# HIGHWAY-RAIL CROSSING ACCIDENT/INCIDENT AND INVENTORY BULLETIN

NO. 18 CALENDAR YEAR 1995

#### 

U.S. Department of Transportation Federal Railroad Administration

Office of Safety

#### **NOTICE**

This document is disseminated under the sponsorship of the Department of Transportation in the interest of the information exchange. The United States Government assumes no liability for its contents or use.

This document only reflects data information. Information is viewed in summaries and tables. No graphics are depicted in this document.

Federal Railroad Administration Office of Safety, RRS-22 400 Seventh Street, S.W. Washington, D.C. 20590

#### **TABLE OF CONTENTS**

<u>SECTION</u>						
INTRODUCTION						
RESOURCE ALLOCATION PROCEDURE CONSTANTS						
TABLE-S.	Summary of Highway-Rail Crossing Accident Statistics for the Nation					
HISTORICAL ACC	IDENT TRENDS - DATA					
TABLE 1.	Summary of Accidents/Incidents and Casualties at Highway-Rail Crossings					
TABLE 2.	Summary of Accidents/Incidents and Accident Rates at Highway-Rail Crossings Involving Motor Vehicles					
CURRENT YEAR A AT PUBLIC CRO	ACCIDENT DATA SSINGS ONLY					
TABLE 3.	Accidents/Incidents at Highway-Rail Crossings by State					
TABLE 4.	MV Accidents/Incidents at Highway-Rail Crossings by State					
TABLE 5.	Accidents/Incidents at Highway-Rail by Type of Motor Vehicle					
TABLE 6.	MV Accidents/Incidents at Highway-Rail Crossings by type of Consist					
TABLE 7.	MV Accidents/Incidents at Highway-Rail Crossings by Warning Device by Railroad					
TABLE 7A.	Accidents/Incidents at Highway-Rail					

#### **TABLE OF CONTENTS**

TABLE 8.	MV Accidents/Incidents at Highway-Rail Crossings by Warning Device by State
TABLE 9.	Accidents/Incidents at Highway-Rail Crossings by Highway User
TABLE 10.	MV Accidents/Incidents at Highway-Rail Crossings by Circumstance
TABLE 11.	Accidents/Incidents at Highway-Rail Crossings by Type of Vehicle and Number of Occupants
TABLE 12.	MV Accidents/Incidents at Highway-Rail Crossings by Type of Vehicle, Circumstance And Visibility
TABLE 13.	Casualties at Highway Crossings by Type of Person Involved, Highway User, and Circumstance
TABLE 14.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Speed of Vehicle, Circumstance, and Visibility
TABLE 15.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Position and Type of Vehicle
TABLE 16.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Speed of Train, Circumstance, and Visibility
TABLE 17.	MV Accidents/Incidents at Highway-Rail Crossings by Railroad Equipment Involved, Part of Train Struck, Circumstance and Visibility
TABLE 18.	MV Accidents/Incidents at Highway-Rail Crossings by Train Speed and Type of Train

TABLE 19.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Number of Cars in Train and Type of Train
TABLE 20.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Length of Consists and Visibility
TABLE 21.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Type and Class of Track
TABLE 22.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Warning Device and Motorist Action
TABLE 23.	MV Accidents/Incidents at Highway-Rail Crossings by Operational Status of Warning Device, Circumstance, and Visibility
TABLE 24.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings During Dusk and Dark Hours by Illumination of Crossing and Circumstance
TABLE 25.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Location and Type of Warning Device, Circumstance and Visibility
TABLE 26.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Visibility and Circumstance
TABLE 27.	MV Accidents/Incidents at Highway-Rail Crossings by Visibility and Circumstance

SECTION	1
---------	---

TABLE 28.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Time of Day and Circumstance
TABLE 29.	MV Accidents/Incidents and Casualties at Highway-Rail Crossings by Month and Circumstance
TABLE 30.	MV Accidents/Incidents at Highway-Rail Crossings by Weather Conditions, Circumstance and Visibility
TABLE 31.	MV Accidents/Incidents at Highway-Rail Crossings by Obstruction of Motorist View, Circumstance and Visibility
TABLE 32.	MV Accidents/Incidents at Highway-Rail Crossings by Motorist Action and Type of Vehicle
	ROSSING INVENTORY
DATA	
TABLE 33.	Total Public and Private Crossings by State and Type
TABLE 34.	Total Public and Private Crossings by Railroad and Type
TABLE 35.	Total Crossings by State and Location: Urban or Rural
TABLE 36.	
	Total Crossings by Number of Main and Other Tracks

