557,827	0.83	-	5,293,711	-	-	34,618,900	471
TRRA	407,895	0.06	400,983	0.09	-	-	407,895	-	-	-
UP	149,509,576	22.53	84,887,725	19.76	127,471,524	-	19,189,198	2,848,854	-	-
URR	100,728	0.02	661,058	0.15	-	-	100,728	-	-	-
WE	938,773	0.14	726,082	0.17	755,743	-	183,030	-	-	-
XXXX	31,894,626	4.81	25,002,255	5.82	12,891,630	10,849,427	8,021,051	132,518	50,246,122	895
Total	663,633,438	100.0	429,649,986	100.0	475,585,531	102,938,132	81,415,380	3,694,395	581,653,492	17,490

XXXX = All other railroads

TABLE 2-10 OPERATIONAL DATA, BY MONTH, 2009

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	57,694,439	8.69	37,584,173	8.75	41,255,314	8,788,398	7,313,060	337,667	46,078,293	1,342
February	53,478,516	8.06	34,344,196	7.99	38,974,351	7,504,915	6,672,634	326,616	44,134,730	1,252
March	57,780,820	8.71	37,879,577	8.82	41,754,347	8,373,951	7,274,134	378,388	49,433,557	1,409
April	54,387,707	8.20	36,153,486	8.41	39,043,006	8,211,967	6,785,378	347,356	48,675,023	1,438
May	54,083,073	8.15	35,272,552	8.21	38,309,424	8,827,406	6,634,903	311,340	47,875,453	1,445
June	54,081,170	8.15	36,068,709	8.39	38,296,349	8,830,209	6,652,361	302,251	50,147,011	1,548
July	55,357,261	8.34	37,308,534	8.68	39,285,300	9,053,922	6,740,507	277,532	50,718,172	1,617
August	56,977,170	8.59	35,896,603	8.35	40,707,747	9,211,739	6,786,383	271,301	49,532,968	1,569
September	54,156,874	8.16	35,469,343	8.26	38,995,582	8,259,832	6,635,938	265,522	48,741,901	1,431
October	57,826,010	8.71	37,140,256	8.64	41,552,670	9,003,269	6,964,158	305,913	50,350,983	1,485
November	54,288,528	8.18	33,212,850	7.73	39,188,098	8,335,133	6,464,245	301,052	47,700,679	1,440
December	53,521,870	8.06	33,319,707	7.76	38,223,343	8,537,391	6,491,679	269,457	48,264,722	1,515
Total	663,633,438	100.0	429,649,986	100.0	475,585,531	102,938,132	81,415,380	3,694,395	581,653,492	17,490

TABLE 2-11 SUMMARY OF ACCIDENTS/INCIDENTS BY STATE, 2009

States	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal	Cnt	Deaths	Nonfatal
Alabama	205	12	105	52	-	-	70	4	27	83	8	78
Alaska	117	3	104	7	-	-	4	1	-	106	2	104
Arizona	126	14	83	17	-	-	20	3	5	89	11	78
Arkansas	183	9	117	43	-	-	44	9	17	96	0	100
California	714	76	508	100	-	7	116	29	33	498	47	468
Colorado	177	3	125	35	-	-	24	1	9	118	2	116
Connecticut	125	4	104	17	-	-	4	1	-	104	3	104
Delaware	46	2	38	4	-	-	4	-	2	38	2	36
Dist Of Columbia	86	1	79	7	-	-	-	-	-	79	1	79
Florida	222	29	166	14	-	1	50	10	24	158	19	141
Georgia	292	16	154	66	-	6	107	6	36	119	10	112
Idaho	61	4	39	16	-	-	10	-	7	35	4	32
Illinois	1,028	41	814	179	1	20	106	18	50	743	22	744
Indiana	278	27	168	42	-	3	98	14	38	138	13	127
Iowa	186	10	101	50	2	1	52	4	19	84	4	81
Kansas	204	8	111	60	-	-	46	2	15	98	6	96
Kentucky	155	6	87	29	-	-	58	1	22	68	5	65
Louisiana	224	21	132	46	-	1	84	11	36	94	10	95
Maine	19	1	12	6	-	-	4	-	4	9	1	8
Maryland	124	5	89	28	-	-	13	-	9	83	5	80
Massachusetts	249	12	238	16	-	2	4	-	1	229	12	235
Michigan	166	20	111	16	-	-	49	12	14	101	8	97
Minnesota	202	16	122	44	-	-	40	6	14	118	10	108
Mississippi	111	14	82	22	-	10	42	8	24	47	6	48
Missouri	236	20	162	51	-	8	39	8	17	146	12	137
Montana	147	4	126	14	-	2	15	1	3	118	3	121
Nebraska	251	11	159	72	-	3	41	8	18	138	3	138
Nevada	27	-	19	5	-	-	4	-	1	18	0	18
New Hampshire	6	-	3	1	-	-	2	-	-	3	0	3
New Jersey	461	25	363	64	1	2	41	4	18	356	20	343
New Mexico	86	15	52	15	-	-	13	3	5	58	12	47
New York	1,071	29	970	66	-	5	31	9	3	974	20	962
North Carolina	167	23	111	25	-	-	55	8	34	87	15	77
North Dakota	87	3	59	19	-	1	15	3	5	53	0	53
Ohio	270	32	135	76	-	2	63	9	21	131	23	112
Oklahoma	137	11	64	41	-	-	48	4	23	48	7	41
Oregon	109	5	75	24	-	1	9	1	2	76	4	72
Pennsylvania	750	33	641	79	-	29	46	1	17	625	32	595
Rhode Island	12	3	6	3	-	-	-	-	-	9	3	6
South Carolina	104	12	56	18	-	1	41	6	16	45	6	39
South Dakota	40	4	25	9	-	-	17	3	11	14	1	14
Tennessee	200	6	107	53	-	1	56	2	17	91	4	89
Texas	770	56	478	196	-	5	178	23	79	396	33	394
Utah	73	3	45	15	-	-	13	2	1	45	1	44
Vermont	28	2	19	2	-	-	9	2	2	17	0	17
Virginia	193	11	128	32	-	-	35	3	9	126	8	119
Washington	251	17	179	37	-	3	32	2	5	182	15	171
West Virginia	122	9	89	17	-	3	23	3	8	82	6	78
Wisconsin	150	4	101	19	-	1	46	2	17	85	2	83
Wyoming	94	3	64	28	-	2	4	-	-	62	3	62
Total	11,142	695	7,925	1,897	4	120	1,925	247	738	7,320	444	7,067

This page intentionally left blank

CHAPTER 3

CASUALTY REPORTING

FRA made minor revisions to the criteria used to report casualties that became effective in May 2003. This change was necessary to maintain consistency with revisions that the Occupational Safety and Health Administration made affecting the reporting of employee cases for all industries. The following are the criteria in place from 1975 through April 2003. Following these are the criteria that became effective May 1, 2003.

Requirements in effect from 1975 to April 2003

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 F6180.55a:

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 workdays, the loss of one or more workdays, termination of employment, transfer to another job, or loss of consciousness.
4. Any occupational illness of a railroad employee.

A railroad need not report the following:

1. Casualties at highway-rail grade 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.

Requirements in effect May 1, 2003

Each event or exposure arising from the operation of a railroad shall be reported on Form FRA F6180.55a (if the event or exposure is a discernable cause of one or more of the following outcomes and this outcome is a new case or a significant aggravation of a pre-existing injury or illness):

1. Death to any person.
2. Injury to any person that results in medical treatment.
3. Injury to a railroad employee that results in:
 - a. A day away from work.
 - b. Restricted work activity or job transfer.
 - c. Loss of consciousness.

4. Occupational illness of a railroad employee that results in any of the following:
 - a. A day away from work.
 - b. Restricted work activity or job transfer.
 - c. Loss of consciousness.
 - d. Medical treatment.
5. A significant injury to or illness of a railroad employee diagnosed by a physician or other licensed healthcare professional even if the injury or illness does not result in death, a day away from work, restricted work activity or job transfer, medical treatment, or loss of consciousness.
6. An illness or injury that meets the application of any of the following specific case criteria:
 - a. A needle stick or sharps injury to a railroad employee.
 - b. Medical removal of a railroad employee.
 - c. Occupational hearing loss of a railroad employee.
 - d. Occupational tuberculosis of a railroad employee.
 - e. A musculoskeletal disorder of a railroad employee if this disorder is independently reportable under one or more of the general reporting criteria.

“Event or exposure arising from the operation of a railroad” includes:

1. *With respect to a person who is on property owned, leased, or maintained by the railroad*, an activity of the railroad that is related to the performance of its rail transportation business or an exposure related to the activity.
2. *With respect to an employee of the railroad (whether on or off property owned, leased, or maintained by the railroad)*, an activity of the railroad that is related to the performance of its rail transportation business or an exposure related to the activity.
3. *With respect to a person who is not an employee of the railroad and not on property owned, leased, or maintained by the railroad*, an event or exposure directly resulting from one or more of the following railroad operations:
 - a. A train accident, a train incident, or a highway-rail grade crossing accident or incident involving the railroad.
 - b. A release of a hazardous material from a railcar in the possession of the railroad or of another dangerous commodity that is related to the performance of the railroad’s rail transportation business.

In the context of casualty reporting, the terms “event” and “exposure” include events of a specific nature, e.g., being struck by a train, and those conditions associated with work place activities, or exposures, that occur over a period of time, e.g., occupational illnesses. See § 225.19(d).

A railroad need not report the following:

1. Casualties at highway-rail grade 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 do not arise from the operation of a railroad.
(Note: camp cars and permanent facilities on the railroad's premises are a part of the work environment and casualties occurring in these are considered to have arisen from the operation of a railroad. Normally, injuries occurring in these facilities will be reported as occurring to an employee not on duty (Class B), but at other times the employee is more properly classified as being on duty (Class A). In these workplaces, if the employee is on duty or engaged in a work activity at the time of injury or illness, then the employee is classified as on duty. In addition, an employee in living quarters on railroad property who is harmed as a result of a serious workplace accident such as a chemical release, fire, explosion, derailment, collision, or building collapse while off duty is nevertheless to be classified as on duty. All other injuries and illnesses occurring during off-duty hours while in living quarters are to be classified as injuries or illnesses to employees not on duty.)
3. Suicides, as determined by a coroner or other public authority.
4. Attempted suicides.

CONTENTS**CHAPTER 3****CASUALTY REPORTING**

Tables	Title	Page
3-1	Casualties by Type Person and Primary Event, 2009	37
3-2	Fatalities by Type Person Killed and Railroad, 2009	37
3-3	Fatalities by Type Person Killed and State, 2009	38
3-4	Nonfatal Conditions by Type Person and Railroad, 2009	39
3-5	Nonfatal Conditions by Type Person and State, 2009	40
3-6	Reportable Conditions, All Type Persons, 2009	41
3-7	Total Casualties by Age of Individual and Type Person, 2009	42
3-8	Total Casualties by Month and Type Person, 2009	43
3-9	Total Casualties by Time of Day and Type Person, 2009	44

TABLE 3-1 CASUALTIES BY TYPE PERSON AND PRIMARY EVENT, 2009

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)	15	4,304	16	4,463	2	64	.	71	14	4,328
B - Employee not on duty	.	138	.	148	.	1	.	.	.	147
C - Passenger on train	3	1,047	3	1,166	.	34	.	60	3	1,072
D - Nontrespasser	98	1,071	121	1,183	1	17	113	361	7	805
E - Trespasser	526	497	549	580	1	.	132	235	416	345
F - Worker on duty(contractor)	1	143	1	144	.	1	.	2	1	141
G - Contractor(other)	3	210	3	213	.	.	.	1	3	212
H - Worker on duty(volunteer)	.	4	.	5	.	.	.	.	.	5
I - Volunteer(other)	.	1	.	1	.	.	.	.	.	1
J - Nontrespasser, off rr property	2	10	2	22	.	3	2	8	.	11
Total..	648	7,425	695	7,925	4	120	247	738	444	7,067

TABLE 3-2 FATALITIES BY TYPE PERSON AND RAILROAD, 2009

			Type Person Codes						
	Total	%	A	C	D	E	F	G	J
Alaska RR Corp.	3	0.4	-	-	-	3	-	-	-
Amtrak	139	20.0	-	3	18	117	-	-	1
Burlington Northern Santa Fe	123	17.7	6	-	21	95	1	-	-
Canadian National	13	1.9	-	-	6	6	-	1	-
Canadian Pacific	9	1.3	2	-	1	6	-	-	-
Conrail Shared Assets	1	0.1	-	-	-	1	-	-	-
CSX Transportation	101	14.5	2	-	10	89	-	-	-
Florida East Coast	11	1.6	-	-	-	11	-	-	-
Guilford Rail System	3	0.4	-	-	-	3	-	-	-
Kansas City Southern	15	2.2	-	-	11	4	-	-	-
Long Island Rail Road	6	0.9	-	-	-	6	-	-	-
MD Assn. of Rail Comm	1	0.1	-	-	-	1	-	-	-
Mass Bay Transit Auth.	5	0.7	-	-	-	5	-	-	-
Metro North Commuter	5	0.7	1	-	-	4	-	-	-
Montana Rail Link	2	0.3	-	-	-	2	-	-	-
Northern IN Comm Trans	2	0.3	-	-	-	2	-	-	-
Northeast IL Reg Comm	10	1.4	-	-	-	10	-	-	-
New Jersey Transit Rail	21	3.0	-	-	-	20	-	1	-
Norfolk Southern Corp.	83	11.9	-	-	12	70	-	1	-
Peninsula Comm San Mateo Cnty	4	0.6	-	-	-	4	-	-	-
Southern CA Reg Rail Auth.	3	0.4	-	-	-	3	-	-	-
Southeastern PA Trans.	4	0.6	1	-	-	3	-	-	-
Union Pacific	103	14.8	3	-	38	62	-	-	-
Wheeling & Lake Erie	1	0.1	-	-	-	1	-	-	-
Other Railroads	27	3.9	1	-	4	21	-	-	1
Total	695	100	16	3	121	549	1	3	2

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

TABLE 3-3 FATALITIES BY TYPE PERSON KILLED AND STATE, 2009

States	Total	%	Type Person Codes						
			A	C	D	E	F	G	J
Alabama	12	1.7	1	-	1	10	-	-	-
Alaska	3	0.4	-	-	-	3	-	-	-
Arizona	14	2.0	2	-	2	10	-	-	-
Arkansas	9	1.3	-	-	8	1	-	-	-
California	76	10.9	-	-	2	74	-	-	-
Colorado	3	0.4	-	-	1	2	-	-	-
Connecticut	4	0.6	-	-	1	3	-	-	-
Delaware	2	0.3	-	-	-	2	-	-	-
Dist Of Columbia	1	0.1	-	-	-	1	-	-	-
Florida	29	4.2	-	-	1	28	-	-	-
Georgia	16	2.3	-	-	4	12	-	-	-
Idaho	4	0.6	-	-	2	2	-	-	-
Illinois	41	5.9	-	-	14	26	-	1	-
Indiana	27	3.9	-	-	6	21	-	-	-
Iowa	10	1.4	3	-	2	5	-	-	-
Kansas	8	1.2	1	1	-	6	-	-	-
Kentucky	6	0.9	-	-	1	5	-	-	-
Louisiana	21	3.0	-	-	11	10	-	-	-
Maine	1	0.1	-	-	-	1	-	-	-
Maryland	5	0.7	-	-	-	5	-	-	-
Massachusetts	12	1.7	-	-	-	12	-	-	-
Michigan	20	2.9	-	-	6	13	-	-	1
Minnesota	16	2.3	1	-	6	9	-	-	-
Mississippi	14	2.0	-	-	5	9	-	-	-
Missouri	20	2.9	-	-	8	12	-	-	-
Montana	4	0.6	-	-	-	4	-	-	-
Nebraska	11	1.6	-	-	7	4	-	-	-
New Jersey	25	3.6	-	-	-	24	-	1	-
New Mexico	15	2.2	2	-	1	12	-	-	-
New York	29	4.2	2	-	-	27	-	-	-
North Carolina	23	3.3	-	-	-	23	-	-	-
North Dakota	3	0.4	-	-	3	-	-	-	-
Ohio	32	4.6	-	-	4	28	-	-	-
Oklahoma	11	1.6	-	-	4	7	-	-	-
Oregon	5	0.7	-	-	-	5	-	-	-
Pennsylvania	33	4.7	2	-	-	31	-	-	-
Rhode Island	3	0.4	-	-	-	3	-	-	-
South Carolina	12	1.7	-	-	2	10	-	-	-
South Dakota	4	0.6	-	-	3	1	-	-	-
Tennessee	6	0.9	-	-	-	5	-	-	1
Texas	56	8.1	1	-	12	43	-	-	-
Utah	3	0.4	-	-	1	2	-	-	-
Vermont	2	0.3	-	-	2	-	-	-	-
Virginia	11	1.6	-	1	-	10	-	-	-
Washington	17	2.4	-	1	-	16	-	-	-
West Virginia	9	1.3	-	-	-	8	-	1	-
Wisconsin	4	0.6	-	-	1	3	-	-	-
Wyoming	3	0.4	1	-	-	1	1	-	-
Total	695	100.0	16	3	121	549	1	3	2

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, 2009

			Type Person Codes									
	Total	%	A	B	C	D	E	F	G	H	I	J
Alaska RR Corp.	81	1.0	81	-	-	-	-	-	-	-	-	-
Amtrak	1,427	18.0	441	38	655	226	59	4	4	-	-	-
Burlington Northern Santa Fe	996	12.6	757	21	-	63	88	11	56	-	-	-
Belt Rwy Of Chicago	15	0.2	14	-	-	-	1	-	-	-	-	-
Canadian National	201	2.5	143	2	-	40	9	2	4	-	-	1
Canadian Pacific	150	1.9	117	4	-	8	17	3	1	-	-	-
Conrail Shared Assets	30	0.4	15	2	-	9	1	3	-	-	-	-
CSX Transportation	527	6.6	335	12	-	66	100	6	7	-	-	1
Florida East Coast	15	0.2	9	-	-	-	6	-	-	-	-	-
Guilford Rail System	11	0.1	10	-	-	-	1	-	-	-	-	-
Other Railroads	636	8.0	476	5	39	47	34	21	7	5	1	1
Indiana Harbor Belt	7	0.1	7	-	-	-	-	-	-	-	-	-
Kansas City Southern	87	1.1	51	-	-	16	8	12	-	-	-	-
Long Island Rail Road	517	6.5	188	5	108	188	9	-	19	-	-	-
MD Assn. of Rail Comm	34	0.4	1	-	16	8	2	-	-	-	-	7
Mass Bay Transit Auth.	172	2.2	83	2	74	10	3	-	-	-	-	-
Metro North Commuter	274	3.5	171	8	22	33	3	-	37	-	-	-
Montana Rail Link	35	0.4	31	1	-	1	1	-	1	-	-	-
Northern IN Comm Trans	17	0.2	5	-	3	7	2	-	-	-	-	-
Northeast IL Reg Comm	274	3.5	82	1	118	58	13	-	1	-	-	1
New Jersey Transit Rail	213	2.7	131	5	39	27	3	-	8	-	-	-
Norfolk Southern Corp.	534	6.7	299	9	-	68	85	43	27	-	-	3
Port Auth Trans Hudson	122	1.5	90	-	12	13	-	7	-	-	-	-
Peninsula Comm San Mateo Cnty	27	0.3	12	-	9	2	3	-	1	-	-	-
Port Terminal RR Assn	6	0.1	6	-	-	-	-	-	-	-	-	-
Southern CA Reg Rail Auth.	29	0.4	6	1	2	2	1	12	5	-	-	-
Southeastern PA Trans.	404	5.1	205	2	69	118	9	1	-	-	-	-
Term RR Assn Of St. Louis	7	0.1	7	-	-	-	-	-	-	-	-	-
Union Pacific	1,063	13.4	678	30	-	172	121	19	35	-	-	8
Union RR (Pittsburgh)	7	0.1	7	-	-	-	-	-	-	-	-	-
Wheeling & Lake Erie	7	0.1	5	-	-	1	1	-	-	-	-	-
Total	7,925	100	4,463	148	1,166	1,183	580	144	213	5	1	22

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, 2009

			Type Person codes									
	Total	%	A	B	C	D	E	F	G	H	I	J
Alabama	105	1.3	61	2	4	21	11	4	2	-	-	-
Alaska	104	1.3	98	-	6	-	-	-	-	-	-	-
Arizona	83	1.0	51	1	10	3	16	-	2	-	-	-
Arkansas	117	1.5	80	2	1	15	14	2	3	-	-	-
California	508	6.4	224	11	124	48	64	15	19	-	-	3
Colorado	125	1.6	89	1	17	7	6	1	3	-	-	1
Connecticut	104	1.3	65	5	19	8	4	-	3	-	-	-
Delaware	38	0.5	27	3	-	8	-	-	-	-	-	-
Dist Of Columbia	79	1.0	37	1	19	20	2	-	-	-	-	-
Florida	166	2.1	66	3	50	22	17	6	2	-	-	-
Georgia	154	1.9	93	-	9	21	27	2	2	-	-	-
Idaho	39	0.5	28	1	-	6	4	-	-	-	-	-
Illinois	814	10.3	370	12	194	161	36	17	22	-	-	2
Indiana	168	2.1	97	2	6	23	30	4	5	1	-	-
Iowa	101	1.3	61	3	6	17	9	2	2	-	1	-
Kansas	111	1.4	81	4	1	10	13	1	1	-	-	-
Kentucky	87	1.1	54	1	1	15	13	1	-	2	-	-
Louisiana	132	1.7	74	-	15	29	8	2	2	-	-	2
Maine	12	0.2	7	-	1	-	4	-	-	-	-	-
Maryland	89	1.1	43	1	23	8	5	1	1	-	-	7
Massachusetts	238	3.0	138	2	81	11	4	1	1	-	-	-
Michigan	111	1.4	72	4	15	10	9	-	1	-	-	-
Minnesota	122	1.5	94	1	2	9	11	4	1	-	-	-
Mississippi	82	1.0	37	-	23	7	14	1	-	-	-	-
Missouri	162	2.0	97	6	15	20	11	5	8	-	-	-
Montana	126	1.6	97	3	11	7	1	1	6	-	-	-
Nebraska	159	2.0	121	8	1	13	12	1	3	-	-	-
Nevada	19	0.2	10	1	4	2	2	-	-	-	-	-
New Hampshire	3	0.0	3	-	-	-	-	-	-	-	-	-
New Jersey	363	4.6	218	6	57	53	10	9	10	-	-	-
New Mexico	52	0.7	29	1	10	2	6	2	2	-	-	-
New York	970	12.2	463	20	162	244	24	3	53	1	-	-
North Carolina	111	1.4	38	-	34	5	28	5	-	-	-	1
North Dakota	59	0.7	45	3	4	7	-	-	-	-	-	-
Ohio	135	1.7	89	1	2	13	20	4	5	1	-	-
Oklahoma	64	0.8	36	1	1	12	12	-	2	-	-	-
Oregon	75	0.9	46	1	6	8	5	7	2	-	-	-
Pennsylvania	641	8.1	337	10	98	154	24	9	9	-	-	-
Rhode Island	6	0.1	3	-	2	1	-	-	-	-	-	-
South Carolina	56	0.7	22	1	11	13	8	1	-	-	-	-
South Dakota	25	0.3	11	-	-	7	6	-	1	-	-	-
Tennessee	107	1.4	69	-	1	11	12	2	10	-	-	2
Texas	478	6.0	286	15	25	69	49	20	13	-	-	1
Utah	45	0.6	25	-	9	5	1	2	3	-	-	-
Vermont	19	0.2	15	-	1	2	1	-	-	-	-	-
Virginia	128	1.6	50	2	46	15	11	4	-	-	-	-
Washington	179	2.3	122	3	27	11	7	2	7	-	-	-
West Virginia	89	1.1	60	1	8	8	4	2	4	-	-	2
Wisconsin	101	1.3	65	4	4	22	4	-	2	-	-	-
Wyoming	64	0.8	59	1	-	-	1	1	1	-	-	1
Total	7,925	100.0	4,463	148	1,166	1,183	580	144	213	5	1	22

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, 2009

Condition	Cnt	%	Type of Person *									
			A	B	C	D	E	F	G	H	I	J
Bruise/contusion	1,553	18.0	592	28	401	328	138	27	28	2	-	9
Occ. Illness	231	2.7	226	1	-	-	-	1	3	-	-	-
Crushing injury	94	1.1	53	-	4	6	20	4	7	-	-	-
Sprain/Str., other	81	0.9	47	3	4	21	6	-	-	-	-	-
Sprain/Str.,arm/hand	257	3.0	216	2	17	16	-	1	4	1	-	-
Sprain/Str.,leg/foot	846	9.8	612	20	105	78	2	9	19	-	-	1
Sprain/Str.,head/face	176	2.0	117	6	15	31	3	2	1	-	-	1
Sprain/Str.,torso	1,344	15.6	1,029	32	115	103	19	19	24	-	-	3
Cut/abrasion	1,214	14.1	488	10	227	260	143	42	44	-	-	-
Puncture wound	65	0.8	55	1	2	-	-	3	4	-	-	-
Needle stick	6	0.1	5	1	-	-	-	-	-	-	-	-
Electric shock/burn	28	0.3	24	-	1	-	-	1	2	-	-	-
Other burn	67	0.8	35	1	13	9	-	6	3	-	-	-
Dislocation	44	0.5	34	2	3	4	1	-	-	-	-	-
Fracture,other	3	0.0	1	-	-	1	1	-	-	-	-	-
Fracture,arm/hand	269	3.1	167	2	25	39	12	8	15	1	-	-
Fracture,leg/foot	304	3.5	120	9	65	60	28	7	14	1	-	-
Fracture,head/face	63	0.7	18	1	6	23	12	2	1	-	-	-
Fracture,torso	139	1.6	55	2	32	30	13	-	5	-	-	2
Fracture,multiple	30	0.3	5	-	-	8	16	1	-	-	-	-
Rupture/tear, tendon, e	115	1.3	92	4	8	8	-	1	2	-	-	-
Gunshot/knife wound	3	0.0	2	-	-	-	-	-	1	-	-	-
Animal/snake/insect bit	107	1.2	76	12	12	2	-	-	5	-	-	-
Dental related	60	0.7	30	3	13	10	-	-	4	-	-	-
Amputation,other	2	0.0	-	-	-	-	2	-	-	-	-	-
Amputation,arm/hand	27	0.3	14	-	-	-	7	2	4	-	-	-
Amputation,leg/foot	49	0.6	7	-	-	1	41	-	-	-	-	-
Fatality	695	8.1	16	-	3	121	549	1	3	-	-	2
Object in eye	121	1.4	99	2	13	-	1	1	5	-	-	-
Hernia	27	0.3	27	-	-	-	-	-	-	-	-	-
Concussion	82	1.0	30	-	14	24	11	2	1	-	-	-
Nervous shock	4	0.0	1	-	-	3	-	-	-	-	-	-
Internal injury	59	0.7	9	-	23	18	8	1	-	-	-	-
Skin reaction	20	0.2	16	-	1	-	-	1	1	-	-	1
One-time exp. to noise	7	0.1	7	-	-	-	-	-	-	-	-	-
Unspecified injury	322	3.7	68	3	42	97	95	2	13	-	1	1
One-time exp.-fumes	106	1.2	86	3	5	3	1	1	3	-	-	4
Total	8,620	100.0	4,479	148	1,169	1,304	1,129	145	216	5	1	24

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
AND TYPE OF PERSON, 2009**

Age		Total		Type of Person *									
		Cnt	%	A	B	C	D	E	F	G	H	I	J
Kid	Unk	61	0.7	-	-	-	3	58	-	-	-	-	-
	1-5	6	0.1	-	-	-	2	4	-	-	-	-	-
	6-10	6	0.1	-	-	-	1	5	-	-	-	-	-
	11-15	15	0.2	-	-	-	3	12	-	-	-	-	-
	16-20	56	0.6	-	-	-	14	42	-	-	-	-	-
	21-25	60	0.7	-	-	-	5	55	-	-	-	-	-
	26-30	53	0.6	3	-	1	6	42	-	1	-	-	-
	31-35	56	0.6	3	-	-	11	41	-	1	-	-	-
	36-40	57	0.7	-	-	-	6	51	-	-	-	-	-
	41-45	79	0.9	3	-	-	18	56	1	1	-	-	-
	46-50	64	0.7	1	-	-	9	53	-	-	-	-	1
	51-55	51	0.6	3	-	-	5	43	-	-	-	-	-
	56-60	37	0.4	2	-	1	7	27	-	-	-	-	-
	> 60	94	1.1	1	-	1	31	60	-	-	-	-	1
	Total	695	8.1	16	-	3	121	549	1	3	-	-	2
Nonfatal	Unk	565	6.6	-	-	242	217	67	4	23	-	-	12
	1-5	52	0.6	-	-	22	18	12	-	-	-	-	-
	6-10	35	0.4	-	-	8	14	13	-	-	-	-	-
	11-15	39	0.5	-	-	11	9	18	-	-	1	-	-
	16-20	171	2.0	19	2	17	52	62	8	7	-	1	3
	21-25	392	4.5	191	4	25	63	73	21	15	-	-	-
	26-30	626	7.3	402	14	33	70	56	27	23	1	-	-
	31-35	731	8.5	533	14	36	66	42	16	24	-	-	-
	36-40	923	10.7	655	15	77	74	53	19	29	-	-	1
	41-45	790	9.2	537	11	61	87	47	16	31	-	-	-
	46-50	841	9.8	563	20	87	94	37	15	22	1	-	2
	51-55	982	11.4	699	27	107	86	34	7	22	-	-	-
	56-60	929	10.8	680	27	89	88	27	6	10	1	-	1
	> 60	849	9.8	184	14	351	245	39	5	7	1	-	3
	Total	7,925	91.9	4,463	148	1,166	1,183	580	144	213	5	1	22
Total		8,620	100.0	4,479	148	1,169	1,304	1,129	145	216	5	1	24

*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, 2009

Month		Total	Type of Person *									
		Cnt	A	B	C	D	E	F	G	H	I	J
Kld	January	40	4	-	-	8	28	-	-	-	-	-
	February	48	3	-	-	4	41	-	-	-	-	-
	March	57	-	-	-	16	41	-	-	-	-	-
	April	53	-	-	-	5	47	-	-	-	-	1
	May	57	2	-	1	5	47	-	1	-	-	1
	June	55	1	-	1	12	41	-	-	-	-	-
	July	85	2	-	-	17	66	-	-	-	-	-
	August	60	-	-	-	13	46	-	1	-	-	-
	September	73	1	-	-	8	63	1	-	-	-	-
	October	55	-	-	-	12	42	-	1	-	-	-
	November	52	2	-	-	7	43	-	-	-	-	-
	December	60	1	-	1	14	44	-	-	-	-	-
	Total	695	16	-	3	121	549	1	3	-	-	2
Nonfatal	January	703	387	29	93	121	43	15	15	-	-	-
	February	560	313	21	69	92	33	14	16	-	-	2
	March	665	362	7	105	99	60	10	15	-	-	7
	April	640	392	9	97	71	33	14	23	-	-	1
	May	641	341	4	103	110	48	10	23	-	-	2
	June	680	376	6	103	87	67	12	26	1	-	2
	July	757	425	10	129	103	58	13	16	-	-	3
	August	733	443	16	94	95	53	9	23	-	-	-
	September	676	401	9	106	83	53	9	13	-	1	1
	October	669	378	6	90	105	54	18	14	1	-	3
	November	537	308	8	70	90	39	6	13	2	-	1
	December	664	337	23	107	127	39	14	16	1	-	-
	Total	7,925	4,463	148	1,166	1,183	580	144	213	5	1	22
Total		8,620	4,479	148	1,169	1,304	1,129	145	216	5	1	24

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, 2009**

Time	Total		Type of Person *									
	Cnt	%	A	B	C	D	E	F	G	H	I	J
AM	1	224	2.6	126	4	18	17	52	2	5	-	-
	2	196	2.3	115	5	7	15	47	2	5	-	-
	3	160	1.9	98	3	10	12	34	1	2	-	-
	4	171	2.0	106	7	20	7	26	1	4	-	-
	5	187	2.2	105	9	12	23	29	3	3	-	3
	6	249	2.9	124	19	37	41	22	4	2	-	-
	7	418	4.8	169	17	72	95	42	10	10	1	2
	8	550	6.4	317	6	63	93	49	11	11	-	-
	9	594	6.9	320	4	92	100	35	15	26	-	2
	10	641	7.4	421	4	66	76	38	15	21	-	-
	11	582	6.8	376	5	49	78	37	15	21	-	1
	12	193	2.2	97	-	23	19	52	-	2	-	-
	Total	4,165	48.3	2,374	83	469	576	463	79	112	1	8
PM	1	485	5.6	288	5	45	67	43	12	22	-	2
	2	483	5.6	271	9	72	75	40	8	8	-	-
	3	434	5.0	208	7	67	75	53	5	16	2	1
	4	418	4.8	193	7	70	60	67	7	5	-	9
	5	443	5.1	190	2	90	86	64	4	7	-	-
	6	369	4.3	140	5	78	72	65	2	7	-	-
	7	317	3.7	132	4	59	58	49	4	10	1	-
	8	269	3.1	110	2	44	53	57	2	-	-	1
	9	244	2.8	99	5	34	38	61	1	6	-	-
	10	238	2.8	102	8	23	28	71	2	4	-	-
	11	218	2.5	103	3	19	29	52	7	4	-	1
	12	537	6.2	269	8	99	87	44	12	15	1	2
	Total	4,455	51.7	2,105	65	700	728	666	66	104	4	16
Total		8,620	100	4,479	148	1,169	1,304	1,129	145	216	5	24

*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 an employee on duty (Class A), while in the work environment, are presumed to be work-related for accident/incident reporting purposes. An employee is considered in the work environment while:

1. Engaged in work activity or apprenticeship/vocational training required by the employer.
2. On break, in the rest room, or in storage areas when located on the employer's premises.
3. 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. 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. Engaged in work activity where a vehicle is considered the work environment (e.g., truck, taxi).
6. At conferences where attendance is expected or required by the employer.
7. Occupying living quarters provided by the employer on workplace premises. Also:
 - a. In these workplaces, injuries or illnesses are presumed to be work-related if the employee is on duty or engaged in a work activity.
 - b. 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.
 - c. 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 an employee on duty (Class A) should they be injured. These individuals are more appropriately classified as employees not on duty, non-trespassers on railroad property, passengers on train, etc., and if hurt should be identified as such. Examples are as follows:

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.

CONTENTS**CHAPTER 4****EMPLOYEE-ON-DUTY CASUALTIES**

Tables		Page
4-1	Reportable Conditions to Employees On Duty, 2009	48
4-2	Reportable Conditions to Employees On Duty, by Railroad, 2009	49
4-3	Reportable Conditions to Employees On Duty, by State, 2009	50
4-4	Reportable Conditions to Employees On Duty, by Activity, 2009	51
4-5	Reportable Conditions to Employees On Duty, by Event, 2009	53
4-6	Reportable Conditions to Employees On Duty, by Location, 2009	55
4-7	Reportable Conditions to Employees On Duty, by Job, 2009	56
4-8	Occupational Illnesses of Employees On Duty, 2009	59
4-9	Occupational Illnesses of Employees On Duty, by Railroad, 2009	59

TABLE 4-1 REPORTABLE CONDITIONS TO RR EMPLOYEES ON DUTY, 2009

Condition	Total		Days Absent			Absent Cases 1/		Term./ Trans. 2/	Days Restricted			Hazmat Exp. 3/
	Cnt	%	Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.	Cnt
Bruise/contusion	592	13.2	26,882	12.2	45	430	14.4	3	3,350	10.5	6	-
Occ. Illness	226	5.0	3,980	1.8	18	59	2.0	-	529	1.7	2	1
Crushing injury	53	1.2	1,722	0.8	32	30	1.0	-	638	2.0	12	-
Sprain/Str.,arm/hand	216	4.8	11,246	5.1	52	158	5.3	-	2,220	7.0	10	1
Sprain/Str.,leg/foot	612	13.7	33,815	15.3	55	488	16.3	1	6,135	19.2	10	2
Sprain/Str.,head/face	117	2.6	6,829	3.1	58	78	2.6	-	579	1.8	5	-
Sprain/Str.,torso	1,029	23.0	74,381	33.7	72	831	27.7	1	7,912	24.8	8	-
Sprain/Str., other	47	1.0	3,215	1.5	68	40	1.3	-	52	0.2	1	-
Cut/abrasion	488	10.9	8,583	3.9	18	199	6.6	1	1,516	4.7	3	-
Puncture wound	55	1.2	545	0.2	10	18	0.6	-	130	0.4	2	-
Needle stick	5	0.1	4	0.0	1	1	0.0	-	0	0.0	0	-
Electric shock/burn	24	0.5	1,319	0.6	55	20	0.7	-	57	0.2	2	-
Other burn	35	0.8	346	0.2	10	15	0.5	-	57	0.2	2	1
Dislocation	34	0.8	3,220	1.5	95	26	0.9	-	342	1.1	10	-
Fracture,arm/hand	167	3.7	7,267	3.3	44	110	3.7	-	3,280	10.3	20	-
Fracture,leg/foot	120	2.7	11,654	5.3	97	109	3.6	-	1,343	4.2	11	-
Fracture,head/face	18	0.4	1,557	0.7	87	15	0.5	-	0	0.0	0	-
Fracture,torso	55	1.2	5,138	2.3	93	49	1.6	-	511	1.6	9	-
Fracture,multiple	5	0.1	900	0.4	180	5	0.2	-	0	0.0	0	1
Fracture,other	1	0.0	180	0.1	180	1	0.0	-	0	0.0	0	-
Rupture/tear, tendon, etc	92	2.1	7,330	3.3	80	74	2.5	-	1,502	4.7	16	-
Gunshot/knife wound	2	0.0	100	0.0	50	1	0.0	-	0	0.0	0	-
Animal/snake/insect bite	76	1.7	253	0.1	3	19	0.6	-	25	0.1	0	-
Dental related	30	0.7	234	0.1	8	7	0.2	1	0	0.0	0	-
Amputation,arm/hand	14	0.3	845	0.4	60	13	0.4	-	581	1.8	42	-
Amputation,leg/foot	7	0.2	1,017	0.5	145	7	0.2	-	0	0.0	0	-
Fatality	16	0.4	0	0.0	0	-	-	-	0	0.0	0	-
Object in eye	99	2.2	101	0.0	1	30	1.0	-	1	0.0	0	-
Hernia	27	0.6	1,175	0.5	44	20	0.7	-	243	0.8	9	-
Concussion	30	0.7	2,272	1.0	76	29	1.0	-	68	0.2	2	1
Nervous shock	1	0.0	0	0.0	0	-	-	-	0	0.0	0	-
Internal injury	9	0.2	157	0.1	17	6	0.2	-	14	0.0	2	-
Skin reaction	16	0.4	428	0.2	27	5	0.2	-	351	1.1	22	3
One-time exp. to noise	7	0.2	36	0.0	5	4	0.1	-	0	0.0	0	-
Unspecified injury	68	1.5	2,575	1.2	38	50	1.7	-	374	1.2	6	-
One-time exp.-fumes	86	1.9	1,541	0.7	18	48	1.6	-	117	0.4	1	24
Total	4,479	100	220,847	100	49	2,995	100	7	31,927	100	7	34

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, 2009

RR	Total		Deaths		Nonfatal		Days Absent			Absent Cases		Term./Trans.	Days Restricted			Hazmat Exp.
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.	Cnt
ARR	81	1.8	-	0.0	81	1.8	414	0.2	5	24	0.8	-	9	0.0	0	-
ATK	441	9.8	-	0.0	441	9.9	19,539	8.8	44	221	7.4	-	2,324	7.3	5	-
BNSF	763	17.0	6	37.5	757	17.0	45,241	20.5	59	549	18.3	-	4,378	13.7	6	8
BRC	14	0.3	-	0.0	14	0.3	174	0.1	12	7	0.2	-	0	0.0	0	-
CN	143	3.2	-	0.0	143	3.2	9,955	4.5	70	117	3.9	1	83	0.3	1	9
CP	119	2.7	2	12.5	117	2.6	6,679	3.0	56	91	3.0	-	1,371	4.3	12	-
CRSH	15	0.3	-	0.0	15	0.3	931	0.4	62	10	0.3	-	0	0.0	0	2
CSX	337	7.5	2	12.5	335	7.5	28,547	12.9	85	277	9.2	-	537	1.7	2	-
FEC	9	0.2	-	0.0	9	0.2	789	0.4	88	8	0.3	-	276	0.9	31	-
GRS	10	0.2	-	0.0	10	0.2	185	0.1	19	7	0.2	-	0	0.0	0	-
IAIS	5	0.1	-	0.0	5	0.1	72	0.0	14	5	0.2	-	0	0.0	0	-
IHB	7	0.2	-	0.0	7	0.2	433	0.2	62	4	0.1	-	0	0.0	0	-
KCS	51	1.1	-	0.0	51	1.1	237	0.1	5	11	0.4	-	1,639	5.1	32	-
LI	188	4.2	-	0.0	188	4.2	4,726	2.1	25	157	5.2	1	4,378	13.7	23	-
MACZ	1	0.0	-	0.0	1	0.0	144	0.1	144	1	0.0	-	0	0.0	0	-
MBTA	83	1.9	-	0.0	83	1.9	1,872	0.8	23	60	2.0	-	32	0.1	0	-
MH	1	0.0	-	0.0	1	0.0	0	0.0	0	-	-	-	0	0.0	0	-
MNCW	172	3.8	1	6.3	171	3.8	7,236	3.3	42	114	3.8	-	1,416	4.4	8	-
MRL	31	0.7	-	0.0	31	0.7	1,088	0.5	35	18	0.6	-	194	0.6	6	1
NICD	5	0.1	-	0.0	5	0.1	296	0.1	59	5	0.2	-	306	1.0	61	-
NIRC	82	1.8	-	0.0	82	1.8	1,857	0.8	23	43	1.4	-	540	1.7	7	4
NJTR	131	2.9	-	0.0	131	2.9	7,098	3.2	54	112	3.7	-	154	0.5	1	-
NS	299	6.7	-	0.0	299	6.7	30,366	13.7	102	241	8.0	-	228	0.7	1	-
PATH	90	2.0	-	0.0	90	2.0	1,029	0.5	11	88	2.9	-	9	0.0	0	-
PCMZ	12	0.3	-	0.0	12	0.3	570	0.3	48	7	0.2	-	41	0.1	3	-
PTRA	6	0.1	-	0.0	6	0.1	51	0.0	9	4	0.1	-	0	0.0	0	1
SCAX	6	0.1	-	0.0	6	0.1	317	0.1	53	4	0.1	-	16	0.1	3	-
SEPA	206	4.6	1	6.3	205	4.6	8,033	3.6	39	162	5.4	1	44	0.1	0	2
TRRA	7	0.2	-	0.0	7	0.2	156	0.1	22	6	0.2	-	156	0.5	22	-
UP	681	15.2	3	18.8	678	15.2	36,653	16.6	54	410	13.7	-	9,019	28.2	13	6
URR	7	0.2	-	0.0	7	0.2	18	0.0	3	1	0.0	-	640	2.0	91	-
WE	5	0.1	-	0.0	5	0.1	0	0.0	0	-	-	-	0	0.0	0	-
XXXX	471	10.5	1	6.3	470	10.5	6,141	2.8	13	231	7.7	4	4,137	13.0	9	1
Tot.	4,479	100	16	100	4,463	100	220,847	100	49	2,995	100	7	31,927	100	7	34