TABLE 38.	Total Crossings by Number of Tracks and Traffic Lanes
TABLE 39.	Total Crossings by Number of Tracks and State
TABLE 40.	Total Crossings by Type of Highway System and State
TABLE 41.	Total Crossings by Highway System Group and State
TABLE 42.	Total Crossings by Functional Classification of Road at Highway-Rail Crossings
TABLE 43.	Total Crossings by Number of Traffic Lanes and State
TABLE 44.	Total Crossings by Number of Traffic Lanes and Warning Device Category
TABLE 45.	Total Crossings by Warning Device Category and State
TABLE 46.	Total Crossings by Warning Device Category and Railroad
TABLE 47.	Total Crossings by Pavement Markings and State
TABLE 48.	Total Crossings by Railroad Advance Warning and State
TABLE 49.	Total Crossings Meeting the Manual on Uniform Traffic Control Devices' Standard for Crossbucks by State

TABLE 50.	Total Crossings by Total Number of Trains Per Day
TABLE 51.	Total Crossings by Number of Thru Trains and Switching Trains Per Day
TABLE 52.	Total Crossings by Number of Day and Night Trains Per Day
TABLE 53.	Total Crossings by Number of Trains Per Day and Warning Device Category
TABLE 54.	Total Crossings by Number of Trains Per Day and Annual Average Daily Traffic
TABLE 55.	Total Crossings by Maximum Timetable Speed
TABLE 56.	Total Crossings by Typical Train Speed Variation
TABLE 57.	Total Crossings by Annual Average Daily Traffic
TABLE 58.	Total Crossings by Annual Average Daily Traffic and Warning Device Category
TABLE 59.	Total Crossings by Truck Traffic as a Percentage of Annual Average Daily Traffic
TABLE 60.	Total Crossings by Crossing Surface
TABLE 61.	Total Crossings by Maximum Timetable Speed, Warning Device Category and Number of Tracks

SUMMARY OF ACCIDENT/INCIDENT AND INVENTORY DATA FOR PRIVATE CROSSINGS					
TABLE 62.	MV Accidents/Incidents at Private Highway-Rail Crossings by Type of Consist				
TABLE 63.	MV Accidents/Incidents at Private Highway-Rail Crossings by State and Warning Device				
TABLE 64.	Accidents/Incidents at Private Highway-Rail Crossings by Highway User				
TABLE 65.	MV Accidents/Incidents at Private Highway-Rail Crossings by Warning Device Category and Motorist Action				
TABLE 66.	MV Accidents/Incidents at Private Highway-Rail Crossings by Warning Device Category and Motorist Action				
TABLE 67.	MV Accidents/Incidents at Private Highway-Rail Crossings by Railroad and Warning Device Category				
TABLE 68.	Accidents/Incidents and Casualties at Private Highway-Rail Crossings by Railroad				
TABLE 69.	MV Accidents/Incidents and Casualties at Private Highway-Rail Crossings by Speed of Consist				
TABLE 70.	MV Accidents/Incidents and Casualties at Private Highway-Rail Crossings by Length of Consist				

<u>SECTION</u>			

TABLE 71.	MV Accidents/Incidents at Private Highway- Rail Crossings by Operational Status of Warning Device, Circumstance and Visibility				
TABLE 72.	Private Crossings At-Grade by State and Type Development				
TABLE 73.	Private Crossings At-Grade by State and Type Warning Device				
TABLE 74.	Private Crossings At-Grade by Type Development and Warning Device				
TABLE 75.	Private Crossings At-Grade by Railroad and Type Development				
TABLE 76.	Private Crossings At-Grade by Railroad and Type Warning Device				
APPENDIX A - REPORTING REQUIREMENTS AND DEFINITIONS					
APPENDIX B - REPORTING FORMS					

#### **LIST OF ABBREVIATIONS**

ACC/INC - Accident/Incident

A/I - Accident/Incident

CONT - Contractor Employee

ENOD - Employee Not On Duty

EOD - Employee On Duty

FA - Federal Aid

HWY - Highway

INJ - Injury or Casualty

K - Thousands

KLD - Killed

LOCO(S) - Locomotive

MUTCD - Manual on Uniform Traffic Control Devices

MV - Motor Vehicle

NONT - Non-Trespasser

PSGR - Passenger

SIG - Signal

TRES - Trespasser

VEH REG - Vehicles Registered

#### INTRODUCTION

The eighteenth annual report, issued by the Federal Railroad Administration (FRA) Office of Safety, combines Highway-Rail Crossing Accident/Incident statistics with the National Highway-Rail Crossing Inventory. Accident/Incident data is compiled from monthly reports filed by railroads. The National Highway-Rail Crossing Inventory contains sight-survey data about individual crossings and is provided voluntarily by states and railroads.