XXXX = All other railroads

TABLE 4-3 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY, BY STATE, 2009

	Total		Deaths		Nonfatal		Days Absent			Absent Cases		Term./	Days Restricted			Hazmat
	Cnt	%	Cnt	%	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	Cnt	%	Avg.	Exp. Cnt
AL	62	1.4	1	6.3	61	1.4	3,722	1.7	60	42	1.4	-	226	0.7	4	-
AK	98	2.2	-	0.0	98	2.2	481	0.2	5	39	1.3	-	9	0.0	0	-
AZ	53	1.2	2	12.5	51	1.1	1,945	0.9	37	40	1.3	-	366	1.1	7	1
AR	80	1.8	-	0.0	80	1.8	3,666	1.7	46	47	1.6	-	880	2.8	11	2
CA	224	5.0	-	0.0	224	5.0	12,797	5.8	57	151	5.0	-	1,999	6.3	9	2
CO	89	2.0	-	0.0	89	2.0	2,453	1.1	28	48	1.6	1	983	3.1	11	-
CT	65	1.5	-	0.0	65	1.5	3,174	1.4	49	41	1.4	-	370	1.2	6	-
DE	27	0.6	-	0.0	27	0.6	624	0.3	23	13	0.4	-	114	0.4	4	-
DC	37	0.8	-	0.0	37	0.8	1,299	0.6	35	14	0.5	-	11	0.0	0	-
FL	66	1.5	-	0.0	66	1.5	3,912	1.8	59	44	1.5	-	451	1.4	7	-
GA	93	2.1	-	0.0	93	2.1	8,855	4.0	95	73	2.4	-	152	0.5	2	-
ID	28	0.6	-	0.0	28	0.6	1,633	0.7	58	14	0.5	-	194	0.6	7	-
IL	370	8.3	-	0.0	370	8.3	18,211	8.2	49	249	8.3	-	2,237	7.0	6	10
IN	97	2.2	-	0.0	97	2.2	6,303	2.9	65	65	2.2	1	1,302	4.1	13	-
IA	64	1.4	3	18.8	61	1.4	1,754	0.8	27	38	1.3	-	720	2.3	11	-
KS	82	1.8	1	6.3	81	1.8	3,263	1.5	40	53	1.8	-	823	2.6	10	-
KY	54	1.2	-	0.0	54	1.2	4,481	2.0	83	44	1.5	-	36	0.1	1	-
LA	74	1.7	-	0.0	74	1.7	2,672	1.2	36	37	1.2	-	1,113	3.5	15	-
ME	7	0.2	-	0.0	7	0.2	313	0.1	45	3	0.1	-	80	0.3	11	-
MD	43	1.0	-	0.0	43	1.0	2,657	1.2	62	31	1.0	-	110	0.3	3	-
MA	138	3.1	-	0.0	138	3.1	5,259	2.4	38	92	3.1	-	165	0.5	1	-
MI	72	1.6	-	0.0	72	1.6	2,993	1.4	42	46	1.5	-	162	0.5	2	2
MN	95	2.1	1	6.3	94	2.1	3,805	1.7	40	64	2.1	-	773	2.4	8	-
MS	37	0.8	-	0.0	37	0.8	3,289	1.5	89	25	0.8	-	87	0.3	2	2
MO	97	2.2	-	0.0	97	2.2	3,947	1.8	41	52	1.7	-	1,145	3.6	12	-
MT	97	2.2	-	0.0	97	2.2	5,136	2.3	53	64	2.1	-	616	1.9	6	1
NE	121	2.7	-	0.0	121	2.7	6,115	2.8	51	78	2.6	1	995	3.1	8	-
NV	10	0.2	-	0.0	10	0.2	388	0.2	39	6	0.2	-	95	0.3	10	-
NH	3	0.1	-	0.0	3	0.1	90	0.0	30	1	0.0	-	7	0.0	2	-
NJ	218	4.9	-	0.0	218	4.9	8,162	3.7	37	185	6.2	-	306	1.0	1	-
NM	31	0.7	2	12.5	29	0.6	1,343	0.6	43	20	0.7	-	199	0.6	6	-
NY	465	10.4	2	12.5	463	10.4	16,504	7.5	35	351	11.7	1	6,755	21.2	15	-
NC	38	0.8	-	0.0	38	0.9	2,286	1.0	60	29	1.0	-	68	0.2	2	-
ND	45	1.0	-	0.0	45	1.0	1,981	0.9	44	25	0.8	-	70	0.2	2	-
OH	89	2.0	-	0.0	89	2.0	7,641	3.5	86	61	2.0	-	214	0.7	2	-
OK	36	0.8	-	0.0	36	0.8	2,230	1.0	62	25	0.8	-	641	2.0	18	-
OR	46	1.0	-	0.0	46	1.0	3,029	1.4	66	29	1.0	-	541	1.7	12	-
PA	339	7.6	2	12.5	337	7.6	15,601	7.1	46	235	7.8	1	955	3.0	3	2
RI	3	0.1	-	0.0	3	0.1	4	0.0	1	1	0.0	-	72	0.2	24	-
SC	22	0.5	-	0.0	22	0.5	1,412	0.6	64	17	0.6	-	31	0.1	1	-
SD	11	0.2	-	0.0	11	0.2	954	0.4	87	10	0.3	-	10	0.0	1	-
TN	69	1.5	-	0.0	69	1.5	5,451	2.5	79	53	1.8	-	56	0.2	1	1
TX	287	6.4	1	6.3	286	6.4	17,109	7.7	60	187	6.2	-	2,861	9.0	10	9
UT	25	0.6	-	0.0	25	0.6	718	0.3	29	12	0.4	-	453	1.4	18	-
VT	15	0.3	-	0.0	15	0.3	107	0.0	7	2	0.1	-	543	1.7	36	-
VA	50	1.1	-	0.0	50	1.1	3,431	1.6	69	36	1.2	-	206	0.6	4	-
WA	122	2.7	-	0.0	122	2.7	6,074	2.8	50	84	2.8	-	656	2.1	5	-
WV	60	1.3	-	0.0	60	1.3	4,542	2.1	76	43	1.4	-	42	0.1	1	-
WI	65	1.5	-	0.0	65	1.5	4,013	1.8	62	46	1.5	2	789	2.5	12	1
WY	60	1.3	1	6.3	59	1.3	3,018	1.4	50	30	1.0	-	238	0.7	4	1
Tot.	4,479	100	16	100	4,463	100	220,847	100	49	2,995	100	7	31,927	100	7	34

TABLE 4-4 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY ACTIVITY, 2009

Activity	Total		Days Absent		Absent Cases		Term./ Trans. Cnt	Days Restricted		Hazmat Exp. Cnt
	Cnt	%	Cnt	%	Cnt	%		Cnt	%	
Adjusting coupler	11	0.2	513	0.2	8	0.3	-	210	0.7	1
Adjusting drawbar	10	0.2	1,014	0.5	10	0.3	-	46	0.1	-
Adjusting, other	53	1.2	1,786	0.8	33	1.1	-	370	1.2	-
Applying rail anchor/fastener	8	0.2	227	0.1	4	0.1	-	32	0.1	-
Bending, stooping	92	2.1	3,136	1.4	60	2.0	-	889	2.8	-
Carrying	48	1.1	2,238	1.0	37	1.2	-	219	0.7	-
Chaining, cabling car or locomotive	3	0.1	249	0.1	3	0.1	-	0	0.0	-
Cleaning	47	1.0	1,372	0.6	21	0.7	-	44	0.1	1
Climbing over/on	59	1.3	3,005	1.4	46	1.5	-	963	3.0	-
Closing	71	1.6	2,733	1.2	48	1.6	-	232	0.7	-
Coupling electric cables	2	0.0	28	0.0	1	0.0	-	0	0.0	-
Coupling air hose	31	0.7	1,736	0.8	24	0.8	-	77	0.2	-
Crossing over	8	0.2	529	0.2	7	0.2	-	88	0.3	-
Crossing or crawling under	3	0.1	80	0.0	2	0.1	-	52	0.2	-
Crossing between	2	0.0	10	0.0	2	0.1	-	11	0.0	-
Cutting rail	11	0.2	337	0.2	7	0.2	-	46	0.1	-
Cutting vegetation	12	0.3	254	0.1	7	0.2	-	105	0.3	-
Cutting, other	46	1.0	353	0.2	20	0.7	-	87	0.3	-
Digging, excavating	15	0.3	651	0.3	10	0.3	-	50	0.2	-
Driving (motor vehicle, forklift, etc.)	118	2.6	5,718	2.6	71	2.4	-	574	1.8	1
Flagging	5	0.1	203	0.1	4	0.1	-	0	0.0	-
Fueling	5	0.1	108	0.0	3	0.1	-	70	0.2	-
Getting on	64	1.4	3,649	1.7	50	1.7	-	399	1.2	-
Getting off	126	2.8	6,685	3.0	92	3.1	-	1,876	5.9	-
Grinding	28	0.6	652	0.3	10	0.3	-	20	0.1	-
Handling baggage	12	0.3	775	0.4	9	0.3	-	201	0.6	-
Handling car parts	7	0.2	324	0.1	4	0.1	-	132	0.4	-
Handling material, general	33	0.7	1,030	0.5	14	0.5	1	165	0.5	-
Handling locomotive parts	14	0.3	689	0.3	9	0.3	-	190	0.6	-
Handling wheels/trucks	2	0.0	3	0.0	1	0.0	-	96	0.3	-
Handling, other	78	1.7	3,253	1.5	46	1.5	-	666	2.1	-
Handling other track material/supplies	28	0.6	1,288	0.6	17	0.6	-	119	0.4	-
Handling poles	2	0.0	180	0.1	1	0.0	-	3	0.0	-
Handling tie plates	10	0.2	548	0.2	6	0.2	-	15	0.0	-
Handling ties	13	0.3	267	0.1	7	0.2	-	75	0.2	-
Handling rail	15	0.3	995	0.5	11	0.4	-	12	0.0	-
Inspecting	57	1.3	2,279	1.0	32	1.1	-	404	1.3	-
Installing	51	1.1	807	0.4	29	1.0	-	209	0.7	-
Jumping from	16	0.4	1,004	0.5	14	0.5	-	15	0.0	-
Jumping onto	1	0.0	0	0.0	-	-	-	0	0.0	-
Laying	3	0.1	83	0.0	3	0.1	-	0	0.0	-
Lifting other material	79	1.8	3,178	1.4	51	1.7	1	1,413	4.4	-
Lifting equipment (tools, parts, etc.)	74	1.7	3,470	1.6	50	1.7	-	952	3.0	1
Lining switches	101	2.3	8,099	3.7	83	2.8	-	1,236	3.9	-
Lining, other	6	0.1	193	0.1	2	0.1	-	44	0.1	-
Loading/unloading	44	1.0	1,399	0.6	27	0.9	-	521	1.6	-
Maintaining	67	1.5	3,274	1.5	43	1.4	-	925	2.9	1
Opening	81	1.8	3,531	1.6	63	2.1	-	516	1.6	-
Opening/closing angle cock	9	0.2	151	0.1	4	0.1	1	53	0.2	-
Operating	134	3.0	8,066	3.7	97	3.2	1	292	0.9	3
Pulling pin lifter/operating uncoupler	33	0.7	1,802	0.8	22	0.7	-	289	0.9	1

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 4-4 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY BY ACTIVITY, 2009

Pulling	68	1.5	3,128	1.4	45	1.5	-	622	1.9	3
Pushing	32	0.7	1,551	0.7	22	0.7	-	306	1.0	-
Reaching	43	1.0	1,749	0.8	25	0.8	-	446	1.4	-
Removing rail anchors/fasteners	11	0.2	484	0.2	7	0.2	-	108	0.3	-
Repairing	88	2.0	3,028	1.4	49	1.6	-	786	2.5	-
Riding	228	5.1	15,217	6.9	158	5.3	1	1,155	3.6	1
Running	12	0.3	1,272	0.6	10	0.3	-	215	0.7	-
Sitting	189	4.2	12,287	5.6	140	4.7	-	348	1.1	2
Spiking (installation/removal)	53	1.2	1,563	0.7	31	1.0	-	391	1.2	-
Standing	284	6.3	8,604	3.9	141	4.7	-	1,018	3.2	7
Stepping up	32	0.7	1,848	0.8	25	0.8	-	302	0.9	-
Stepping down	111	2.5	6,183	2.8	87	2.9	2	1,289	4.0	-
Stepping over	18	0.4	951	0.4	10	0.3	-	268	0.8	-
Uncoupling air hose	10	0.2	344	0.2	6	0.2	-	46	0.1	-
Uncoupling electric cables	1	0.0	32	0.0	1	0.0	-	0	0.0	-
Using hand tool	127	2.8	4,746	2.1	67	2.2	-	670	2.1	1
Using, other	11	0.2	374	0.2	5	0.2	-	171	0.5	-
Walking	739	16.5	42,065	19.0	555	18.5	-	5,192	16.3	11
Welding (includes field welding)	18	0.4	593	0.3	6	0.2	-	5	0.0	-
Handbrakes, applying	84	1.9	5,809	2.6	69	2.3	-	735	2.3	-
Handbrakes, releasing	62	1.4	5,290	2.4	51	1.7	-	482	1.5	-
Handbrakes, other	3	0.1	235	0.1	2	0.1	-	51	0.2	-
Derail, applying	5	0.1	383	0.2	5	0.2	-	17	0.1	-
Derail, removing	4	0.1	210	0.1	4	0.1	-	0	0.0	-
Derail, other	3	0.1	362	0.2	3	0.1	-	0	0.0	-
Other (Narrative must be provided)	97	2.2	1,663	0.8	33	1.1	-	26	0.1	-
Replacing	20	0.4	851	0.4	16	0.5	-	342	1.1	-
Ascending	37	0.8	2,458	1.1	28	0.9	-	134	0.4	-
Descending	86	1.9	6,469	2.9	71	2.4	-	481	1.5	-
Exercising	4	0.1	360	0.2	2	0.1	-	0	0.0	-
Getting in	12	0.3	653	0.3	9	0.3	-	1	0.0	-
Getting out	30	0.7	1,359	0.6	21	0.7	-	335	1.0	-
Moving	23	0.5	831	0.4	11	0.4	-	437	1.4	-
Washing	2	0.0	34	0.0	2	0.1	-	0	0.0	-
Servicing	35	0.8	709	0.3	16	0.5	-	224	0.7	-
Sanding	8	0.2	308	0.1	6	0.2	-	91	0.3	-
Arresting/apprehending/subduing	14	0.3	672	0.3	10	0.3	-	132	0.4	-
Sleeping	1	0.0	0	0.0	-	-	-	0	0.0	-
Stepped on	24	0.5	2,217	1.0	20	0.7	-	98	0.3	-
Lying down	2	0.0	1	0.0	1	0.0	-	0	0.0	-
Total	4,479	100	220,847	100	2,995	100	7	31,927	100	34

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, 2009

Event	Total		Days Absent		Absent Cases		Term./ Trans.	Days Restricted		Hazmat Exp.
	Cnt	%	Cnt	%	Cnt	%		Cnt	%	
Aggravated pre-existing condition	76	1.7	4,025	1.8	59	2.0	-	478	1.5	-
Apprehending/removing from property	10	0.2	311	0.1	7	0.2	-	132	0.4	-
Assaulted by other	27	0.6	926	0.4	21	0.7	-	248	0.8	-
Assaulted by coworker	6	0.1	48	0.0	1	0.0	-	0	0.0	-
Bitten/stung by bee, spider, other insect	79	1.8	247	0.1	18	0.6	-	9	0.0	-
Bitten by animal	5	0.1	9	0.0	2	0.1	-	16	0.1	-
Bodily function/sudden movement, e.g., sneez	163	3.6	8,916	4.0	127	4.2	-	1,614	5.1	-
Caught in/compressed by hand tools	22	0.5	364	0.2	11	0.4	-	346	1.1	-
Caught in/compressed by other machinery	16	0.4	653	0.3	10	0.3	-	265	0.8	-
Caught in/crushed by materials	26	0.6	805	0.4	16	0.5	-	295	0.9	-
Caught in/compressed by powered hand tools	6	0.1	38	0.0	3	0.1	-	134	0.4	-
Cave in, slide, etc.	1	0.0	0	0.0	-	-	-	0	0.0	-
Climatic conditions, other (e.g., high wind	20	0.4	165	0.1	9	0.3	-	93	0.3	-
Climatic condition, exposure to environment	18	0.4	36	0.0	8	0.3	-	0	0.0	-
Collision - between on track equipment	71	1.6	6,221	2.8	52	1.7	1	80	0.3	-
Collision/impact - auto, truck, bus, van, e	154	3.4	8,627	3.9	107	3.6	-	713	2.2	-
Defective/malfunctioning equipment	70	1.6	6,509	2.9	56	1.9	-	594	1.9	-
Derailment	31	0.7	2,087	0.9	20	0.7	-	103	0.3	-
Electrical shock while operating welding e	1	0.0	0	0.0	-	-	-	0	0.0	-
Electrical shock due to contact with 3rd ra	2	0.0	7	0.0	2	0.1	-	14	0.0	-
Electrical shock, other (explain in narrati	15	0.3	971	0.4	12	0.4	-	37	0.1	-
Electrical shock from hand tool	1	0.0	13	0.0	1	0.0	-	0	0.0	-
Exposure to fumes - inhalation	90	2.0	1,233	0.6	50	1.7	-	498	1.6	22
Exposure to chemicals - external	20	0.4	444	0.2	6	0.2	-	1	0.0	6
Exposure to poisonous plants	4	0.1	18	0.0	3	0.1	-	0	0.0	-
Exposure to noise over time	135	3.0	0	0.0	-	-	-	0	0.0	-
Exposure to noise - single incident	5	0.1	36	0.0	4	0.1	-	0	0.0	-
Exposure to welding light	1	0.0	2	0.0	1	0.0	-	0	0.0	-
Highway-rail collision/impact	69	1.5	6,580	3.0	54	1.8	1	12	0.0	2
Horseplay, practical joke, etc.	7	0.2	455	0.2	5	0.2	-	6	0.0	-
Lost balance	127	2.8	8,772	4.0	102	3.4	-	771	2.4	-
Missed handhold, grabiron, step, etc.	37	0.8	2,371	1.1	30	1.0	-	587	1.8	-
Needle puncture/prick/stick	14	0.3	4	0.0	1	0.0	-	7	0.0	-
Other impacts - on track equipment	21	0.5	1,629	0.7	16	0.5	-	67	0.2	-
Overexertion	617	13.8	39,495	17.9	485	16.2	-	6,723	21.1	-
Pushed/shoved into/against	13	0.3	655	0.3	11	0.4	1	185	0.6	-
Pushed/shoved onto	2	0.0	4	0.0	1	0.0	-	0	0.0	-
Pushed/shoved from	13	0.3	798	0.4	9	0.3	-	445	1.4	-
Ran into on-track equipment	3	0.1	52	0.0	1	0.0	-	0	0.0	-
Ran into object/equipment	19	0.4	867	0.4	11	0.4	-	8	0.0	-
Repetitive motion - work processes	39	0.9	2,220	1.0	29	1.0	-	435	1.4	-
Repetitive motion - typing, keyboard, etc.	3	0.1	1	0.0	1	0.0	-	19	0.1	-
Repetitive motion - tools	13	0.3	487	0.2	9	0.3	-	42	0.1	-
Repetitive motion - other (describe in narr	11	0.2	1,055	0.5	9	0.3	-	21	0.1	-
Rubbed, abraded, etc.	14	0.3	8	0.0	3	0.1	-	29	0.1	-
Shot	1	0.0	100	0.0	1	0.0	-	0	0.0	-
Slack action, draft, compressive buff/coupl	22	0.5	1,889	0.9	20	0.7	-	152	0.5	-
Slipped,fell,stumbled,etc. due to irregular	128	2.9	7,087	3.2	106	3.5	-	1,401	4.4	-
Slipped, fell, stumbled, etc. due to climat	154	3.4	8,238	3.7	121	4.0	-	1,458	4.6	-
Slipped,fell,stumbled,etc. on oil, grease,e	50	1.1	3,636	1.6	39	1.3	-	497	1.6	1
Slipped,fell,stumbled,etc. due to object,ba	241	5.4	15,528	7.0	188	6.3	1	2,533	7.9	2

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, 2009

Stabbing, knifing, etc.	4	0.1	0	0.0	-	-	-	7	0.0	-
Stepped on object	70	1.6	4,131	1.9	45	1.5	-	727	2.3	-
Struck by thrown or propelled object	44	1.0	1,222	0.6	18	0.6	-	96	0.3	-
Struck by object	289	6.5	8,964	4.1	178	5.9	1	1,183	3.7	-
Struck by on-track equipment	29	0.6	1,949	0.9	17	0.6	-	177	0.6	-
Struck by falling object	74	1.7	2,961	1.3	50	1.7	-	469	1.5	-
Struck against object	131	2.9	4,029	1.8	79	2.6	-	380	1.2	-
Sudden release of air	6	0.1	50	0.0	2	0.1	-	0	0.0	-
Sudden/unexpected movement of material	28	0.6	1,637	0.7	20	0.7	1	251	0.8	-
Sudden/unexpected movement of on-track equ	50	1.1	2,954	1.3	38	1.3	-	251	0.8	-
Sudden/unexpected movement of vehicle	33	0.7	1,837	0.8	24	0.8	-	28	0.1	-
Sustained viewing	1	0.0	17	0.0	1	0.0	-	0	0.0	-
Caught, crushed, pinched, other	188	4.2	4,142	1.9	100	3.3	-	1,494	4.7	-
On track equipment, other incidents	17	0.4	1,250	0.6	13	0.4	-	182	0.6	-
Slipped, fell, stumbled, other	362	8.1	24,559	11.1	286	9.5	-	2,375	7.4	1
Sudden, unexpected movement, other	98	2.2	6,576	3.0	71	2.4	-	756	2.4	-
Bumped	19	0.4	930	0.4	14	0.5	-	10	0.0	-
Burned	27	0.6	543	0.2	14	0.5	-	49	0.2	-
Blowing/falling debris	59	1.3	75	0.0	18	0.6	-	7	0.0	-
Sudden/Unexpected Movement of tools	59	1.3	2,237	1.0	29	1.0	-	355	1.1	-
Struck by Other Remote Control Locomotive	1	0.0	7	0.0	1	0.0	-	0	0.0	-
Caught Between Machinery	3	0.1	233	0.1	3	0.1	-	324	1.0	-
Slack adjustment during switching operation	15	0.3	603	0.3	9	0.3	-	201	0.6	-
Caught Between Equipment	20	0.4	698	0.3	8	0.3	-	393	1.2	-
Caught Between Material	12	0.3	617	0.3	6	0.2	-	226	0.7	-
Other (describe in narrative)	147	3.3	3,984	1.8	93	3.1	1	918	2.9	-
Total	4,479	100	220,847	100	2,995	100	7	31,927	100	34

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 EMPLOYEE ON DUTY BY LOCATION, 2009

Location	Total		Days Absent		Absent Cases		Term./ Trans. Cnt	Days Restricted		Hazmat Exp. Cnt
	Cnt	%	Cnt	%	Cnt	%		Cnt	%	
Main/branch	1,334	29.8	71,338	32.3	926	30.9	1	8,500	26.6	5
Yard	1,285	28.7	74,043	33.5	964	32.2	3	9,741	30.5	25
Siding	135	3.0	7,109	3.2	93	3.1	-	1,016	3.2	1
Industry	188	4.2	11,147	5.0	131	4.4	-	2,130	6.7	-
Repair	101	2.3	2,665	1.2	49	1.6	1	1,135	3.6	-
Break/lunch room	24	0.5	1,475	0.7	16	0.5	-	76	0.2	-
Freight terminal	40	0.9	2,178	1.0	34	1.1	-	433	1.4	-
Highway/roadway	192	4.3	10,557	4.8	131	4.4	1	1,094	3.4	1
Loading dock	13	0.3	301	0.1	9	0.3	-	23	0.1	-
Office environment	94	2.1	2,637	1.2	49	1.6	-	77	0.2	1
Parking lot	72	1.6	2,934	1.3	48	1.6	-	386	1.2	-
Passenger terminal	310	6.9	10,990	5.0	155	5.2	-	1,851	5.8	-
Repair shop	436	9.7	15,887	7.2	251	8.4	1	3,815	11.9	1
Storage facility	34	0.8	1,451	0.7	22	0.7	-	710	2.2	-
Sidewalk/walkway	36	0.8	1,446	0.7	24	0.8	-	191	0.6	-
Other, (off site location	48	1.1	1,635	0.7	28	0.9	-	396	1.2	-
Other (explain in narrati	31	0.7	1,240	0.6	24	0.8	-	46	0.1	-
Other location (describe	106	2.4	1,814	0.8	41	1.4	-	307	1.0	-
Total	4,479	100	220,847	100	2,995	100	7	31,927	100	34

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, 2009

Executives, Officials, and Staff Assistants

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Executives and general officers	-	2	-	1	0
Corporate staff managers	-	6	-	181	26
Regional/division officers, assistants and staff assistants	-	9	-	293	1
Transportation officers/managers	-	9	-	362	19
Total	-	26	-	837	46

Professional and Administrative

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Professional and administrative (miscellaneous)	-	5	-	3	10
Professional	-	7	2	5	7
Subprofessionals	-	10	-	354	2
General and administrative supervisors	-	8	1	189	0
Sales and traffic representatives and agents	-	1	-	0	0
Supervising and chief claim agents	-	2	-	0	0
Lieutenants and sergeants of police	-	11	-	766	0
Police officers, watchmen, guards (except crossing & bridge)	-	33	3	2,033	191
Inspectors, (except MOW & MOE), other investigators, etc	-	9	-	230	9
Clerical technicians and clerical specialists	-	8	3	264	158
Office machine and data equipment operators	-	4	-	80	0
Secretaries, stenographers, and typists	-	2	-	155	0
General/other clerks (except yd clerk and crew dispatcher)	-	54	2	1,797	361
Building and office attendants	-	20	-	659	140
Messengers and office persons	-	3	1	53	0
Motor vehicle operators	-	37	1	1,310	285
Total	-	214	13	7,898	1,163

Maintenance of Way and Structures

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Maintenance of way and structures (miscellaneous)	-	40	2	683	319
Supervisors, MOW, structures, communication & signals	-	20	2	640	229
MOW, structures, comm. & signals, & scale inspectors	1	30	2	1,311	100
Bridge and building gang foreman	-	19	-	865	54
Bridge and building carpenters	-	32	3	1,610	241
Bridge and building ironworkers	-	6	-	134	186
Bridge and building painters	-	3	-	192	0
Masons, bricklayers, plasterers, and plumbers	-	76	2	4,307	807
Bridge and building helpers and apprentices	-	16	2	375	64
Bridge/building gang and bridge/building dept laborers	-	45	1	2,571	212
Track gang foremen (extra gang work train laborers)	-	45	2	2,462	776
Gang or section foreman	3	77	11	4,041	417
Extra gang laborers	-	98	9	4,471	651
Section laborers	-	198	14	8,012	1,172
Machine operators	-	204	12	10,895	1,682
Gang foremen, communications and signals	-	20	3	680	671
Signalmen and signal maintainers	2	136	5	5,530	1,048
Linemen and groundmen and communications craftsman	-	53	3	1,460	345
Assistant signalmen and assistant signal maintainers	-	16	1	937	141
Signal helpers and signal maintainer helpers	-	3	-	209	0
Camp car cooks	-	6	-	508	0
Total	6	1,143	74	51,893	9,115

TABLE 4-7 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY, 2009

Maintenance of Equipment and Stores

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Maintenance of equipment and stores (miscellaneous)	-	17	-	155	93
Supervisors and general foremen, maintenance of equipment	-	16	-	328	18
Supervisors and general foremen, materials and stores	-	1	-	0	16
Equipment, shop, electrical inspectors	-	9	-	146	16
Materials and supplies inspectors	-	1	-	20	0
Storekeeper	-	6	-	181	49
Gang foremen, maintenance of equipment	-	15	2	749	16
Blacksmiths	-	4	-	131	19
Boilermakers	-	9	-	340	30
Carmen (freight)	-	131	6	7,177	2,018
Carmen (other)	-	113	13	3,536	977
Electrical workers (A)	-	116	7	4,788	1,355
Electrical workers (B)	-	9	1	188	0
Electrical workers (C)	-	2	-	184	0
Machinists	-	161	6	6,506	1,669
Sheet metal workers	-	24	3	1,391	217
Skilled trades, helpers, maintenance of equipment and stores	-	64	-	1,452	330
Apprentices, maintenance of equipment and stores	-	10	-	313	34
Coach cleaners	-	68	2	2,364	721
Laborers: shops, enginehouses and power plants	-	59	1	1,834	604
Gang foremen, materials and stores	-	4	-	235	0
Equipment operators/general laborers, materials and stores	-	23	3	732	141
Stationary engineers	-	2	-	180	0
Total	-	864	44	32,930	8,323

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	-	14	0
Transportation supervisor and chief train dispatcher	-	3	-	8	51
Train dispatchers	-	8	1	256	0
Station, freight and passenger agents	-	8	-	221	39
Clerk operators, towerman, train directors	-	2	1	181	0
Station masters & assts, super bag. agents, bag. agents, etc	-	1	-	0	1
Baggage, parcel room and station attendants	-	10	-	735	67
Gen/asst gnrl foremen,stations,warehouses,grain elev., docks	-	1	-	0	0
Grain elevator, and dock laborers	-	2	-	242	0
Station, and warehouse laborers	-	4	-	38	0
Truckers (station, warehouse and platforms)	-	4	6	262	0
Food and lodging manager, supervisors	-	1	-	0	0
Waiters and kitchen helpers (restaurant and dining car)	-	2	-	5	12
Chefs and cooks (restaurant and dining car)	-	6	-	62	16
Marine officers and workers and shore workers	-	1	-	0	0
Train attendants	-	45	1	2,507	226
Bridge and crossing flagmen and gatemen	-	1	-	17	38
Yards clerks	-	16	-	779	169
Crew dispatchers	-	1	-	37	0
Yardmasters and assistant yardmasters	-	12	-	838	3
Total	-	130	9	6,202	622

TABLE 4-7 REPORTABLE CONDITIONS TO EMPLOYEE ON DUTY, 2009

Transportation, Train and Engine

Job Titles	---Total---			---- Days ----	
	Killed	Injured	Illness	Absent From Work	Restricted At Work
Transportation, train and engine (miscellaneous)	-	54	-	1,367	49
Switchtenders	-	20	-	1,789	96
Car retarder operators and ground service employees	-	1	-	180	0
Outside hostlers	-	19	1	925	304
Outside hostler helpers	-	3	-	173	20
Road passenger conductors	-	199	10	8,548	1,344
Assistant road passenger conductors and ticket collectors	-	68	5	3,263	226
Road freight conductors (through freight)	5	342	9	26,773	3,242
Road freight conductors (local and way freight)	-	180	2	13,388	992
Road Passenger brakemen and flagmen	-	9	-	109	257
Road freight brakemen and flagmen (through freight)	-	39	2	2,353	509
Road freight brakemen and flagmen (local and way freight)	-	78	-	5,824	303
Yard conductors and yard foremen	1	171	16	11,452	1,213
Yard brakemen and yard helpers	-	117	2	7,484	810
Road passenger engineers and motormen	-	97	27	4,335	752
Road freight engineers (through freight)	2	186	3	13,847	516
Road freight engineers (local and way freight)	-	79	-	6,630	212
Yard engineers	-	77	7	5,083	342
Road passenger firemen and helpers	-	4	1	181	0
Road freight firemen and helpers (through freight)	-	1	-	180	0
Road freight firemen and helpers (local and way freight)	-	1	-	72	0
Yard firemen and helpers	-	1	-	0	0
Remote control locomotive operator -operating	2	55	1	3,356	456
Remote control locomotive operator - not operating	-	59	-	3,775	1,015
Total	10	1,860	86	121,087	12,658

TABLE 4-8 OCCUPATIONAL ILLNESSES OF EMPLOYEE ON DUTY, 2009

Illness	Total		Kld	Nonfatal	Days Absent	Absent Cases	Term./Trans.	Days Restricted	Hazmat Exp.
	Cnt	%							
Rashes	3	1.3	-	3	18	3	-	0	-
Misc. skin diseases/disorders	1	0.4	-	1	0	-	-	0	-
Asbestosis	1	0.4	-	1	0	-	-	0	-
Pneumonitis	1	0.4	-	1	0	-	-	0	-
Acute congestion, dust/gas/etc.	2	0.9	-	2	1	1	-	0	1
Heat/sun stroke	3	1.3	-	3	10	3	-	0	-
Effects, non-ionizing radiation	1	0.4	-	1	2	1	-	0	-
Heat exhaustion	17	7.5	-	17	35	7	-	0	-
Freezing/frostbite	3	1.3	-	3	7	1	-	0	-
Noise induced hearing loss	135	59.7	-	135	0	-	-	0	-
Synovitis	10	4.4	-	10	829	7	-	35	-
Tenosynovitis	6	2.7	-	6	350	4	-	33	-
Bursitis	5	2.2	-	5	39	3	-	167	-
Carpal tunnel syndrome	9	4.0	-	9	498	8	-	186	-
Misc. repeated trauma condition	12	5.3	-	12	966	8	-	94	-
Stress related syndromes	9	4.0	-	9	756	8	-	0	-
Misc. illnesses, unclassified	3	1.3	-	3	59	1	-	14	-
Emotional trauma/nervous shock	5	2.2	-	5	410	4	-	0	-
Total	226	100	-	226	3,980	59	-	529	1

TABLE 4-9 OCCUPATIONAL ILLNESSES OF EMPLOYEE ON DUTY, BY RAILROAD, 2009

RR	Total		Kld	Nonfatal	Days Absent			Absent Cases		Term./Trans.	Days Restricted			Hazmat Exp.
	Cnt	%			Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.	
ARR	46	20.4	-	46	0	0.0	0	-	-	-	0	0.0	0	-
ATK	98	43.4	-	98	1,108	27.8	11	10	16.9	-	19	3.6	0	-
BNSF	31	13.7	-	31	1,435	36.1	46	17	28.8	-	257	48.6	8	-
CN	4	1.8	-	4	223	5.6	56	2	3.4	-	0	0.0	0	-
CP	5	2.2	-	5	194	4.9	39	4	6.8	-	166	31.4	33	-
CSX	4	1.8	-	4	184	4.6	46	2	3.4	-	0	0.0	0	-
IAIS	1	0.4	-	1	1	0.0	1	1	1.7	-	0	0.0	0	-
LI	4	1.8	-	4	18	0.5	5	3	5.1	-	0	0.0	0	-
MACZ	1	0.4	-	1	144	3.6	144	1	1.7	-	0	0.0	0	-
MBTA	1	0.4	-	1	0	0.0	0	-	-	-	0	0.0	0	-
MNCW	1	0.4	-	1	42	1.1	42	1	1.7	-	0	0.0	0	-
NIRC	1	0.4	-	1	0	0.0	0	-	-	-	0	0.0	0	-
NS	3	1.3	-	3	184	4.6	61	2	3.4	-	0	0.0	0	-
PTRA	1	0.4	-	1	9	0.2	9	1	1.7	-	0	0.0	0	-
SCAX	1	0.4	-	1	33	0.8	33	1	1.7	-	0	0.0	0	-
UP	15	6.6	-	15	390	9.8	26	7	11.9	-	56	10.6	4	-
XXXX	9	4.0	-	9	15	0.4	2	7	11.9	-	31	5.9	3	1
Tot.	226	100	-	226	3,980	100	18	59	100	-	529	100	2	1

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

This page intentionally left blank

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 F6180.54. The reporting threshold for calendar years (CY) 1992–1996 was \$6300. The reporting threshold for CY 1998 was \$6600; CY 2005, \$6700; CY 2006, \$7700; CY 2007, \$8200; CY 2008, \$8,500; and CY 2009, \$8,900.

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 and bulldozers, (2) services of contractors to replace or repair the track right-of-way and associated structures, and (3) 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 wheelset changeout.)

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 railroads involved. When total reportable damage (for 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 by railroad show the number of events that a railroad was involved in, regardless of whether 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, regardless of if there is an 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 on-track rail equipment involved, a report containing the track information must be forwarded.

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

A railroad need not report the following:

1. Cars derailed on industry tracks by nonrailroad employees or nonrailroad 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.
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.
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 nonrevenue 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.

CONTENTS**CHAPTER 5****TRAIN ACCIDENTS**

Tables	Title	Page
5-1	Train Accidents by Railroad, Type, and Major Cause, 2009	64
5-2	Train Accidents by State, Type, and Major Cause, 2009	65
5-3	Train Accidents by Month, Type, and Major Cause, 2009	66
5-4	Train Accidents by Day, Type, and Major Cause, 2009	66
5-5	Train Accidents by Time of Day, Type, and Major Cause, 2009	67
5-6	Train Accidents by Type and Major Cause, 2009	67
5-7	Train Accidents by Subcause and Type, 2009	68
5-8	Train Accidents with Contributing Cause, 2009	69
5-9	Train Accidents by Specific Cause and Type, 2009	70
5-10	Train Accidents by Type Track and Class, 2009	76
5-11	Train Accidents by Type Track and Consist Speed, 2009	77
5-12	Train Accidents by Weather Condition, 2009	78
5-13	Train Accidents by Consist Length, 2009	79
5-14	Train Accidents by Type Track and Consist, 2009	80
5-15	Train Accidents by Consist Length and Type Consist, 2009	81
5-16	Involvement in Train Accidents by Type Consist, 2009	82
5-17	Damage by Track Type, 2009	82
5-18	Damage by Consist Type, 2009	82

TABLE 5-1 TRAIN ACCIDENTS BY RR, TYPE AND MAJOR CAUSE, 2009

Railroad	Total		Type of Accident				Reportable Damage	Casualties		Causes						
	Cnt	%	Coll	Der	HRC	Othr		Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk	
Alaska RR Corp.	7	0.3	-	1	-	6	832,574	-	-	1	-	5	1	-	-	-
Amtrak	115	5.0	1	35	29	50	5,348,098	9	92	13	29	18	19	-	36	-
Burlington Northern Santa Fe	440	19.3	19	322	33	66	60,636,989	5	26	58	33	161	45	6	137	-
Buffalo & Pittsburg	4	0.2	1	3	-	-	56,905	-	-	1	-	2	1	-	-	-
Belt Rwy Of Chicago	12	0.5	-	11	-	1	369,274	-	-	3	-	4	3	-	2	-
Canadian National	78	3.4	4	43	11	20	8,036,061	2	24	13	11	27	6	-	21	-
Canadian Pacific	44	1.9	1	29	5	9	5,073,367	3	5	3	5	17	1	-	18	-
Conrail Shared Assets	32	1.4	5	24	-	3	1,184,347	-	1	1	-	16	2	1	12	-
CSX Transportation	287	12.6	28	207	23	29	34,537,134	2	19	37	23	80	37	20	90	-
Florida East Coast	3	0.1	-	1	2	-	1,668,908	1	2	-	2	-	-	-	1	-
Guilford Rail System	4	0.2	-	4	-	-	753,005	-	-	-	-	-	2	-	2	-
Other Railroads	307	13.5	16	245	16	30	20,254,439	3	12	30	16	82	28	-	151	-
Indiana Harbor Belt	9	0.4	4	3	-	2	195,691	-	-	-	-	3	2	3	1	-
Kansas City Southern	49	2.1	7	33	1	8	4,522,956	-	2	2	1	22	10	-	14	-
Long Island Rail Road	19	0.8	2	7	4	6	1,573,677	2	3	1	4	8	6	-	-	-
MD Assn. of Rail Comm	2	0.1	-	-	-	2	16,000	-	-	2	-	-	-	-	-	-
Mass Bay Transit Auth.	1	0.0	-	1	-	-	12,768	-	-	-	-	-	1	-	-	-
Metro North Commuter	24	1.1	-	3	-	21	883,983	-	-	11	-	2	2	-	9	-
Montana Rail Link	8	0.4	1	7	-	-	1,818,370	-	-	-	-	4	-	-	4	-
Northeast IL Reg Comm	5	0.2	-	4	-	1	147,741	-	1	-	-	4	-	-	1	-
New Jersey Transit Rail	42	1.8	-	11	5	26	1,660,983	2	11	1	5	14	5	-	17	-
Norfolk Southern Corp.	243	10.6	23	158	18	44	10,609,361	1	18	34	18	85	35	7	64	-
Port Auth Trans Hudson	3	0.1	-	-	-	3	486,000	-	2	-	-	3	-	-	-	-
Peninsula Comm San Mateo Cnty	3	0.1	-	-	2	1	24,858	-	1	-	2	1	-	-	-	-
Port Terminal RR Assn	4	0.2	2	2	-	-	153,732	-	-	-	-	2	1	-	1	-
Southern CA Reg Rail Auth.	5	0.2	-	1	4	-	79,512	1	-	-	4	-	1	-	-	-
Southeastern PA Trans.	13	0.6	1	-	-	12	1,024,173	-	27	8	-	3	1	1	-	-
Term RR Assn Of St. Louis	3	0.1	-	2	-	1	55,371	-	-	-	-	1	-	-	2	-
Union Pacific	503	22.0	31	317	54	101	69,608,584	7	37	62	54	139	82	13	153	-
Union RR (Pittsburgh)	6	0.3	-	6	-	-	120,722	-	-	1	-	1	1	-	3	-
Wheeling & Lake Erie	7	0.3	-	6	1	-	426,725	-	1	-	1	1	-	-	5	-

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

TABLE 5-2 TRAIN ACCIDENTS BY STATE, TYPE AND MAJOR CAUSE, 2009

State	Total		Type of Accident				Reportable Damage		Casualties		Causes						
	Accs	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk	
Alabama	54	2.6	5	38	2	9	2,763,741	1.2	-	1	11	2	12	8	2	19	
Alaska	7	0.3	-	1	-	6	832,574	0.4	-	-	1	-	5	1	-	-	
Arizona	18	0.9	2	12	1	3	1,783,742	0.8	1	1	2	1	9	1	-	5	
Arkansas	47	2.3	4	31	4	8	2,688,487	1.2	-	3	6	4	11	10	-	16	
California	123	5.9	5	74	23	21	8,561,968	3.7	5	17	12	23	46	17	2	23	
Colorado	39	1.9	1	29	4	5	13,840,559	6.0	-	3	5	4	14	4	-	12	
Connecticut	17	0.8	-	2	-	15	466,326	0.2	-	-	5	-	2	3	-	7	
Delaware	4	0.2	-	3	-	1	189,246	0.1	-	-	1	-	-	-	-	3	
Dist Of Columbi	7	0.3	-	5	-	2	181,393	0.1	-	-	2	-	3	-	-	2	
Florida	21	1.0	1	11	7	2	3,781,093	1.6	5	15	-	7	6	1	-	7	
Georgia	74	3.6	7	48	8	11	7,772,269	3.3	-	10	5	8	17	11	5	28	
Idaho	16	0.8	3	10	-	3	1,356,968	0.6	-	-	3	-	6	4	-	3	
Illinois	187	9.0	6	136	8	37	23,108,246	10.0	4	36	22	8	72	20	4	61	
Indiana	47	2.3	7	32	5	3	4,497,940	1.9	3	7	4	5	16	4	4	14	
Iowa	56	2.7	1	46	6	3	8,321,333	3.6	3	3	10	6	5	3	-	32	
Kansas	62	3.0	3	48	2	9	6,739,712	2.9	-	-	7	2	19	10	2	22	
Kentucky	31	1.5	2	24	2	3	5,244,460	2.3	-	-	4	2	12	4	2	7	
Louisiana	52	2.5	8	34	6	4	4,682,686	2.0	2	8	4	6	16	5	1	20	
Maine	6	0.3	-	6	-	-	1,419,656	0.6	-	-	2	-	-	2	-	2	
Maryland	28	1.4	-	17	-	11	1,112,692	0.5	-	-	6	-	5	7	-	10	
Massachusetts	16	0.8	1	9	-	6	1,174,716	0.5	-	2	2	-	3	4	-	7	
Michigan	20	1.0	1	13	4	2	1,313,417	0.6	-	5	3	4	6	1	-	6	
Minnesota	50	2.4	1	34	6	9	3,311,895	1.4	2	5	8	6	17	5	2	12	
Mississippi	29	1.4	2	13	7	7	1,674,055	0.7	1	18	1	7	9	2	-	10	
Missouri	52	2.5	4	31	1	16	8,712,082	3.8	-	10	5	1	12	9	4	21	
Montana	15	0.7	1	11	1	2	2,793,473	1.2	-	3	-	1	5	2	-	7	
Nebraska	77	3.7	3	55	5	14	17,658,970	7.6	1	7	9	5	25	12	1	25	
Nevada	6	0.3	1	3	1	1	2,602,078	1.1	-	-	1	1	3	-	-	1	
New Hampshire	1	0.0	-	1	-	-	65,358	0.0	-	-	-	-	-	1	-	-	
New Jersey	69	3.3	5	28	5	31	3,273,869	1.4	2	12	2	5	28	9	1	24	
New Mexico	16	0.8	-	12	1	3	2,782,148	1.2	1	1	2	1	7	1	-	5	
New York	70	3.4	6	38	4	22	3,963,314	1.7	2	6	12	4	23	13	2	16	
North Carolina	29	1.4	3	16	4	6	2,736,415	1.2	-	18	6	4	5	2	4	8	
North Dakota	21	1.0	-	19	2	-	5,064,912	2.2	1	2	5	2	3	2	-	9	
Ohio	80	3.9	6	58	4	12	6,953,263	3.0	-	8	9	4	22	13	3	29	
Oklahoma	46	2.2	-	35	5	6	6,443,111	2.8	2	4	8	5	6	9	2	16	
Oregon	25	1.2	2	16	1	6	2,664,253	1.1	-	1	2	1	12	1	-	9	
Pennsylvania	84	4.1	5	54	5	20	5,287,498	2.3	-	30	22	5	24	7	2	24	
Rhode Island	3	0.1	-	-	-	3	134,053	0.1	-	-	1	-	-	1	-	1	
South Carolina	20	1.0	3	12	2	3	2,018,697	0.9	-	5	2	2	7	3	-	6	
South Dakota	11	0.5	-	8	2	1	1,782,989	0.8	-	1	-	2	2	-	-	7	
Tennessee	54	2.6	7	35	1	11	4,378,064	1.9	-	1	7	1	23	11	1	11	
Texas	221	10.7	13	148	25	35	30,202,068	13.0	2	30	22	25	73	24	3	74	
Utah	17	0.8	2	9	2	4	1,189,522	0.5	-	-	4	2	6	1	1	3	
Vermont	3	0.1	-	1	1	1	120,277	0.1	-	-	-	1	-	1	-	1	
Virginia	32	1.5	4	25	-	3	2,943,591	1.3	-	-	6	-	9	5	2	10	
Washington	38	1.8	3	24	1	10	2,019,934	0.9	-	3	3	1	23	3	-	8	
West Virginia	19	0.9	-	14	2	3	1,811,756	0.8	-	5	3	2	4	3	-	7	
Wisconsin	20	1.0	1	9	1	9	1,616,040	0.7	1	1	2	1	9	3	-	5	
Wyoming	28	1.4	4	20	-	4	6,135,399	2.6	-	2	7	-	8	5	-	8	
Total	2,068	100	133	1,358	171	406	232,172,308	100.0	38	284	266	171	650	268	50	663	

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

TABLE 5-3 TRAIN ACCIDENTS BY MONTH, TYPE AND MAJOR CAUSE, 2009

Day	Total		Type of Accident				Reportable Damage		Casualties		Causes					
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
January	212	10.3	17	141	14	40	24,406,168	10.5	2	44	29	14	78	31	5	55
February	170	8.2	15	103	14	38	15,568,391	6.7	3	17	30	14	45	30	7	44
March	174	8.4	10	110	14	40	15,793,041	6.8	1	34	31	14	45	22	4	58
April	144	7.0	6	95	11	32	12,643,124	5.4	2	23	17	11	37	24	3	52
May	159	7.7	10	100	12	37	20,993,766	9.0	3	19	23	12	51	23	4	46
June	171	8.3	8	111	16	36	22,111,810	9.5	6	28	18	16	55	18	4	60
July	184	8.9	9	129	20	26	16,247,393	7.0	13	21	15	20	60	26	1	62
August	185	8.9	14	117	16	38	23,410,879	10.1	2	18	18	16	65	23	1	62
September	170	8.2	16	117	9	28	16,451,552	7.1	-	9	18	9	61	11	8	63
October	155	7.5	9	109	11	26	25,760,492	11.1	1	26	24	11	51	16	5	48
November	140	6.8	9	88	15	28	18,143,984	7.8	3	22	16	15	49	18	3	39
December	204	9.9	10	138	19	37	20,641,708	8.9	2	23	27	19	53	26	5	74
Total	2,068	100	133	1,358	171	406	232,172,308	100.0	38	284	266	171	650	268	50	663

TABLE 5-4 TRAIN ACCIDENTS BY DAY, TYPE AND MAJOR CAUSE, 2009

Day	Total		Type of Accident				Reportable Damage		Casualties		Causes					
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Sunday	250	12.1	15	176	7	52	31,675,239	13.6	4	22	36	7	94	30	4	79
Monday	285	13.8	23	167	29	66	29,997,862	12.9	9	34	26	29	95	42	6	87
Tuesday	339	16.4	21	235	28	55	32,674,354	14.1	8	52	44	28	105	33	7	122
Wednesday	324	15.7	18	203	32	71	32,926,908	14.2	5	38	37	32	95	42	8	110
Thursday	299	14.5	20	202	24	53	36,092,509	15.5	4	52	38	24	104	45	4	84
Friday	330	16.0	18	210	38	64	39,318,275	16.9	5	65	39	38	77	51	11	114
Saturday	241	11.7	18	165	13	45	29,487,161	12.7	3	21	46	13	80	25	10	67
Total	2,068	100	133	1,358	171	406	232,172,308	100.0	38	284	266	171	650	268	50	663

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

TABLE 5-5 TRAIN ACCIDENTS BY TIME OF DAY, TYPE AND MAJOR CAUSE, 2009

Time	Total		Type of Accident				Reportable Damage		Casualties		Causes					
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
AM 1	79	3.8	7	60	3	9	10,541,291	4.5	1	2	14	3	24	11	1	26
2	90	4.4	7	58	2	23	10,474,609	4.5	3	5	12	2	32	7	3	34
3	87	4.2	5	61	4	17	8,971,163	3.9	-	1	15	4	22	11	6	29
4	65	3.1	8	40	1	16	13,301,340	5.7	-	21	15	1	25	5	5	14
5	83	4.0	7	45	5	26	12,335,916	5.3	3	5	11	5	28	19	1	19
6	76	3.7	5	44	9	18	8,851,588	3.8	1	12	21	9	17	11	1	17
7	62	3.0	5	41	9	7	13,134,159	5.7	-	10	10	9	13	6	1	23
8	84	4.1	9	41	13	21	9,073,208	3.9	3	16	7	13	31	10	1	22
9	91	4.4	4	61	11	15	5,192,421	2.2	1	17	3	11	34	15	3	25
10	92	4.4	5	56	11	20	5,452,623	2.3	1	18	11	11	31	13	1	25
11	104	5.0	4	57	17	26	11,148,583	4.8	2	33	11	17	33	9	4	30
12	74	3.6	4	54	3	13	5,878,165	2.5	-	3	9	3	24	9	1	28
Sub	987	47.7	70	618	88	211	114,355,066	49.3	15	143	139	88	314	126	28	292
PM 1	88	4.3	5	60	9	14	9,105,827	3.9	-	9	11	9	31	8	2	27
2	88	4.3	3	63	7	15	10,146,202	4.4	2	13	5	7	29	6	2	39
3	103	5.0	6	68	14	15	13,737,725	5.9	7	17	8	14	32	6	2	41
4	91	4.4	2	73	6	10	11,120,398	4.8	1	12	10	6	20	12	2	41
5	107	5.2	7	73	10	17	8,251,053	3.6	1	20	15	10	26	19	2	35
6	91	4.4	2	65	7	17	9,094,703	3.9	4	5	11	7	31	13	2	27
7	90	4.4	8	60	5	17	3,814,107	1.6	-	14	7	5	25	17	1	35
8	85	4.1	5	60	2	18	9,902,827	4.3	1	11	15	2	31	9	1	27
9	84	4.1	6	58	3	17	7,727,514	3.3	-	7	10	3	29	17	2	23
10	74	3.6	5	48	3	18	6,212,167	2.7	3	10	6	3	26	10	3	26
11	73	3.5	4	52	3	14	18,285,765	7.9	1	11	12	3	19	12	2	25
12	107	5.2	10	60	14	23	10,418,954	4.5	3	12	17	14	37	13	1	25
Sub	1,081	52.3	63	740	83	195	117,817,242	50.7	23	141	127	83	336	142	22	371
Total	2,068	100	133	1,358	171	406	232,172,308	100	38	284	266	171	650	268	50	663

TABLE 5-6 TRAIN ACCIDENTS BY TYPE AND MAJOR CAUSE, 2009

Type Accident	Total		Reportable Damage		Casualties		Causes					
	Cnt	%	Amount	%	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Derailments	1,358	65.7	189,880,057	81.8	1	37	195	-	377	143	18	625
Head on collision	5	0.2	2,935,881	1.3	-	5	-	-	5	-	-	-
Rear end collision	12	0.6	1,948,851	0.8	-	25	-	-	12	-	-	-
Side collision	73	3.5	5,379,677	2.3	-	6	1	-	61	4	7	-
Raking collision	37	1.8	1,230,945	0.5	-	-	2	-	22	9	3	1
Broken train coll.	6	0.3	641,140	0.3	-	-	4	-	1	1	-	-
Highway-rail Impact	171	8.3	10,069,360	4.3	34	164	-	171	-	-	-	-
Obstruction impact	70	3.4	5,314,490	2.3	1	25	4	-	19	43	-	4
Explosion/detonation	2	0.1	34,937	0.0	-	-	1	-	1	-	-	-
Fire/violent rupture	20	1.0	1,754,433	0.8	-	7	12	-	-	7	-	1
Other impacts	205	9.9	8,367,779	3.6	2	11	7	-	131	41	20	6
Other events	109	5.3	4,614,758	2.0	-	4	40	-	21	20	2	26
Total	2,068	100	232,172,308	100	38	284	266	171	650	268	50	663

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

TABLE 5-7 TRAIN ACCIDENTS BY SUBCAUSE AND TYPE, 2009

Causes	Total		Type of Accident				Reportable Damage		Casualties	
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Kld	Nonfatal
Brakes	27	1.3	1	20	-	6	1,550,404	0.7	-	-
Body	21	1.0	-	16	-	5	1,537,821	0.7	-	-
Coupler & Draft System	32	1.5	4	21	-	7	2,360,210	1.0	-	-
Truck Components	50	2.4	-	48	-	2	3,331,902	1.4	-	-
Axles & Journal Bearings	34	1.6	1	32	-	1	15,155,166	6.5	-	-
Wheels	52	2.5	-	49	-	3	10,810,864	4.7	-	5
Locomotives	41	2.0	-	4	-	37	1,435,705	0.6	-	8
Doors	3	0.1	-	3	-	-	347,540	0.1	-	-
Other Mechanical	6	0.3	1	2	-	3	394,573	0.2	-	-
Brakes, Use of	74	3.6	11	29	-	34	5,829,745	2.5	-	-
Employee Physical Condition	2	0.1	1	1	-	-	177,809	0.1	-	-
Flagging, Fixed, Hand & Radio	15	0.7	7	4	-	4	5,899,068	2.5	-	11
General Switching Rules	220	10.6	42	110	-	68	10,269,292	4.4	-	6
Main Track Authority	20	1.0	6	4	-	10	1,785,954	0.8	-	4
Train Handling/Makeup	70	3.4	1	63	-	6	8,161,266	3.5	-	3
Speed	71	3.4	15	36	-	20	5,000,854	2.2	-	24
Switches, Use of	140	6.8	11	112	-	17	7,220,257	3.1	2	4
Cab Signals	1	0.0	-	-	-	1	60,000	0.0	-	-
Miscellaneous Human Factors	37	1.8	7	18	-	12	4,918,398	2.1	-	6
Environmental Conditions	48	2.3	1	35	-	12	6,627,575	2.9	-	4
Loading Procedures	25	1.2	2	17	-	6	2,286,360	1.0	-	-
Highway-Rail Incidents	171	8.3	-	-	171	-	10,069,360	4.3	34	164
Unusual Operational Situations	136	6.6	9	49	-	78	12,408,407	5.3	1	18
Other Miscellaneous Causes	59	2.9	2	42	-	15	4,153,663	1.8	-	1
Signal Defects	50	2.4	10	18	-	22	1,453,321	0.6	-	1
Roadbed	29	1.4	-	29	-	-	8,164,713	3.5	1	12
Track Geometry	252	12.2	-	251	-	1	38,040,314	16.4	-	4
Rail, Joint Bar & Anchors	198	9.6	1	196	-	1	47,587,088	20.5	-	4
Frogs, Switches, Appliances	139	6.7	-	136	-	3	11,077,692	4.8	-	4
Other Track Defects	45	2.2	-	13	-	32	4,056,987	1.7	-	1
Total	2,068	100	133	1,358	171	406	232,172,308	100.0	38	284

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

TABLE 5-8 TRAIN ACCIDENTS WITH CONTRIBUTING CAUSE, 2009

Contributing Cause	Total		Type of Accident				Type of Track			
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Siding	Industry
Brakes	3	1.1	-	2	-	1	1	1	-	1
Trailer/Container on Flatcar	1	0.4	-	1	-	-	-	1	-	-
Truck Components	8	2.8	-	8	-	-	1	5	1	1
Axles & Journal Bearings	2	0.7	-	1	-	1	2	-	-	-
Wheels	10	3.6	-	9	-	1	3	5	1	1
Locomotives	1	0.4	-	-	-	1	1	-	-	-
Brakes, Use of	6	2.1	1	3	-	2	2	3	-	1
Employee Physical Condition	4	1.4	-	2	-	2	2	2	-	-
Flagging, Fixed, Hand & Radio	8	2.8	1	1	-	6	3	5	-	-
General Switching Rules	46	16.4	11	19	-	16	1	36	2	7
Main Track Authority	4	1.4	3	-	-	1	3	1	-	-
Train Handling/Makeup	19	6.8	1	18	-	-	10	8	-	1
Speed	11	3.9	4	6	-	1	5	5	-	1
Switches, Use of	17	6.0	3	11	-	3	5	9	-	3
Miscellaneous Human Factors	7	2.5	-	5	-	2	3	3	1	-
Environmental Conditions	16	5.7	-	8	-	8	10	5	-	1
Loading Procedures	7	2.5	1	6	-	-	4	3	-	-
Highway-Rail Incidents	20	7.1	-	-	20	-	19	-	-	1
Unusual Operational Situations	7	2.5	-	2	-	5	4	3	-	-
Other Miscellaneous Causes	10	3.6	-	8	-	2	4	1	1	4
Signal Defects	1	0.4	1	-	-	-	1	-	-	-
Roadbed	13	4.6	-	13	-	-	8	4	-	1
Track Geometry	36	12.8	-	35	-	1	15	14	2	5
Rail, Joint Bar & Anchors	12	4.3	-	12	-	-	3	4	1	4
Frogs, Switches, Appliances	12	4.3	-	12	-	-	2	8	-	2
Total	281	100	26	182	20	53	112	126	9	34

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

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

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	-	-	2	-	2	-	23,714	-	-
Failure to secure engine- rr empl	7	0.3	2	3	2	1	3	3	682,298	-	-
Fail to secure car hnd brk -rr emp	21	1.0	7	5	9	4	13	4	1,434,495	-	-
Fail to release hand brk - rr emp	10	0.5	-	7	3	7	3	-	2,588,116	-	-
Fail to apply suff. hand brakes -rr emp	23	1.1	1	9	13	2	17	4	668,335	-	-
Fail to apply car hnd brks -rr emp	6	0.3	-	1	5	-	4	2	279,113	-	-
Fail to ctrl car spd use hnd brk-r emp	1	0.0	-	1	-	-	-	1	51,167	-	-
Use of brakes, other	4	0.2	1	3	-	1	2	1	102,507	-	-
Employee asleep	2	0.1	1	1	-	1	-	1	177,809	-	-
Radio communication, failure to comply	4	0.2	-	1	3	1	2	1	105,759	-	1
Failure to comply with failed equipment detector warning or with applicable train inspection rules.	1	0.0	-	1	-	-	-	1	105,543	-	-
Fixed signal (other than automatic block or interlocking signal), failure to comply.	3	0.1	1	2	-	2	1	-	847,243	-	2
Automatic block or interlocking signal displaying a stop indication - failure to comply.*	6	0.3	5	-	1	6	-	-	4,648,221	-	8
Automatic block or interlocking signal displaying other than a stop indication - failure to comply.*	1	0.0	1	-	-	1	-	-	192,302	-	-
Car(s) shoved out & left out of clear	2	0.1	1	-	1	-	2	-	29,070	-	-
Cars left foul	18	0.9	7	3	8	-	15	3	428,372	-	-
Derail, failure to apply or remove	25	1.2	-	25	-	-	17	8	899,769	-	-
Instruction to trn/yard crew improper	1	0.0	-	1	-	-	1	-	36,000	-	-
Shoving movement, absence of man	53	2.6	18	19	16	5	37	11	2,700,475	-	2
Shoving movement, failure to control	53	2.6	8	29	16	-	40	13	3,271,872	-	1
Skate, failure to remove or place	2	0.1	1	1	-	-	2	-	32,164	-	-
Failure to stretch cars before shoving	2	0.1	1	1	-	-	2	-	370,693	-	-
Failure to couple	6	0.3	2	3	1	-	5	1	174,253	-	1
Moving cars-load ramp,etc, not in pos	1	0.0	-	-	1	-	-	1	64,000	-	-
Passed couplers	19	0.9	1	12	6	-	19	-	487,789	-	-
Retarder, improper manual operation	4	0.2	-	3	1	-	4	-	62,847	-	-
Manual intervention of classification yard automatic control system modes by operator	2	0.1	-	1	1	-	2	-	150,453	-	-
Humping or cutting off in motion equipment susceptible to damage, or to cause damage to other equipment	2	0.1	-	1	1	-	2	-	149,062	-	-
Kicking or dropping cars, inadequate precautions	19	0.9	2	8	9	2	16	1	808,173	-	-
Other general switching rules	11	0.5	1	3	7	-	10	1	604,300	-	2
Failure to stop train in clear	2	0.1	-	1	1	-	2	-	97,500	-	1
Motor car/on-trk rules, fail to comply	14	0.7	5	3	6	13	-	1	1,158,511	-	3
Movement without authority - rr emp	1	0.0	1	-	-	1	-	-	19,000	-	-
Fail to comply with trn order, etc.	1	0.0	-	-	1	1	-	-	9,800	-	-
Trn orders, trk warrants, radio error	1	0.0	-	-	1	1	-	-	203,000	-	-
Other main track authority causes	1	0.0	-	-	1	1	-	-	298,143	-	-
Improper train make-up at init term	1	0.0	-	1	-	1	-	-	140,000	-	-
Buff/slack action excess, trn handling	24	1.2	-	24	-	7	15	2	3,804,750	-	-
Buff/slack action excess, trn make-up	3	0.1	-	3	-	-	3	-	42,270	-	-
Lat DB force on curve xcess trn hndlng	4	0.2	-	4	-	-	3	1	203,504	-	-
Lat DB force on curve excess, make-up	4	0.2	-	4	-	1	3	-	133,131	-	-
Lat drawbar force-short/long car combo	2	0.1	-	2	-	-	2	-	136,390	-	-
Improper train inspection	2	0.1	-	1	1	2	-	-	23,878	-	-
Automatic brake, insufficient	2	0.1	-	2	-	1	1	-	127,942	-	-
Automatic brake, excessive	1	0.0	-	1	-	1	-	-	36,061	-	-

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

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

Automatic brake, other improper use	1	0.0	-	1	-	-	1	-	23,150	-	-
Fail to allow air brks to release	2	0.1	-	2	-	-	2	-	36,104	-	-
Dynamic brake, excessive	1	0.0	-	1	-	1	-	-	1,138,308	-	-
Dynamic brake, too rapid adjustment	1	0.0	-	1	-	1	-	-	278,500	-	-
Dynamic brake, excessive axles	1	0.0	-	1	-	1	-	-	50,500	-	-
Throttle (power), improper use	1	0.0	-	1	-	-	1	-	14,575	-	-
Excessive horsepower	3	0.1	-	3	-	3	-	-	811,277	-	-
Independent brake, improper use	11	0.5	-	10	1	4	6	1	683,762	-	-
Failure to actuate off independent brk	1	0.0	-	1	-	-	1	-	49,152	-	-
Other train handling/makeup	5	0.2	1	-	4	1	4	-	428,012	-	3
Coupling speed excessive	14	0.7	-	5	9	1	10	3	475,838	-	-
Switch movement, excessive speed	12	0.6	1	7	4	-	11	1	627,112	-	-
Train inside yard limits, excess speed	1	0.0	-	1	-	1	-	-	121,101	-	-
Train outside yd limits, excess speed	2	0.1	-	2	-	2	-	-	211,200	-	-
Failure to comply with restricted speed	7	0.3	5	-	2	3	4	-	466,289	-	2
Failure to comply with restricted speed or its equivalent not in connection with a block or interlocking signal.	33	1.6	9	20	4	10	21	2	2,819,810	-	22
Speed, other	2	0.1	-	1	1	1	1	-	279,504	-	-
Spring Swtch not clear before reverse	3	0.1	-	2	1	2	1	-	498,215	-	-
Switch improperly lined	105	5.1	8	83	14	10	81	14	4,949,622	2	4
Switch not latched or locked	8	0.4	2	6	-	-	7	1	439,136	-	-
Switch previously run through	16	0.8	-	15	1	3	12	1	825,333	-	-
Moveable point trk frog improper lined	1	0.0	-	1	-	1	-	-	25,000	-	-
Switch improperly lined, radio controlled	2	0.1	1	-	1	1	1	-	52,601	-	-
Use of switches, other	5	0.2	-	5	-	1	2	2	430,350	-	-
Other causes relating to cab signals	1	0.0	-	-	1	-	1	-	60,000	-	-
Tampering - safety/protective device	1	0.0	-	1	-	-	1	-	225,000	-	-
Human factors - track	11	0.5	1	8	2	5	6	-	3,312,201	-	2
Human factors -motive power & equipment	4	0.2	1	2	1	1	3	-	382,422	-	-
Oversized loads or Excess Height/Width cars, mis-routed or switched.	5	0.2	3	1	1	2	3	-	228,998	-	-
Motor car or other on-track equipment rules (other than main track authority) - Failure to Comply.	8	0.4	1	2	5	6	2	-	485,728	-	4
Other train operation/human factors	7	0.3	1	4	2	3	4	-	213,549	-	-
Human Factor - Signal - Train Control - Operator Input On-board computer incorrect data entry.	1	0.0	-	-	1	1	-	-	70,500	-	-
Total	650	31.4	101	377	172	128	436	86	49,322,643	2	58

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	2	0.1	-	1	1	-	2	103,942	-	-
Class yd auto ctrl sys retarder fail	11	0.5	2	2	7	-	11	265,252	-	-
Power switch failure	10	0.5	-	10	-	1	9	370,988	-	1
Other communication equipment failure	1	0.0	-	-	1	1	-	115,904	-	-
Computer system design error (vendor)	2	0.1	2	-	-	-	2	45,526	-	-
Computer system configuration/management error (vendor)	1	0.0	1	-	-	-	1	12,451	-	-
Classification yard automatic control system - Inadequate/insufficient control	20	1.0	4	3	13	-	20	445,345	-	-
Other signal failures	1	0.0	1	-	-	-	1	40,100	-	-
Radio controlled switch not locked effectively	2	0.1	-	2	-	-	2	53,813	-	-
Total	50	2.4	10	18	22	2	48	1,453,321	-	1

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

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

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	21	1.0	-	21	-	11	7	3	5,201,887	-	1
Washout/rain/slide/etc. dmg -track	4	0.2	-	4	-	3	1	-	2,078,006	1	11
Other roadbed defects	4	0.2	-	4	-	3	-	1	884,820	-	-
Cross level of track irregular(joints)	15	0.7	-	15	-	7	5	3	1,504,116	-	-
Cross level track irreg.(not at joints)	22	1.1	-	22	-	16	3	3	4,334,428	-	-
Deviate frm uniform top of rail profile	4	0.2	-	3	1	-	4	-	154,081	-	-
Superelevation improper, excessive,etc.	2	0.1	-	2	-	-	2	-	34,730	-	-
Trk alignmnt irreg-not buckled/sunkink	15	0.7	-	15	-	8	4	3	6,953,339	-	1
Track alignment irreg(buckled/sunkink)	18	0.9	-	18	-	16	2	-	8,277,324	-	-
Wide gage(defective/missing crossties)	132	6.4	-	132	-	24	56	52	10,481,616	-	1
Wide gage(spikes/other rail fasteners)	29	1.4	-	29	-	8	11	10	4,638,430	-	2
Wide gage(loose,broke, etc, gage rods)	3	0.1	-	3	-	-	2	1	152,929	-	-
Wide gage (due to worn rails)	5	0.2	-	5	-	1	2	2	425,152	-	-
Other track geometry defects	7	0.3	-	7	-	3	2	2	1,084,169	-	-
Bolt hole crack or break	9	0.4	-	9	-	4	3	2	631,875	-	-
Broken base of rail	8	0.4	-	8	-	2	3	3	1,708,071	-	-
Broken weld (plant)	2	0.1	-	2	-	2	-	-	782,036	-	-
Broken weld (field)	5	0.2	-	5	-	3	1	1	4,951,622	-	1
Defective or missing crossties	6	0.3	-	6	-	-	3	3	241,328	-	-
Defect/missing spike-oth rail fastener	10	0.5	-	10	-	4	4	2	2,176,582	-	-
Detail fracture - shelling/head check	20	1.0	-	20	-	10	6	4	8,587,735	-	-
Engine burn fracture	1	0.0	-	1	-	1	-	-	1,703,409	-	-
Head and web sep(outside jt bar limit)	25	1.2	1	24	-	8	11	6	1,648,504	-	3
Head & web separation-in jt bar limit	4	0.2	-	4	-	1	2	1	195,013	-	-
Horizontal split head	4	0.2	-	4	-	2	1	1	273,516	-	-
Joint bar broken (compromise)	1	0.0	-	1	-	-	1	-	30,719	-	-
Joint bar broken (insulated)	2	0.1	-	2	-	1	1	-	1,095,773	-	-
Joint bar broken (noninsulated)	2	0.1	-	2	-	1	1	-	1,500,018	-	-
Joint bolts, broken, or missing	1	0.0	-	1	-	-	1	-	11,085	-	-
Mismatched rail-head contour	2	0.1	-	2	-	-	1	1	55,280	-	-
Transverse/compound fissure	56	2.7	-	56	-	18	32	6	9,576,087	-	-
Vertical split head	29	1.4	-	28	1	12	15	2	9,496,652	-	-
Worn rail	2	0.1	-	2	-	1	1	-	153,806	-	-
Other rail and joint bar defects	9	0.4	-	9	-	6	2	1	2,767,977	-	-
Derail, defective	3	0.1	-	2	1	-	1	2	46,284	-	-
Guard rail loose/broken or mislocated	6	0.3	-	6	-	-	6	-	273,262	-	-
Retarder worn, broken, malfunctioning	4	0.2	-	2	2	-	4	-	188,717	-	-
Spring/power swtch mech. malfunction	1	0.0	-	1	-	-	1	-	38,762	-	-
Stock rail worn, broken, disconnected	1	0.0	-	1	-	-	1	-	14,500	-	-
Switch (hand op) stand mechanism defect	5	0.2	-	5	-	1	3	1	101,004	-	-
Switch connect/operate rod broke/defect	1	0.0	-	1	-	1	-	-	2,436,190	-	-
Switch damaged or out of adjustment	15	0.7	-	15	-	2	7	6	764,633	-	3
Switch out of adj. insuff. anchoring	5	0.2	-	5	-	-	4	1	216,875	-	-
Switch point worn or broken	61	2.9	-	61	-	11	37	13	3,993,389	-	1
Switch rod worn, bent, broken, etc.	3	0.1	-	3	-	1	2	-	131,900	-	-
Turnout frog (rigid) worn, or broken	1	0.0	-	1	-	-	-	1	20,684	-	-
Turnout frog(self guarded)-worn/broken	4	0.2	-	4	-	-	4	-	197,564	-	-
Switch pt gap(btw swt pt & stock rail)	19	0.9	-	19	-	1	15	3	782,985	-	-
Oth frog, switch, trk appliance defect	10	0.5	-	10	-	4	5	1	1,870,943	-	-
Bridge misalignment or failure	4	0.2	-	4	-	4	-	-	2,276,853	-	-
Flangeway clogged	1	0.0	-	1	-	-	1	-	27,388	-	-
Engineering design or construction	9	0.4	-	8	1	-	9	-	209,964	-	-
Catenary system defect	29	1.4	-	-	29	26	3	-	1,489,665	-	-
Other way and structure defect	2	0.1	-	-	2	2	-	-	53,117	-	1
Total	663	32.1	1	625	37	229	293	141	108,926,794	1	25

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

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

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	2	0.1	-	1	1	2	-	-	27,954	-	-
Oth brk component dmg,worn,broke,etc.	3	0.1	-	3	-	-	3	-	67,640	-	-
Brk valve malf.(undesire emerg)-Loco	1	0.0	-	1	-	-	-	1	27,500	-	-
Brake valve malf. (stuck brake, etc.)	6	0.3	-	4	2	3	3	-	514,437	-	-
Rigging down or dragging	8	0.4	-	8	-	2	4	2	651,212	-	-
Hand brk broken or defective	2	0.1	-	-	2	-	2	-	66,111	-	-
Other brake defects, cars	3	0.1	1	1	1	1	1	1	161,419	-	-
Other brake defects, (LOCO)	1	0.0	-	1	-	-	1	-	21,750	-	-
Hnd brk link and/or connect defect	1	0.0	-	1	-	-	1	-	12,381	-	-
Center sill broken or bent	6	0.3	-	3	3	3	3	-	224,639	-	-
Draft sill broken or bent	3	0.1	-	2	1	2	1	-	78,982	-	-
Center plate broken or defective	4	0.2	-	4	-	1	3	-	783,094	-	-
Ctr plate disengaged from truck	2	0.1	-	2	-	-	1	1	27,107	-	-
Center plate attachment defective	1	0.0	-	1	-	-	1	-	295,483	-	-
Side sill broken	2	0.1	-	1	1	2	-	-	28,413	-	-
Other body defects, (CAR)	3	0.1	-	3	-	1	1	1	100,103	-	-
Knuckle broken or defective	5	0.2	1	1	3	-	5	-	1,477,937	-	-
Coupler mismatch, high/low	3	0.1	-	3	-	1	2	-	221,545	-	-
Coupler drawhead broken or defective	3	0.1	2	-	1	1	2	-	52,706	-	-
Coupler retainer pin/cross key missing	6	0.3	-	6	-	6	-	-	221,468	-	-
Draft gear/mechanism broke/defective	5	0.2	-	3	2	1	3	1	101,398	-	-
Coupler carrier broken or defective	2	0.1	-	2	-	-	2	-	49,426	-	-
Coupler shank broken/defective	1	0.0	-	-	1	-	1	-	33,240	-	-
Failure of articulated connectors	1	0.0	-	1	-	1	-	-	20,000	-	-
Oth coupler/draft system defects-car	6	0.3	1	5	-	-	6	-	182,490	-	-
Side bearing clearance insufficient	19	0.9	-	19	-	8	9	2	910,266	-	-
Side bearing clearance excessive	1	0.0	-	1	-	-	1	-	14,781	-	-
Truck bolster broken	2	0.1	-	2	-	2	-	-	458,701	-	-
Side frame broken	3	0.1	-	3	-	2	1	-	160,529	-	-
Truck bolster stiff	5	0.2	-	5	-	-	4	1	185,609	-	-
Truck bolster stiff (LOCO)	2	0.1	-	2	-	1	1	-	30,532	-	-
Defective snubbing	3	0.1	-	3	-	3	-	-	219,740	-	-
Broken, missing, or defective springs	1	0.0	-	1	-	1	-	-	3,000	-	-
Other truck component defects, (CAR)	7	0.3	-	5	2	4	2	1	807,478	-	-
Other truck component defects, (LOCO)	1	0.0	-	1	-	1	-	-	51,340	-	-
Truck bolster stiff (failure to slew)	5	0.2	-	5	-	1	3	1	268,075	-	-
Truck hunting	1	0.0	-	1	-	1	-	-	221,851	-	-
Broken/bent axle between wheel seats	4	0.2	-	4	-	4	-	-	3,729,532	-	-
Journal (roller bearing) overheating	25	1.2	1	24	-	25	-	-	10,369,413	-	-
Journal fractured, new cold break	3	0.1	-	2	1	3	-	-	184,433	-	-
Oth axle/journal bearing defect-car	2	0.1	-	2	-	2	-	-	871,788	-	-
Broken flange	1	0.0	-	1	-	1	-	-	1,292,342	-	-
Broken rim	15	0.7	-	15	-	15	-	-	4,815,802	-	-
Worn Flange	6	0.3	-	6	-	2	4	-	394,370	-	-
Worn flange (LOCO)	3	0.1	-	3	-	-	2	1	99,665	-	-
Worn tread	3	0.1	-	3	-	1	2	-	410,946	-	-
Damaged flange or tread (flat)	3	0.1	-	2	1	3	-	-	219,805	-	-
Damaged flange or tread (build up)	12	0.6	-	12	-	8	3	1	1,857,207	-	-
Loose wheel	2	0.1	-	1	1	1	1	-	79,636	-	-
Other wheel defects (CAR)	5	0.2	-	5	-	2	3	-	307,920	-	5
Thermal crack, flange or tread	2	0.1	-	1	1	2	-	-	1,333,171	-	-
Running gear failure (LOCO)	1	0.0	-	1	-	1	-	-	11,168	-	-
Traction motor failure (LOCO)	5	0.2	-	2	3	5	-	-	178,278	-	-
Crank case or air box explosion (LOCO)	1	0.0	-	-	1	1	-	-	21,158	-	-

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

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

Oil or fuel fire (LOCO)	5	0.2	-	-	5	5	-	-	272,613	-	1
Electrically caused fire (LOCO)	9	0.4	-	-	9	8	1	-	563,028	-	7
Remote control equip inoperative (LOCO)	2	0.1	-	1	1	1	1	-	103,868	-	-
Pantograph defect (LOCO)	17	0.8	-	-	17	17	-	-	273,851	-	-
Other LOCO defects	1	0.0	-	-	1	1	-	-	11,741	-	-
Bottom outlet door attachment defect	2	0.1	-	2	-	1	1	-	48,753	-	-
Other car door defects	1	0.0	-	1	-	1	-	-	298,787	-	-
Other mechanical/electrical failures	3	0.1	-	2	1	-	3	-	151,268	-	-
Other mechanical/electrical fail(LOCO)	3	0.1	1	-	2	2	1	-	243,305	-	-
Total	266	12.9	7	195	64	163	89	14	36,924,185	-	13

TABLE 5-9 TRAIN ACCIDENTS BY SPECIFIC CAUSE AND TYPE, 2009

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	25	1.2	-	19	-	6	9	9	7	1,025,159	-	4
Extreme environmental - TORNADO	2	0.1	-	2	-	-	2	-	-	311,508	-	-
Extreme environmental - FLOOD	6	0.3	-	4	-	2	2	2	2	1,912,655	-	-
Extreme wind velocity	12	0.6	1	10	-	1	9	2	1	2,862,253	-	-
Other extreme environmental conditions	3	0.1	-	-	-	3	3	-	-	516,000	-	-
Load shifted	7	0.3	1	4	-	2	2	3	2	547,828	-	-
Load fell from car	2	0.1	-	2	-	-	1	-	1	813,831	-	-
Overloaded car	3	0.1	-	2	-	1	1	1	1	169,682	-	-
Improperly loaded car	9	0.4	-	8	-	1	5	4	-	522,585	-	-
Trailer/container tiedown eqp improper	2	0.1	1	1	-	-	1	1	-	155,820	-	-
Overloaded container/trailer on flat car	1	0.0	-	-	-	1	1	-	-	66,523	-	-
Miscellaneous loading procedures	1	0.0	-	-	-	1	-	-	1	10,091	-	-
Hwy user impairment-drug/alcohol use	2	0.1	-	-	2	-	2	-	-	44,575	-	2
Highway user inattentiveness	68	3.3	-	-	68	-	68	-	-	3,295,058	16	86
Hwy user misjudgement	22	1.1	-	-	22	-	20	2	-	1,101,480	4	6
Highway user cited for violation	40	1.9	-	-	40	-	39	1	-	4,018,445	1	36
Hwy user unaware,environmental factor	1	0.0	-	-	1	-	1	-	-	11,323	-	-
Highway user unable to stop, weather	1	0.0	-	-	1	-	1	-	-	25,553	-	1
Highway user deliberately disregarded crossing warning devices	24	1.2	-	-	24	-	23	-	1	1,086,350	13	19
Other causes (highway-rail collisions)	13	0.6	-	-	13	-	13	-	-	486,576	-	14
Object/equipment (mtr veh) on track	16	0.8	-	-	-	16	13	2	1	413,059	1	6
Obj/equip on/fouling track, other	34	1.6	2	9	-	23	21	10	3	2,772,733	-	12
Harmonic rock off, etc.	14	0.7	-	13	-	1	4	9	1	1,842,411	-	-
Fire, other than vandalism	8	0.4	-	2	-	6	6	2	-	5,412,865	-	-
Auto hump retarder failed to slow car	20	1.0	3	3	-	14	-	19	1	799,760	-	-
Yard skate slid and failed to stop car	11	0.5	3	5	-	3	-	11	-	229,005	-	-
Lading chains/straps fouling switches	1	0.0	-	-	-	1	1	-	-	249,361	-	-
Lading chains or straps fouling wheels	1	0.0	-	1	-	-	-	-	1	9,986	-	-
Passed couplers (automated classification yard)	31	1.5	1	16	-	14	-	31	-	679,227	-	-
Interference(not vandals)with RR op.	8	0.4	1	5	-	2	-	2	6	271,296	-	-
Vandalism of track or track appliances	10	0.5	-	8	-	2	2	6	2	219,904	-	-
Fail by non-rr empto control spd of car	9	0.4	-	7	-	2	3	-	6	434,543	-	1
Cause under investigation	5	0.2	-	4	-	1	1	3	1	177,664	-	-
Track damage caused by non-railroad interference with track structure	5	0.2	-	4	-	1	2	2	1	280,984	-	-
Investigation complete, cause could not be determined	11	0.5	-	6	-	5	5	5	1	1,582,325	-	-
Other miscellaneous causes	11	0.5	1	8	-	2	2	8	1	1,186,947	-	-
Total	439	21.2	14	143	171	111	263	135	41	35,545,365	35	187

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

TABLE 5-10 TRAIN ACCIDENTS BY TYPE TRACK AND CLASS, 2009

Track & Class		Total		Type of Accident				Reportable	Casualties		Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Main	1	107	5.2	2	92	1	12	13,119,730	-	9	19	1	26	10	-	51
	2	114	5.5	7	81	10	16	27,582,887	-	10	23	10	26	11	-	44
	3	144	7.0	7	68	35	34	35,335,351	3	75	26	35	24	15	1	43
	4	280	13.5	8	130	85	57	70,227,369	22	121	64	85	44	43	-	44
	5	82	4.0	1	25	36	20	18,008,816	11	37	19	36	5	10	1	11
	6	13	0.6	-	2	-	11	1,020,032	-	-	4	-	2	2	-	5
	?	16	0.8	1	1	-	14	411,697	-	1	6	-	1	4	-	5
	X	29	1.4	-	28	-	1	1,812,508	-	-	2	-	-	1	-	26
	-Sub	785	38.0	26	427	167	165	167,518,390	36	253	163	167	128	96	2	229
Yard	1	908	43.9	83	633	3	189	45,207,217	-	17	80	3	403	121	45	256
	2	46	2.2	5	33	-	8	2,730,600	2	-	6	-	16	4	2	18
	3	6	0.3	1	5	-	-	418,091	-	-	-	-	3	-	-	3
	4	2	0.1	-	1	-	1	46,033	-	-	1	-	-	-	-	1
	?	2	0.1	-	1	-	1	30,450	-	-	-	-	-	1	-	1
	X	37	1.8	5	26	-	6	1,038,794	-	-	2	-	14	6	1	14
	-Sub	1,001	48.4	94	699	3	205	49,471,185	2	17	89	3	436	132	48	293
Siding	1	44	2.1	-	38	-	6	2,881,862	-	1	1	-	16	2	-	25
	2	7	0.3	1	6	-	-	1,839,599	-	-	2	-	3	-	-	2
	3	7	0.3	1	5	-	1	1,137,272	-	5	-	-	2	1	-	4
	4	1	0.0	-	1	-	-	13,539	-	-	-	-	-	-	-	1
	X	3	0.1	-	2	-	1	80,801	-	-	-	-	1	-	-	2
	-Sub	62	3.0	2	52	-	8	5,953,073	-	6	3	-	22	3	-	34
Industry	1	190	9.2	10	153	1	26	8,491,112	-	8	9	1	56	33	-	91
	2	7	0.3	-	6	-	1	127,673	-	-	1	-	3	2	-	1
	X	23	1.1	1	21	-	1	610,875	-	-	1	-	5	2	-	15
	-Sub	220	10.6	11	180	1	28	9,229,660	-	8	11	1	64	37	-	107
Total		2,068	100	133	1,358	171	406	232,172,308	38	284	266	171	650	268	50	663

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

TABLE 5-11 TRAIN ACCIDENTS BY TYPE TRACK AND CONSIST SPEED, 2009

Track - Spd Rng		Total		Type of Accident				Reportable Damage	Casualties		Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Main	?	22	1.1	-	4	1	17	1,606,902	-	1	12	1	1	7	-	1
	1 - 9	162	7.8	4	132	5	21	15,615,462	-	9	17	5	47	18	-	75
	10-19	150	7.3	10	111	7	22	23,946,535	-	8	36	7	41	12	1	53
	20-29	107	5.2	6	75	14	12	39,225,593	-	14	24	14	20	13	-	36
	30-39	104	5.0	5	48	31	20	33,462,284	6	69	33	31	11	8	1	20
	40-49	105	5.1	1	40	50	14	39,517,213	9	55	20	50	5	14	-	16
	50-59	62	3.0	-	13	28	21	9,594,871	6	38	9	28	2	11	-	12
	60-69	27	1.3	-	3	10	14	1,652,666	4	14	3	10	1	5	-	8
	>= 70	46	2.2	-	1	21	24	2,896,864	11	45	9	21	-	8	-	8
	-Sub	785	38.0	26	427	167	165	167,518,390	36	253	163	167	128	96	2	229
Yard	?	17	0.8	-	3	-	14	1,269,486	-	-	2	-	4	11	-	-
	1 - 9	848	41.0	75	617	3	153	36,065,227	-	8	72	3	381	94	42	256
	10-19	127	6.1	19	76	-	32	10,120,469	-	7	15	-	45	26	6	35
	20-29	5	0.2	-	2	-	3	1,265,504	2	-	-	-	3	1	-	1
	30-39	1	0.0	-	-	-	1	84,199	-	2	-	-	1	-	-	-
	40-49	3	0.1	-	1	-	2	666,300	-	-	-	-	2	-	-	1
	-Sub	1,001	48.4	94	699	3	205	49,471,185	2	17	89	3	436	132	48	293
Siding	?	3	0.1	-	2	-	1	46,859	-	-	-	-	-	3	-	-
	1 - 9	40	1.9	-	35	-	5	2,525,161	-	-	2	-	13	-	-	25
	10-19	15	0.7	2	11	-	2	1,626,883	-	3	1	-	8	-	-	6
	20-29	2	0.1	-	2	-	-	1,326,977	-	-	-	-	1	-	-	1
	30-39	2	0.1	-	2	-	-	427,193	-	3	-	-	-	-	-	2
	-Sub	62	3.0	2	52	-	8	5,953,073	-	6	3	-	22	3	-	34
Industry	?	4	0.2	-	1	-	3	452,000	-	-	1	-	-	3	-	-
	1 - 9	197	9.5	10	162	1	24	7,436,907	-	5	9	1	59	31	-	97
	10-19	18	0.9	1	17	-	-	1,316,457	-	3	1	-	4	3	-	10
	20-29	1	0.0	-	-	-	1	24,296	-	-	-	-	1	-	-	-
	-Sub	220	10.6	11	180	1	28	9,229,660	-	8	11	1	64	37	-	107
Total		2,068	100	133	1,358	171	406	232,172,308	38	284	266	171	650	268	50	663

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

TABLE 5-12 TRAIN ACCIDENTS BY WEATHER CONDITION, 2009

Conditions		Total		Type of Accident				Reportable	Casualties		Causes					
		Cnt	%	Coll	Der	HRC	Othr	Amount	Kld	Nonfatal	Eqp	HRC	Hmn	Othr	Sig	Trk
Dawn	Clear	60	2.9	3	37	4	16	12,959,998	-	3	9	4	17	10	1	19
	Cloudy	20	1.0	2	14	2	2	4,218,446	-	2	7	2	2	1	-	8
	Rain	6	0.3	-	2	1	3	542,128	-	-	-	1	-	3	-	2
	Fog	2	0.1	-	-	2	-	31,535	-	-	-	2	-	-	-	-
	Snow	5	0.2	-	5	-	-	572,548	-	-	1	-	1	2	-	1
	-- Sub	93	4.5	5	58	9	21	18,324,655	-	5	17	9	20	16	1	30
Day	Clear	704	34.0	35	447	96	126	73,041,188	20	142	69	96	217	73	16	233
	Cloudy	229	11.1	13	149	24	43	21,534,728	5	43	30	24	73	29	4	69
	Rain	62	3.0	6	36	5	15	4,401,728	-	6	8	5	19	12	1	17
	Fog	3	0.1	1	1	-	1	120,821	-	-	-	-	1	-	-	2
	Sleet	2	0.1	-	1	-	1	136,400	-	-	-	-	1	-	-	1
	Snow	29	1.4	1	21	2	5	2,195,892	-	1	6	2	11	2	-	8
	-- Sub	1,029	49.8	56	655	127	191	101,430,757	25	192	113	127	322	116	21	330
Dusk	Clear	67	3.2	4	49	1	13	5,762,994	-	-	8	1	24	7	1	26
	Cloudy	23	1.1	3	18	1	1	1,583,526	-	-	5	1	7	3	-	7
	Rain	10	0.5	1	7	-	2	660,369	-	-	-	-	3	5	-	2
	Snow	1	0.0	-	1	-	-	16,150	-	-	-	-	1	-	-	-
	-- Sub	101	4.9	8	75	2	16	8,023,039	-	-	13	2	35	15	1	35
Dark	Clear	498	24.1	39	327	21	111	62,104,375	7	32	66	21	179	61	15	156
	Cloudy	195	9.4	12	132	6	45	24,002,167	2	8	38	6	53	31	6	61
	Rain	92	4.4	8	65	5	14	11,510,081	3	17	9	5	25	17	5	31
	Fog	18	0.9	2	14	-	2	2,777,145	1	-	3	-	7	3	-	5
	Sleet	1	0.0	-	1	-	-	9,325	-	-	-	-	-	1	-	-
	Snow	41	2.0	3	31	1	6	3,990,764	-	30	7	1	9	8	1	15
	-- Sub	845	40.9	64	570	33	178	104,393,857	13	87	123	33	273	121	27	268
Total		2,068	100	133	1,358	171	406	232,172,308	38	284	266	171	650	268	50	663

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

TABLE 5-13 TRAIN ACCIDENTS BY CONSIST LENGTH, 2009

Length	Consists		Type of Accident				Equipment Damage		Causes					
	Cnt	%	Coll	Der	HRC	Othr	Amount	%	Eqp	HRC	Hmn	Othr	Sig	Trk
???	1	0.0	-	1	-	-	6,000	0.0	-	-	1	-	-	-
1	191	7.9	35	56	6	94	5,877,097	3.7	11	6	94	48	16	16
2-5	285	11.8	37	119	21	108	6,033,952	3.8	22	21	132	53	18	39
6-10	265	11.0	18	117	27	103	7,803,196	4.9	24	27	101	39	4	70
11-15	148	6.1	21	87	10	30	4,877,093	3.0	7	10	62	17	3	49
16-20	105	4.4	15	58	4	28	2,463,690	1.5	5	4	47	11	2	36
21-25	98	4.1	8	67	6	17	2,006,008	1.2	12	6	31	11	6	32
26-30	85	3.5	8	65	1	11	2,227,312	1.4	7	1	32	8	4	33
31-35	86	3.6	13	53	6	14	2,576,240	1.6	11	6	34	8	3	24
36-40	72	3.0	13	48	1	10	1,587,544	1.0	10	1	23	7	3	28
41-45	66	2.7	8	42	3	13	2,500,925	1.6	7	3	28	9	2	17
46-50	83	3.4	10	54	6	13	2,915,870	1.8	9	6	39	7	2	20
51-60	120	5.0	4	89	18	9	8,922,710	5.5	19	18	29	14	2	38
61-70	95	3.9	7	71	8	9	6,582,354	4.1	10	8	33	8	3	33
71-80	125	5.2	12	83	14	16	9,716,236	6.0	17	14	36	13	1	44
81-90	93	3.9	9	70	4	10	8,090,345	5.0	16	4	25	11	2	35
91-100	83	3.4	5	64	4	10	9,205,389	5.7	22	4	23	11	-	23
101-110	117	4.9	9	84	10	14	19,495,714	12.1	24	10	27	13	2	41
111-120	102	4.2	6	74	8	14	12,365,267	7.7	20	8	24	13	-	37
121-130	93	3.9	6	67	9	11	21,017,670	13.1	15	9	17	14	1	37
131-140	55	2.3	5	42	5	3	14,001,021	8.7	10	5	12	4	-	24
141-150	22	0.9	1	17	-	4	7,803,969	4.9	3	-	6	1	-	12
>= 151	17	0.7	2	13	1	1	2,711,006	1.7	4	1	7	1	1	3
Total	2,407	100	252	1,441	172	542	160,786,608	100.0	285	172	863	321	75	691

Coll = collision, Der = derailment, HRC = highway-rail grade crossing, Othr = other
 EQP = equipment (on-track), 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, 2009

Track - Equipment		Consists		Avg Len. Coll		Type of Accident				Primary Cause						
		Cnt	%			Der	HRC	Othr	Eqp	HRC	Hmn	Othr	Sig	Trk		
Main	Freight Train	558	23.2	81	12	355	108	44	117	108	69	52	1	172		
	Psgr Train	121	5.0	8	2	10	17	63	28	17	8	17	1	21		
	Commuter Train	37	1.5	7	-	2	13	16	2	13	2	4	-	10		
	Work Train	9	0.4	16	-	3	-	5	1	-	2	2	-	3		
	Single Car	4	0.2	1	1	-	-	-	-	-	1	-	-	-		
	Cut of Cars	9	0.4	21	-	4	-	3	2	-	2	2	-	1		
	Yard/ Switch	27	1.1	56	2	17	-	3	3	-	10	2	-	7		
	Light loco(s)	18	0.7	2	1	5	6	5	2	6	7	-	-	2		
	Maint/ Insp car	24	1.0	2	4	3	3	4	-	3	8	3	-	-		
	Spec MOW Eqp	22	0.9	1	2	4	1	11	1	1	13	3	-	-		
	-Sub total	829	34.4	59	24	403	148	154	156	148	122	85	2	216		
Yard	Freight Train	281	11.7	68	11	197	2	12	23	2	73	20	3	101		
	Psgr Train	9	0.4	8	-	4	-	4	1	-	4	2	-	1		
	Commuter Train	9	0.4	7	-	5	-	4	-	-	6	-	-	3		
	Work Train	6	0.2	18	-	5	-	1	1	-	2	-	-	3		
	Single Car	88	3.7	2	9	15	-	30	4	-	17	23	7	3		
	Cut of Cars	121	5.0	17	15	26	-	28	3	-	36	17	9	4		
	Yard/ Switch	665	27.6	40	52	378	1	108	56	1	247	63	29	143		
	Light loco(s)	83	3.4	2	7	42	-	12	-	-	41	2	-	18		
	Maint/ Insp car	2	0.1	1	-	-	-	2	-	-	1	1	-	-		
	Spec MOW Eqp	4	0.2	1	-	2	-	2	1	-	2	1	-	-		
	-Sub total	1,268	52.7	38	94	674	3	203	89	3	429	129	48	276		
Siding	Freight Train	42	1.7	71	1	34	-	3	3	-	8	-	-	27		
	Psgr Train	1	0.0	11	-	1	-	-	-	-	-	-	-	1		
	Work Train	1	0.0	16	-	1	-	-	-	-	1	-	-	-		
	Single Car	2	0.1	1	-	-	-	2	-	-	1	1	-	-		
	Cut of Cars	6	0.2	15	-	3	-	1	-	-	2	2	-	-		
	Yard/ Switch	10	0.4	52	-	6	-	-	-	-	2	-	-	4		
	Light loco(s)	4	0.2	1	1	2	-	1	-	-	4	-	-	-		
	Maint/ Insp car	1	0.0	1	-	1	-	-	-	-	1	-	-	-		
	Spec MOW Eqp	1	0.0	1	-	-	-	1	-	-	1	-	-	-		
	-Sub total	68	2.8	53	2	48	-	8	3	-	20	3	-	32		
	Industry	Freight Train	99	4.1	62	3	83	-	9	8	-	18	19	-	50	
Work Train		3	0.1	19	-	2	-	-	-	-	1	-	-	1		
Single Car		11	0.5	1	3	2	-	4	1	-	5	2	-	1		
Cut of Cars		15	0.6	20	2	4	-	3	-	-	7	2	-	-		
Yard/ Switch		104	4.3	38	3	79	-	11	1	-	31	12	-	49		
Light loco(s)		10	0.4	3	-	7	1	1	1	1	1	2	-	4		
-Sub total		242	10.1	43	11	177	1	28	11	1	63	37	-	105		
Total		2,407	100	46	131	1,302	152	393	259	152	634	254	50	629		

Coll = collision, Der = derailment, HRC = highway-rail grade crossing, Othr = other
 EQP = equipment (on-track), 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,2009

Length	Freight Train	Psgr Train	Commuter Train	Work Train	Single Car	Cut of Cars	Yard/ Switch	Light loco(s)	Maint/ Insp car	Spec MOW Eqp
???	-	-	-	-	-	-	-	1	-	-
1	-	4	1	-	101	-	2	33	24	26
2-5	16	22	11	4	3	73	81	74	1	-
6-10	40	82	28	3	-	16	87	7	1	1
11-15	30	21	4	2	-	13	77	-	1	-
16-20	29	1	2	5	-	9	59	-	-	-
21-25	39	-	-	1	-	7	51	-	-	-
26-30	33	-	-	2	-	5	45	-	-	-
31-35	39	-	-	-	-	5	42	-	-	-
36-40	23	-	-	1	-	5	43	-	-	-
41-45	26	-	-	-	-	2	38	-	-	-
46-50	29	1	-	-	-	3	50	-	-	-
51-60	76	-	-	1	1	1	41	-	-	-
61-70	54	-	-	-	-	3	38	-	-	-
71-80	90	-	-	-	-	4	31	-	-	-
81-90	71	-	-	-	-	2	20	-	-	-
91-100	59	-	-	-	-	1	23	-	-	-
101-110	87	-	-	-	-	1	29	-	-	-
111-120	81	-	-	-	-	1	20	-	-	-
121-130	82	-	-	-	-	-	11	-	-	-
131-140	49	-	-	-	-	-	6	-	-	-
141-150	15	-	-	-	-	-	7	-	-	-
>= 151	12	-	-	-	-	-	5	-	-	-
Total	980	131	46	19	105	151	806	115	27	27

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

TABLE 5-16 INVOLVEMENT IN TRAIN ACCIDENTS BY TYPE CONSIST, 2009

Type Equipment	Total		Type of Accident				Type of Track				Causes					
	Cnt	%	Coll	Der	HRC	Othr	Main	Yard	Siding	Industry	Eqp	HRC	Hmn	Othr	Sig	Trk
Freight Train	965	41.7	54	718	112	81	552	274	40	99	162	112	213	96	5	377
Psgr Train	129	5.6	3	19	32	75	119	9	1	-	29	32	15	26	1	26
Commuter Train	46	2.0	1	7	15	23	37	9	-	-	3	15	8	5	-	15
Work Train	19	0.8	-	12	-	7	9	6	1	3	2	-	7	2	-	8
Single Car	88	3.8	18	24	-	46	3	72	2	11	6	-	34	30	12	6
Cut of Cars	140	6.1	25	51	-	64	9	110	6	15	7	-	79	30	13	11
Yard/ Switch	764	33.0	86	513	1	164	27	623	10	104	63	1	350	98	36	216
Light loco(s)	112	4.8	16	63	7	26	18	80	4	10	5	7	67	6	-	27
Maint/ Insp car	24	1.0	7	5	3	9	21	2	1	-	-	3	17	4	-	-
Spec MOW Eqp	25	1.1	2	7	1	15	20	4	1	-	2	1	18	4	-	-
Total	2,312	100	212	1,419	171	510	815	1,189	66	242	279	171	808	301	67	686

TABLE 5-17 DAMAGE BY TRACK TYPE, 2009

Track	Total Damage		Equip Damage		Track Damage	
	Amount	Avg	Amount	Avg	Amount	Avg
Main	167,518,390	177,268	117,870,754	124,731	49,647,636	52,537
Yard	49,471,185	37,168	33,023,113	24,811	16,448,072	12,358
Siding	5,953,073	78,330	4,043,884	53,209	1,909,189	25,121
Industry	9,229,660	36,772	5,848,857	23,302	3,380,803	13,469
Total	232,172,308	89,194	160,786,608	61,770	71,385,700	27,424

TABLE 5-18 DAMAGE BY CONSIST TYPE, 2009

Type Equipment	Total Damage		Equip Damage		Track Damage	
	Amount	Avg	Amount	Avg	Amount	Avg
Freight Train	171,171,228	174,665	121,488,577	123,968	49,682,651	50,697
Psgr Train	6,892,984	52,618	6,399,927	48,854	493,057	3,764
Commuter Train	1,328,193	28,874	1,237,158	26,895	91,035	1,979
Work Train	1,525,829	80,307	786,280	41,383	739,549	38,924
Single Car	2,341,557	22,301	2,258,138	21,506	83,419	794
Cut of Cars	4,140,523	27,421	3,760,304	24,903	380,219	2,518
Yard/ Switch	30,370,380	37,680	19,611,199	24,332	10,759,181	13,349
Light loco(s)	3,029,270	26,341	2,078,195	18,071	951,075	8,270
Maint/ Insp car	1,863,658	69,024	1,832,928	67,886	30,730	1,138
Spec MOW Eqp	1,560,442	57,794	1,333,902	49,404	226,540	8,390
Other	7,948,244	40,552	0	0	7,948,244	40,552
Total	232,172,308	89,194	160,786,608	61,770	71,385,700	27,424

If more than one consist of same type in accident, then only one is counted. For example, a collision between two freight trains would be counted as one freight train.

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

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; \$6,700 in 2005; \$7,700 in 2006; \$8,200 in 2007; \$8,500 in 2008; \$8,900 in 2009.

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.

CONTENTS

CHAPTER 6

**TRAIN ACCIDENTS/INVOLVING CONSISTS TRANSPORTING
HAZARDOUS MATERIAL**

Tables	Title	Page
6-1	Consists Transporting Hazardous Material, by Railroad, 2009	85
6-2	Consists Transporting Hazardous Material, by State, 2009	86
6-3	Consists Transporting Hazardous Material, by Subcause, 2009	87
6-4	Consists Transporting Hazardous Material, by Accident Type, 2009	87

TABLE 6-1 CONSISTS TRANSPORTING HAZMAT, BY RAILROAD, 2009

Railroad	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Alaska RR Corp.	1	1	-	28	4	4	-	-	-
Burlington Northern Santa Fe	190	72	7	12,043	2,325	220	10	-	-
Buffalo & Pittsburg	2	1	-	102	21	1	-	-	-
Belt Rwy Of Chicago	2	2	-	65	5	4	-	-	-
Canadian National	35	21	3	2,875	607	65	18	3	251
Canadian Pacific	13	7	-	870	258	54	-	-	-
Conrail Shared Assets	8	5	1	365	103	15	1	-	-
CSX Transportation	105	42	-	6,055	1,103	99	-	4	260
Florida East Coast	2	1	1	119	11	1	1	-	-
Other Railroads	46	32	3	1,932	554	105	3	2	27
Indiana Harbor Belt	3	1	-	72	6	2	-	-	-
Kansas City Southern	13	6	-	771	104	24	-	-	-
Long Island Rail Road	-	-	-	-	0	0	0	-	950
Montana Rail Link	3	-	-	103	46	-	-	-	-
Norfolk Southern Corp.	34	18	4	1,924	264	35	5	1	2
Port Auth Trans Hudson	-	-	-	-	0	0	0	-	100
Port Terminal RR Assn	3	1	-	33	11	5	-	-	-
Southeastern PA Trans.	-	-	-	-	0	0	0	-	1,370
Term RR Assn Of St. Louis	1	-	-	103	3	-	-	-	-
Union Pacific	149	50	3	8,423	1,323	114	6	2	200
Total	610	260	22	35,883	6,748	748	44	12	3,160

TABLE 6-2 CONSISTS TRANSPORTING HAZMAT, BY STATE, 2009

States	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Alabama	18	11	-	650	97	21	-	-	-
Alaska	1	1	-	28	4	4	-	-	-
Arizona	10	3	-	387	113	16	-	-	-
Arkansas	13	2	-	646	92	5	-	-	-
California	43	19	1	2,131	356	45	1	-	-
Colorado	10	5	1	797	213	29	3	-	-
Dist Of Columb	1	-	-	101	18	-	-	-	-
Florida	8	3	1	588	103	5	1	-	-
Georgia	25	11	1	1,213	263	20	1	-	-
Idaho	5	1	-	422	82	2	-	-	-
Illinois	53	28	4	3,679	570	74	18	3	280
Indiana	8	2	-	426	54	4	-	-	-
Iowa	24	8	1	1,511	375	67	2	1	31
Kansas	10	4	-	572	96	7	-	-	-
Kentucky	4	1	-	178	33	3	-	-	-
Louisiana	19	8	1	1,140	258	22	1	1	100
Maine	3	2	1	217	83	15	1	1	2
Maryland	8	4	-	419	83	13	-	-	-
Massachusetts	2	-	-	158	4	-	-	-	-
Michigan	4	-	-	389	34	-	-	-	-
Minnesota	14	7	1	801	208	11	1	-	-
Mississippi	7	6	-	409	114	18	-	-	-
Missouri	15	5	1	1,295	181	10	2	-	-
Montana	5	1	-	252	75	5	-	-	-
Nebraska	23	8	-	1,338	199	44	-	-	-
Nevada	5	3	-	288	64	6	-	-	-
New Jersey	7	4	1	349	87	11	1	-	-
New Mexico	8	4	-	602	195	15	-	-	-
New York	9	5	-	518	155	8	0	-	1,050
North Carolina	12	8	2	405	97	24	3	1	2
North Dakota	9	4	1	603	99	8	1	-	-
Ohio	14	6	-	1,069	148	20	-	1	100
Oklahoma	16	3	-	1,352	139	4	-	-	-
Oregon	9	3	-	451	30	3	-	-	-
Pennsylvania	15	10	-	778	179	22	0	-	1,370
South Carolina	9	3	-	389	61	7	-	-	-
South Dakota	1	-	-	83	18	-	-	-	-
Tennessee	21	8	1	1,570	238	25	1	3	125
Texas	95	37	3	5,100	1,177	107	6	1	100
Utah	4	3	-	83	18	6	-	-	-
Virginia	6	4	-	333	24	10	-	-	-
Washington	18	9	-	891	112	24	-	-	-
West Virginia	3	-	-	170	17	-	-	-	-
Wisconsin	10	2	-	684	69	2	-	-	-
Wyoming	6	4	1	418	113	6	1	-	-
Total	610	260	22	35,883	6,748	748	44	12	3,160

TABLE 6-3 CONSISTS TRANSPORTING HAZMAT, BY SUBCAUSE, 2009

Causes	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Brakes	13	3	-	764	147	6	-	-	-
Body	7	1	-	616	58	2	-	-	-
Coupler & Draft System	14	4	-	1,117	160	5	-	-	-
Truck Components	20	13	2	1,362	345	29	2	-	-
Axles & Journal Bearings	13	6	1	1,165	195	12	1	3	180
Wheels	19	10	-	1,444	237	27	-	-	-
Locomotives	2	-	-	196	25	0	0	-	900
Doors	1	-	-	10	1	-	-	-	-
Other Mechanical	5	1	-	286	85	1	-	-	-
Brakes, Use of	27	12	-	1,303	284	17	-	-	-
Flagging, Fixed, Hand & Radio	7	1	-	567	97	1	-	-	-
General Switching Rules	84	40	2	3,113	728	83	2	2	100
Train Handling/Makeup	30	10	-	2,572	427	32	0	-	570
Speed	24	12	2	1,186	274	25	3	1	2
Switches, Use of	44	25	2	2,288	496	60	2	1	25
Miscellaneous Human Factors	8	1	-	312	37	4	-	-	-
Environmental Conditions	8	3	-	651	111	7	0	-	125
Loading Procedures	3	1	-	275	88	7	-	-	-
Highway-Rail Incidents	38	2	-	2,382	368	6	-	-	-
Unusual Operational Situations	34	12	1	1,575	198	18	4	-	825
Other Miscellaneous Causes	13	8	1	869	158	16	1	-	-
Signal Defects	16	2	-	441	118	3	-	-	-
Roadbed	10	6	3	759	240	33	19	2	231
Track Geometry	68	37	4	4,341	733	117	4	1	100
Rail, Joint Bar & Anchors	49	28	4	3,250	631	113	6	2	102
Frogs, Switches, Appliances	47	20	-	2,549	458	111	-	-	-
Other Track Defects	6	2	-	490	49	13	-	-	-
Total	610	260	22	35,883	6,748	748	44	12	3,160

TABLE 6-4 CONSISTS TRANSPORTING HAZMAT, BY ACCIDENT TYPE, 2009

Type Accident	Hazmat Consists			Total Cars In Consist	Hazmat Cars			Evacuations	
	Cnt	Damaged	Releasing		Cnt	Damaged	Releasing	Cnt	People
Derailments	413	198	17	26,211	4,998	625	35	11	863
Head on collision	1	-	-	85	14	-	-	-	-
Rear end collision	4	-	-	128	11	-	-	-	-
Side collision	40	14	-	1,992	345	23	-	-	-
Raking collision	12	4	-	527	131	12	-	-	-
Broken train coll.	3	-	-	225	48	-	-	-	-
Highway-rail Impact	38	2	-	2,382	368	6	-	-	-
Obstruction impact	10	2	1	838	80	5	4	-	-
Fire/violent rupture	3	-	-	201	51	0	0	-	925
Other impacts	75	39	3	2,473	618	76	4	1	102
Other events	11	1	1	821	84	1	1	-	1,270
Total	610	260	22	35,883	6,748	748	44	12	3,160

This page intentionally left blank

CHAPTER 7

HIGHWAY-RAIL GRADE 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 F6180.57. 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 F6180.54 must be completed. The reporting threshold for accidents for 1998 was \$6,600; \$6,700 in 2005; \$7,700 in 2006; \$8,200 in 2007; \$8,500 in 2008; and \$8,900 in 2009.

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 grade 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 F6180.55a, e.g., the engineer sustained a fractured arm.

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 grade crossing impact must also be reported on Form FRA F6180.55a.

If the accident/incident satisfies the reporting requirements for rail equipment accidents (e.g., reportable railroad damage exceeds threshold), Form FRA F6180.54 must also be completed by all railroads involved, including the railroad with track maintenance responsibility.

CONTENTS**CHAPTER 7****HIGHWAY-RAIL GRADE INCIDENTS**

Tables	Title	Page
7-1	Total Highway-Rail Grade Incidents, by Railroad, 2009	91
7-2	Total Highway-Rail Grade Incidents, by State, 2009	92
7-3	Total Highway-Rail Grade Casualties, by State and Age Group, 2009	93
7-4	Total Highway-Rail Grade Incidents, by Month, 2009	94
7-5	Total Highway-Rail Grade Incidents, by Day, 2009	95
7-6	Total Highway-Rail Grade Incidents, by Hour of Day, 2009	96
7-7	Total Highway-Rail Grade Incidents, by Type Highway User, 2009	97
7-8	Total Highway-Rail Grade Incidents, by User, 2009	98
7-9	Total Highway-Rail Grade Incidents, by Warning Device, 2009	99
7-10	Total Highway-Rail Grade Incidents, by Weather, 2009	100

TABLE 7-1 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY RAILROAD, 2009

Railroads	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
Alaska RR Corp.	4	1	-	4	1	-	-	-	-	-	-	-	-	-	-
Amtrak	129	51	109	87	32	85	28	17	10	13	1	12	1	1	2
Burlington Northern Santa Fe	257	38	104	188	23	81	19	9	9	50	6	14	-	-	-
Canadian National	105	6	38	91	5	34	6	1	2	8	-	2	-	-	-
Canadian Pacific	45	4	18	36	2	17	3	2	-	6	-	1	-	-	-
Conrail Shared Assets	19	-	5	16	-	4	1	-	-	2	-	1	-	-	-
CSX Transportation	332	30	105	266	15	83	20	11	5	42	4	14	4	-	3
Florida East Coast	10	2	4	9	1	4	1	1	-	-	-	-	-	-	-
Guilford Rail System	2	-	-	1	-	-	-	-	-	1	-	-	-	-	-
Other Railroads	277	17	65	217	9	48	17	8	5	40	-	12	3	-	-
Indiana Harbor Belt	3	-	-	2	-	-	-	-	-	1	-	-	-	-	-
Kansas City Southern	54	11	17	45	11	14	3	-	-	6	-	3	-	-	-
Long Island Rail Road	15	4	2	6	2	1	8	2	-	1	-	1	-	-	-
MD Assn. of Rail Comm	3	1	10	2	-	9	1	1	1	-	-	-	-	-	-
Mass Bay Transit Auth.	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Metro North Commuter	2	-	-	1	-	-	-	-	-	1	-	-	-	-	-
Montana Rail Link	5	-	-	3	-	-	-	-	-	2	-	-	-	-	-
Northern IN Comm Trans	4	2	2	4	2	2	-	-	-	-	-	-	-	-	-
Northeast IL Reg Comm	14	4	5	8	1	3	5	3	1	1	-	1	-	-	-
New Jersey Transit Rail	15	4	11	13	3	11	1	1	-	1	-	-	-	-	-
Norfolk Southern Corp.	277	23	94	227	18	74	5	2	3	45	3	17	-	-	-
Peninsula Comm San Mateo Cnty	11	3	1	6	2	1	4	1	-	1	-	-	-	-	-
Port Terminal RR Assn	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Southern CA Reg Rail Auth.	9	2	-	8	1	-	1	1	-	-	-	-	-	-	-
Southeastern PA Trans.	5	-	6	4	-	5	1	-	1	-	-	-	-	-	-
Term RR Assn Of St. Louis	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Union Pacific	319	43	141	250	31	123	14	6	3	54	6	15	1	-	-
Wheeling & Lake Erie	5	1	2	5	1	2	-	-	-	-	-	-	-	-	-
Total	1,925	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-2 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY STATE, 2009

States				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
Alabama	70	4	27	58	2	24	2	1		2	10	1	1	-	-
Alaska	4	1	-	4	1	-	-	-		-	-	-	-	-	-
Arizona	20	3	5	13	1	1	5	1		3	2	1	1	-	-
Arkansas	44	9	17	38	6	17	2	1		-	4	2	-	-	-
California	116	29	33	70	9	21	33	19		9	12	1	3	1	-
Colorado	24	1	9	18	1	4	2	-		1	4	-	4	-	-
Connecticut	4	1	-	4	1	-	-	-		-	-	-	-	-	-
Delaware	4	-	2	3	-	1	-	-		-	1	-	1	-	-
Florida	50	10	24	33	5	11	7	4		-	8	1	11	2	2
Georgia	107	6	36	91	4	31	4	1		2	12	1	3	-	-
Idaho	10	-	7	8	-	6	-	-		-	2	-	1	-	-
Illinois	106	18	50	72	11	39	10	6		3	21	-	5	3	3
Indiana	98	14	38	82	12	28	5	1		2	10	1	8	1	-
Iowa	52	4	19	43	2	17	3	2		-	6	-	2	-	-
Kansas	46	2	15	38	2	11	1	-		-	7	-	4	-	-
Kentucky	58	1	22	52	1	20	1	-		-	5	-	2	-	-
Louisiana	84	11	36	69	9	33	2	1		-	13	1	3	-	-
Maine	4	-	4	2	-	2	2	-		2	-	-	-	-	-
Maryland	13	-	9	11	-	9	-	-		-	2	-	-	-	-
Massachusetts	4	-	1	2	-	1	-	-		-	2	-	-	-	-
Michigan	49	12	14	43	10	13	3	2		-	3	-	1	-	-
Minnesota	40	6	14	32	4	10	4	1		3	4	1	1	-	-
Mississippi	42	8	24	38	8	23	1	-		1	3	-	-	-	-
Missouri	39	8	17	30	6	15	2	-		1	7	2	1	-	-
Montana	15	1	3	9	-	1	1	1		-	5	-	2	-	-
Nebraska	41	8	18	35	5	18	-	-		-	6	3	-	-	-
Nevada	4	-	1	3	-	1	-	-		-	1	-	-	-	-
New Hampshire	2	-	1	2	-	1	-	-		-	-	-	-	-	-
New Jersey	41	4	18	35	3	17	2	1		-	4	-	1	-	-
New Mexico	13	3	5	10	2	5	1	1		-	2	-	-	-	-
New York	31	9	3	13	6	2	9	3		-	7	-	1	2	-
North Carolina	55	8	34	49	8	33	1	-		-	5	-	1	-	-
North Dakota	15	3	5	14	3	5	-	-		-	1	-	-	-	-
Ohio	63	9	21	49	1	16	6	5		2	8	3	3	-	-
Oklahoma	48	4	23	41	3	20	1	-		1	6	1	2	-	-
Oregon	9	1	2	6	-	2	1	1		-	2	-	-	-	-
Pennsylvania	46	1	17	33	1	11	2	-		2	11	-	4	-	-
South Carolina	41	6	16	35	5	14	1	1		-	5	-	2	-	-
South Dakota	17	3	11	15	3	11	1	-		-	1	-	-	-	-
Tennessee	56	2	17	49	1	15	3	1		1	4	-	1	-	-
Texas	178	23	79	141	17	68	9	5		1	28	1	10	-	-
Utah	13	2	1	10	-	-	3	2		1	-	-	-	-	-
Vermont	9	2	2	7	2	1	-	-		-	2	-	1	-	-
Virginia	35	3	9	21	2	5	2	1		1	12	-	3	-	-
Washington	32	2	5	16	1	1	1	1		-	15	-	4	-	-
West Virginia	23	3	8	12	-	2	3	3		1	8	-	5	-	-
Wisconsin	46	2	17	41	2	15	2	-		1	3	-	1	-	-
Wyoming	4	-	-	2	-	-	-	-		-	2	-	-	-	-
Total	1,925	247	739	1,502	160	601	138	66		40	276	20	93	9	5

TABLE 7-3 TOTAL HIGHWAY-RAIL GRADE CASUALTIES BY STATE AND AGE GROUP, 2009

States	Deaths						Nonfatal Cases					
	Age Group					Total	Age Group					Total
	Unk	< 16	16-21	> 21	Cnt		Unk	< 16	16-21	> 21	Cnt	
Alabama	1	-	-	3	4	1.6	1	4	3	19	27	3.7
Alaska	1	-	-	-	1	0.4	-	-	-	-	0	0.0
Arizona	2	-	-	1	3	1.2	-	-	-	5	5	0.7
Arkansas	-	-	-	9	9	3.6	-	2	1	14	17	2.3
California	3	4	1	21	29	11.7	1	4	2	26	33	4.5
Colorado	-	-	1	-	1	0.4	-	-	-	9	9	1.2
Connecticut	-	-	1	-	1	0.4	-	-	-	-	0	0.0
Delaware	-	-	-	-	0	0.0	-	-	1	1	2	0.3
Florida	1	-	-	9	10	4.0	4	-	-	20	24	3.3
Georgia	-	-	1	5	6	2.4	3	3	1	29	36	4.9
Idaho	-	-	-	-	0	0.0	-	-	1	6	7	0.9
Illinois	1	1	1	15	18	7.3	5	4	7	34	50	6.8
Indiana	-	-	2	12	14	5.7	5	2	4	27	38	5.1
Iowa	-	-	-	4	4	1.6	-	-	3	16	19	2.6
Kansas	-	-	-	2	2	0.8	2	-	3	10	15	2.0
Kentucky	-	-	-	1	1	0.4	2	5	-	15	22	3.0
Louisiana	-	2	1	8	11	4.5	2	5	1	28	36	4.9
Maine	-	-	-	-	0	0.0	-	-	4	-	4	0.5
Maryland	-	-	-	-	0	0.0	8	-	-	1	9	1.2
Massachusetts	-	-	-	-	0	0.0	-	-	-	1	1	0.1
Michigan	5	-	1	6	12	4.9	2	-	1	11	14	1.9
Minnesota	-	-	1	5	6	2.4	2	-	3	9	14	1.9
Mississippi	-	2	4	2	8	3.2	1	1	2	20	24	3.3
Missouri	-	-	-	8	8	3.2	1	1	1	14	17	2.3
Montana	-	-	-	1	1	0.4	1	-	-	2	3	0.4
Nebraska	2	-	2	4	8	3.2	2	4	-	12	18	2.4
Nevada	-	-	-	-	0	0.0	-	-	-	1	1	0.1
New Jersey	-	-	-	4	4	1.6	5	-	-	13	18	2.4
New Mexico	-	-	-	3	3	1.2	3	-	1	1	5	0.7
New York	1	-	-	8	9	3.6	-	-	-	3	3	0.4
North Carolina	-	3	-	5	8	3.2	2	2	3	27	34	4.6
North Dakota	-	-	-	3	3	1.2	-	-	2	3	5	0.7
Ohio	-	1	2	6	9	3.6	1	1	4	15	21	2.8
Oklahoma	-	-	-	4	4	1.6	2	-	1	20	23	3.1
Oregon	-	-	-	1	1	0.4	-	-	-	2	2	0.3
Pennsylvania	-	-	-	1	1	0.4	5	1	1	10	17	2.3
South Carolina	-	1	1	4	6	2.4	3	2	-	11	16	2.2
South Dakota	-	-	1	2	3	1.2	4	-	1	6	11	1.5
Tennessee	-	-	-	2	2	0.8	1	-	2	14	17	2.3
Texas	-	-	1	22	23	9.3	4	1	2	72	79	10.7
Utah	-	-	1	1	2	0.8	-	-	-	1	1	0.1
Vermont	-	-	-	2	2	0.8	-	-	-	2	2	0.3
Virginia	-	-	-	3	3	1.2	1	-	1	7	9	1.2
Washington	1	-	-	1	2	0.8	-	-	2	3	5	0.7
West Virginia	-	1	-	2	3	1.2	-	-	-	8	8	1.1
Wisconsin	-	-	-	2	2	0.8	-	1	2	14	17	2.3
Total	18	15	22	192	247	100.0	73	43	60	562	738	100.0

TABLE 7-4 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY MONTH, 2009

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	220	18	72	183	15	67	9	1	1	27	2	4	1	-	-
February	154	13	56	117	5	45	8	6	2	29	2	9	-	-	-
March	177	20	83	140	11	74	13	6	4	23	3	3	1	-	2
April	142	18	40	108	7	34	15	9	3	19	2	3	-	-	-
May	142	18	56	111	11	42	13	6	3	18	1	11	-	-	-
June	160	21	71	116	12	53	16	7	7	26	2	11	2	-	-
July	158	33	67	125	25	55	13	6	7	19	2	4	1	-	1
August	144	18	50	111	11	36	7	6	1	25	1	13	1	-	-
September	128	22	46	98	14	40	15	8	4	15	-	2	-	-	-
October	171	20	77	132	13	56	10	3	1	28	4	20	1	-	-
November	150	19	45	119	14	36	11	5	4	19	-	5	1	-	-
December	179	27	76	142	22	63	8	3	3	28	1	8	1	1	2
Total	1,925	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-5 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY DAY, 2009

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	143	7.43	26	54	112	14	43	14	8	4	17	4	7	-	-	-
Monday	220	11.43	34	76	165	25	57	17	8	4	37	1	15	1	-	-
Tuesday	227	11.79	32	68	173	20	58	16	10	2	36	2	6	2	-	2
Wednesday	246	12.78	36	75	188	22	61	18	10	4	38	4	9	2	-	1
Thursday	254	13.19	39	116	187	23	86	29	14	11	36	1	17	2	1	2
Friday	268	13.92	27	115	198	17	93	20	6	7	50	4	15	-	-	-
Saturday	208	10.81	34	99	159	22	81	15	10	3	33	2	15	1	-	-
Total	1,566	81.35	228	603	1,182	143	479	129	66	35	247	18	84	8	1	5

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	26	1.35	3	12	25	3	12	-	-	-	1	-	-	-	-	-
Monday	50	2.60	2	19	41	2	17	4	-	1	5	-	1	-	-	-
Tuesday	49	2.55	3	7	42	3	5	-	-	-	7	-	2	-	-	-
Wednesday	64	3.32	2	26	60	2	25	-	-	-	4	-	1	-	-	-
Thursday	60	3.12	2	16	53	2	14	1	-	1	5	-	1	1	-	-
Friday	62	3.22	2	31	56	2	26	2	-	2	4	-	3	-	-	-
Saturday	48	2.49	5	25	43	3	23	2	-	1	3	2	1	-	-	-
Total	359	18.65	19	136	320	17	122	9	-	5	29	2	9	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	169	8.78	29	66	137	17	55	14	8	4	18	4	7	-	-	-
Monday	270	14.03	36	95	206	27	74	21	8	5	42	1	16	1	-	-
Tuesday	276	14.34	35	75	215	23	63	16	10	2	43	2	8	2	-	2
Wednesday	310	16.10	38	101	248	24	86	18	10	4	42	4	10	2	-	1
Thursday	314	16.31	41	132	240	25	100	30	14	12	41	1	18	3	1	2
Friday	330	17.14	29	146	254	19	119	22	6	9	54	4	18	-	-	-
Saturday	256	13.30	39	124	202	25	104	17	10	4	36	4	16	1	-	-
Total	1,925	100.0	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-6 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY HOUR OF DAY, 2009

Hour of 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
AM	1	62	3.22	9	13	49	4	11	5	3	1	8	2	1	-	-
	2	55	2.86	3	10	45	3	8	3	-	2	7	-	-	-	-
	3	50	2.60	3	12	44	3	12	-	-	-	5	-	-	1	-
	4	21	1.09	2	4	16	1	4	1	1	-	4	-	-	-	-
	5	43	2.23	7	16	35	5	15	2	2	1	6	-	-	-	-
	6	57	2.96	4	10	46	2	10	3	1	-	8	1	-	-	-
	7	89	4.62	11	43	71	7	34	7	3	3	11	1	6	-	-
	8	92	4.78	9	50	71	8	42	7	1	3	14	-	5	-	-
	9	112	5.82	10	60	82	8	49	5	1	2	24	1	9	1	-
	10	100	5.19	17	38	74	12	29	4	3	-	20	2	7	2	-
	11	122	6.34	13	53	91	10	43	5	2	1	26	1	9	-	-
	12	59	3.06	7	10	46	2	6	9	5	2	4	-	2	-	-
	Total	862	44.78	95	319	670	65	263	51	22	15	137	8	39	4	-
PM	1	92	4.78	12	36	65	6	29	9	5	2	16	1	5	2	-
	2	118	6.13	15	27	93	9	20	5	3	-	20	3	7	-	-
	3	121	6.29	23	49	95	15	36	9	3	4	17	5	9	-	-
	4	105	5.45	11	58	84	6	43	9	5	3	12	-	12	-	-
	5	106	5.51	11	58	87	8	50	7	2	3	11	-	3	1	1
	6	96	4.99	15	41	69	9	26	12	5	5	14	1	10	1	-
	7	70	3.64	10	33	55	4	29	8	6	2	7	-	2	-	-
	8	73	3.79	13	19	55	9	15	9	4	3	8	-	-	1	-
	9	68	3.53	8	17	55	3	16	7	5	-	6	-	1	-	-
	10	54	2.81	8	31	46	5	29	4	3	1	4	-	1	-	-
	11	69	3.58	6	22	55	4	20	4	2	1	10	-	1	-	-
	12	91	4.73	20	29	73	17	25	4	1	1	14	2	3	-	-
	Total	1,063	55.22	152	420	832	95	338	87	44	25	139	12	54	5	1
Total	1,925	100.0	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-7 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY TYPE HIGHWAY USER, 2009
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	671	34.86	96	215	601	91	200	-	-	-	70	5	15	-	-	-
Truck	89	4.62	16	50	65	15	40	-	-	-	24	1	10	-	-	-
Trk& Trail	247	12.83	3	104	188	3	91	-	-	-	59	-	13	-	-	-
Pickup Trk	244	12.68	26	84	187	18	60	-	-	-	57	8	24	-	-	-
Van	59	3.06	10	42	47	7	30	-	-	-	12	3	12	-	-	-
Bus	4	0.21	-	18	4	-	18	-	-	-	-	-	-	-	-	-
School Bus	1	0.05	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Motorcycle	3	0.16	1	3	3	1	3	-	-	-	-	-	-	-	-	-
Oth Mtr V.	111	5.77	9	47	86	8	37	-	-	-	25	1	10	-	-	-
Pedestrian	104	5.40	59	33	-	-	-	102	58	31	-	-	-	2	1	2
Other	33	1.71	8	7	-	-	-	27	8	4	-	-	-	6	-	3
Total	1,566	81.35	228	603	1,182	143	479	129	66	35	247	18	84	8	1	5

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	207	10.75	11	63	198	9	62	-	-	-	9	2	1	-	-	-
Truck	19	0.99	-	5	16	-	3	-	-	-	3	-	2	-	-	-
Trk& Trail	21	1.09	2	8	15	2	7	-	-	-	6	-	1	-	-	-
Pickup Trk	61	3.17	3	28	60	3	28	-	-	-	1	-	-	-	-	-
Van	13	0.68	-	7	9	-	5	-	-	-	4	-	2	-	-	-
Bus	1	0.05	-	2	1	-	2	-	-	-	-	-	-	-	-	-
Motorcycle	2	0.10	-	1	2	-	1	-	-	-	-	-	-	-	-	-
Oth Mtr V.	25	1.30	3	17	19	3	14	-	-	-	6	-	3	-	-	-
Pedestrian	5	0.26	-	4	-	-	-	5	-	4	-	-	-	-	-	-
Other	5	0.26	-	1	-	-	-	4	-	1	-	-	-	1	-	-
Total	359	18.65	19	136	320	17	122	9	-	5	29	2	9	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	878	45.61	107	278	799	100	262	-	-	-	79	7	16	-	-	-
Truck	108	5.61	16	55	81	15	43	-	-	-	27	1	12	-	-	-
Trk& Trail	268	13.92	5	112	203	5	98	-	-	-	65	-	14	-	-	-
Pickup Trk	305	15.84	29	112	247	21	88	-	-	-	58	8	24	-	-	-
Van	72	3.74	10	49	56	7	35	-	-	-	16	3	14	-	-	-
Bus	5	0.26	-	20	5	-	20	-	-	-	-	-	-	-	-	-
School Bus	1	0.05	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Motorcycle	5	0.26	1	4	5	1	4	-	-	-	-	-	-	-	-	-
Oth Mtr V.	136	7.06	12	64	105	11	51	-	-	-	31	1	13	-	-	-
Pedestrian	109	5.66	59	37	-	-	-	107	58	35	-	-	-	2	1	2
Other	38	1.97	8	8	-	-	-	31	8	5	-	-	-	7	-	3
Total	1,925	100.0	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-8 HIGHWAY-RAIL GRADE INCIDENTS BY USERS, 2009

Rail Equip Struck Highway User

Highway User	Total		Freight Train	Psgr Train	Commuter Train	Work Train	Single Car	Cut of Cars	Yard/ Switch	Light loco(s)	Maint Insp car	Spec MOW Eqp
	Cnt	%										
Car	671	34.9	484	64	31	6	-	1	35	37	7	6
Truck	89	4.6	60	13	5	-	-	-	5	5	-	1
Trk& Trail	247	12.8	181	15	2	1	1	-	27	18	1	1
Pickup Trk	244	12.7	179	20	4	1	-	-	17	14	8	1
Van	59	3.1	38	5	2	-	-	-	4	8	2	-
Bus	4	0.2	2	-	2	-	-	-	-	-	-	-
School Bus	1	0.1	1	-	-	-	-	-	-	-	-	-
Motorcycle	3	0.2	2	1	-	-	-	-	-	-	-	-
Oth Mtr V.	111	5.8	91	3	1	2	-	-	5	7	1	1
Pedestrian	104	5.4	48	46	9	-	-	-	1	-	-	-
Other	33	1.7	19	5	6	-	-	-	-	3	-	-
Total	1,566	81.4	1,105	172	62	10	1	1	94	92	19	10

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	Spec MOW Eqp
	Cnt	%										
Car	207	10.8	123	14	4	2	-	-	25	22	10	7
Truck	19	1.0	12	1	-	-	-	-	2	2	2	-
Trk& Trail	21	1.1	14	1	-	-	-	-	4	1	-	1
Pickup Trk	61	3.2	45	-	1	-	-	-	9	2	2	2
Van	13	0.7	5	3	-	-	-	-	2	1	1	1
Bus	1	0.1	-	-	-	-	-	-	1	-	-	-
Motorcycle	2	0.1	2	-	-	-	-	-	-	-	-	-
Oth Mtr V.	25	1.3	18	1	-	-	1	1	3	1	-	-
Pedestrian	5	0.3	4	1	-	-	-	-	-	-	-	-
Other	5	0.3	4	-	-	-	-	-	-	-	-	1
Total	359	18.6	227	21	5	2	1	1	46	29	15	12

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	Spec MOW Eqp
	Cnt	%										
Car	878	45.6	607	78	35	8	-	1	60	59	17	13
Truck	108	5.6	72	14	5	-	-	-	7	7	2	1
Trk& Trail	268	13.9	195	16	2	1	1	-	31	19	1	2
Pickup Trk	305	15.8	224	20	5	1	-	-	26	16	10	3
Van	72	3.7	43	8	2	-	-	-	6	9	3	1
Bus	5	0.3	2	-	2	-	-	-	1	-	-	-
School Bus	1	0.1	1	-	-	-	-	-	-	-	-	-
Motorcycle	5	0.3	4	1	-	-	-	-	-	-	-	-
Oth Mtr V.	136	7.1	109	4	1	2	1	1	8	8	1	1
Pedestrian	109	5.7	52	47	9	-	-	-	1	-	-	-
Other	38	2.0	23	5	6	-	-	-	-	3	-	1
Total	1,925	100.0	1,332	193	67	12	2	2	140	121	34	22

TABLE 7-9 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY WARNING DEVICE, 2009

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	53	2.75	2	17	9	-	2	1	1	-	40	1	15	3	-	-
Other	12	0.62	1	4	2	-	-	2	1	1	8	-	3	-	-	-
Cross bucks	479	24.88	48	198	414	44	175	6	1	-	58	3	23	1	-	-
Stop signs	296	15.38	36	114	144	20	63	2	-	1	147	16	48	3	-	2
Special warning	23	1.19	-	9	16	-	7	-	-	-	7	-	2	-	-	-
HWTS,WW,Bells	12	0.62	-	2	12	-	2	-	-	-	-	-	-	-	-	-
Flashing lights	278	14.44	21	107	257	16	103	11	4	1	9	-	1	1	1	2
Gates	772	40.10	139	288	648	80	249	116	59	37	7	-	1	1	-	1
Total	1,925	100.0	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

TABLE 7-10 TOTAL HIGHWAY-RAIL GRADE INCIDENTS BY WEATHER, 2009

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	1,077	55.95	170	426	804	97	325	103	56	30	162	16	66	8	1	5
Cloudy	302	15.69	47	95	227	37	80	17	9	3	58	1	12	-	-	-
Rain	118	6.13	6	53	93	4	47	9	1	2	16	1	4	-	-	-
Fog	20	1.04	1	5	18	1	5	-	-	-	2	-	-	-	-	-
Sleet	2	0.10	-	1	2	-	1	-	-	-	-	-	-	-	-	-
Snow	47	2.44	4	23	38	4	21	-	-	-	9	-	2	-	-	-
Total	1,566	81.35	228	603	1,182	143	479	129	66	35	247	18	84	8	1	5

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	258	13.40	13	95	228	13	84	8	-	4	22	-	7	-	-	-
Cloudy	69	3.58	5	22	61	3	19	1	-	1	7	2	2	-	-	-
Rain	16	0.83	-	7	16	-	7	-	-	-	-	-	-	-	-	-
Fog	5	0.26	-	7	5	-	7	-	-	-	-	-	-	-	-	-
Sleet	2	0.10	-	-	1	-	-	-	-	-	-	-	-	1	-	-
Snow	9	0.47	1	5	9	1	5	-	-	-	-	-	-	-	-	-
Total	359	18.65	19	136	320	17	122	9	-	5	29	2	9	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	1,335	69.35	183	521	1,032	110	409	111	56	34	184	16	73	8	1	5
Cloudy	371	19.27	52	117	288	40	99	18	9	4	65	3	14	-	-	-
Rain	134	6.96	6	60	109	4	54	9	1	2	16	1	4	-	-	-
Fog	25	1.30	1	12	23	1	12	-	-	-	2	-	-	-	-	-
Sleet	4	0.21	-	1	3	-	1	-	-	-	-	-	-	1	-	-
Snow	56	2.91	5	28	47	5	26	-	-	-	9	-	2	-	-	-
Total	1,925	100.0	247	739	1,502	160	601	138	66	40	276	20	93	9	1	5

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 grade 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 grade 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 FRA F6180.57). The motorist did sustain a reportable injury arising from the operation of a railroad. Therefore, an injury report (Form FRA F6180.55a) must be completed. If the motorist had struck the consist, a Form FRA F6180.57 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 grade 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 grade 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 FRA F6180.54, 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 FRA F6180.55a) would need to be completed.

CONTENTS

CHAPTER 8

HIGHWAY-RAIL INCIDENTS AT PUBLIC CROSSINGS THAT INVOLVE MOTOR VEHICLES

Tables	Title	Page
8-1	Rates for Motor Vehicle Incidents at Public Crossings, by State, 2009	103
8-2	Rates for Motor Vehicle Incidents at Public Crossings, by Warning Device, 2009	104
8-3	Motor Vehicle HRC Incidents at Public Crossings, by Railroad and Type Warning, 2009	104
8-4	Motor Vehicle HRC Incidents at Public Crossings, by State and Type Warning, 2009	105
8-5	Motor Vehicle HRC Incidents at Public Crossings, by Type Consist and Consist Speed, 2009	106
8-6	Motor Vehicle HRC Incidents at Public Crossings, by Type Warning, Motorist Action and Warning Location, 2009	107
8-7	Motor Vehicle HRC Incidents at Public Crossings, by Type Vehicle, Vehicle Speed and Driver Gender, 2009	108
8-8	Motor Vehicle HRC Incidents at Public Crossings, by Vehicle Speed, Weather and Condition of Driver, 2009	109
8-9	Motor Vehicle HRC Incidents at Public Crossings, by Driver Age, Gender, and Type Vehicle, 2009	110
8-10	Motor Vehicles that Struck Consist at Public Crossings, by Consist Length, Portion of Train Struck and Warning Type, 2009	110
8-11	Motor Vehicle HRC Incidents at Public Crossings, by Consist Length, Type Consist, and Driver Gender, 2009	111
8-12	Motor Vehicle HRC Incidents at Public Crossings, by Type Consist, Number of People on Train, and Type Person Hurt, 2009	112
8-13	Motor Vehicle HRC Incidents at Public Crossings, by Type Vehicle, Number of Occupants, and Vehicle Damage, 2009	113
8-14	Motor Vehicle HRC Incidents at Public Crossings, by Type Warning, Position on Crossing and if Hazardous Material was Released, 2009	113
8-15	Motor Vehicle HRC Incidents at Public Crossings, by Type Vehicle and Warning, 2009	114
8-16	Motor Vehicle HRC Incidents at Public Crossings, by Warning Status for Incidents Occurring at Crossings with Train Activated Devices, by Type Vehicle, 2009	115

TABLE 8-1 RATES FOR MOTOR VEHICLE INCIDENTS AT PUBLIC CROSSINGS BY STATE, 2009

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	58	2.05	1.19	1.03	2	0.07	0.04	0.04	24	0.85	4.94	0.43
Alaska	4	2.33	0.56	0.83	1	0.58	0.14	0.21	.	.	.	.
Arizona	13	1.67	0.29	0.48	1	0.13	0.02	0.04	1	0.13	0.22	0.04
Arkansas	38	1.28	1.80	1.09	6	0.20	0.28	0.17	17	0.57	8.05	0.49
California	70	1.08	0.20	0.20	9	0.14	0.03	0.03	21	0.32	0.61	0.06
Colorado	18	1.04	1.04	0.55	1	0.06	0.06	0.03	4	0.23	2.30	0.12
Connecticut	4	1.09	0.13	0.31	1	0.27	0.03	0.08	.	.	.	.
Delaware	3	1.12	0.34	0.27	.	.	.	.	1	0.37	1.12	0.09
Dist Of Columbia	.	.	.	.	.	.	.	.	.	.	.	.
Florida	33	0.88	0.19	0.14	5	0.13	0.03	0.02	11	0.29	0.64	0.05
Georgia	91	1.69	1.04	0.92	4	0.07	0.05	0.04	31	0.58	3.54	0.31
Hawaii	.	.	.	.	.	.	.	.	.	.	.	.
Idaho	8	0.62	0.58	0.47	.	.	.	.	6	0.47	4.34	0.35
Illinois	72	0.92	0.71	0.37	11	0.14	0.11	0.06	39	0.50	3.85	0.20
Indiana	82	1.38	1.35	0.60	12	0.20	0.20	0.09	28	0.47	4.63	0.21
Iowa	43	0.98	1.19	0.81	2	0.05	0.06	0.04	17	0.39	4.71	0.32
Kansas	38	0.71	1.50	0.86	2	0.04	0.08	0.05	11	0.21	4.34	0.25
Kentucky	52	2.21	1.42	1.41	1	0.04	0.03	0.03	20	0.85	5.45	0.54
Louisiana	69	2.28	1.70	1.12	9	0.30	0.22	0.15	33	1.09	8.15	0.54
Maine	2	0.24	0.18	0.10	.	.	.	.	2	0.24	1.77	0.10
Maryland	11	1.72	0.24	0.50	.	.	.	.	9	1.41	1.95	0.41
Massachusetts	2	0.24	0.04	0.04	.	.	.	.	1	0.12	0.18	0.02
Michigan	43	0.89	0.52	0.31	10	0.21	0.12	0.07	13	0.27	1.58	0.09
Minnesota	32	0.70	0.64	0.50	4	0.09	0.08	0.06	10	0.22	1.99	0.16
Mississippi	38	1.69	1.84	0.93	8	0.36	0.39	0.19	23	1.02	11.15	0.56
Missouri	30	0.76	0.60	0.72	6	0.15	0.12	0.14	15	0.38	3.02	0.36
Montana	9	0.65	0.87	0.66	.	.	.	.	1	0.07	0.96	0.07
Nebraska	35	1.16	1.94	1.88	5	0.17	0.28	0.27	18	0.60	10.00	0.97
Nevada	3	1.05	0.20	0.33	.	.	.	.	1	0.35	0.67	0.11
New Hampshire	2	0.57	0.15	0.27	.	.	.	.	1	0.29	0.77	0.14
New Jersey	35	2.25	0.55	0.38	3	0.19	0.05	0.03	17	1.09	2.65	0.18
New Mexico	10	1.38	0.62	1.05	2	0.28	0.12	0.21	5	0.69	3.09	0.52
New York	13	0.48	0.11	0.17	6	0.22	0.05	0.08	2	0.07	0.17	0.03
North Carolina	49	1.25	0.77	0.38	8	0.20	0.13	0.06	33	0.84	5.18	0.25
North Dakota	14	0.40	1.87	1.35	3	0.09	0.40	0.29	5	0.14	6.68	0.48
Ohio	49	0.84	0.43	0.33	1	0.02	0.01	0.01	16	0.27	1.42	0.11
Oklahoma	41	1.05	1.20	0.96	3	0.08	0.09	0.07	20	0.51	5.87	0.47
Oregon	6	0.32	0.19	0.14	.	.	.	.	2	0.11	0.62	0.05
Pennsylvania	33	0.95	0.31	0.51	1	0.03	0.01	0.02	11	0.32	1.02	0.17
Rhode Island	.	.	.	.	.	.	.	.	.	.	.	.
South Carolina	35	1.29	0.94	0.58	5	0.18	0.13	0.08	14	0.52	3.78	0.23
South Dakota	15	0.78	1.55	1.35	3	0.16	0.31	0.27	11	0.57	11.39	0.99
Tennessee	49	1.74	0.93	0.86	1	0.04	0.02	0.02	15	0.53	2.86	0.26
Texas	141	1.44	0.76	0.41	17	0.17	0.09	0.05	68	0.69	3.65	0.20
Utah	10	1.43	0.40	0.37	.	.	.	.	.	.	.	.
Vermont	7	1.86	1.15	1.12	2	0.53	0.33	0.32	1	0.27	1.64	0.16
Virginia	21	1.08	0.32	0.40	2	0.10	0.03	0.04	5	0.26	0.76	0.10
Washington	16	0.63	0.26	0.35	1	0.04	0.02	0.02	1	0.04	0.16	0.02
West Virginia	12	0.83	0.83	0.76	.	.	.	.	2	0.14	1.38	0.13
Wisconsin	41	1.01	0.77	0.46	2	0.05	0.04	0.02	15	0.37	2.82	0.17
Wyoming	2	0.51	0.29	0.56	.	.	.	.	.	.	.	.
Total...	1,502	1.12	0.59	0.47	160	0.12	0.06	0.05	601	0.45	2.36	0.19

TABLE 8-2 RATES FOR MOTOR VEHICLE INCIDENTS AT PUBLIC CROSSINGS BY WARNING DEVICE, 2009

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	9	0.29	0.11	.	.	.	2	0.06	0.03	3,108
Other	2	0.68	0.36	.	.	.	.	.	.	292
Cross bucks	414	0.81	1.13	44	0.09	0.12	175	0.34	0.48	50,881
Stop signs	144	1.24	2.45	20	0.17	0.34	63	0.54	1.07	11,652
Special warning	16	0.81	0.27	.	.	.	7	0.36	0.12	1,967
HWTS,WW,Bells	12	0.81	0.27	.	.	.	2	0.14	0.04	1,480
Flashing lights	257	1.21	0.32	16	0.08	0.02	103	0.48	0.13	21,256
Gates	648	1.49	0.37	80	0.18	0.05	249	0.57	0.14	43,525
Total	1,502	1.12	0.47	160	0.12	0.05	601	0.45	0.19	134,161

TABLES 8-3 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS, BY RAILROAD AND TYPE WARNING, 2009

Railroads	Types of Warning								Type Incident	
	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates	Rail Equip Struck Highway User	Highway User Struck Rail Equip
Alaska RR Corp.	-	-	1	-	-	-	-	3	3	1
Amtrak	-	-	10	7	-	-	8	62	77	10
Burlington Northern Santa Fe	-	-	51	14	-	-	24	99	154	34
Canadian National	1	1	33	12	1	-	17	26	66	25
Canadian Pacific	-	-	14	5	-	-	3	14	24	12
Conrail Shared Assets	4	-	3	1	1	-	7	-	11	5
CSX Transportation	1	1	55	27	-	2	55	125	220	46
Florida East Coast	-	-	-	-	-	-	-	9	6	3
Guilford Rail System	-	-	-	-	-	-	1	-	-	1
Other Railroads	2	-	94	25	9	9	49	29	146	71
Indiana Harbor Belt	-	-	1	-	-	-	-	1	2	-
Kansas City Southern	-	-	21	1	-	-	11	12	36	9
Long Island Rail Road	-	-	-	-	-	-	-	6	5	1
MD Assn. of Rail Comm	-	-	-	-	-	-	-	2	2	-
Mass Bay Transit Auth.	-	-	-	-	-	-	-	1	1	-
Metro North Commuter	-	-	-	-	-	-	1	-	1	-
Montana Rail Link	-	-	-	1	-	-	1	1	1	2
Northern IN Comm Trans	-	-	-	-	-	1	1	2	3	1
Northeast IL Reg Comm	-	-	-	-	-	-	-	8	8	-
New Jersey Transit Rail	-	-	-	-	-	-	-	13	11	2
Norfolk Southern Corp.	1	-	46	15	2	-	52	111	189	38
Peninsula Comm San Mateo Cnty	-	-	-	-	-	-	-	6	6	-
Southern CA Reg Rail Auth.	-	-	-	-	-	-	-	8	7	1
Southeastern PA Trans.	-	-	-	-	-	-	1	3	3	1
Term RR Assn Of St. Louis	-	-	1	-	-	-	-	1	2	-
Union Pacific	-	-	79	36	3	-	26	106	193	57
Wheeling & Lake Erie	-	-	5	-	-	-	-	-	5	-
Total	9	2	414	144	16	12	257	648	1,182	320

**TABLES 8-4 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY STATE AND TYPE WARNING, 2009**

States	Type of Warning							
	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS,WW,Bells	Flashing lights	Gates
Alabama	-	-	17	14	1	-	13	13
Alaska	-	-	1	-	-	-	-	3
Arizona	-	-	-	-	-	-	6	7
Arkansas	-	-	11	13	1	1	5	7
California	1	-	6	1	1	3	2	56
Colorado	-	-	9	2	-	-	3	4
Connecticut	-	-	-	-	-	1	3	-
Delaware	-	-	-	-	-	-	3	-
Florida	-	-	2	1	-	-	1	29
Georgia	-	1	20	13	-	-	9	48
Idaho	-	-	2	4	-	-	1	1
Illinois	-	-	25	-	-	-	13	34
Indiana	-	-	13	13	1	1	17	37
Iowa	-	-	24	1	1	-	9	8
Kansas	-	-	18	4	-	1	1	14
Kentucky	-	-	14	2	-	1	22	13
Louisiana	-	-	36	9	1	-	7	16
Maine	-	-	-	-	-	-	1	1
Maryland	-	-	2	-	-	1	2	6
Massachusetts	-	-	-	-	-	-	1	1
Michigan	-	-	6	7	-	-	10	20
Minnesota	-	-	6	13	-	-	2	11
Mississippi	-	-	8	6	-	-	6	18
Missouri	-	-	12	-	-	-	10	8
Montana	-	-	3	1	-	-	1	4
Nebraska	-	-	17	5	1	-	-	12
Nevada	-	-	-	-	1	-	-	2
New Hampshire	-	-	-	-	-	-	2	-
New Jersey	2	-	4	1	1	-	12	15
New Mexico	-	-	3	1	-	-	2	4
New York	-	-	3	-	1	-	-	9
North Carolina	-	-	6	-	-	-	3	40
North Dakota	-	-	10	1	-	-	-	3
Ohio	-	-	24	-	-	-	4	21
Oklahoma	-	-	17	3	1	-	9	11
Oregon	-	-	-	5	-	-	-	1
Pennsylvania	4	-	7	-	-	-	11	11
South Carolina	-	-	4	2	2	-	11	16
South Dakota	-	-	9	2	-	-	4	-
Tennessee	1	1	11	3	-	1	13	19
Texas	-	-	31	3	1	-	18	88
Utah	-	-	2	2	1	-	-	5
Vermont	-	-	1	2	1	2	1	-
Virginia	-	-	4	-	-	-	4	13
Washington	-	-	4	4	-	-	2	6
West Virginia	-	-	5	-	-	-	3	4
Wisconsin	1	-	17	6	-	-	10	7
Wyoming	-	-	-	-	-	-	-	2
Total	9	2	414	144	16	12	257	648

**TABLE 8-5 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSING,
BY TYPE CONSIST AND CONSIST SPEED, 2009**

Rail Equip Struck Highway User

Consist Speed											Whistle Ban?			
	Total	Freight Train	Psgr Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	A	Unk	Yes	No			
Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-9	180	89	7	-	13	48	18	5	4	8	168			
10-19	149	101	13	5	4	7	16	3	2	10	137			
20-29	195	167	12	2	1	1	12	-	2	6	187			
30-39	228	203	17	1	-	-	7	-	3	8	217			
40-49	250	230	10	2	-	2	6	-	1	3	246			
50-59	95	73	20	-	-	-	2	-	1	2	92			
>= 60	85	13	71	-	-	-	1	-	1	4	80			
Total	1,182	876	150	10	18	58	62	8	14	41	1,127			

Highway User Struck Rail Equip

Consist Speed											Whistle Ban?			
	Total	Freight Train	Psgr Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	A	Unk	Yes	No			
Unknown	28	17	-	-	4	6	1	-	-	2	26			
1-9	101	37	3	-	11	29	14	7	3	3	95			
10-19	45	31	2	-	1	5	5	1	-	4	41			
20-29	43	33	2	1	1	1	5	-	1	2	40			
30-39	35	35	-	-	-	-	-	-	-	1	34			
40-49	44	42	1	-	-	-	-	1	-	2	42			
50-59	9	5	3	-	-	-	-	1	-	-	9			
>= 60	15	5	10	-	-	-	-	-	-	1	14			
Total	320	205	21	1	17	41	25	10	4	15	301			

Grand Total

Consist Speed											Whistle Ban?			
	Total	Freight Train	Psgr Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	A	Unk	Yes	No			
Unknown	28	17	-	-	4	6	1	-	-	2	26			
1-9	281	126	10	-	24	77	32	12	7	11	263			
10-19	194	132	15	5	5	12	21	4	2	14	178			
20-29	238	200	14	3	2	2	17	-	3	8	227			
30-39	263	238	17	1	-	-	7	-	3	9	251			
40-49	294	272	11	2	-	2	6	1	1	5	288			
50-59	104	78	23	-	-	-	2	1	1	2	101			
>= 60	100	18	81	-	-	-	1	-	1	5	94			
Total	1,502	1,081	171	11	35	99	87	18	18	56	1,428			

**TABLE 8-6 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE WARNING, MOTORIST ACTION, AND WARNING LOCATION, 2009**

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
Unknown	6	0.4	-	1	4	-	1	5	-	-	1
Other	1	0.1	-	-	1	-	-	-	-	1	-
Cross bucks	322	21.4	-	24	205	85	8	-	306	12	4
Stop signs	119	7.9	-	18	69	30	2	-	114	5	-
Special warning	9	0.6	-	2	5	1	1	-	5	3	1
HWTS,WW,Bells	11	0.7	-	1	8	2	-	-	10	1	-
Flashing lights	177	11.8	-	23	92	56	6	-	170	7	-
Gates	537	35.8	122	9	8	246	152	-	528	8	1
Total	1,182	78.7	122	78	392	420	170	5	1,133	37	7

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
Unknown	3	0.2	-	-	3	-	-	2	1	-	-
Other	1	0.1	-	-	1	-	-	-	1	-	-
Cross bucks	92	6.1	-	4	86	-	2	-	88	4	-
Stop signs	25	1.7	-	2	22	-	1	-	23	2	-
Special warning	7	0.5	-	2	4	-	1	-	6	1	-
HWTS,WW,Bells	1	0.1	-	1	-	-	-	-	1	-	-
Flashing lights	80	5.3	-	6	73	-	1	-	76	4	-
Gates	111	7.4	87	4	5	-	15	-	108	3	-
Total	320	21.3	87	19	194	-	20	2	304	14	-

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
Unknown	9	0.6	-	1	7	-	1	7	1	-	1
Other	2	0.1	-	-	2	-	-	-	1	1	-
Cross bucks	414	27.6	-	28	291	85	10	-	394	16	4
Stop signs	144	9.6	-	20	91	30	3	-	137	7	-
Special warning	16	1.1	-	4	9	1	2	-	11	4	1
HWTS,WW,Bells	12	0.8	-	2	8	2	-	-	11	1	-
Flashing lights	257	17.1	-	29	165	56	7	-	246	11	-
Gates	648	43.1	209	13	13	246	167	-	636	11	1
Total	1,502	100.0	209	97	586	420	190	7	1,437	51	7

**TABLE 8-7 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE VEHICLE, VEHICLE SPEED AND DRIVER GENDER, 2009**

Rail Equip Struck Highway User

Vehicle Speed								Driver Gender		
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	80	50	14	8	3	-	5	8	50	22
Stopped	535	299	90	96	18	4	28	53	332	150
1-9	283	116	73	47	11	1	35	4	214	65
10-19	150	65	41	23	6	-	15	7	115	28
20-29	64	32	15	8	5	-	4	1	42	21
30-39	45	23	13	5	2	-	2	-	32	13
40-49	15	10	3	-	2	-	-	-	10	5
50-59	8	4	3	1	-	-	-	-	7	1
>= 60	2	2	-	-	-	-	-	-	2	-
Total	1,182	601	252	188	47	5	89	73	804	305

Highway User Struck Rail Equip

Vehicle Speed								Driver Gender		
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	23	20	1	-	-	-	2	4	10	9
Stopped	1	1	-	-	-	-	-	-	1	-
1-9	122	64	35	6	5	1	11	3	91	28
10-19	60	37	14	5	1	-	3	2	43	15
20-29	49	32	10	1	3	-	3	2	35	12
30-39	29	21	7	1	-	-	-	1	20	8
40-49	18	11	5	1	-	-	1	-	15	3
50-59	11	8	1	1	-	-	1	-	7	4
>= 60	7	4	3	-	-	-	-	-	4	3
Total	320	198	76	15	9	1	21	12	226	82

Grand Total

Vehicle Speed								Driver Gender		
	Total	Car	Trucks	Trk& Trail	Van	Buses	Oth Mtr V.	?	M	F
Unknown	103	70	15	8	3	-	7	12	60	31
Stopped	536	300	90	96	18	4	28	53	333	150
1-9	405	180	108	53	16	2	46	7	305	93
10-19	210	102	55	28	7	-	18	9	158	43
20-29	113	64	25	9	8	-	7	3	77	33
30-39	74	44	20	6	2	-	2	1	52	21
40-49	33	21	8	1	2	-	1	-	25	8
50-59	19	12	4	2	-	-	1	-	14	5
>= 60	9	6	3	-	-	-	-	-	6	3
Total	1,502	799	328	203	56	6	110	85	1,030	387

**TABLE 8-8 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY VEHICLE SPEED, WEATHER AND CONDITION OF DRIVER, 2009**

Rail Equip Struck Highway User

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	80	54	13	12	-	-	1	-	5	22	53
Stopped	535	352	98	51	11	2	21	3	24	78	430
1-9	283	199	54	14	4	-	12	1	34	86	162
10-19	150	101	36	9	1	-	3	-	19	42	89
20-29	64	45	13	4	1	-	1	-	7	15	42
30-39	45	35	8	1	1	-	-	-	10	14	21
40-49	15	12	1	2	-	-	-	-	3	6	6
50-59	8	4	4	-	-	-	-	-	1	5	2
>= 60	2	2	-	-	-	-	-	-	-	1	1
Total	1,182	804	227	93	18	2	38	4	103	269	806

Highway User Struck Rail Equip

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	23	12	9	1	-	-	1	1	-	6	16
Stopped	1	1	-	-	-	-	-	-	-	-	1
1-9	122	89	17	8	4	1	3	-	2	22	98
10-19	60	44	12	3	-	-	1	-	1	16	43
20-29	49	32	14	1	-	-	2	-	4	14	31
30-39	29	23	4	1	-	-	1	-	1	12	16
40-49	18	11	3	2	1	-	1	-	1	13	4
50-59	11	11	-	-	-	-	-	-	1	7	3
>= 60	7	5	2	-	-	-	-	1	2	2	2
Total	320	228	61	16	5	1	9	2	12	92	214

Grand Total

Vehicle Speed									Driver		
	Total	Clear	Cloudy	Rain	Fog	Sleet	Snow	?	Kld	Nonfatal	Unhurt
Unknown	103	66	22	13	-	-	2	1	5	28	69
Stopped	536	353	98	51	11	2	21	3	24	78	431
1-9	405	288	71	22	8	1	15	1	36	108	260
10-19	210	145	48	12	1	-	4	-	20	58	132
20-29	113	77	27	5	1	-	3	-	11	29	73
30-39	74	58	12	2	1	-	1	-	11	26	37
40-49	33	23	4	4	1	-	1	-	4	19	10
50-59	19	15	4	-	-	-	-	-	2	12	5
>= 60	9	7	2	-	-	-	-	1	2	3	3
Total	1,502	1,032	288	109	23	3	47	6	115	361	1,020

**TABLE 8-9 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY DRIVER AGE, GENDER, AND TYPE VEHICLE, 2009**

Age	Total		Type Vehicle										Driver Gender	
	Cnt	%	Car	Truck	Trk& Trail	Pickup Trk	Van	Bus	School Bus	Motorcycle	Oth Mtr V.	?	M	F
Unknown	274	18.2	165	8	33	41	11	2	-	-	14	85	136	53
11-15	1	0.1	1	-	-	-	-	-	-	-	-	-	1	-
16-20	112	7.5	83	3	-	17	2	-	-	-	7	-	72	40
21-25	138	9.2	91	6	3	24	4	-	-	-	10	-	100	38
26-30	135	9.0	73	6	22	20	2	-	-	-	12	-	95	40
31-35	107	7.1	49	5	17	22	1	-	-	1	12	-	81	26
36-40	123	8.2	44	11	23	25	4	1	-	1	14	-	94	29
41-45	114	7.6	56	7	19	16	7	-	-	-	9	-	81	33
46-50	114	7.6	46	8	25	18	3	2	-	1	11	-	80	34
51-55	102	6.8	45	8	21	17	4	-	-	1	6	-	77	25
56-60	74	4.9	28	7	20	12	3	-	-	1	3	-	60	14
61-65	59	3.9	30	3	9	11	4	-	-	-	2	-	45	14
66-70	48	3.2	24	2	9	8	2	-	1	-	2	-	36	12
Other	101	6.7	64	7	2	16	9	-	-	-	3	-	72	29
Total	1,502	100.0	799	81	203	247	56	5	1	5	105	85	1,030	387

**TABLE 8-10 MOTOR VEHICLES THAT STRUCK CONSIST AT PUBLIC CROSSINGS,
BY CONSIST LENGTH, PORTION OF TRAIN STRUCK AND WARNING TYPE, 2009**

Consist Length	Position of Consist Struck						Type of Warning							
	Total	1st car/ loco	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates
???	2	-	2	-	-	-	-	-	-	-	-	-	1	1
1	36	36	-	-	-	-	1	1	11	3	-	-	7	13
2-5	39	32	1	-	2	4	-	-	11	6	1	-	11	10
6-10	45	28	3	7	2	5	1	-	17	3	4	-	9	11
11-15	20	12	3	1	-	4	-	-	7	1	1	-	9	2
16-20	12	7	3	1	-	1	-	-	5	1	-	-	2	4
21-25	16	7	4	1	1	3	-	-	4	-	1	1	5	5
26-30	5	3	1	-	-	1	-	-	2	-	-	-	2	1
31-35	8	5	2	1	-	-	-	-	4	1	-	-	1	2
36-40	7	4	2	-	-	1	-	-	1	1	-	-	4	1
41-45	5	3	-	1	1	-	-	-	1	1	-	-	2	1
46-50	6	3	1	-	-	2	-	-	-	1	-	-	1	4
51-60	23	12	3	2	2	4	-	-	7	1	-	-	6	9
61-70	15	10	3	1	-	1	-	-	4	3	-	-	3	5
71-80	19	8	6	1	2	2	1	-	6	-	-	-	3	9
81-90	13	6	3	2	1	1	-	-	4	-	-	-	2	7
91-100	2	1	-	-	1	-	-	-	-	-	-	-	1	1
> 100	47	17	13	9	4	4	-	-	8	3	-	-	11	25
-Total	320	194	50	27	16	33	3	1	92	25	7	1	80	111

**TABLE 8-11 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY CONSIST LENGTH, TYPE CONSIST, AND DRIVER GENDER, 2009**

Rail Equip Struck Highway User

Consist Length									Driver Gender			
	Total	Freight Train	Psgm Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	A	?	M	F	
???	-	-	-	-	-	-	-	-	-	-	-	
1	48	-	-	-	17	-	23	8	-	33	15	
2-5	125	27	49	1	-	11	37	-	3	94	28	
6-10	131	40	70	1	-	18	2	-	10	80	41	
11-15	72	35	28	-	-	9	-	-	6	45	21	
16-20	46	36	-	1	-	9	-	-	2	34	10	
21-25	45	37	1	1	1	5	-	-	-	31	14	
26-30	30	28	-	1	-	1	-	-	4	18	8	
31-35	46	43	-	1	-	2	-	-	5	34	7	
36-40	23	22	-	1	-	-	-	-	3	10	10	
41-45	37	35	-	1	-	1	-	-	2	22	13	
46-50	39	37	2	-	-	-	-	-	3	29	7	
51-60	62	62	-	-	-	-	-	-	4	48	10	
61-70	84	83	-	1	-	-	-	-	8	58	18	
71-80	72	70	-	1	-	1	-	-	3	49	20	
81-90	51	50	-	-	-	1	-	-	4	34	13	
91-100	63	63	-	-	-	-	-	-	4	41	18	
> 100	208	208	-	-	-	-	-	-	12	144	52	
Total	1,182	876	150	10	18	58	62	8	73	804	305	

Highway User Struck Rail Equip

Nightly Consist Screen Main Equip										Driver Gender	
Consist Length											
	Total	Freight Train	Psgrr Comm Trn	Work Train	Car(s)	Yard Switch	Light loco(s)	A	?	M	F
???	2	-	-	-	-	-	-	2	-	2	-
1	36	-	-	-	15	-	14	7	1	25	10
2-5	39	14	7	1	-	5	11	1	3	26	10
6-10	45	21	11	-	-	13	-	-	1	31	13
11-15	20	12	3	-	1	4	-	-	2	10	8
16-20	12	10	-	-	-	2	-	-	-	10	2
21-25	16	9	-	-	1	6	-	-	-	9	7
26-30	5	5	-	-	-	-	-	-	-	5	-
31-35	8	5	-	-	-	3	-	-	-	5	3
36-40	7	7	-	-	-	-	-	-	-	4	3
41-45	5	4	-	-	-	1	-	-	-	4	1
46-50	6	5	-	-	-	1	-	-	-	6	-
51-60	23	19	-	-	-	4	-	-	-	17	6
61-70	15	14	-	-	-	1	-	-	2	8	5
71-80	19	19	-	-	-	-	-	-	2	14	3
81-90	13	12	-	-	-	1	-	-	1	6	6
91-100	2	2	-	-	-	-	-	-	-	1	1
> 100	47	47	-	-	-	-	-	-	-	43	4
Total	320	205	21	1	17	41	25	10	12	226	82

**TABLE 8-12 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE CONSIST, NUMBER OF PEOPLE ON TRAIN, AND TYPE PERSON HURT, 2009**

Consist	People on Train		Total		Hwy User		RR Employees		Others	
	Total	Avg	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal	Kld	Nonfatal
Freight Train	2,312	2	95	395	95	359	0	36	0	0
Psgr Train	16,471	134	35	100	35	49	0	10	0	41
Commuter Train	8,798	183	13	28	13	17	0	1	0	10
Work Train	29	3	-	5	0	5	0	0	0	0
Single Car	3	2	-	1	0	1	0	0	0	0
Cut of Cars	3	2	-	4	0	4	0	0	0	0
Yard/ Switch	240	2	4	18	4	17	0	1	0	0
Light loco(s)	198	2	12	35	12	32	0	3	0	0
Maint Insp car	40	1	-	12	0	11	0	1	0	0
Spec MOW Eqp	26	1	1	3	1	2	0	1	0	0
Total	28,120	19	160	601	160	497	0	53	0	51

**TABLE 8-13 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE VEHICLE, NUMBER OF OCCUPANTS, AND VEHICLE DAMAGE, 2009**

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	924	1	3,405,518	4,262	100	262	100	250	0	4	0	8
Truck	90	1	881,600	10,884	15	43	15	26	0	8	0	9
Trk& Trail	185	1	3,315,199	16,331	5	98	5	40	0	35	0	23
Pickup Trk	2,780	11	1,244,986	5,040	21	88	21	85	0	2	0	1
Van	91	2	195,785	3,496	7	35	7	33	0	2	0	0
Bus	14	3	125,000	25,000	-	20	0	9	0	2	0	9
School Bus	9	9	0	0	-	-	0	0	0	0	0	0
Motorcycle	4	1	21,000	4,200	1	4	1	3	0	0	0	1
Oth Mtr V.	125	1	645,321	6,146	11	51	11	51	0	0	0	0
Total	4,222	3	9,834,409	6,548	160	601	160	497	0	53	0	51

**TABLE 8-14 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE WARNING, POSITION ON CROSSING AND IF HAZMAT WAS RELEASED, 2009**

Rail Equip Struck Highway User

Type Warning	Total		Position on Crossing				Hazmat Released By				
	Cnt	%	Stalled	Stopped	Moving	Trapped	Unk	Hwy User	Rail User	Both	Neither
Unknown	6	0.4	-	-	2	4	-	-	2	-	4
Other	1	0.1	-	-	-	1	-	-	-	-	1
Cross bucks	322	21.4	11	74	233	4	-	-	78	1	243
Stop signs	119	7.9	6	24	88	1	1	1	39	-	78
Special warning	9	0.6	-	-	9	-	-	-	-	-	9
HWTS,WW,Bells	11	0.7	-	2	8	1	-	-	-	-	11
Flashing lights	177	11.8	4	55	117	1	-	2	35	-	140
Gates	537	35.8	85	272	152	28	-	3	128	2	404
Total	1,182	78.7	106	429	612	35	1	8	280	3	890

Highway User Struck Rail Equip

Type Warning	Total		Position on Crossing				Hazmat Released By				
	Cnt	%	Stalled	Stopped	Moving	Trapped	Unk	Hwy User	Rail User	Both	Neither
Unknown	3	0.2	-	-	3	-	-	-	-	-	3
Other	1	0.1	-	-	1	-	-	-	-	-	1
Cross bucks	92	6.1	-	1	91	-	-	-	19	-	73
Stop signs	25	1.7	-	-	25	-	-	-	4	-	21
Special warning	7	0.5	-	-	7	-	-	-	-	-	7
HWTS,WW,Bells	1	0.1	-	-	1	-	-	-	-	-	1
Flashing lights	80	5.3	-	-	80	-	-	-	14	1	65
Gates	111	7.4	-	1	109	1	-	-	27	-	84
Total	320	21.3	-	2	317	1	-	-	64	1	255

Grand Total

Type Warning	Total		Position on Crossing				Hazmat Released By				
	Cnt	%	Stalled	Stopped	Moving	Trapped	Unk	Hwy User	Rail User	Both	Neither
Unknown	9	0.6	-	2	7	-	-	2	-	-	7
Other	2	0.1	-	-	2	-	-	-	-	-	2
Cross bucks	414	27.6	11	75	324	4	-	-	97	1	316
Stop signs	144	9.6	6	24	113	1	1	1	43	-	99
Special warning	16	1.1	-	-	16	-	-	-	-	-	16
HWTS,WW,Bells	12	0.8	-	2	9	1	-	-	-	-	12
Flashing lights	257	17.1	4	55	197	1	-	2	49	1	205
Gates	648	43.1	85	273	261	29	-	3	155	2	488
Total	1,502	100.0	106	431	929	36	1	8	344	4	1,145

**TABLE 8-15 MOTOR VEHICLE HRC INCIDENTS AT PUBLIC CROSSINGS,
BY TYPE VEHICLE AND WARNING, 2009**

Rail Equip Struck Highway User

Type Vehicle	Total		Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS,WW,Bells	Flashing lights	Gates
	Cnt	%								
Car	601	40.0	3	-	133	41	3	6	101	314
Truck	65	4.3	2	-	14	16	-	1	15	17
Trk& Trail	188	12.5	-	-	53	37	3	1	23	71
Pickup Trk	187	12.5	-	-	74	14	1	2	22	74
Van	47	3.1	1	1	14	6	-	1	1	23
Bus	4	0.3	-	-	-	-	-	-	1	3
School Bus	1	0.1	-	-	-	-	-	-	-	1
Motorcycle	3	0.2	-	-	-	-	-	-	1	2
Oth Mtr V.	86	5.7	-	-	34	5	2	-	13	32
Total	1,182	78.7	6	1	322	119	9	11	177	537

Highway User Struck Rail Equip

Type Vehicle	Total		Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS,WW,Bells	Flashing lights	Gates
	Cnt	%								
Car	198	13.2	2	1	50	19	3	-	49	74
Truck	16	1.1	1	-	3	-	1	1	3	7
Trk& Trail	15	1.0	-	-	5	1	-	-	6	3
Pickup Trk	60	4.0	-	-	23	4	1	-	11	21
Van	9	0.6	-	-	-	-	1	-	5	3
Bus	1	0.1	-	-	-	-	1	-	-	-
School Bus	-	0.0	-	-	-	-	-	-	-	-
Motorcycle	2	0.1	-	-	-	-	-	-	1	1
Oth Mtr V.	19	1.3	-	-	11	1	-	-	5	2
Total	320	21.3	3	1	92	25	7	1	80	111

Grand Total

Type Vehicle	Total		Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS,WW,Bells	Flashing lights	Gates
	Cnt	%								
Car	799	53.2	5	1	183	60	6	6	150	388
Truck	81	5.4	3	-	17	16	1	2	18	24
Trk& Trail	203	13.5	-	-	58	38	3	1	29	74
Pickup Trk	247	16.4	-	-	97	18	2	2	33	95
Van	56	3.7	1	1	14	6	1	1	6	26
Bus	5	0.3	-	-	-	-	1	-	1	3
School Bus	1	0.1	-	-	-	-	-	-	-	1
Motorcycle	5	0.3	-	-	-	-	-	-	2	3
Oth Mtr V.	105	7.0	-	-	45	6	2	-	18	34
Total	1,502	100.0	9	2	414	144	16	12	257	648

**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, 2009**

Rail Equip Struck Highway User

Type Vehicle	Status of Warning System						
	Total	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm < 20 Secs.	Confirm No Warning
Car	421	398	7	4	3	1	8
Truck	33	31	1	-	-	-	1
Trk& Trail	95	87	5	2	-	-	1
Pickup Trk	98	88	3	-	-	-	7
Van	25	23	-	-	-	-	2
Bus	4	4	-	-	-	-	-
School Bus	1	1	-	-	-	-	-
Motorcycle	3	3	-	-	-	-	-
Oth Mtr V.	45	43	1	1	-	-	-
Total	725	678	17	7	3	1	19

Highway User Struck Rail Equip

Type Vehicle	Status of Warning System						
	Total	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm < 20 Secs.	Confirm No Warning
Car	123	115	1	2	-	-	5
Truck	11	10	-	-	-	-	1
Trk& Trail	9	8	-	1	-	-	-
Pickup Trk	32	29	-	2	-	-	1
Van	8	6	-	-	1	-	1
Bus	-	-	-	-	-	-	-
School Bus	-	-	-	-	-	-	-
Motorcycle	2	2	-	-	-	-	-
Oth Mtr V.	7	6	-	1	-	-	-
Total	192	176	1	6	1	-	8

Grand Total

Type Vehicle	Status of Warning System						
	Total	Provided Minimum 20 Secs.	Alleged > 60 Secs.	Alleged < 20 Secs.	Alleged No Warning	Confirm < 20 Secs.	Confirm No Warning
Car	544	513	8	6	3	1	13
Truck	44	41	1	-	-	-	2
Trk& Trail	104	95	5	3	-	-	1
Pickup Trk	130	117	3	2	-	-	8
Van	33	29	-	-	1	-	3
Bus	4	4	-	-	-	-	-
School Bus	1	1	-	-	-	-	-
Motorcycle	5	5	-	-	-	-	-
Oth Mtr V.	52	49	1	2	-	-	-
Total	917	854	18	13	4	1	27

This page intentionally left blank

CHAPTER 9

HIGHWAY-RAIL GRADE 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 (AAR) and the American Short Line and Regional Railroad Association, were assigned the responsibility for making a site-specific inventory of each highway-rail grade crossing and for installing a unique identifying number at each location. The railroads were also identified as being responsible for the periodic updating of certain inventory information and the 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 updating 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 locations, and physical and operational characteristics to provide information for the administration and statistical analysis of crossings. This information is reported on a voluntary basis to FRA on the U.S. DOT-AAR Crossing Inventory Form (Form FRA F6180.71).

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 devices, 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.

CONTENTS**CHAPTER 9****HIGHWAY-RAIL GRADE CROSSING INVENTORY**

Tables	Title	Page
9-1	At-Grade Highway-Rail Crossings, by Railroad, 2009	119
9-2	At-Grade Highway-Rail Crossings, by State, 2009	120
9-3	Public At-Grade Crossings, by Warning Device and Railroad, 2009	121
9-4	Public At-Grade Crossings, by Warning Device and State, 2009	122
9-5	Private/Pedestrian At-Grade Crossings, by Type Development and Railroad, 2009	123
9-6	Private/Pedestrian At-Grade Crossings, by Type Development and State, 2009	124

TABLE 9-1 AT-GRADE HIGHWAY-RAIL CROSSINGS BY RAILROAD, 2009

Railroads	Total		Pedestrian		Private Vehicle		Public Vehicle	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alaska RR Corp.	270	0.1	5	0.0	97	0.0	168	0.1
Amtrak	270	0.1	18	0.0	67	0.0	185	0.1
Burlington Northern Santa Fe	27,015	12.3	186	0.1	9,532	4.3	17,297	7.9
Buffalo & Pittsburg	812	0.4	9	0.0	397	0.2	406	0.2
Belt Rwy Of Chicago	99	0.0	-	-	61	0.0	38	0.0
Canadian National	10,415	4.7	136	0.1	3,866	1.8	6,413	2.9
Canadian Pacific	6,860	3.1	74	0.0	2,953	1.3	3,833	1.7
Conrail Shared Assets	1,160	0.5	8	0.0	279	0.1	873	0.4
CSX Transportation	26,677	12.2	303	0.1	9,152	4.2	17,222	7.8
Florida East Coast	708	0.3	9	0.0	88	0.0	611	0.3
Guilford Rail System	1,193	0.5	12	0.0	520	0.2	661	0.3
Other Railroads	72,111	32.9	652	0.3	29,673	13.5	41,786	19.0
Indiana Harbor Belt	135	0.1	1	0.0	60	0.0	74	0.0
Kansas City Southern	4,549	2.1	11	0.0	1,804	0.8	2,734	1.2
Long Island Rail Road	335	0.2	10	0.0	45	0.0	280	0.1
MD Assn. of Rail Comm	133	0.1	4	0.0	78	0.0	51	0.0
Mass Bay Transit Auth.	340	0.2	8	0.0	32	0.0	300	0.1
Metro North Commuter	163	0.1	4	0.0	70	0.0	89	0.0
Montana Rail Link	1,122	0.5	3	0.0	698	0.3	421	0.2
Northern IN Comm Trans	138	0.1	7	0.0	23	0.0	108	0.0
Northeast IL Reg Comm	397	0.2	115	0.1	28	0.0	254	0.1
New Jersey Transit Rail	441	0.2	25	0.0	81	0.0	335	0.2
Norfolk Southern Corp.	26,516	12.1	146	0.1	10,295	4.7	16,075	7.3
Port Auth Trans Hudson	2	0.0	-	-	2	0.0	-	-
Peninsula Comm San Mateo Cnty	15	0.0	2	0.0	-	-	13	0.0
Port Terminal RR Assn	171	0.1	1	0.0	101	0.0	69	0.0
Southern CA Reg Rail Auth.	314	0.1	19	0.0	32	0.0	263	0.1
Southeastern PA Trans.	202	0.1	11	0.0	25	0.0	166	0.1
Term RR Assn Of St. Louis	124	0.1	-	-	11	0.0	113	0.1
Union Pacific	35,879	16.3	229	0.1	12,828	5.8	22,822	10.4
Union RR (Pittsburgh)	20	0.0	-	-	17	0.0	3	0.0
Wheeling & Lake Erie	909	0.4	8	0.0	403	0.2	498	0.2
Total	219,495	100.0	2,016	0.9	83,318	38.0	134,161	61.1

TABLE 9-2 AT-GRADE HIGHWAY-RAIL CROSSINGS BY STATE, 2009

States	Total		Pedestrian		Private Vehicle		Public Vehicle	
	Cnt	%	Cnt	%	Cnt	%	Cnt	%
Alabama	4,565	2.1	19	0.0	1,711	0.8	2,835	1.3
Alaska	274	0.1	5	0.0	97	0.0	172	0.1
Arizona	1,300	0.6	6	0.0	516	0.2	778	0.4
Arkansas	4,396	2.0	8	0.0	1,427	0.7	2,961	1.3
California	10,331	4.7	169	0.1	3,671	1.7	6,491	3.0
Colorado	2,836	1.3	27	0.0	1,083	0.5	1,726	0.8
Connecticut	645	0.3	9	0.0	269	0.1	367	0.2
Delaware	388	0.2	2	0.0	118	0.1	268	0.1
Dist Of Columbia	34	0.0	10	0.0	19	0.0	5	0.0
Florida	5,042	2.3	58	0.0	1,217	0.6	3,767	1.7
Georgia	7,803	3.6	44	0.0	2,369	1.1	5,390	2.5
Hawaii	8	0.0	-	-	-	-	8	0.0
Idaho	2,441	1.1	13	0.0	1,139	0.5	1,289	0.6
Illinois	12,257	5.6	338	0.2	4,081	1.9	7,838	3.6
Indiana	7,951	3.6	47	0.0	1,976	0.9	5,928	2.7
Iowa	7,290	3.3	43	0.0	2,843	1.3	4,404	2.0
Kansas	8,035	3.7	23	0.0	2,660	1.2	5,352	2.4
Kentucky	4,809	2.2	35	0.0	2,418	1.1	2,356	1.1
Louisiana	5,673	2.6	32	0.0	2,614	1.2	3,027	1.4
Maine	1,699	0.8	10	0.0	863	0.4	826	0.4
Maryland	1,302	0.6	20	0.0	642	0.3	640	0.3
Massachusetts	1,377	0.6	27	0.0	515	0.2	835	0.4
Michigan	7,206	3.3	89	0.0	2,270	1.0	4,847	2.2
Minnesota	7,122	3.2	59	0.0	2,505	1.1	4,558	2.1
Mississippi	4,147	1.9	18	0.0	1,883	0.9	2,246	1.0
Missouri	6,795	3.1	46	0.0	2,785	1.3	3,964	1.8
Montana	3,256	1.5	13	0.0	1,850	0.8	1,393	0.6
Nebraska	4,965	2.3	6	0.0	1,943	0.9	3,016	1.4
Nevada	530	0.2	5	0.0	239	0.1	286	0.1
New Hampshire	598	0.3	16	0.0	234	0.1	348	0.2
New Jersey	2,160	1.0	49	0.0	556	0.3	1,555	0.7
New Mexico	1,235	0.6	9	0.0	503	0.2	723	0.3
New York	5,348	2.4	72	0.0	2,593	1.2	2,683	1.2
North Carolina	6,911	3.1	54	0.0	2,945	1.3	3,912	1.8
North Dakota	4,786	2.2	15	0.0	1,274	0.6	3,497	1.6
Ohio	8,709	4.0	41	0.0	2,820	1.3	5,848	2.7
Oklahoma	5,296	2.4	14	0.0	1,392	0.6	3,890	1.8
Oregon	4,094	1.9	73	0.0	2,163	1.0	1,858	0.8
Pennsylvania	6,201	2.8	102	0.0	2,609	1.2	3,490	1.6
Rhode Island	123	0.1	26	0.0	30	0.0	67	0.0
South Carolina	3,972	1.8	17	0.0	1,245	0.6	2,710	1.2
South Dakota	2,994	1.4	6	0.0	1,074	0.5	1,914	0.9
Tennessee	4,694	2.1	31	0.0	1,848	0.8	2,815	1.3
Texas	15,084	6.9	29	0.0	5,238	2.4	9,817	4.5
Utah	1,288	0.6	4	0.0	586	0.3	698	0.3
Vermont	927	0.4	49	0.0	501	0.2	377	0.2
Virginia	4,396	2.0	39	0.0	2,412	1.1	1,945	0.9
Washington	5,264	2.4	46	0.0	2,678	1.2	2,540	1.2
West Virginia	3,398	1.5	54	0.0	1,902	0.9	1,442	0.7
Wisconsin	6,446	2.9	88	0.0	2,288	1.0	4,070	1.9
Wyoming	1,094	0.5	1	0.0	704	0.3	389	0.2
Total	219,495	100.0	2,016	0.9	83,318	38.0	134,161	61.1

TABLE 9-3 PUBLIC AT GRADE BY WARNING DEVICE AND RAILROAD, 2009

Railroads	Total									
	Cnt	%	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates
Alaska RR Corp.	168	0.13	1	1	57	24	5	-	9	71
Amtrak	185	0.14	8	-	8	6	3	1	4	155
Burlington Northern Santa Fe	17,297	12.89	217	30	7,825	687	107	73	1,904	6,454
Buffalo & Pittsburg	406	0.30	2	1	162	8	4	2	127	100
Belt Rwy Of Chicago	38	0.03	1	-	12	-	-	-	8	17
Canadian National	6,413	4.78	68	10	2,049	899	49	26	1,318	1,994
Canadian Pacific	3,833	2.86	72	3	1,875	455	12	14	448	954
Conrail Shared Assets	873	0.65	59	-	132	13	122	16	395	136
CSX Transportation	17,222	12.84	358	9	3,707	1,472	265	173	3,220	8,018
Florida East Coast	611	0.46	4	-	19	3	20	-	21	544
Guilford Rail System	661	0.49	20	4	149	32	61	8	218	169
Other Railroads	41,786	31.15	1,195	173	20,945	4,576	846	799	7,263	5,989
Indiana Harbor Belt	74	0.06	2	-	12	1	13	-	16	30
Kansas City Southern	2,734	2.04	51	-	1,268	96	12	22	335	950
Long Island Rail Road	280	0.21	6	1	2	-	-	1	-	270
MD Assn. of Rail Comm	51	0.04	7	-	11	6	4	7	9	7
Mass Bay Transit Auth.	300	0.22	13	-	35	2	17	3	23	207
Metro North Commuter	89	0.07	2	-	13	1	7	1	29	36
Montana Rail Link	421	0.31	1	5	210	32	-	-	70	103
Northern IN Comm Trans	108	0.08	-	-	27	5	-	1	37	38
Northeast IL Reg Comm	254	0.19	-	-	-	1	-	-	3	250
New Jersey Transit Rail	335	0.25	3	-	24	-	7	1	68	232
Norfolk Southern Corp.	16,075	11.98	432	30	3,791	1,548	231	84	2,750	7,209
Peninsula Comm San Mateo Cnty	13	0.01	1	-	-	-	-	-	-	12
Port Terminal RR Assn	69	0.05	6	-	24	3	-	-	11	25
Southern CA Reg Rail Auth.	263	0.20	1	-	4	1	-	5	6	246
Southeastern PA Trans.	166	0.12	6	-	2	19	3	27	14	95
Term RR Assn Of St. Louis	113	0.08	1	-	12	2	39	-	17	42
Union Pacific	22,822	17.01	567	25	8,266	1,738	139	214	2,814	9,059
Union RR (Pittsburgh)	3	0.00	-	-	-	-	-	-	1	2
Wheeling & Lake Erie	498	0.37	4	-	240	22	1	2	118	111
Total	134,161	100.0	3,108	292	50,881	11,652	1,967	1,480	21,256	43,525

TABLE 9-4 PUBLIC AT GRADE BY WARNING DEVICE AND STATE, 2009

States	Total										
	Cnt	%	Unknown	Other	Cross bucks	Stop signs	Special warning	HWTS, WW, Bells	Flashing lights	Gates	AADT
Alabama	2,835	2.11	44	9	733	689	16	87	515	742	5,609,195
Alaska	172	0.13	2	1	60	24	5	-	9	71	481,388
Arizona	778	0.58	12	-	226	73	13	6	47	401	2,683,605
Arkansas	2,961	2.21	113	1	1,646	223	62	78	394	444	3,501,446
California	6,491	4.84	109	16	2,018	240	26	193	795	3,094	35,089,608
Colorado	1,726	1.29	33	6	834	167	21	29	172	464	3,280,117
Connecticut	367	0.27	16	-	27	47	29	5	143	100	1,307,462
Delaware	268	0.20	2	-	22	1	17	1	160	65	1,119,426
Dist Of Columbia	5	0.00	-	-	-	1	2	-	2	-	71,200
Florida	3,767	2.81	60	3	598	199	67	7	440	2,393	23,364,634
Georgia	5,390	4.02	122	15	1,468	1,186	115	205	255	2,024	9,877,174
Hawaii	8	0.01	-	1	6	1	-	-	-	-	27,000
Idaho	1,289	0.96	9	-	415	532	1	3	171	158	1,704,032
Illinois	7,838	5.84	173	5	2,500	84	71	112	1,890	3,003	19,487,012
Indiana	5,928	4.42	126	12	1,521	992	9	71	1,264	1,933	13,612,093
Iowa	4,404	3.28	33	3	2,101	442	20	23	815	967	5,301,204
Kansas	5,352	3.99	66	2	3,326	171	60	66	406	1,255	4,398,840
Kentucky	2,356	1.76	119	-	964	52	46	8	720	447	3,681,993
Louisiana	3,027	2.26	113	10	1,328	207	21	7	484	857	6,159,338
Maine	826	0.62	7	-	271	11	60	5	389	83	1,926,765
Maryland	640	0.48	22	3	207	40	24	20	201	123	2,221,283
Massachusetts	835	0.62	33	3	107	11	60	14	271	336	5,075,705
Michigan	4,847	3.61	104	3	1,010	1,321	78	35	1,219	1,077	13,888,982
Minnesota	4,558	3.40	56	5	2,102	911	11	6	408	1,059	6,377,598
Mississippi	2,246	1.67	56	59	759	423	27	31	414	477	4,105,142
Missouri	3,964	2.95	151	3	1,983	117	63	38	727	882	4,163,335
Montana	1,393	1.04	8	24	832	88	6	1	160	274	1,371,940
Nebraska	3,016	2.25	59	4	1,944	187	4	5	182	631	1,864,293
Nevada	286	0.21	1	2	122	10	2	1	24	124	919,573
New Hampshire	348	0.26	4	1	99	44	33	2	122	43	739,251
New Jersey	1,555	1.16	62	-	277	13	138	17	599	449	9,281,979
New Mexico	723	0.54	19	4	351	17	-	5	82	245	953,301
New York	2,683	2.00	55	11	452	36	101	59	271	1,698	7,483,554
North Carolina	3,912	2.92	175	10	1,073	102	84	15	430	2,023	12,968,503
North Dakota	3,497	2.61	35	1	2,816	65	-	-	32	548	1,040,088
Ohio	5,848	4.36	27	1	2,037	128	36	23	836	2,760	14,923,866
Oklahoma	3,890	2.90	49	7	2,297	87	55	17	512	866	4,268,588
Oregon	1,858	1.38	58	26	597	374	37	31	102	633	4,177,039
Pennsylvania	3,490	2.60	70	13	1,026	168	183	62	1,014	954	6,474,358
Rhode Island	67	0.05	6	-	4	-	9	17	15	16	371,000
South Carolina	2,710	2.02	9	2	511	679	69	9	362	1,069	6,078,294
South Dakota	1,914	1.43	72	-	1,501	35	-	-	252	54	1,110,384
Tennessee	2,815	2.10	67	6	1,075	171	111	12	601	772	5,706,207
Texas	9,817	7.32	321	5	3,584	208	66	54	934	4,645	34,496,931
Utah	698	0.52	23	-	173	135	32	13	96	226	2,700,810
Vermont	377	0.28	5	-	109	27	30	2	174	30	625,088
Virginia	1,945	1.45	46	2	360	31	3	15	332	1,156	5,227,785
Washington	2,540	1.89	222	4	1,242	97	29	27	334	585	4,633,098
West Virginia	1,442	1.07	86	6	624	38	10	6	446	226	1,569,342
Wisconsin	4,070	3.03	41	3	1,429	742	4	32	978	841	8,884,331
Wyoming	389	0.29	7	-	114	5	1	5	55	202	354,204
Total	134,161	100.0	3,108	292	50,881	11,652	1,967	1,480	21,256	43,525	316,739,384

TABLE 9-5 PRIVATE/PEDESTRIAN AT GRADE BY DEVELOPMENT AND RAILROAD, 2009

Railroads	Total		Not reported	Farm	Residential	Recreational	Industrial
	Cnt	%					
Alaska RR Corp.	97	0.12	4	4	15	6	68
Amtrak	67	0.08	1	26	12	2	26
Burlington Northern Santa Fe	9,532	11.43	27	6,516	707	172	2,110
Buffalo & Pittsburg	397	0.48	5	165	88	23	116
Belt Rwy Of Chicago	61	0.07	-	-	-	-	61
Canadian National	3,867	4.64	29	2,069	365	72	1,332
Canadian Pacific	2,956	3.54	28	2,131	270	82	445
Conrail Shared Assets	279	0.33	5	40	20	4	210
CSX Transportation	9,161	10.99	369	4,767	1,709	156	2,160
Florida East Coast	90	0.11	72	2	2	1	13
Guilford Rail System	520	0.62	-	154	51	20	295
Other Railroads	29,708	35.62	593	17,363	4,004	748	7,000
Indiana Harbor Belt	60	0.07	4	-	-	-	56
Kansas City Southern	1,804	2.16	15	1,270	201	9	309
Long Island Rail Road	45	0.05	-	33	4	3	5
MD Assn. of Rail Comm	78	0.09	-	50	10	2	16
Mass Bay Transit Auth.	32	0.04	3	10	6	1	12
Metro North Commuter	70	0.08	1	13	11	9	36
Montana Rail Link	698	0.84	-	485	59	16	138
Northern IN Comm Trans	28	0.03	8	6	-	2	12
Northeast IL Reg Comm	39	0.05	9	2	7	1	20
New Jersey Transit Rail	81	0.10	1	28	17	4	31
Norfolk Southern Corp.	10,304	12.36	780	4,955	2,247	141	2,181
Port Auth Trans Hudson	2	0.00	-	1	-	-	1
Port Terminal RR Assn	101	0.12	-	2	-	-	99
Southern CA Reg Rail Auth.	34	0.04	1	7	7	3	16
Southeastern PA Trans.	25	0.03	-	9	4	2	10
Term RR Assn Of St. Louis	11	0.01	-	3	-	-	8
Union Pacific	12,828	15.38	144	8,152	1,179	146	3,207
Union RR (Pittsburgh)	17	0.02	-	-	-	-	17
Wheeling & Lake Erie	403	0.48	2	214	34	6	147
Total	83,395	100.0	2,101	48,477	11,029	1,631	20,157

TABLE 9-6 PRIVATE/PEDESTRIAN AT GRADE BY TYPE DEVELOPMENT AND STATE, 2009

States	Total		Not reported	Farm	Residential	Recreational	Industrial
	Cnt	%					
Alabama	1,712	2.05	25	892	292	20	483
Alaska	97	0.12	4	4	15	6	68
Arizona	516	0.62	5	302	19	14	176
Arkansas	1,427	1.71	9	919	209	18	272
California	3,674	4.41	55	1,744	275	94	1,506
Colorado	1,083	1.30	18	655	197	14	199
Connecticut	269	0.32	3	54	36	33	143
Delaware	118	0.14	3	50	36	5	24
Dist Of Columbia	27	0.03	1	-	1	-	25
Florida	1,227	1.47	181	406	173	23	444
Georgia	2,369	2.84	15	1,204	524	34	592
Idaho	1,139	1.37	1	719	53	22	344
Illinois	4,092	4.91	33	2,557	369	61	1,072
Indiana	1,986	2.38	108	1,192	355	20	311
Iowa	2,843	3.41	26	2,015	286	39	477
Kansas	2,660	3.19	-	2,198	132	5	325
Kentucky	2,418	2.90	3	1,374	654	15	372
Louisiana	2,614	3.13	77	1,276	410	23	828
Maine	863	1.03	16	335	126	118	268
Maryland	642	0.77	20	325	79	12	206
Massachusetts	515	0.62	7	155	65	37	251
Michigan	2,271	2.72	41	1,118	346	122	644
Minnesota	2,509	3.01	14	1,790	220	53	432
Mississippi	1,883	2.26	19	1,163	348	12	341
Missouri	2,785	3.34	9	1,996	301	22	457
Montana	1,850	2.22	-	1,438	102	28	282
Nebraska	1,943	2.33	1	1,699	68	11	164
Nevada	239	0.29	140	32	2	17	48
New Hampshire	237	0.28	1	105	50	27	54
New Jersey	557	0.67	15	140	52	13	337
New Mexico	503	0.60	1	351	26	19	106
New York	2,601	3.12	38	1,648	350	148	417
North Carolina	2,947	3.53	19	1,326	838	32	732
North Dakota	1,274	1.53	-	1,155	14	4	101
Ohio	2,822	3.38	30	1,774	309	33	676
Oklahoma	1,392	1.67	4	989	129	11	259
Oregon	2,163	2.59	4	926	316	34	883
Pennsylvania	2,610	3.13	46	978	487	128	971
Rhode Island	40	0.05	-	2	7	6	25
South Carolina	1,245	1.49	3	560	302	23	357
South Dakota	1,074	1.29	5	911	60	4	94
Tennessee	1,849	2.22	15	940	392	24	478
Texas	5,238	6.28	11	3,415	547	37	1,228
Utah	586	0.70	2	335	25	14	210
Vermont	502	0.60	4	344	56	16	82
Virginia	2,412	2.89	1,031	877	193	19	292
Washington	2,678	3.21	26	1,240	402	58	952
West Virginia	1,902	2.28	8	809	600	47	438
Wisconsin	2,288	2.74	2	1,489	169	48	580
Wyoming	704	0.84	2	551	12	8	131
Total	83,395	100.0	2,101	48,477	11,029	1,631	20,157

CHAPTER 10

TRESPASSERS NOT AT HIGHWAY-RAIL GRADE CROSSINGS

A “trespasser” is defined as any person who is on 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 grade 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 F6180.55a, they are excluded from this chapter because the incident is defined as a highway-rail incident. The casualties that summarize highway-rail grade crossing incidents can be found in Chapters 7 and 8.

CONTENTS**CHAPTER 10****TRESPASSERS NOT AT HIGHWAY-RAIL GRADE CROSSINGS**

Tables	Title	Page
10-1	Reportable Conditions to Trespassers by Age, not at HRC, 2009	127
10-2	Trespassers Killed, by Railroad and Age, not at HRC, 2009	128
10-3	Trespassers Killed, by State and Age, not at HRC, 2009	129
10-4	Trespassers Injured, by Railroad and Age, not at HRC, 2009	130
10-5	Trespassers Injured, by State and Age, not at HRC, 2009	131
10-6	Trespasser Casualties, by State and Age Group, not at HRC, 2009	132
10-7	Trespasser Casualties, by Month and Day, not at HRC, 2009	133
10-8	Trespasser Casualties, by Time and Day, not at HRC, 2009	134
10-9	Trespasser Casualties, by Location, not at HRC, 2009	135
10-10	Trespasser Casualties, by Event, not at HRC, 2009	136

TABLE 10-1 REPORTABLE CONDITIONS TO TRESPASSERS NOT AT HRC, 2009

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	69	6	-	2	1	9	7	7	11	8	5	6	3	3	1
Crushing injury	14	1	-	-	-	2	4	3	-	1	2	-	-	1	-
Sprain/Str.,leg/foot	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Sprain/Str.,torso	9	1	-	-	-	1	2	1	1	-	1	-	1	-	1
Sprain/Str., other	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Cut/abrasion	96	10	-	2	3	8	17	11	6	14	4	6	6	6	3
Dislocation	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Fracture,arm/hand	8	1	-	-	-	2	1	-	-	1	1	1	1	-	-
Fracture,leg/foot	21	4	-	-	1	3	2	1	1	5	2	1	1	-	-
Fracture,head/face	10	1	-	-	-	2	1	-	-	1	1	1	1	1	1
Fracture,torso	7	-	-	1	-	1	1	1	-	-	1	-	2	-	-
Fracture,multiple	9	-	-	-	1	1	1	-	2	-	2	1	1	-	-
Fracture,other	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Amputation,other	2	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Amputation,arm/hand	7	2	-	-	-	-	1	2	-	-	-	2	-	-	-
Amputation,leg/foot	36	5	-	1	2	6	4	3	1	4	2	1	2	3	2
Fatality	417	43	2	2	8	36	45	36	32	43	46	38	36	20	30
Object in eye	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Concussion	4	-	-	-	-	-	-	-	-	-	1	1	-	2	-
Internal injury	5	1	1	-	-	-	1	-	-	1	1	-	-	-	-
Unspecified injury	41	6	2	-	4	6	4	3	1	2	8	2	1	2	-
One-time exp.-fumes	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total	762	82	5	9	21	78	91	69	56	81	77	60	56	38	39

TABLE 10-2 TRESPASSERS KILLED, BY RAILROAD AND AGE, NOT AT HRC, 2009

Railroads		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
Alaska RR Corp.	2	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Amtrak	84	5	-	1	4	7	5	8	7	10	7	9	9	3	9
Burlington Northern Santa Fe	77	10	1	-	-	7	13	9	4	5	8	5	7	2	6
Canadian National	5	-	-	-	-	-	-	-	-	3	1	1	-	-	-
Canadian Pacific	3	-	-	-	-	1	2	-	-	-	-	-	-	-	-
Conrail Shared Assets	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
CSX Transportation	69	20	-	-	2	8	7	6	3	4	5	4	3	3	4
Florida East Coast	9	-	-	-	-	-	2	-	1	1	-	-	3	2	-
Guilford Rail System	3	-	-	-	-	-	1	-	-	-	1	1	-	-	-
Kansas City Southern	4	-	-	-	-	1	2	-	-	-	1	-	-	-	-
Long Island Rail Road	2	1	-	-	-	1	-	-	-	-	-	-	-	-	-
Mass Bay Transit Auth.	5	3	-	-	-	-	-	-	-	-	-	-	-	-	2
Metro North Commuter	4	-	-	-	-	-	-	-	1	1	1	-	1	-	-
Montana Rail Link	2	-	-	-	-	-	1	-	-	-	-	1	-	-	-
Northeast IL Reg Comm	6	-	-	-	-	-	1	-	2	1	1	1	-	-	-
New Jersey Transit Rail	16	-	-	-	-	1	-	2	4	1	1	3	1	1	2
Norfolk Southern Corp.	59	-	1	1	2	3	3	4	1	10	11	8	5	7	3
Peninsula Comm San Mateo Cnty	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern CA Reg Rail Auth.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Southeastern PA Trans.	3	1	-	-	-	2	-	-	-	-	-	-	-	-	-
Union Pacific	52	-	-	-	-	5	6	7	8	7	8	4	4	-	3
Other Railroads	9	1	-	-	-	-	2	-	-	-	1	1	2	2	-
Total	417	43	2	2	8	36	45	36	32	43	46	38	36	20	30

TABLE 10-3 TRESPASSERS KILLED, BY STATE AND AGE, NOT AT HRC, 2009

States	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			
Alabama	7	-	-	-	-	-	-	-	-	2	2	1	-	2	-			
Alaska	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Arizona	8	1	-	-	-	-	1	2	1	1	-	-	1	-	1			
California	47	3	-	-	-	3	3	2	7	4	5	3	8	2	7			
Colorado	2	-	-	-	-	-	1	-	-	-	1	-	-	-	-			
Connecticut	3	-	-	-	-	-	-	1	-	-	1	-	1	-	-			
Delaware	2	-	-	-	-	-	1	-	-	-	1	-	-	-	-			
Dist Of Columbia	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Florida	19	4	-	-	-	1	3	-	1	1	1	1	4	2	1			
Georgia	10	4	-	-	-	2	-	2	-	-	-	-	2	-	-			
Idaho	2	-	-	-	-	-	1	-	-	1	-	-	-	-	-			
Illinois	20	-	-	1	-	2	2	2	2	6	3	2	-	-	-			
Indiana	13	1	-	-	-	1	2	2	-	2	1	1	-	3	-			
Iowa	3	-	-	-	-	2	-	-	-	-	-	-	1	-	-			
Kansas	4	-	-	-	-	-	-	-	-	-	-	3	1	-	-			
Kentucky	5	-	-	-	-	-	2	-	-	-	1	1	-	-	1			
Louisiana	10	-	-	-	-	-	1	2	1	-	3	1	2	-	-			
Maine	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-			
Maryland	5	1	-	-	2	-	-	1	1	-	-	-	-	-	-			
Massachusetts	12	3	-	-	-	1	2	-	-	1	1	2	-	-	2			
Michigan	8	-	-	-	1	1	-	-	-	-	-	4	2	-	-			
Minnesota	9	1	-	-	-	1	2	2	1	-	-	-	1	1	-			
Mississippi	6	3	-	-	-	-	-	1	-	-	1	-	-	-	1			
Missouri	12	1	-	-	-	1	3	1	1	2	2	1	-	-	-			
Montana	3	-	1	-	-	-	1	-	-	-	-	1	-	-	-			
Nebraska	3	1	-	-	-	-	-	1	-	-	-	-	-	1	-			
New Jersey	20	-	-	-	-	1	2	2	3	2	2	3	1	1	3			
New Mexico	10	1	-	-	-	1	-	1	1	-	1	1	2	-	2			
New York	18	2	-	-	-	3	-	3	2	2	2	-	1	-	3			
North Carolina	15	2	-	1	2	-	1	-	1	5	2	-	1	-	-			
Ohio	22	2	-	-	-	4	2	2	1	2	1	3	2	1	2			
Oklahoma	7	1	-	-	-	3	-	1	-	1	-	1	-	-	-			
Oregon	4	-	-	-	-	-	-	-	1	1	1	1	-	-	-			
Pennsylvania	30	4	1	-	1	4	1	-	2	3	5	2	1	5	1			
Rhode Island	3	-	-	-	-	-	-	-	-	1	-	1	1	-	-			
South Carolina	6	-	-	-	-	-	-	3	-	-	1	1	1	-	-			
South Dakota	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-			
Tennessee	4	-	-	-	-	1	-	-	-	2	-	-	1	-	-			
Texas	31	4	-	-	-	1	8	3	4	2	6	1	-	-	2			
Utah	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-			
Virginia	7	2	-	-	-	1	-	-	-	-	1	1	-	1	1			
Washington	14	-	-	-	2	1	3	-	1	2	1	1	1	-	2			
West Virginia	5	-	-	-	-	-	-	1	1	-	-	1	1	1	-			
Wisconsin	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-			
Wyoming	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-			
Total	417	43	2	2	8	36	45	36	32	43	46	38	36	20	30			

TABLE 10-4 TRESPASSERS INJURED, BY RAILROAD AND AGE, NOT AT HRC, 2009

Railroads	Cnt	%	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	30	8.7	3	-	1	1	4	4	4	1	1	2	3	4	1	1
Burlington Northern Santa Fe	45	13.0	5	-	2	2	5	3	6	-	3	7	3	2	4	3
Belt Rwy Of Chicago	1	0.3	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Canadian National	5	1.4	-	-	1	-	1	-	-	-	1	1	1	-	-	-
Canadian Pacific	6	1.7	1	-	-	-	1	4	-	-	-	-	-	-	-	-
Conrail Shared Assets	1	0.3	-	-	-	-	-	-	-	-	-	-	-	-	1	-
CSX Transportation	66	19.1	17	2	1	6	9	6	3	3	3	3	3	5	5	-
Florida East Coast	2	0.6	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Guilford Rail System	1	0.3	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Kansas City Southern	8	2.3	-	-	-	-	2	1	-	1	1	1	2	-	-	-
Long Island Rail Road	7	2.0	-	-	-	-	-	-	1	1	1	-	1	1	2	-
Mass Bay Transit Auth.	3	0.9	2	-	-	-	-	-	-	1	-	-	-	-	-	-
Metro North Commuter	3	0.9	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Montana Rail Link	1	0.3	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Northeast IL Reg Comm	8	2.3	-	-	-	-	1	-	-	1	-	2	1	2	-	1
New Jersey Transit Rail	2	0.6	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Norfolk Southern Corp.	50	14.5	1	-	-	3	6	9	9	3	8	1	3	2	2	3
Peninsula Comm San Mateo Cnty	2	0.6	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern CA Reg Rail Auth.	1	0.3	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Southeastern PA Trans.	3	0.9	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Union Pacific	92	26.7	-	1	2	1	11	15	8	11	18	12	5	4	3	1
Other Railroads	8	2.3	4	-	-	-	1	1	1	-	1	-	-	-	-	-
Total	345	100	39	3	7	13	42	46	33	24	38	31	22	20	18	9

TABLE 10-5 TRESPASSERS INJURED, BY STATE AND AGE, NOT AT HRC, 2009

States	Cnt	%	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
Alabama	6	1.7	1	-	-	-	-	1	1	-	1	-	1	-	-	1
Arizona	12	3.5	1	-	-	-	-	2	1	-	4	3	-	-	-	1
Arkansas	7	2.0	-	-	-	1	-	2	2	1	-	-	1	-	-	-
California	41	11.9	6	-	2	1	8	4	5	2	3	3	1	4	2	-
Colorado	3	0.9	-	-	-	-	2	-	-	-	-	1	-	-	-	-
Connecticut	4	1.2	-	-	-	-	-	-	-	1	1	2	-	-	-	-
Dist Of Columbia	2	0.6	-	-	-	-	-	-	1	-	-	-	-	-	1	-
Florida	8	2.3	1	-	-	-	-	2	1	1	-	-	2	1	-	-
Georgia	14	4.1	5	1	-	1	2	-	2	-	1	-	-	2	-	-
Idaho	4	1.2	-	-	-	-	1	1	1	-	1	-	-	-	-	-
Illinois	23	6.7	3	-	-	-	3	1	3	2	2	3	1	2	2	1
Indiana	13	3.8	4	1	1	1	-	4	-	1	-	-	-	-	1	-
Iowa	4	1.2	-	-	-	-	1	1	-	-	1	1	-	-	-	-
Kansas	8	2.3	1	-	-	-	-	2	1	-	-	1	1	-	1	1
Kentucky	7	2.0	3	-	-	-	-	1	1	-	-	1	-	-	1	-
Louisiana	5	1.4	-	-	1	-	-	-	1	-	1	-	1	1	-	-
Maryland	3	0.9	1	-	-	1	-	-	-	-	-	-	-	-	1	-
Massachusetts	4	1.2	2	-	-	-	-	-	1	1	-	-	-	-	-	-
Michigan	4	1.2	1	-	-	-	1	1	-	-	-	-	1	-	-	-
Minnesota	5	1.4	1	-	-	-	1	1	-	-	1	1	-	-	-	-
Mississippi	5	1.4	1	-	-	1	-	1	-	-	-	1	-	1	-	-
Missouri	7	2.0	-	1	1	-	-	1	-	3	-	1	-	-	-	-
Montana	1	0.3	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Nebraska	6	1.7	-	-	-	-	-	-	-	-	1	1	1	2	-	1
Nevada	2	0.6	-	-	-	-	-	-	1	-	1	-	-	-	-	-
New Jersey	9	2.6	-	-	-	-	4	1	1	-	1	1	-	-	1	-
New Mexico	4	1.2	-	-	-	-	-	-	1	-	1	1	-	-	-	1
New York	21	6.1	1	-	-	2	2	4	3	1	2	1	1	1	2	1
North Carolina	14	4.1	2	-	-	1	-	1	1	2	3	-	3	1	-	-
Ohio	7	2.0	-	-	-	-	1	1	-	-	3	-	-	1	1	-
Oklahoma	4	1.2	1	-	-	-	1	-	1	-	-	1	-	-	-	-
Oregon	5	1.4	-	-	-	-	1	-	-	-	1	1	-	1	1	-
Pennsylvania	15	4.3	4	-	-	1	2	2	1	1	1	-	2	-	-	1
South Carolina	3	0.9	-	-	-	-	-	-	-	1	-	-	-	-	1	1
South Dakota	2	0.6	-	-	1	-	-	1	-	-	-	-	-	-	-	-
Tennessee	8	2.3	-	-	-	-	1	1	1	-	1	1	1	2	-	-
Texas	31	9.0	-	-	1	1	6	6	1	5	6	3	2	-	-	-
Utah	1	0.3	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Virginia	7	2.0	-	-	-	1	4	1	-	-	-	1	-	-	-	-
Washington	7	2.0	-	-	-	-	-	-	1	-	1	-	2	1	2	-
West Virginia	4	1.2	-	-	-	1	1	1	-	-	-	-	-	-	1	-
Wisconsin	4	1.2	-	-	-	-	-	2	-	-	-	2	-	-	-	-
Wyoming	1	0.3	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Total	345	100	39	3	7	13	42	46	33	24	38	31	22	20	18	9

TABLE 10-6 TRESPASSERS NOT AT HRC, BY STATE AND AGE GROUP, 2009

States	Deaths Age Group				Total Killed		Nonfatal Cases Age Group				Total Injured	
	Unk	< 16	16-21	> 21	Cnt	%	Unk	< 16	16-21	> 21	Cnt	%
Alabama	-	-	-	7	7	1.7	1	-	-	5	6	1.7
Alaska	1	-	-	1	2	0.5	-	-	-	-	0	0.0
Arizona	1	-	-	7	8	1.9	1	-	-	11	12	3.5
Arkansas	-	-	-	-	0	0.0	-	1	1	5	7	2.0
California	3	-	4	40	47	11.3	6	3	9	23	41	11.9
Colorado	-	-	-	2	2	0.5	-	-	2	1	3	0.9
Connecticut	-	-	-	3	3	0.7	-	-	-	4	4	1.2
Delaware	-	-	-	2	2	0.5	-	-	-	-	0	0.0
Dist Of Columbia	1	-	-	-	1	0.2	-	-	-	2	2	0.6
Florida	4	-	2	13	19	4.6	1	-	1	6	8	2.3
Georgia	4	-	2	4	10	2.4	5	2	2	5	14	4.1
Idaho	-	-	-	2	2	0.5	-	-	2	2	4	1.2
Illinois	-	1	2	17	20	4.8	3	-	3	17	23	6.7
Indiana	1	-	1	11	13	3.1	4	3	-	6	13	3.8
Iowa	-	-	2	1	3	0.7	-	-	1	3	4	1.2
Kansas	-	-	-	4	4	1.0	1	-	1	6	8	2.3
Kentucky	-	-	1	4	5	1.2	3	-	1	3	7	2.0
Louisiana	-	-	-	10	10	2.4	-	1	-	4	5	1.4
Maine	-	-	-	1	1	0.2	-	-	-	-	0	0.0
Maryland	1	2	-	2	5	1.2	1	1	-	1	3	0.9
Massachusetts	3	-	1	8	12	2.9	2	-	-	2	4	1.2
Michigan	-	1	1	6	8	1.9	1	-	2	1	4	1.2
Minnesota	1	-	1	7	9	2.2	1	-	2	2	5	1.4
Mississippi	3	-	-	3	6	1.4	1	1	-	3	5	1.4
Missouri	1	-	3	8	12	2.9	-	2	-	5	7	2.0
Montana	-	1	-	2	3	0.7	-	-	-	1	1	0.3
Nebraska	1	-	-	2	3	0.7	-	-	-	6	6	1.7
Nevada	-	-	-	-	0	0.0	-	-	-	2	2	0.6
New Jersey	-	-	1	19	20	4.8	-	-	4	5	9	2.6
New Mexico	1	-	1	8	10	2.4	-	-	-	4	4	1.2
New York	2	-	3	13	18	4.3	1	2	2	16	21	6.1
North Carolina	2	3	-	10	15	3.6	2	1	-	11	14	4.1
Ohio	2	-	5	15	22	5.3	-	-	1	6	7	2.0
Oklahoma	1	-	3	3	7	1.7	1	-	1	2	4	1.2
Oregon	-	-	-	4	4	1.0	-	-	1	4	5	1.4
Pennsylvania	4	2	4	20	30	7.2	4	1	2	8	15	4.3
Rhode Island	-	-	-	3	3	0.7	-	-	-	-	0	0.0
South Carolina	-	-	-	6	6	1.4	-	-	-	3	3	0.9
South Dakota	-	-	-	1	1	0.2	-	1	-	1	2	0.6
Tennessee	-	-	1	3	4	1.0	-	-	1	7	8	2.3
Texas	4	-	1	26	31	7.4	-	2	8	21	31	9.0
Utah	-	-	-	1	1	0.2	-	-	-	1	1	0.3
Virginia	2	-	1	4	7	1.7	-	1	4	2	7	2.0
Washington	-	2	1	11	14	3.4	-	-	-	7	7	2.0
West Virginia	-	-	-	5	5	1.2	-	1	2	1	4	1.2
Wisconsin	-	-	-	1	1	0.2	-	-	-	4	4	1.2
Wyoming	-	-	1	-	1	0.2	-	-	-	1	1	0.3
Total	43	12	42	320	417	100.0	39	23	53	230	345	100.0

TABLE 10-7 TRESPASSERS CASUALTIES, BY MONTH AND DAY, NOT AT HRC, 2009

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	18	2.4	4	-	4	1	2	2	5	2	-	1	15
	February	32	4.2	2	5	3	7	4	7	4	3	-	2	27
	March	37	4.9	8	5	4	5	5	3	7	5	-	4	28
	April	35	4.6	3	3	8	2	9	4	6	4	4	5	22
	May	35	4.6	9	-	3	6	4	5	8	1	1	7	26
	June	31	4.1	6	2	4	5	3	3	8	5	-	2	24
	July	48	6.3	4	3	5	6	10	13	7	8	1	2	37
	August	37	4.9	5	7	5	3	2	7	8	2	1	1	33
	September	48	6.3	10	2	3	7	8	9	9	6	3	5	34
	October	34	4.5	5	4	2	2	8	5	8	1	2	4	27
	November	31	4.1	7	1	5	5	4	6	3	4	-	4	23
	December	31	4.1	6	3	5	6	3	4	4	2	-	5	24
	Total	417	54.7	69	35	51	55	62	68	77	43	12	42	320
Nonfatal	January	16	2.1	3	3	-	1	5	4	-	2	3	3	8
	February	16	2.1	1	2	5	1	3	2	2	1	1	3	11
	March	36	4.7	3	2	10	5	5	6	5	3	1	5	27
	April	20	2.6	3	2	2	2	5	5	1	2	1	3	14
	May	35	4.6	5	5	3	6	6	2	8	5	1	9	20
	June	40	5.2	5	6	5	6	7	4	7	7	2	9	22
	July	36	4.7	4	4	2	5	10	4	7	3	-	2	31
	August	40	5.2	10	2	3	4	3	8	10	7	2	4	27
	September	32	4.2	8	4	4	4	1	8	3	3	3	4	22
	October	27	3.5	2	4	3	3	3	7	5	2	1	4	20
	November	28	3.7	5	4	1	2	5	6	5	2	5	4	17
	December	19	2.5	5	2	2	3	1	2	4	2	3	3	11
	Total	345	45.3	54	40	40	42	54	58	57	39	23	53	230
Total		762	100	123	75	91	97	116	126	134	82	35	95	550

TABLE 10-8 TRESPASSERS CASUALTIES, BY TIME AND DAY, NOT AT HRC, 2009

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	Kld Nonfatal	Kld Nonfatal	Kld Nonfatal	Kld Nonfatal	Kld Nonfatal	Kld Nonfatal
AM 1	40	6	4	1	-	3	2	2	1	2	4	3	3	5	4
2	39	2	3	-	2	6	2	-	-	3	3	5	2	8	3
3	26	3	1	1	2	1	2	1	-	1	3	3	1	5	2
4	21	4	1	-	1	-	-	3	-	4	-	1	2	3	2
5	17	3	1	-	-	1	-	2	1	-	1	2	1	2	3
6	18	1	2	-	-	-	1	4	2	1	2	-	-	5	-
7	25	3	2	3	2	1	1	1	-	-	2	4	1	3	2
8	24	3	1	1	2	1	2	2	3	4	1	1	-	1	2
9	18	-	1	1	1	2	-	1	1	3	1	1	3	1	2
10	27	1	2	1	2	-	1	1	3	3	2	1	4	3	3
11	24	4	-	1	-	4	-	2	1	2	2	2	1	1	4
12	42	4	3	4	-	3	-	3	4	2	-	4	5	5	5
Total	321	34	21	13	12	22	11	22	16	25	21	27	23	42	32
PM 1	29	4	-	-	2	1	5	2	2	5	2	1	2	3	-
2	28	3	2	3	2	1	3	1	-	4	-	4	1	3	1
3	30	3	1	1	3	2	1	4	5	-	3	5	-	2	-
4	39	4	3	2	3	2	4	4	2	3	4	-	4	4	-
5	36	4	3	3	3	2	3	6	3	-	3	2	3	1	-
6	43	3	2	3	2	4	3	3	3	4	4	6	2	2	2
7	33	2	1	2	2	2	3	2	2	5	2	4	2	1	3
8	41	1	3	1	3	3	2	2	2	3	2	2	2	7	8
9	44	4	4	3	7	4	1	-	3	4	1	6	2	3	2
10	48	3	5	1	-	6	1	3	4	2	3	5	7	5	3
11	43	4	5	2	-	2	2	5	-	4	4	4	4	3	4
12	27	-	4	1	1	-	1	1	-	3	5	2	6	1	2
Total	441	35	33	22	28	29	29	33	26	37	33	41	35	35	25
Total	762	69	54	35	40	51	40	55	42	62	54	68	58	77	57

TABLE 10-9 TRESPASSERS CASUALTIES, BY LOCATION, NOT AT HRC, 2009

Location	Total		Fatal		Nonfatal		Age of Person			
	Cnt	%	Cnt	%	Cnt	%	Unk	< 16	16-21	> 21
Alongside of on-track equipmen	50	6.6	11	2.6	39	11.3	4	4	7	35
At work station	1	0.1	-	0.0	1	0.3	-	-	-	1
Beside track	131	17.2	49	11.8	82	23.8	18	9	18	86
Between tracks	150	19.7	109	26.1	41	11.9	14	4	20	112
Between cars/locomotives	18	2.4	8	1.9	10	2.9	2	-	3	13
In cab or on walkways of locom	2	0.3	1	0.2	1	0.3	-	-	-	2
In car	13	1.7	4	1.0	9	2.6	-	-	3	10
In/operating vehicle	16	2.1	3	0.7	13	3.8	-	-	1	15
In tunnel	2	0.3	2	0.5	-	0.0	-	-	-	2
On bridge/trestle	23	3.0	8	1.9	15	4.3	3	1	3	16
On highway-rail crossing	2	0.3	2	0.5	-	0.0	2	-	-	-
On side of car	13	1.7	1	0.2	12	3.5	1	1	-	11
On track	313	41.1	212	50.8	101	29.3	36	14	36	227
On end of car	3	0.4	1	0.2	2	0.6	-	-	1	2
On platform	4	0.5	1	0.2	3	0.9	-	-	-	4
On stairs	1	0.1	-	0.0	1	0.3	-	-	-	1
Under car	3	0.4	-	0.0	3	0.9	-	1	-	2
Under locomotive	1	0.1	-	0.0	1	0.3	1	-	-	-
Car, on top of (rail car)	3	0.4	1	0.2	2	0.6	-	1	1	1
On top of equipment, other tha	1	0.1	1	0.2	-	0.0	-	-	1	-
Depot	2	0.3	-	0.0	2	0.6	-	-	-	2
Other location	10	1.3	3	0.7	7	2.0	1	-	1	8
Total	762	100	417	100	345	100	82	35	95	550

TABLE 10-10 TRESPASSERS CASUALTIES, BY EVENT, NOT AT HRC, 2009

Location	Total		Fatal		Nonfatal		Age of Person			
	Cnt	%	Cnt	%	Cnt	%	Unk	< 16	16-21	> 21
Apprehending/removing from property	1	0.1	-	0.0	1	0.3	-	-	-	1
Assaulted by other	2	0.3	-	0.0	2	0.6	-	-	1	1
Collision - between on track equipment	2	0.3	2	0.5	-	0.0	1	-	-	1
Collision/impact - auto, truck, bus, van, etc.	24	3.1	10	2.4	14	4.1	-	-	-	24
Electrical shock due to contact with 3rd rail, c	2	0.3	2	0.5	-	0.0	-	-	1	1
Electrical shock from hand tool	1	0.1	-	0.0	1	0.3	-	-	-	1
Exposure to fumes - inhalation	1	0.1	1	0.2	-	0.0	-	-	-	1
Horseplay, practical joke, etc.	5	0.7	-	0.0	5	1.4	1	-	1	3
Lost balance	13	1.7	3	0.7	10	2.9	2	-	1	10
Missed handhold, grabiron, step, etc.	1	0.1	-	0.0	1	0.3	-	-	-	1
Other impacts - on track equipment	4	0.5	3	0.7	1	0.3	-	-	-	4
Pushed/shoved into/against	1	0.1	-	0.0	1	0.3	-	1	-	-
Pushed/shoved onto	1	0.1	1	0.2	-	0.0	-	-	-	1
Ran into on-track equipment	3	0.4	-	0.0	3	0.9	1	-	-	2
Ran into object/equipment	3	0.4	2	0.5	1	0.3	-	-	1	2
Rubbed, abraded, etc.	1	0.1	-	0.0	1	0.3	-	1	-	-
Shot	2	0.3	2	0.5	-	0.0	-	-	-	2
Slipped,fell,stumbled,etc. due to irregular surf	4	0.5	-	0.0	4	1.2	-	-	-	4
Slipped, fell, stumbled, etc. due to climatic co	1	0.1	-	0.0	1	0.3	-	-	-	1
Slipped,fell,stumbled,etc. due to object,ballast	8	1.0	1	0.2	7	2.0	2	-	-	6
Stepped on object	1	0.1	-	0.0	1	0.3	-	-	-	1
Struck by object	8	1.0	-	0.0	8	2.3	-	-	-	8
Struck by on-track equipment	551	72.3	369	88.5	182	52.8	59	23	69	400
Struck against object	11	1.4	2	0.5	9	2.6	2	-	3	6
Sudden/unexpected movement of on-track equipmen	4	0.5	-	0.0	4	1.2	1	-	2	1
Thrill seeking	9	1.2	-	0.0	9	2.6	-	3	1	5
Caught, crushed, pinched, other	6	0.8	-	0.0	6	1.7	-	-	2	4
On track equipment, other incidents	7	0.9	3	0.7	4	1.2	1	3	-	3
Slipped, fell, stumbled, other	59	7.7	5	1.2	54	15.7	4	2	11	42
Sudden, unexpected movement, other	4	0.5	1	0.2	3	0.9	-	1	-	3
Bumped	1	0.1	-	0.0	1	0.3	-	-	-	1
Blowing/falling debris	1	0.1	-	0.0	1	0.3	-	1	-	-
Caught Between Equipment	4	0.5	2	0.5	2	0.6	1	-	-	3
Other (describe in narrative)	16	2.1	8	1.9	8	2.3	7	-	2	7
Total	762	100	417	100	345	100	82	35	95	550

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
De	Derailment
EOD	Railroad employee on duty
Eqp	Equipment
Exp	Exposure
Ftl	Fatality
HRC	Highway-rail grade crossing
HWTS	Highway traffic signals
Hmn	Human factor
Incs	Incidents
Kld	Killed
Len	Length
Loco	Locomotive
Maint/Insp	Maintenance Inspection
MOW	Maintenance of way
Mtr	V Motor vehicle
Nonf	Nonfatal cases (injuries and occupational illnesses)
Othr	Other
Psg	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
Xing	Crossing

This page intentionally left blank

APPENDIX B

2007 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 periodically adjusted in order to keep the procedure matched with the current accident trends, the current number of open crossings, and the changes in the warning devices. The last recalculation and adjustment was made for Calendar Year 2005 and were used in the Procedure dated 2005.

The process for determining the three (3) new “normalizing constants” for 2007 is performed by making the sum of the calculated accident prediction values for all currently open public at-grade crossings for Calendar Years 2001–2005, as of December 2006, be equal to the sum of the *observed* number of 2006 accidents that occurred at the 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 (which is downward) for each of the three types of warning device categories, and adjusts for the current total number of open crossings (which is downward) and the accidents occurring at them, and any changes in warning devices at any of the crossings currently open.

The *observed* accidents result from those records in the accident data file that exist for only those crossings that are currently open. This means that the number of *observed* accidents for these public at-grade crossings will not be equal to the actual number of accidents that are reported for a specific year. While mismatched data records caused by inaccurate accident/inventory reporting are included, those accidents which occurred prior to the date of a warning device change are excluded, as well as any closed crossings.

The new constants were determined for the national model using all open public crossings in the National Inventory File as of December 2006. Those using the DOT Model should update their models by replacing the old constants with the new recalculated values. The “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 December 2007, these new constants will be in the 2007 PCAPS Computer Program and Internet version WBAPS located on the FRA Website at <http://safetydata.fra.dot.gov/officeofsafety/>. The table below lists the new and prior year constants. **There were no changes for 2008.**

ACCIDENT PREDICTION AND RESOURCE ALLOCATION PROCEDURE NORMALIZING CONSTANTS

WARNING DEVICE	NEW	PRIOR YEAR CONSTANTS						
GROUPS	2007	2005	2003	1998	1992	1990	1988	1986
(1) Passive	.6768	.6407	.6500	.7159	.8239	.9417	.8778	.8644
(2) Flashing Lights	.4605	.5233	.5001	.5292	.6935	.8345	.8013	.8887
(3) Gates	.6039	.6513	.5725	.4921	.6714	.8901	.8911	.8131

wpdata\ACPD\ACPD Constants 2007.wpd

This page intentionally left blank

APPENDIX C

ACCIDENTS/INCIDENTS REPORTED BY GROUP III RAILROADS, 2009

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]	1	-	1	-	-	-	-	-	-	1	-	1
Aberdeen, Carolina & Western RR [ACWR]	2	-	1	1	-	-	-	-	-	1	-	1
Abilene & Smokey Valley RR [AVSX]	-	-	-	-	-	-	-	-	-	-	-	-
Acadiana Rwy Co. [AKDN]	-	-	-	-	-	-	-	-	-	-	-	-
Adirondack Scenic RR [ADCX]	1	-	1	-	-	-	-	-	-	1	-	1
Adrian & Blissfield RR [ADBF]	1	-	1	-	-	-	-	-	-	1	-	1
Akron Barberton Cluster Rwy Co. [AB]	-	-	-	-	-	-	-	-	-	-	-	-
Alabama & Florida Rwy Co. [AF]	-	-	-	-	-	-	-	-	-	-	-	-
Alabama & Gulf Coast Rwy LLC [AGR]	5	-	-	2	-	-	3	-	-	-	-	-
Alabama & Tennessee River Rwy LLC [ATN]	7	1	1	2	-	-	3	-	-	2	1	1
Alabama RR Co., Inc. [ALAB]	-	-	-	-	-	-	-	-	-	-	-	-
Alabama Southern RR [ABS]	3	-	-	3	-	-	-	-	-	-	-	-
Alabama Warrior Rwy, LLC [ABWR]	-	-	-	-	-	-	-	-	-	-	-	-
Alameda Belt Line [ABL]	-	-	-	-	-	-	-	-	-	-	-	-
Alamo Gulf Coast RR Co. [AGCR]	-	-	-	-	-	-	-	-	-	-	-	-
Albany & Eastern RR Co. [AERC]	1	-	1	-	-	-	-	-	-	1	-	1
Albany Port RR [APRR]	-	-	-	-	-	-	-	-	-	-	-	-
Alexander RR Co. [ARC]	2	-	1	-	-	-	1	-	-	1	-	1
Aliquippa & Ohio River RR Co. [AOR]	-	-	-	-	-	-	-	-	-	-	-	-
Allegheny Valley RR Co. [AVR]	5	-	1	4	-	-	-	-	-	1	-	1
Alliance Term. RR LLC [ATR]	1	-	-	1	-	-	-	-	-	-	-	-
Altamont Commuter Express Authority [ACEX]	5	2	1	1	-	-	2	1	-	2	1	1
American Rail Dispatching Center [ARDJ]	-	-	-	-	-	-	-	-	-	-	-	-
Angelina & Neches River RR Co. [ANR]	2	-	1	-	-	-	1	-	-	1	-	1
Ann Arbor RR [AA]	-	-	-	-	-	-	-	-	-	-	-	-
Apache Rwy Co. [APA]	1	-	1	-	-	-	-	-	-	1	-	1
Appalachian & Ohio RR [AO]	5	-	2	1	-	-	2	-	-	2	-	2
Appanoose County Community RR Co. [APNC]	-	-	-	-	-	-	-	-	-	-	-	-
Arcade & Attica RR Corp. [ARA]	1	-	1	-	-	-	-	-	-	1	-	1
Arizona & California RR Co. [ARZC]	-	-	-	-	-	-	-	-	-	-	-	-
Arizona Central RR, Inc. [AZCR]	-	-	-	-	-	-	-	-	-	-	-	-
Arizona Eastern RR [AZER]	9	-	5	3	-	-	1	-	-	5	-	5
Arkansas & Missouri RR Co. [AM]	10	-	4	-	-	-	6	-	-	4	-	4
Arkansas Louisiana & Mississippi RR Co. [ALM]	1	-	-	-	-	-	1	-	-	-	-	-
Arkansas Midland RR Co., Inc. [AKMD]	16	-	8	6	-	-	2	-	-	8	-	8
Arkansas Southern RR [ARS]	4	-	-	3	-	-	1	-	-	-	-	-
Arkansas-Oklahoma RR Inc. [AOK]	1	-	-	1	-	-	-	-	-	-	-	-
Ashland Rwy Inc. [ASRY]	-	-	-	-	-	-	-	-	-	-	-	-
Ashtubula, Carson & Jefferson RR [ACJR]	-	-	-	-	-	-	-	-	-	-	-	-
Athens Line LLC, The [ABR]	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic & Western Rwy, L.P. [ATW]	-	-	-	-	-	-	-	-	-	-	-	-
Austin & Texas Central RR [ATCX]	-	-	-	-	-	-	-	-	-	-	-	-
Austin Western RR [AWRR]	3	1	1	1	-	-	1	1	-	1	-	1
Austin, Todd & Ladd RR Co. [ATLT]	-	-	-	-	-	-	-	-	-	-	-	-
B&H Rail Corp [BHX]	1	-	1	-	-	-	-	-	-	1	-	1
BG & CM RR [BGCM]	-	-	-	-	-	-	-	-	-	-	-	-
Ballard Term. RR Co LLC [BDTL]	-	-	-	-	-	-	-	-	-	-	-	-
Baton Rouge Southern RR [BRS]	1	-	-	1	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Batten Kill RR [BKRR]	2	-	1	1	-	-	-	-	-	1	-	1
Battleground, Yacolt & Chelatchie Prarie RR [BYCX]	-	-	-	-	-	-	-	-	-	-	-	-
Bauxite & Northern Rwy Co. [BXN]	-	-	-	-	-	-	-	-	-	-	-	-
Bay Coast RR [BCR]	2	-	2	-	-	-	-	-	-	2	-	2
Bay Colony RR [BCLR]	1	-	-	1	-	-	-	-	-	-	-	-
Bay Line RR, L.L.C., The [BAYL]	4	-	1	2	-	-	1	-	-	1	-	1
Bee Line RR, Inc. [BLRR]	-	-	-	-	-	-	-	-	-	-	-	-
Beech Mountain RR Co. [BEEM]	-	-	-	-	-	-	-	-	-	-	-	-
Belton Grandview and Kansas City RR Co. [BGKX]	-	-	-	-	-	-	-	-	-	-	-	-
Berkshire Scenic Rwy Museum, Inc. [BCRY]	-	-	-	-	-	-	-	-	-	-	-	-
Big Eagle Rail LLC [BGEX]	-	-	-	-	-	-	-	-	-	-	-	-
Big South Fork Scenic Rwy [BSFX]	-	-	-	-	-	-	-	-	-	-	-	-
Bighorn Divide & Wyoming RR, Inc. [BDW]	1	-	1	-	-	-	-	-	-	1	-	1
Birdsboro Materials/Haines & Kibblehouse [HKGX]	-	-	-	-	-	-	-	-	-	-	-	-
Birmingham Southern RR Co. [BS]	2	-	2	-	-	-	-	-	-	2	-	2
Black Hills Central RR [BHC]	-	-	-	-	-	-	-	-	-	-	-	-
Black River & Western RR [BRW]	-	-	-	-	-	-	-	-	-	-	-	-
Blacklands RR, The [BLR]	1	-	-	1	-	-	-	-	-	-	-	-
Blackwell Northern Gateway RR Co. [BNG]	-	-	-	-	-	-	-	-	-	-	-	-
Bloomer Shippers Connecting RR Co. [BLOL]	1	-	-	1	-	-	-	-	-	-	-	-
Blue Ridge Scenic Rwy [BLRX]	-	-	-	-	-	-	-	-	-	-	-	-
Boise Valley RR, Inc. [BVRR]	-	-	-	-	-	-	-	-	-	-	-	-
Boone Scenic Valley [BSVY]	4	-	4	-	-	-	-	-	-	4	-	4
Boot Hill and Western RR [BHWY]	-	-	-	-	-	-	-	-	-	-	-	-
Border Pacific RR [BOP]	-	-	-	-	-	-	-	-	-	-	-	-
Brandon Corp. [BRAN]	-	-	-	-	-	-	-	-	-	-	-	-
Brandywine Scenic RR Co. [BSRX]	2	-	2	-	-	-	-	-	-	2	-	2
Brandywine Valley RR Co. [BVRV]	-	-	-	-	-	-	-	-	-	-	-	-
Brownsville & Rio Grande International RR [BRG]	4	-	4	-	-	-	-	-	-	4	-	4
Buckingham Branch RR Co. [BB]	7	-	3	2	-	-	2	-	-	3	-	3
Buffalo Southern RR, Inc. [BSOR]	-	-	-	-	-	-	-	-	-	-	-	-
Burlington Junction Rwy [BJRY]	-	-	-	-	-	-	-	-	-	-	-	-
Byesville Scenic Rwy [BYSR]	-	-	-	-	-	-	-	-	-	-	-	-
C & NC RR Corp. [CNUR]	-	-	-	-	-	-	-	-	-	-	-	-
CHICAGO, FT. WAYNE & EASTERN [CFE]	4	-	1	2	-	-	1	-	-	1	-	1
CMC RR Inc. [CMC]	6	-	1	5	-	-	-	-	-	1	-	1
Caddo Valley RR Co. [CVYR]	2	-	2	-	-	-	-	-	-	2	-	2
Caldwell County RR Co. [CWCY]	-	-	-	-	-	-	-	-	-	-	-	-
Calera & Shelby RR & Museum, Inc. [CSMX]	1	-	1	-	-	-	-	-	-	1	-	1
California Northern RR Co. [CFNR]	3	-	2	1	-	-	1	-	1	1	-	1
California State RR Museum [CSRM]	-	-	-	-	-	-	-	-	-	-	-	-
California Western RR [CWR]	-	-	-	-	-	-	-	-	-	-	-	-
Camp Chase Industrial RR Corp [CCRA]	-	-	-	-	-	-	-	-	-	-	-	-
Caney Fork & Western RR [CFWR]	2	-	2	-	-	-	-	-	-	2	-	2
Canon City And Royal Gorge RR, LLC [CRRX]	7	-	7	-	-	-	-	-	-	7	-	7
Canton RR Co. [CTN]	-	-	-	-	-	-	-	-	-	-	-	-
Cape Cod Central [CCCX]	-	-	-	-	-	-	-	-	-	-	-	-
Cape May Seashore Lines, Inc. [CMSX]	-	-	-	-	-	-	-	-	-	-	-	-
Capital Metropolitan Transportation Authority [CMTY]	1	-	1	-	-	-	-	-	-	1	-	1
Cargill Inc Iowa Falls [CGIF]	-	-	-	-	-	-	-	-	-	-	-	-
Cargill Inc. GOSCNA [CGIV]	-	-	-	-	-	-	-	-	-	-	-	-
Carolina Coastal Rwy, Inc. [CLNA]	2	-	1	-	-	-	2	-	1	-	-	-
Carolina Southern RR Co., The [CALA]	1	-	-	1	-	-	-	-	-	-	-	-
Carrizo Gorge Rwy Inc. [CZRY]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Carthage, Knightstown & Shirley RR [CKSI]	2	-	-	-	-	-	2	-	-	-	-	-
Cascade & Columbia River RR [CSCD]	-	-	-	-	-	-	-	-	-	-	-	-
Cass Scenic [CASS]	10	-	10	-	-	-	-	-	-	10	-	10
Catskill Mountain RR [CMRR]	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Rapids & Iowa City Rwy Co. [CIC]	2	-	1	1	-	-	-	-	-	1	-	1
Central California Traction Co. [CCT]	4	-	-	2	-	-	2	-	-	-	-	-
Central Illinois RR Co. [CIRY]	-	-	-	-	-	-	-	-	-	-	-	-
Central Indiana & Western RR Co. [CEIW]	1	-	-	-	-	-	1	-	-	-	-	-
Central Midland Rwy Co. [CMR]	-	-	-	-	-	-	-	-	-	-	-	-
Central Montana RR [CM]	-	-	-	-	-	-	-	-	-	-	-	-
Central Oregon & Pacific RR, Inc. [CORP]	2	-	-	1	-	-	1	-	-	-	-	-
Central RR Co. Of Indiana [CIND]	3	1	1	1	-	-	-	-	-	2	1	1
Central RR Co. Of Indianapolis [CERA]	-	-	-	-	-	-	-	-	-	-	-	-
Central Washington RR Co. [CWA]	-	-	-	-	-	-	-	-	-	-	-	-
Charlotte Southern RR Co. [CHS]	-	-	-	-	-	-	-	-	-	-	-	-
Chattahoochee Bay RR [CHAT]	-	-	-	-	-	-	-	-	-	-	-	-
Chattahoochee Industrial RR [CIRR]	-	-	-	-	-	-	-	-	-	-	-	-
Chattooga & Chickamauga RR [CCKY]	-	-	-	-	-	-	-	-	-	-	-	-
Chehalis & Centralia RR Association [CHCX]	1	-	-	-	-	-	1	-	-	-	-	-
Chesapeake & Albemarle RR Co. [CA]	-	-	-	-	-	-	-	-	-	-	-	-
Chesapeake & Indiana RR [CKIN]	-	-	-	-	-	-	-	-	-	-	-	-
Chestnut Ridge Rwy Co. [CHR]	-	-	-	-	-	-	-	-	-	-	-	-
Chicago Port RR Co. [CPC]	-	-	-	-	-	-	-	-	-	-	-	-
Chicago Rail Link [CRL]	8	-	2	5	-	-	1	-	-	2	-	2
Chicago Southshore & South Bend RR [CSS]	3	-	2	-	-	-	1	-	-	2	-	2
Chicago Term. RR [CTM]	-	-	-	-	-	-	-	-	-	-	-	-
Chicago-Chemung RR Corp. [CCUO]	-	-	-	-	-	-	-	-	-	-	-	-
Cimarron Valley RR L C [CVR]	1	-	1	-	-	-	-	-	-	1	-	1
Cincinnati Rwy Co., The [CNRX]	-	-	-	-	-	-	-	-	-	-	-	-
City Of Prineville Rwy [COP]	-	-	-	-	-	-	-	-	-	-	-	-
City of Keokuk [KEOK]	-	-	-	-	-	-	-	-	-	-	-	-
Claremont Concord RR Corp. [CCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Clarendon & Pittsford RR Co. [CLP]	3	-	2	-	-	-	1	-	-	2	-	2
Cleveland Commercial RR Co., LLC [CCRL]	1	-	-	-	-	-	1	-	-	-	-	-
Cleveland Works Rwy Co. [CWRO]	3	-	1	-	-	-	2	-	-	1	-	1
Clinton Term. RR Co. [CTR]	-	-	-	-	-	-	-	-	-	-	-	-
Cloquet Term. RR Co., Inc. [CTRR]	2	-	2	-	-	-	-	-	-	2	-	2
Colorado & Wyoming Rwy Co. [CW]	3	-	3	-	-	-	-	-	-	3	-	3
Columbia & Cowlitz Rwy Co. [CLC]	-	-	-	-	-	-	-	-	-	-	-	-
Columbia Basin RR Co. Inc. [CBRW]	2	-	2	-	-	-	-	-	-	2	-	2
Columbia Business Center [CBCX]	-	-	-	-	-	-	-	-	-	-	-	-
Columbia Term. RR Co. [CT]	2	-	2	-	-	-	-	-	-	2	-	2
Columbus & Greenville Rwy Co. [CAGY]	2	-	1	1	-	-	1	-	1	-	-	-
Columbus & Ohio River RR [CUOH]	9	-	5	4	-	-	2	-	2	3	-	3
Commonwealth Rwy, Inc. [CWRY]	1	-	-	-	-	-	1	-	-	-	-	-
Conecuh Valley RR [COEH]	1	-	-	-	-	-	1	-	-	-	-	-
Connecticut Department Of Transportation [CDOT]	1	-	1	-	-	-	-	-	-	1	-	1
Connecticut Southern RR Inc. [CSO]	1	-	1	-	-	-	-	-	-	1	-	1
Consolidated Grain & Barge Co. [CGBX]	1	-	1	-	-	-	-	-	-	1	-	1
Conway Scenic RR [CONW]	2	-	2	-	-	-	-	-	-	2	-	2
Coopersville & Marne RR [CPMY]	-	-	-	-	-	-	-	-	-	-	-	-
Copper Basin Rwy, Inc. [CBRY]	-	-	-	-	-	-	-	-	-	-	-	-
Corpus Christi Term. RR Inc. [CCPN]	2	-	1	1	-	-	-	-	-	1	-	1
Crab Orchard & Egyptian RR [COER]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Cumbres & Toltec Scenic RR [CTSR]	4	-	2	1	-	-	2	-	1	1	-	1
Cuyahoga Valley Scenic Rwy [CVSX]	3	-	4	-	-	-	2	-	3	1	-	1
D & I RR Co. [DAIR]	1	-	1	-	-	-	1	-	1	-	-	-
Dakota Northern RR, Inc. [DN]	1	-	1	-	-	-	-	-	-	1	-	1
Dakota Southern Rwy Co. [DSRC]	-	-	-	-	-	-	-	-	-	-	-	-
Dakota, Missouri Valley & Western RR, Inc. [DMVW]	6	-	2	2	-	-	2	-	-	2	-	2
Dallas, Garland & Northeastern RR [DGNO]	4	-	1	2	-	-	1	-	-	1	-	1
Dardanelle & Russellville RR [DR]	-	-	-	-	-	-	-	-	-	-	-	-
DeQueen & Eastern RR Co. [DQE]	2	-	1	1	-	-	-	-	-	1	-	1
Decatur Junction Rwy Co. [DT]	-	-	-	-	-	-	-	-	-	-	-	-
Delaware & Ulster Rail Ride [DURR]	-	-	-	-	-	-	-	-	-	-	-	-
Delaware Coast Line RR [DCLR]	-	-	-	-	-	-	-	-	-	-	-	-
Delaware Lackawanna RR [DL]	2	1	1	-	-	-	-	-	-	2	1	1
Delray Connecting RR Co. [DC]	-	-	-	-	-	-	-	-	-	-	-	-
Delta Southern RR Co. [DSRR]	-	-	-	-	-	-	-	-	-	-	-	-
Delta Valley & Southern Rwy Co. [DVS]	-	-	-	-	-	-	-	-	-	-	-	-
Denver & Rio Grande RR Co. [DRGR]	-	-	-	-	-	-	-	-	-	-	-	-
Denver Rock Island RR [DRIR]	1	-	1	-	-	-	-	-	-	1	-	1
Depew, Lancaster & Western RR Co., Inc. [DLWR]	1	-	1	-	-	-	-	-	-	1	-	1
Detroit Connecting RR [DCON]	-	-	-	-	-	-	-	-	-	-	-	-
Detroit Edison [DE]	3	-	3	-	-	-	-	-	-	3	-	3
Dubois County RR [DCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Durango & Silverton Narrow Gauge RR Co. [DSNG]	28	-	28	-	-	-	-	-	-	28	-	28
East Brookfield & Spencer RR LLC [EBSR]	-	-	-	-	-	-	-	-	-	-	-	-
East Camden & Highland RR Co. [EACH]	-	-	-	-	-	-	-	-	-	-	-	-
East Chattanooga Belt Rwy Co. [ECTB]	-	-	-	-	-	-	-	-	-	-	-	-
East Cooper & Berkeley RR [ECBR]	-	-	-	-	-	-	-	-	-	-	-	-
East Erie Commercial RR [EEC]	-	-	-	-	-	-	-	-	-	-	-	-
East Jersey RR & Term. Co. [EJR]	-	-	-	-	-	-	-	-	-	-	-	-
East Penn RR LLC [ESPN]	8	-	3	-	-	-	6	-	1	2	-	2
East Tennessee Rwy, L.P. [ETRY]	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Alabama Rwy Co. [EARY]	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Idaho RR [EIRR]	3	-	1	1	-	-	1	-	-	1	-	1
Eastern Illinois RR Co. [EIRC]	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Maine RR Co. [EMRY]	-	-	-	-	-	-	-	-	-	-	-	-
Eastern Washington Gateway RR Co. [EWG]	1	-	1	-	-	-	-	-	-	1	-	1
Econo Rail Corp. [TXTX]	5	-	1	4	-	-	-	-	-	1	-	1
Effingham RR Co. [EFRR]	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado & Wesson Rwy Co. [EDW]	-	-	-	-	-	-	-	-	-	-	-	-
Elk River RR, Inc. [ELKR]	-	-	-	-	-	-	-	-	-	-	-	-
Ellis and Eastern Co. [EERZ]	-	-	-	-	-	-	-	-	-	-	-	-
Erie Western Rwy [EWR]	-	-	-	-	-	-	-	-	-	-	-	-
Escalante Western Rwy [ESWR]	-	-	-	-	-	-	-	-	-	-	-	-
Escanaba & Lake Superior RR Co. [ELS]	3	-	2	-	-	-	1	-	-	2	-	2
Everett RR Co. [EV]	-	-	-	-	-	-	-	-	-	-	-	-
Exel Switching Service [ESSV]	1	-	-	1	-	-	-	-	-	-	-	-
Falls Road RR Co. Inc. [FRR]	-	-	-	-	-	-	-	-	-	-	-	-
Farmrail Corp. [FMRC]	5	-	3	2	-	-	-	-	-	3	-	3
Fayette Central RR [FCRV]	-	-	-	-	-	-	-	-	-	-	-	-
Fillmore And Western [FMWX]	-	-	-	-	-	-	-	-	-	-	-	-
Finger Lakes Rwy Corp. [FGLK]	6	-	1	1	-	-	4	-	-	1	-	1
First Coast RR Inc. [FCRD]	-	-	-	-	-	-	-	-	-	-	-	-
Flats Industrial RR [FIR]	-	-	-	-	-	-	-	-	-	-	-	-
Florida Central RR Co. [FCEN]	4	-	4	-	-	-	-	-	-	4	-	4

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Florida Midland RR Co., Inc. [FMID]	-	-	-	-	-	-	-	-	-	-	-	-
Florida Northern RR Co., Inc. [FNOR]	3	-	3	-	-	-	-	-	-	3	-	3
Florida Rail Adventures [FRAX]	-	-	-	-	-	-	-	-	-	-	-	-
Flying J / Big West Oil [FLYJ]	-	-	-	-	-	-	-	-	-	-	-	-
Fordyce & Princeton RR Co. [FP]	-	-	-	-	-	-	-	-	-	-	-	-
Fore River Transportation Corp. [FRVT]	-	-	-	-	-	-	-	-	-	-	-	-
Fort Smith RR Co. [FSR]	-	-	-	-	-	-	-	-	-	-	-	-
Fort Worth & Western RR [FWWR]	14	-	7	1	-	-	7	-	1	6	-	6
Fremont & Elkhorn Valley RR [FEVR]	-	-	-	-	-	-	-	-	-	-	-	-
Frontier Rail Switch Service [FRRV]	-	-	-	-	-	-	-	-	-	-	-	-
Fulton County RR Co. [FC]	-	-	-	-	-	-	-	-	-	-	-	-
Fulton County Rwy [FCR]	3	-	1	2	-	-	-	-	-	1	-	1
GITM Intermodal Yard [GIMY]	1	-	-	1	-	-	-	-	-	-	-	-
GITM Savannah Wharf Yard [GSWY]	1	-	-	1	-	-	-	-	-	-	-	-
Galveston RR, L.P. [GVSR]	1	-	-	1	-	-	-	-	-	-	-	-
Garden City Western Rwy Co. [GCW]	1	-	1	-	-	-	-	-	-	1	-	1
Gary Rwy Co. [GRW]	8	-	3	5	-	-	-	-	-	3	-	3
Georgetown Loop RR [GLRX]	1	-	1	-	-	-	-	-	-	1	-	1
Georgetown RR Co. [GRR]	-	-	-	-	-	-	-	-	-	-	-	-
Georgia & Florida Rwy [GFRR]	4	-	1	3	-	-	-	-	-	1	-	1
Georgia Central Rwy, L.P. [GC]	5	-	2	-	-	-	3	-	-	2	-	2
Georgia Midland RR, Inc. [GMR]	1	-	-	-	-	-	1	-	-	-	-	-
Georgia Northeastern RR Co. [GNRR]	4	-	3	1	-	-	-	-	-	3	-	3
Georgia Southwestern RR Inc. [GSWR]	2	-	2	1	-	-	1	-	2	-	-	-
Georgia Woodlands RR [GWRC]	1	-	1	-	-	-	-	-	-	1	-	1
Gettysburg and Northern RR [GET]	1	-	1	-	-	-	-	-	-	1	-	1
Giant Cement [GICX]	-	-	-	-	-	-	-	-	-	-	-	-
Golden Isles Term. RR, Inc. [GITM]	-	-	-	-	-	-	-	-	-	-	-	-
Golden Triangle RR Co. [GTRA]	1	-	1	-	-	-	-	-	-	1	-	1
Grafton & Upton RR Co. [GU]	-	-	-	-	-	-	-	-	-	-	-	-
Grainbelt Corp. [GNBC]	6	-	3	2	-	-	1	-	-	3	-	3
Grand Canyon Rwy [GCRX]	15	-	15	-	-	-	-	-	-	15	-	15
Grand Elk RR, LLC [GDLK]	2	-	1	-	-	-	1	-	-	1	-	1
Grand Rapids Eastern RR Inc. [GR]	-	-	-	-	-	-	-	-	-	-	-	-
Grapevine Vintage RR [GRVV]	1	-	-	-	-	-	1	-	-	-	-	-
Great Lakes Central RR [GLC]	1	-	1	-	-	-	-	-	-	1	-	1
Great Northwest RR, Inc. [GRNW]	-	-	-	-	-	-	-	-	-	-	-	-
Great Smoky Mountains Rwy, The [GSM]	7	-	7	-	-	-	-	-	-	7	-	7
Great Walton RR Co. [GRWR]	1	-	-	1	-	-	-	-	-	-	-	-
Great Western Rwy of Colorado, LLC [GWR]	3	-	3	-	-	-	-	-	-	3	-	3
Green Mountain RR Corp. [GMRC]	-	-	-	-	-	-	-	-	-	-	-	-
Greenville & Western Rwy Co. LLC [GRLW]	-	-	-	-	-	-	-	-	-	-	-	-
Grenada Rwy LLC [GRYR]	2	-	-	-	-	-	2	-	-	-	-	-
Gulf, Colorado San Saba Rwy Corp. [GCSR]	1	-	-	1	-	-	-	-	-	-	-	-
Hampton & Branchville RR Co. [HB]	-	-	-	-	-	-	-	-	-	-	-	-
Hartwell RR Co. [HRT]	2	-	-	-	-	-	2	-	-	-	-	-
Hawaiian Rwy Society [HRSX]	-	-	-	-	-	-	-	-	-	-	-	-
Heart of Georgia RR, Inc. [HOG]	-	-	-	-	-	-	-	-	-	-	-	-
Heber Valley RR Utah [HVRX]	6	-	4	1	-	-	1	-	-	4	-	4
Heritage RR Corp [HR]	1	-	1	-	-	-	1	-	1	-	-	-
High Point, Thomasville & Denton RR Co. [HPTD]	2	-	-	1	-	-	1	-	-	-	-	-
Hiwassee River RR [HWRV]	-	-	-	-	-	-	-	-	-	-	-	-
Hollis & Eastern RR Co. [HE]	-	-	-	-	-	-	-	-	-	-	-	-
Hondo Rwy LLC [HHRV]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Honey Creek RR, Inc. [HCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Hoosier Southern RR [HOS]	-	-	-	-	-	-	-	-	-	-	-	-
Hoosier Valley RR Museum [HVMV]	1	-	-	-	-	-	1	-	-	-	-	-
Housatonic RR Co., Inc. [HRRC]	5	-	3	1	-	-	1	-	-	3	-	3
Huckleberry RR [HRR]	-	-	-	-	-	-	-	-	-	-	-	-
Huntsville & Madison county RR Authority [HMCR]	-	-	-	-	-	-	-	-	-	-	-	-
Huron & Eastern Rwy [HESR]	8	1	3	1	-	-	4	1	-	3	-	3
ITS Technologies & Logistics, LLC. [ITSL]	1	-	-	1	-	-	-	-	-	-	-	-
Idaho Northern & Pacific RR Co. [INPR]	3	-	2	-	-	-	1	-	-	2	-	2
Illinois & Midland RR Inc. [IMRR]	4	-	1	2	-	-	1	-	-	1	-	1
Illinois Rwy Museum [IRYM]	-	-	-	-	-	-	-	-	-	-	-	-
Illinois Rwy, Inc. [IR]	1	-	-	1	-	-	-	-	-	-	-	-
Illinois Western RR Co. [ILW]	-	-	-	-	-	-	-	-	-	-	-	-
Indian Creek RR Co. [ICRK]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana & Ohio Rwy [IORY]	6	-	3	2	-	-	1	-	-	3	-	3
Indiana Eastern RR LLC [IERR]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana Northeastern RR Co., Incorporated [IN]	2	-	2	-	-	-	-	-	-	2	-	2
Indiana Rwy Museum [IRM]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana Southern RR Co., Inc. [ISRR]	2	-	2	-	-	-	1	-	1	1	-	1
Indiana Southwestern Rwy Co. [ISW]	-	-	-	-	-	-	-	-	-	-	-	-
Indiana Transportation Museum [ITMZ]	-	-	-	-	-	-	-	-	-	-	-	-
Industrial Rwy Switching & Services [IRSS]	-	-	-	-	-	-	-	-	-	-	-	-
Inland Lakes Rwy [ILRV]	1	-	1	-	-	-	-	-	-	1	-	1
Iowa Northern Rwy Co. [IANR]	10	-	5	3	-	-	2	-	-	5	-	5
Iowa River RR Inc [IARR]	-	-	-	-	-	-	-	-	-	-	-	-
Iowa Traction RR Co. [IATR]	-	-	-	-	-	-	-	-	-	-	-	-
Jacintoport International, LP [JCIV]	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson Warrior RR [JEFW]	-	-	-	-	-	-	-	-	-	-	-	-
Johnson County Airport Commission [JCAX]	-	-	-	-	-	-	-	-	-	-	-	-
Joppa & Eastern RR Co. [JERX]	-	-	-	-	-	-	-	-	-	-	-	-
Juniata Valley RR Co. [JVRR]	-	-	-	-	-	-	-	-	-	-	-	-
K.W.T. Rwy, Inc. [KWT]	-	-	-	-	-	-	-	-	-	-	-	-
Kankakee, Beaverville & Southern RR Co. [KBSR]	2	-	2	-	-	-	2	-	2	-	-	-
Kansas City Term. Rwy Co. [KCT]	2	-	-	2	-	-	-	-	-	-	-	-
Kansas and Oklahoma RR [KO]	7	-	3	2	-	-	4	-	2	1	-	1
Kaw River RR [KAW]	1	-	-	-	-	-	1	-	-	-	-	-
Kendallville Term. Rwy Co. [KTR]	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky & Tennessee Rwy [KT]	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky Rwy Museum [KRM]	1	-	2	-	-	-	-	-	-	1	-	2
Keokuk Junction Rwy [KJRY]	5	-	-	4	-	-	1	-	-	-	-	-
Kettle Falls International Rwy LLC [KFR]	4	-	2	2	-	-	-	-	-	2	-	2
Kiamichi RR Co. LLC [KRR]	6	-	1	5	-	-	1	-	1	-	-	-
Kiski Junction RR [KJR]	-	-	-	-	-	-	-	-	-	-	-	-
Klamath Northern Rwy Co. [KNOR]	-	-	-	-	-	-	-	-	-	-	-	-
Knoxville & Holston River RR Co., Inc. [KXHR]	4	-	3	1	-	-	-	-	-	3	-	3
Kosciusko And Southwestern Rwy [KSRY]	-	-	-	-	-	-	-	-	-	-	-	-
Kyle RR Co. [KYLE]	6	-	-	5	-	-	1	-	-	-	-	-
Lahaina Kaanapoli And Pacific [LKP]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Charlse Harbor District [LCHD]	-	-	-	-	-	-	-	-	-	-	-	-
Lake County RR [LCR]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Michigan & Indiana RR Co. [LMIC]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Shore Rwy [LSRX]	-	-	-	-	-	-	-	-	-	-	-	-
Lake State Rwy Co. [LSRC]	11	-	5	5	-	-	1	-	-	5	-	5
Lake Superior & Ishpeming RR Co. [LSI]	2	-	2	-	-	-	-	-	-	2	-	2

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Lake Superior & Mississippi RR [LSMR]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Superior RR Museum [LSMT]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Term. RR Co. [LT]	-	-	-	-	-	-	-	-	-	-	-	-
Lake Whatcom Rwy [LWAT]	-	-	-	-	-	-	-	-	-	-	-	-
Lancaster & Chester Rwy Co. [LC]	2	-	1	1	-	-	-	-	-	1	-	1
Landisville RR, LLC [LVR]	-	-	-	-	-	-	-	-	-	-	-	-
Laona & Northern Rwy [LNO]	-	-	-	-	-	-	-	-	-	-	-	-
Lapree Industrial RR [LIRR]	-	-	-	-	-	-	-	-	-	-	-	-
Laurinburg & Southern RR Co. [LRS]	-	-	-	-	-	-	-	-	-	-	-	-
Leadville, Colorado & Southern RR, Co. [LCSR]	-	-	-	-	-	-	-	-	-	-	-	-
Lehigh Rwy, LLC [LRWY]	-	-	-	-	-	-	-	-	-	-	-	-
Lehigh Valley Rail Management [LVRX]	-	-	-	-	-	-	-	-	-	-	-	-
Litchfield Industrial RR [LFIZ]	-	-	-	-	-	-	-	-	-	-	-	-
Little Kanawha River Rail [LKRR]	-	-	-	-	-	-	-	-	-	-	-	-
Little River RR [LRR]	-	-	-	-	-	-	-	-	-	-	-	-
Little Rock & Western Rwy, L.P. [LRWN]	-	-	-	-	-	-	-	-	-	-	-	-
Little Rock Port RR Co. [LRPA]	1	-	1	-	-	-	1	-	1	-	-	-
Livonia, Avon & Lakeville RR Corp. [LAL]	-	-	-	-	-	-	-	-	-	-	-	-
Lodestar Logistics [LDLV]	-	-	-	-	-	-	-	-	-	-	-	-
Logansport & Eel River Short Line Co., Inc. [LER]	-	-	-	-	-	-	-	-	-	-	-	-
Lone Star Industries [LSIZ]	1	-	1	-	-	-	-	-	-	1	-	1
Longview Switching [LS]	1	-	-	-	-	-	1	-	-	-	-	-
Los Angeles County Metropolitan Trans Authority [LACZ]	5	2	1	-	-	-	5	2	1	-	-	-
Louisiana & Delta RR [LDRR]	4	-	1	2	-	-	2	-	1	-	-	-
Louisiana & North West RR Co. [LNW]	1	-	1	-	-	-	-	-	-	1	-	1
Louisiana Southern [LAS]	9	-	1	4	-	-	4	-	-	1	-	1
Louisville & Indiana RR Co. [LIRC]	2	-	-	1	-	-	1	-	-	-	-	-
Louisville & Wadley Rwy Co. [LW]	-	-	-	-	-	-	-	-	-	-	-	-
Louisville, New Albany & Corydon RR [LNAL]	-	-	-	-	-	-	-	-	-	-	-	-
Lowville & Beaver River RR Co. [LBR]	-	-	-	-	-	-	-	-	-	-	-	-
Luxapalila Valley RR Inc. [LXVR]	-	-	-	-	-	-	-	-	-	-	-	-
Luzerene & Susquehanna Rwy Co. [LSX]	-	-	-	-	-	-	-	-	-	-	-	-
Lycoming Valley RR Co. [LVRR]	-	-	-	-	-	-	-	-	-	-	-	-
M & B RR LLC [MNBR]	3	-	-	1	-	-	2	-	-	-	-	-
Madison RR Division [CMPA]	-	-	-	-	-	-	-	-	-	-	-	-
Magma Arizona RR Co. [MAA]	-	-	-	-	-	-	-	-	-	-	-	-
Mahoning Valley RR Co. [MVRY]	-	-	-	-	-	-	-	-	-	-	-	-
Maine Eastern RR [MERR]	-	-	-	-	-	-	-	-	-	-	-	-
Manufacturers' Junction Rwy Co. [MJ]	-	-	-	-	-	-	-	-	-	-	-	-
Manufacturers' Rwy Co. [MRS]	4	-	4	-	-	-	-	-	-	4	-	4
Marquette Rail LLC [MQT]	6	1	4	-	-	-	1	-	-	5	1	4
Maryland & Delaware RR Co. [MDDE]	2	-	1	-	-	-	1	-	-	1	-	1
Maryland Midland Rwy, Inc. [MMID]	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts Central RR Corp. [MCER]	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts Coastal RR LLC [MCRL]	-	-	-	-	-	-	-	-	-	-	-	-
Massena Term. RR Co. [MSTR]	-	-	-	-	-	-	-	-	-	-	-	-
Maumee & Western RR Corp. [MAW]	-	-	-	-	-	-	-	-	-	-	-	-
Mccloud Rwy Co. [MCR]	-	-	-	-	-	-	-	-	-	-	-	-
Mckeesport Connecting RR Co. [MKC]	-	-	-	-	-	-	-	-	-	-	-	-
Meeker Southern RR [MSN]	-	-	-	-	-	-	-	-	-	-	-	-
Meridian Southern Rwy LLC [MDS]	2	-	-	2	-	-	-	-	-	-	-	-
Michigan Air-Line Rwy Co. [MAL]	-	-	-	-	-	-	-	-	-	-	-	-
Michigan Shore RR [MS]	-	-	-	-	-	-	-	-	-	-	-	-
Michigan Southern RR Co., Inc. [MSO]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Michigan State Trust For Rwy Preservation [MSTP]	-	-	-	-	-	-	-	-	-	-	-	-
Mid-Continent Rwy [MCRY]	1	-	1	-	-	-	-	-	-	1	-	1
Mid-Michigan RR Co. [MMRR]	-	-	-	-	-	-	-	-	-	-	-	-
Middletown & Hummelstown RR Co. [MIDH]	1	-	1	-	-	-	-	-	-	1	-	1
Middletown & New Jersey RR LLC [MNJ]	-	-	-	-	-	-	-	-	-	-	-	-
Midlands Rwy [MDRY]	1	-	1	-	-	-	1	-	1	-	-	-
Milford-Bennington RR Co. [MBRX]	1	-	-	-	-	-	1	-	-	-	-	-
Minnesota Commercial Rwy [MNNR]	14	-	10	-	-	-	4	-	-	10	-	10
Minnesota Northern RR Inc. [MNN]	1	1	-	-	-	-	1	1	-	-	-	-
Minnesota Prairie Line, Inc. [MPLI]	1	-	-	1	-	-	-	-	-	-	-	-
Minnesota Southern Rwy, Inc. [MSWY]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota Transportation Museum [MNTX]	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota, Dakota & Western Rwy Co. [MDW]	3	-	1	1	-	-	1	-	-	1	-	1
Mission Mountain RR [MMT]	1	-	-	-	-	-	1	-	-	-	-	-
Mississippi Central RR Co. [MSCI]	1	-	-	1	-	-	-	-	-	-	-	-
Mississippi Export RR Co. [MSE]	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi Southern RR [MSR]	4	-	-	4	-	-	-	-	-	-	-	-
Mississippi Tennessee RR LLC [MTNR]	-	-	-	-	-	-	-	-	-	-	-	-
Mississippian Rwy Cooperative, Inc. [MSRW]	-	-	-	-	-	-	-	-	-	-	-	-
Missouri & Northern Arkansas RR Co., Inc. [MNA]	8	-	5	1	-	-	3	-	1	4	-	4
Missouri & Valley Park RR Corp [MVP]	-	-	-	-	-	-	-	-	-	-	-	-
Missouri North Central RR [MNC]	-	-	-	-	-	-	-	-	-	-	-	-
Modesto & Empire Traction Co. [MET]	5	-	3	-	-	-	2	-	-	3	-	3
Modoc Northern RR Co. [MNRR]	-	-	-	-	-	-	-	-	-	-	-	-
Mohawk, Adirondack & Northern RR Corp. [MHWA]	-	-	-	-	-	-	-	-	-	-	-	-
Monticello Rwy Museum [MRMZ]	-	-	-	-	-	-	-	-	-	-	-	-
Montreal, Maine and Atlantic Rwy, Ltd. [MMA]	6	-	3	2	-	-	1	-	-	3	-	3
Morehead & South Fork RR Co. Inc. [MHSE]	-	-	-	-	-	-	-	-	-	-	-	-
Morristown & Erie Rwy, Inc. [ME]	2	-	2	-	-	-	-	-	-	2	-	2
Morton Buildings [MTBD]	-	-	-	-	-	-	-	-	-	-	-	-
Moscow, Camden & San Augustine RR [MCSA]	-	-	-	-	-	-	-	-	-	-	-	-
Motive Power - Houston [MOPH]	-	-	-	-	-	-	-	-	-	-	-	-
Mount Rainier Scenic RR [MRSR]	1	-	1	-	-	-	-	-	-	1	-	1
Mount Vernon Term. Rwy, Inc. [MVT]	-	-	-	-	-	-	-	-	-	-	-	-
Municipality Of East Troy [METW]	-	-	-	-	-	-	-	-	-	-	-	-
Muskogee City-County Port Authority [MCCP]	1	-	-	-	-	-	1	-	-	-	-	-
N C Transportation Museum Foundation [NCMX]	1	-	1	-	-	-	-	-	-	1	-	1
Napa Valley RR [NVRN]	-	-	-	-	-	-	-	-	-	-	-	-
Nash County RR [NCYR]	-	-	-	-	-	-	-	-	-	-	-	-
Nashville & Eastern RR Corp [NERR]	4	1	6	-	-	-	1	1	1	3	-	5
Nashville & Western RR Corp. [NWR]	-	-	-	-	-	-	-	-	-	-	-	-
Natchez Rwy LLC [NTZR]	-	-	-	-	-	-	-	-	-	-	-	-
National Switching Services [NSWS]	-	-	-	-	-	-	-	-	-	-	-	-
Naugatuck RR Co. Inc. [NAUG]	-	-	-	-	-	-	-	-	-	-	-	-
Nebkota Rwy, Inc. [NRI]	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska Central RR [NCRC]	2	-	2	-	-	-	-	-	-	2	-	2
Nebraska Northeastern Rwy Co. [NENE]	1	-	1	-	-	-	-	-	-	1	-	1
Nebraska, Kansas, Colorado Railnet [NKCR]	6	-	2	2	-	-	2	-	-	2	-	2
Nevada Comm. for the Recon of the V&T Rwy [VTRW]	1	-	1	-	-	-	-	-	-	1	-	1
Nevada Northern Rwy [NNRX]	-	-	-	-	-	-	-	-	-	-	-	-
Nevada Southern Rwy [NVSU]	-	-	-	-	-	-	-	-	-	-	-	-
New Castle Industrial RR [NCIR]	1	-	1	-	-	-	-	-	-	1	-	1
New England Central RR [NECR]	11	-	4	3	-	-	6	-	2	2	-	2
New England Southern RR Co., Inc. [NEGS]	-	-	-	-	-	-	-	-	-	-	-	-

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	-	-	-	-	-
New Hope & Ivyland Rail Road [NHRR]	-	-	-	-	-	-	-	-	-	-	-	-
New Hope Valley Rwy/NC RR Museum [NHVX]	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey Rail Carrier, LLC. [NJRC]	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico Rail Runner Express [NMRX]	2	1	1	-	-	-	2	1	1	-	-	-
New Orleans & Gulf Coast Rwy Co. Inc. [NOGC]	3	-	-	-	-	-	3	-	-	-	-	-
New Orleans Public Belt RR [NOPB]	6	-	3	3	-	-	-	-	-	3	-	3
New River Rwy [NRRX]	1	-	-	1	-	-	-	-	-	-	-	-
New York & Atlantic Rwy Co. [NYA]	4	-	3	1	-	-	-	-	-	3	-	3
New York & Lake Erie [NYLE]	-	-	-	-	-	-	-	-	-	-	-	-
New York & Ogdensburg Rwy Co. Inc. [NYOG]	2	-	1	1	-	-	-	-	-	1	-	1
New York Container Term. [NYCT]	-	-	-	-	-	-	-	-	-	-	-	-
New York New Jersey Rail LLC [NYNJ]	-	-	-	-	-	-	-	-	-	-	-	-
New York, Susquehanna & Western RR Co. [NYSW]	6	-	6	1	-	-	-	-	-	5	-	6
Newburgh & South Shore RR [NSR]	-	-	-	-	-	-	-	-	-	-	-	-
Newport Dinner Train [NPDx]	-	-	-	-	-	-	-	-	-	-	-	-
Niles Canyon Rwy [NICK]	-	-	-	-	-	-	-	-	-	-	-	-
Nimishillen & Tuscarawas, LLC [NTRY]	9	-	7	2	-	-	-	-	-	7	-	7
Nittany & Bald Eagle [NBER]	2	-	1	1	-	-	-	-	-	1	-	1
North Alabama RR Museum [NARZ]	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina & Virginia RR Co. [NCVA]	-	-	-	-	-	-	-	-	-	-	-	-
North Shore RR [NSHR]	-	-	-	-	-	-	-	-	-	-	-	-
North Shore Scenic RR [NSSR]	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lines Rwy LLC [NLR]	1	-	-	1	-	-	-	-	-	-	-	-
Northern Ohio & Western Rwy, LTD. [NOW]	-	-	-	-	-	-	-	-	-	-	-	-
Northern Plains RR, Inc. [NPR]	3	-	1	1	-	-	1	-	-	1	-	1
Northstar Corridor Rail [NSCR]	-	-	-	-	-	-	-	-	-	-	-	-
Northwestern Oklahoma RR Co. [NOKL]	-	-	-	-	-	-	-	-	-	-	-	-
Oakland Term. Rwy [OTR]	-	-	-	-	-	-	-	-	-	-	-	-
Ohi Rail Corp. [OHIC]	1	-	-	-	-	-	1	-	-	-	-	-
Ohio Central RR Co. [OHCR]	2	-	2	1	-	-	1	-	2	-	-	-
Ohio Southern RR Co. [OSRR]	1	-	-	1	-	-	-	-	-	-	-	-
Ohio Valley RR Co. [OVR]	-	-	-	-	-	-	-	-	-	-	-	-
Oil Creek & Titusville Lines [OCTL]	1	-	1	-	-	-	-	-	-	1	-	1
Oklahoma Rwy Museum Ltd [OKRX]	-	-	-	-	-	-	-	-	-	-	-	-
Old Augusta RR Co. [OAR]	-	-	-	-	-	-	-	-	-	-	-	-
Omaha, Lincoln & Beatrice Rwy Co. [OLB]	-	-	-	-	-	-	-	-	-	-	-	-
Ontario Central RR Corp. [ONCT]	-	-	-	-	-	-	-	-	-	-	-	-
Ontario Midland RR Corp. [OMID]	1	-	1	-	-	-	-	-	-	1	-	1
Orange Empire Rwy Museum [OERY]	-	-	-	-	-	-	-	-	-	-	-	-
Oregon Coast Scenic RR [OCSR]	-	-	-	-	-	-	-	-	-	-	-	-
Oregon Eastern RR [OERR]	-	-	-	-	-	-	-	-	-	-	-	-
Oregon Pacific RR Co. [OPR]	-	-	-	-	-	-	-	-	-	-	-	-
Otter Tail Valley RR Co., Inc. [OTVR]	-	-	-	-	-	-	-	-	-	-	-	-
Ouachita RR [OUCH]	-	-	-	-	-	-	-	-	-	-	-	-
Over Land Trucking and Rail [OLTX]	-	-	-	-	-	-	-	-	-	-	-	-
Owego & Harford Rwy, Inc. [OHRY]	1	-	1	-	-	-	-	-	-	1	-	1
Ozark Valley RR Inc. [OVRr]	-	-	-	-	-	-	-	-	-	-	-	-
Pacific & Arctic RR & Navigation Co. [PARN]	23	-	23	-	-	-	-	-	-	23	-	23
Pacific Harbor Line Inc. [PHL]	10	-	6	5	-	-	-	-	-	5	-	6
Pacific SW Rwy Museum [PSRM]	-	-	-	-	-	-	-	-	-	-	-	-
Pacific Sun RR, LLC [PSRR]	-	-	-	-	-	-	-	-	-	-	-	-
Palouse River & Coulee City RR Inc. [PCC]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Panhandle Northern RR Co. [PNR]	1	-	-	1	-	-	-	-	-	-	-	-
Patapsco & Back Rivers RR Co. [PBR]	2	-	2	-	-	-	-	-	-	2	-	2
Pecos Valley Southern Rwy Co. [PVS]	-	-	-	-	-	-	-	-	-	-	-	-
Pend Oreille Valley RR, Inc. [POVA]	-	-	-	-	-	-	-	-	-	-	-	-
Peninsula Term. Co. [PT]	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania & Southern Rwy, LLC [PSCC]	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania Southwestern RR, Inc. [PSWR]	-	-	-	-	-	-	-	-	-	-	-	-
Pickens Rwy Co. [PICK]	-	-	-	-	-	-	-	-	-	-	-	-
Pioneer Industrial Rwy Co. [PRY]	-	-	-	-	-	-	-	-	-	-	-	-
Pioneer RR Co., Inc. [PWJ]	-	-	-	-	-	-	-	-	-	-	-	-
Pioneer Valley RR Co., Inc. [PVRR]	1	-	1	-	-	-	-	-	-	1	-	1
Pittsburgh & Ohio Central RR Co., The [POHC]	3	-	2	1	-	-	-	-	-	2	-	2
Pittsburgh, Allegheny & McKees Rocks RR [PAM]	-	-	-	-	-	-	-	-	-	-	-	-
Plainsman Switching Co. [PMSW]	-	-	-	-	-	-	-	-	-	-	-	-
Plymouth & Lincoln [PLL]	-	-	-	-	-	-	-	-	-	-	-	-
Point Comfort & Northern Rwy Co. [PCN]	-	-	-	-	-	-	-	-	-	-	-	-
Port Bienville RR [PBVR]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Catoosa Term. RR [POCA]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Los Angeles [PLAX]	-	-	-	-	-	-	-	-	-	-	-	-
Port Of Manatee [MAUP]	1	-	-	1	-	-	-	-	-	-	-	-
Port Of Palm Beach Term. [PPBD]	1	-	1	-	-	-	-	-	-	1	-	1
Port Of Tillamook Bay RR [POTB]	-	-	-	-	-	-	-	-	-	-	-	-
Port San Antonio [PSAN]	-	-	-	-	-	-	-	-	-	-	-	-
Port Term. RR Of South Carolina [PTR]	2	-	1	1	-	-	1	-	1	-	-	-
Port Utilities Commission Of Charleston, S.C. [PUCC]	1	-	-	1	-	-	-	-	-	-	-	-
Portland & Western RR, Inc. [PNWR]	5	-	3	2	-	-	1	-	1	2	-	2
Potomac Eagle Scenic Rail Excursion [PEX]	1	-	1	-	-	-	-	-	-	1	-	1
Prescott & Northwestern RR Co. [PNW]	-	-	-	-	-	-	-	-	-	-	-	-
Progressive Rail Inc [PGR]	1	-	-	1	-	-	-	-	-	-	-	-
Providence & Worcester RR Co. [PW]	4	1	2	1	-	-	1	1	-	2	-	2
Pueblo RR Museum [PBRF]	-	-	-	-	-	-	-	-	-	-	-	-
Puget Sound & Pacific RR Co. [PSAP]	6	-	1	2	-	-	3	-	-	1	-	1
Quincy RR Co. [QRR]	-	-	-	-	-	-	-	-	-	-	-	-
R J Corman RR Co./Tennessee Term. LLC [RJCK]	-	-	-	-	-	-	-	-	-	-	-	-
R. J. Corman RR Co./Pennsylvania Lines, Inc. [RJCP]	-	-	-	-	-	-	-	-	-	-	-	-
R. J. Corman RR Co./WV Line [RJCV]	-	-	-	-	-	-	-	-	-	-	-	-
R. J. Corman RR Co./Central Kentucky Lines [RJCC]	1	-	-	1	-	-	-	-	-	-	-	-
R. J. Corman RR Corp./Bardstown Line [RJCR]	4	-	2	3	-	1	-	-	-	1	-	1
R. J. Corman, Western Ohio Line [RJCW]	-	-	-	-	-	-	-	-	-	-	-	-
RTD Denver Union Station [DUT]	-	-	-	-	-	-	-	-	-	-	-	-
Rail Link Inc. [RLIX]	1	-	-	1	-	-	-	-	-	-	-	-
Rail Serve [RASX]	3	-	-	3	-	-	-	-	-	-	-	-
Rail Term [RRTM]	-	-	-	-	-	-	-	-	-	-	-	-
Railtown 1897 RR [RTRX]	-	-	-	-	-	-	-	-	-	-	-	-
Raritan Central Rwy LLC [RCRY]	1	-	-	-	-	-	1	-	-	-	-	-
Rarus Rwy Co. [RARW]	1	-	1	-	-	-	-	-	-	1	-	1
Reading Blue Mountain & Northern RR Commision [RBMN]	8	-	8	-	-	-	-	-	-	8	-	8
Red River Valley & Western RR [RRVW]	3	-	1	2	-	-	-	-	-	1	-	1
Redmont Rwy Co. [RRC]	-	-	-	-	-	-	-	-	-	-	-	-
Regional Transportation Authority-Nashville, TN [NRTX]	2	-	-	-	-	-	2	-	-	-	-	-
Rescar Industries - Beaumont [RCIB]	3	-	1	2	-	-	-	-	-	1	-	1
Rescar Location 715 Switching [RCXM]	1	-	-	1	-	-	-	-	-	-	-	-
Riceboro Southern Rwy LLC [RSOR]	-	-	-	-	-	-	-	-	-	-	-	-
Richmond Pacific RR Corp. [RPRC]	3	-	2	1	-	-	-	-	-	2	-	2

Railroads whose employees worked < 400,000 hours

	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Rio Valley Switching Co. [RVSC]	2	-	1	-	-	-	1	-	-	1	-	1
River Port RR [RVPR]	3	-	-	3	-	-	-	-	-	-	-	-
Rochester Southern RR, Inc. [RSR]	1	-	-	1	-	-	-	-	-	-	-	-
Rock & Rail Inc [RRRR]	-	-	-	-	-	-	-	-	-	-	-	-
Rockdale, Sandow & Southern RR Co. [RSS]	-	-	-	-	-	-	-	-	-	-	-	-
S&S Shortline RR [SSR]	-	-	-	-	-	-	-	-	-	-	-	-
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY [VTAZ]	3	1	2	-	-	-	3	1	2	-	-	-
SCTRR, LLC [SCTR]	2	-	2	-	-	-	-	-	-	2	-	2
SGS [SGZZ]	1	-	-	1	-	-	-	-	-	-	-	-
SMS Rail Lines of New York City LLC [SNY]	-	-	-	-	-	-	-	-	-	-	-	-
SMS Rail Service, Inc. [SLRS]	-	-	-	-	-	-	-	-	-	-	-	-
Sabine River & Northern RR Co. [SRN]	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento Valley RR [SAV]	-	-	-	-	-	-	-	-	-	-	-	-
Salt Lake City Southern RR Co., Inc. [SL]	-	-	-	-	-	-	-	-	-	-	-	-
Salt Lake, Garfield & Western Rwy Co. [SLGW]	-	-	-	-	-	-	-	-	-	-	-	-
San Diego & Imperial Valley [SDIY]	1	-	-	-	-	-	1	-	-	-	-	-
San Diego Northern Rwy [SDNX]	5	-	4	1	-	-	2	-	2	2	-	2
San Diego Trolley Inc. [SDTI]	5	3	1	-	-	-	5	3	1	-	-	-
San Francisco Belt RR [SFBR]	-	-	-	-	-	-	-	-	-	-	-	-
San Joaquin Valley RR Co. [SJVR]	8	1	-	-	-	-	7	-	-	1	1	-
San Luis & Rio Grande RR [SLRG]	6	-	1	1	-	-	5	-	1	-	-	-
San Luis Central RR Co. [SLC]	-	-	-	-	-	-	-	-	-	-	-	-
San Manuel Arizona RR Co. [SMA]	-	-	-	-	-	-	-	-	-	-	-	-
San Pedro & Southwestern RR Co. [SPSR]	2	-	-	2	-	-	-	-	-	-	-	-
Sand Springs Rwy Co. [SS]	-	-	-	-	-	-	-	-	-	-	-	-
Sandersville RR Co. [SAN]	4	-	2	-	-	-	2	-	-	2	-	2
Santa Cruz, Big Tree & Pacific RR [SCBG]	-	-	-	-	-	-	-	-	-	-	-	-
Santa Fe Southern Rwy, Inc. [SFS]	3	-	2	-	-	-	1	-	-	2	-	2
Santa Maria Valley RR Co. [SMV]	2	-	3	-	-	-	1	-	2	1	-	1
Savage Bingham & Garfield RR Co. [SBG]	-	-	-	-	-	-	-	-	-	-	-	-
Savannah Port Term. RR, Inc. [SAPT]	-	-	-	-	-	-	-	-	-	-	-	-
Seminole Gulf RR [SGLR]	4	1	2	-	-	-	1	-	-	3	1	2
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]	4	-	2	2	-	-	-	-	-	2	-	2
Sisseton Milbank RR [SMRR]	-	-	-	-	-	-	-	-	-	-	-	-
Ski Train RR [SKTX]	-	-	-	-	-	-	-	-	-	-	-	-
Snoqualmie Valley RR [SNVX]	-	-	-	-	-	-	-	-	-	-	-	-
Somerset RR Co. [SOM]	-	-	-	-	-	-	-	-	-	-	-	-
Souder Commuter Rail [SCR]	2	-	2	-	-	-	-	-	-	2	-	2
South Branch Valley RR [SBVR]	3	-	2	-	-	-	1	-	-	2	-	2
South Buffalo Rwy Co. [SB]	1	-	-	1	-	-	-	-	-	-	-	-
South Carolina Central RR Co., Inc. [SCRF]	2	-	-	-	-	-	2	-	-	-	-	-
South Carolina RR Museum, The [RRWX]	-	-	-	-	-	-	-	-	-	-	-	-
South Central Florida Express, Inc. [SCXF]	6	-	6	-	-	-	-	-	-	6	-	6
South Chicago & Indiana Harbor Rwy Co. [SCIH]	1	-	1	-	-	-	-	-	-	1	-	1
South Florida Regional Transit Authority [SFRV]	23	2	19	-	-	-	5	2	1	18	-	18
South Kansas & Oklahoma RR Co. [SKOL]	20	-	6	11	-	-	4	-	1	5	-	5
South Plains Lamesa RR, Ltd. [SLAL]	1	-	2	-	-	-	1	-	2	-	-	-
Southern Appalachian Rwy Museum [SPRX]	-	-	-	-	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Southern Electric RR [SERX]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Indiana Rwy, Inc. [SIND]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Michigan RR Society [SMRS]	-	-	-	-	-	-	-	-	-	-	-	-
Southern New Jersey Light Rail Group [SNJX]	7	1	5	1	-	-	-	-	-	6	1	5
Southern RR Co. Of New Jersey [SRNJ]	-	-	-	-	-	-	-	-	-	-	-	-
Southern Switching Co. [SSC]	-	-	-	-	-	-	-	-	-	-	-	-
Southwest Pennsylvania RR Co. [SWP]	1	-	-	1	-	-	-	-	-	-	-	-
Southwestern RR Co., Inc. [SW]	3	-	-	1	-	-	2	-	-	-	-	-
Squaw Creek Southern RR [SCS]	-	-	-	-	-	-	-	-	-	-	-	-
St Marys Rwy West LLC [SMW]	-	-	-	-	-	-	-	-	-	-	-	-
St. Croix Valley RR Co. [SCXY]	-	-	-	-	-	-	-	-	-	-	-	-
St. Lawrence & Atlantic RR Co. [SLR]	6	1	3	2	-	-	-	-	-	4	1	3
St. Louis, Iron Mountain, & Southern [SLOI]	-	-	-	-	-	-	-	-	-	-	-	-
St. Maries River RR Co. [STMA]	-	-	-	-	-	-	-	-	-	-	-	-
St. Marys RR Co. [SM]	-	-	-	-	-	-	-	-	-	-	-	-
Steamtown National Historic Site [SNCX]	-	-	-	-	-	-	-	-	-	-	-	-
Steelton & Highspire RR [SH]	-	-	-	-	-	-	-	-	-	-	-	-
Stewartstown RR Co. [STRT]	-	-	-	-	-	-	-	-	-	-	-	-
Stillwater Central RR Co., Inc. [SLWC]	6	-	2	3	-	-	1	-	-	2	-	2
Stockton Term. & Eastern RR [STE]	1	-	1	-	-	-	-	-	-	1	-	1
Strasburg RR Co. [SRC]	11	-	11	-	-	-	-	-	-	11	-	11
Sumpter Valley RR [SUVX]	-	-	-	-	-	-	-	-	-	-	-	-
Sunflour RR, Inc. [SNR]	-	-	-	-	-	-	-	-	-	-	-	-
Sweetwater Central RR [SWCX]	-	-	-	-	-	-	-	-	-	-	-	-
Syracuse Binghampton And New York RR [SBNX]	-	-	-	-	-	-	-	-	-	-	-	-
Tacoma Municipal Belt Line Rwy [TMBL]	7	-	4	1	-	-	2	-	-	4	-	4
Tacoma Rail Mountain Division [TRMW]	-	-	-	-	-	-	-	-	-	-	-	-
Talley Rand Term. RR [TTR]	-	-	-	-	-	-	-	-	-	-	-	-
Tazewell & Peoria RR, Inc. [TZPR]	-	-	-	-	-	-	-	-	-	-	-	-
Temple & Central Texas Rwy, Inc. [TC]	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee Southern RR Co., Inc. [TSRR]	2	-	-	1	-	-	1	-	-	-	-	-
Tennessee Valley RR [TVRM]	2	-	2	-	-	-	2	-	2	-	-	-
Tennken RR Co. Inc. [TKEN]	1	-	1	-	-	-	-	-	-	1	-	1
Terminal Rwy Alabama State Docks [TASD]	30	-	17	12	-	-	1	-	-	17	-	17
Texas & New Mexico RR Co. [TNMR]	1	-	-	1	-	-	-	-	-	-	-	-
Texas & Northern Rwy Co. [TN]	-	-	-	-	-	-	-	-	-	-	-	-
Texas & Oklahoma RR Co. [TXOR]	-	-	-	-	-	-	-	-	-	-	-	-
Texas Northwestern Rwy Co. [TXNW]	1	-	-	1	-	-	-	-	-	-	-	-
Texas Pacifico Transportation Limited [TXPF]	-	-	-	-	-	-	-	-	-	-	-	-
Texas Rock Crusher Rwy Co. [TXR]	-	-	-	-	-	-	-	-	-	-	-	-
Texas South-Eastern RR Co. [TSE]	-	-	-	-	-	-	-	-	-	-	-	-
Texas State RR [TSR]	4	-	4	-	-	-	-	-	-	4	-	4
Texas, Gonzales & Northern Rwy Co. [TXGN]	-	-	-	-	-	-	-	-	-	-	-	-
The Youngstown Belt RR Co. [YB]	-	-	-	-	-	-	-	-	-	-	-	-
Thermal Belt Rwy [TBRY]	-	-	-	-	-	-	-	-	-	-	-	-
Three Notch RR [TNHR]	-	-	-	-	-	-	-	-	-	-	-	-
Timberrock RR Co., Inc. [TIBR]	5	-	-	5	-	-	-	-	-	-	-	-
Tioga Central RR [TIOC]	-	-	-	-	-	-	-	-	-	-	-	-
Tishomingo RR Co., Inc. [TISH]	-	-	-	-	-	-	-	-	-	-	-	-
Toledo Lake Erie & Western RR [TLEW]	1	-	-	-	-	-	1	-	-	-	-	-
Toledo, Peoria & Western Rwy Corp. [TPW]	2	-	-	1	-	-	1	-	-	-	-	-
Tomahawk Rwy, L.P. [TR]	-	-	-	-	-	-	-	-	-	-	-	-
Transco Railcar Repair, Inc. [TRRJ]	-	-	-	-	-	-	-	-	-	-	-	-
Transkentucky Transportation RR, Inc. [TTIS]	2	-	-	2	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train			HRC			Other		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Tri-City RR Co. [TCRY]	3	-	3	-	-	-	-	-	-	3	-	3
Tri-Met Westside Express Service [TMEV]	-	-	-	-	-	-	-	-	-	-	-	-
Trinity Rwy Express [TRES]	6	-	6	-	-	-	-	-	-	6	-	6
Trona Rwy Co. [TRC]	1	-	1	-	-	-	-	-	-	1	-	1
Tulsa-Sapulpa Union Rwy Co. LLC [TSU]	3	-	-	1	-	-	2	-	-	-	-	-
Turtle Creek Industrial RR, Inc. [TCKR]	-	-	-	-	-	-	-	-	-	-	-	-
Twin City & Western RR [TCWR]	11	1	6	2	-	-	3	-	1	6	1	5
U S. Rail/Salem [USRS]	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Rail Corp/Ohio [USRO]	3	-	1	-	-	-	2	-	-	1	-	1
UTA FrontRunner Commuter Rail [UFRC]	11	1	9	-	-	-	2	1	-	9	-	9
Union County Industrial RR Co. [UCIR]	-	-	-	-	-	-	-	-	-	-	-	-
Upper Hudson River RR [UHRX]	1	-	1	-	-	-	-	-	-	1	-	1
Upper Merion & Plymouth RR Co. [UMP]	-	-	-	-	-	-	-	-	-	-	-	-
Utah Central Rwy Co. [UCRY]	1	-	-	-	-	-	1	-	-	-	-	-
Utah Rwy Co. [UTAH]	2	-	-	1	-	-	1	-	-	-	-	-
Utah Transit Authority [UTAX]	3	1	1	1	-	-	2	1	1	-	-	-
V and S Rwy, Inc. [VSR]	-	-	-	-	-	-	-	-	-	-	-	-
Valdosta Rwy, L.P. [VR]	-	-	-	-	-	-	-	-	-	-	-	-
Valley RR Co. [VALE]	-	-	-	-	-	-	-	-	-	-	-	-
Vandalia RR Co. [VRRR]	-	-	-	-	-	-	-	-	-	-	-	-
Ventura County RR Co. [VCRR]	-	-	-	-	-	-	-	-	-	-	-	-
Vermillion Valley RR Co., Inc. [VVRV]	1	-	1	-	-	-	-	-	-	1	-	1
Vermont Rwy, Inc. [VTR]	11	-	10	-	-	-	1	-	-	10	-	10
Vicksburg Southern RR, Inc. [VSOR]	2	-	-	-	-	-	2	-	-	-	-	-
Virginia & Truckee RR Co., Inc. [VTRR]	-	-	-	-	-	-	-	-	-	-	-	-
Virginia Rwy Express [VREX]	6	-	6	-	-	-	-	-	-	6	-	6
Virginia Southern RR [VSRR]	-	-	-	-	-	-	-	-	-	-	-	-
WCTU Rwy [WCTR]	-	-	-	-	-	-	-	-	-	-	-	-
Wabash Central RR Corp. [WBCR]	-	-	-	-	-	-	-	-	-	-	-	-
Waccamaw Coast Line RR Co. [WCLR]	-	-	-	-	-	-	-	-	-	-	-	-
Walkersville Southern RR, Inc. [WS]	-	-	-	-	-	-	-	-	-	-	-	-
Walking Horse & Eastern RR Co. [WHOE]	-	-	-	-	-	-	-	-	-	-	-	-
Wallowa Union RR Authority [WURR]	-	-	-	-	-	-	-	-	-	-	-	-
Warren & Saline River RR Co. [WSR]	-	-	-	-	-	-	-	-	-	-	-	-
Warren & Trumbull RR Co., The [WTRM]	-	-	-	-	-	-	-	-	-	-	-	-
Washington & Idaho Rwy, Inc. [WIR]	1	-	-	1	-	-	-	-	-	-	-	-
Washington County RR Corp. [WACR]	2	-	2	-	-	-	-	-	-	2	-	2
Watco Switching [WATX]	3	-	3	-	-	-	-	-	-	3	-	3
Wellsboro & Corning RR Co. [WCOR]	-	-	-	-	-	-	-	-	-	-	-	-
West Chester RR Co. [WCRL]	-	-	-	-	-	-	-	-	-	-	-	-
West Isle Line Inc. [WFS]	-	-	-	-	-	-	-	-	-	-	-	-
West Michigan RR Co. [WMI]	-	-	-	-	-	-	-	-	-	-	-	-
West Tennessee RR Corp. [WTNN]	5	-	5	-	-	-	1	-	1	4	-	4
West Texas and Lubbock Rwy Co. [WTLC]	1	-	-	1	-	-	-	-	-	-	-	-
West Virginia Central RR [WVC]	-	-	-	-	-	-	-	-	-	-	-	-
Western Kentucky Rwy, LLC [WKRL]	-	-	-	-	-	-	-	-	-	-	-	-
Western Maryland Scenic RR [WMSR]	3	-	3	-	-	-	-	-	-	3	-	3
Western New York & Pennsylvania RR LLC [WNYP]	10	-	5	1	-	-	5	-	1	4	-	4
Western RR Co. [WRRR]	2	-	2	-	-	-	-	-	-	2	-	2
Western Rwy Museum [WRM]	-	-	-	-	-	-	-	-	-	-	-	-
Weyerhaeuser Woods RRs [WCTX]	-	-	-	-	-	-	-	-	-	-	-	-
Whitewater Valley RR [WVRR]	2	-	1	-	-	-	1	-	-	1	-	1
Wichita Term. Association [WTA]	-	-	-	-	-	-	-	-	-	-	-	-
Wichita, Tillman & Jackson Rwy Co., Inc. [WTJR]	2	-	-	2	-	-	-	-	-	-	-	-

Railroads whose employees worked < 400,000 hours

	Total			Train Accidents			HRC Incidents			Other Incidents		
	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj	Cnt	Kld	Inj
Willamette Valley Rwy Co. [WVR]	-	-	-	-	-	-	-	-	-	-	-	-
Wilmington & Western RR Co. [WWRC]	-	-	-	-	-	-	-	-	-	-	-	-
Wilmington Term. RR Inc. [WTRY]	-	-	-	-	-	-	-	-	-	-	-	-
Winamac Southern Rwy Co. [WSRY]	-	-	-	-	-	-	-	-	-	-	-	-
Winchester & Western RR Co. [WW]	4	-	3	-	-	-	3	-	2	1	-	1
Winston-Salem Southbound Rwy [WSS]	-	-	-	-	-	-	-	-	-	-	-	-
Wiregrass Central RR Co. [WGCR]	-	-	-	-	-	-	-	-	-	-	-	-
Wisconsin & Southern RR Co. [WSOR]	22	-	13	3	-	-	8	-	2	11	-	11
Wisconsin Northern RR [WN]	-	-	-	-	-	-	-	-	-	-	-	-
YCR Corp. [YCR]	-	-	-	-	-	-	-	-	-	-	-	-
Yadkin Valley RR Co. [YVRR]	2	-	1	-	-	-	1	-	-	1	-	1
Yellowstone Valley RR Inc. [YSVR]	1	-	1	-	-	-	-	-	-	1	-	1
York Rwy Co. [YRC]	1	-	-	1	-	-	-	-	-	-	-	-
Youngstown & Austintown RR [YARR]	1	-	-	-	-	-	1	-	-	-	-	-
Yountstown & Southeastern RR Co., Inc. [YSRR]	1	-	1	-	-	-	-	-	-	1	-	1
Yreka Western RR Co. [YW]	-	-	-	-	-	-	-	-	-	-	-	-
ZIOF	-	-	-	-	-	-	-	-	-	-	-	-
Zanesville & Western Scenic RR [ZWSX]	-	-	-	-	-	-	-	-	-	-	-	-