The Federal Railroad Safety Act of 1970 (P.L. 91-458) and the Accident Reports Act (45 U.S.C. 38-34) require railroads to file accident/incident reports with the FRA. The National Highway-Rail Crossing Inventory was developed in response to the Federal Railroad Safety Act of 1970 and the Federal Highway Safety Acts of 1970 and 1973, which require the Secretary of Transportation to work towards improving safety at highway-rail crossings.

\* \* \* \* \* \* \*

Tables and figures retain the number identification used in prior years. Information on accidents/incidents and crossings is presented in the following sequence:

Historical data on highway-rail crossings accidents/incidents at public crossings.

Summary of 1995 accidents/incidents that occurred at public crossings sites.

Physical and operational statistics for all public at-grade highway-rail crossings as described in the inventory on July 19, 1996.

Summary of 1995 accidents/incidents occurring at <u>private</u> highway-rail crossings and tabulations of private crossings in the inventory.

The tables and figures in Sections 1,2,3,5, and Appendix C furnish data on public highway-rail crossings; although tables 33 and 34 in Section 4 include counts of the number of private crossings. The majority of the accident tables and charts shown in this bulletin provide information on motor vehicle accidents. Those tables and figures that do not refer to motor vehicle in their title contain data for all accidents/incidents.

# 1992/3 ACCIDENT PREDICTION AND RESOURCE ALLOCATION PROCEDURE CONSTANTS

The U.S. DOT Highway-Rail Crossing Resource Allocation Procedure, described in the Rail-Highway Crossing Resource Allocation Procedure User's Guide, Third Edition, DOT/FRA/OS-87/10, August 1987, uses three "normalizing constants" in the accident prediction formulas, Formula A, Section 3.2.4, Page 17. These constants have been adjusted periodically in order to keep the formulas matched with current accident trends. The last readjustment was made for Calendar Year 1992 and was published in Bulletin No. 14.

The process of determining the three (3) current normalizing constants for 1992 was performed so that the sum of the December 1991, predictions using only accident history data for Calendar Years 1986 to 1990 for the top 20 percent of each of the three classes of crossings (gates, flashing lights, passive) for the respective three formulas is made equal to the actual number of accidents that occurred for those same crossings in 1991. This process was performed for each of the three warning device groups, (1) passive, (2) flashing lights, and (3) gates.

These constants were redetermined for the "national" model using the crossings in the inventory as of December 31, 1991. Organizations using the "DOT Model" should update their models by replacing the old constants with the recalculated constants. The constants referenced here are located in the computer program ACPD.NEW as shown in the coding at the top of page A-4, Appendix A1 of the <u>User's Guide Third Edition</u> and in RESAL.NEW on page B-3, Appendix B1.

These constants will be used in fulfilling requests for accident prediction and resource allocation procedure listings. The table below lists the current and prior constants.

### ACCIDENT PREDICTION AND RESOURCE ALLOCATION PROCEDURE NORMALIZING CONSTANTS

WAR	NING DEVICE	CURRENT	PRIOR YEARS		
GROUPS		1992	1988	1986	
(1)	Passive	.8239	.9417	.8778	.8644
(2)	Flashing Lights	.6935	.8345	.8013	.8887
(3)	Gates	.6714	.8901	.8911	.8131

The Resource Allocation Procedure is currently being reviewed and, if merited, may be revised. (This project is one of 55 actions identified within the Department of Transportation's recently released <u>Highway-Rail Crossing Safety Action Plan.</u>) As such, recalculation of the "normalizing constants" for the existing accident prediction formulas has been deferred until this review is complete. Users of the "DOT Model" should continue to use the 1992 constants detailed above.

TABLE-S. SUMMARY OF HIGHWAY-RAIL CROSSING ACCIDENT STATISTICS FOR THE NATION

YEAR	ACCI	TOTAL	. INJ	MOT ACCI	OR VEH	INJ	NON- ACCI	MOTOR VE FATAL	HICLES
<u>1990</u>									
PUBLIC PRIVATE	5,233 480	648 50	2,254 153	5,022 458	568 46	2,186 146	211 22	80 4	68 7
TOTAL	5,713	698	2,407	5,480	614	2,332	233	84	75
<u>1991</u>									
PUBLIC PRIVATE	4,861 525	565 43	1,923 171	4,677 495	497 38	1,866 163	184 30	68 5	57 8
TOTAL	5,386	608	2,094	5,172	535	2,029	214	73	65
<u>1992</u>									
PUBLIC PRIVATE	4,465 445	536 43	1,830 145	4,269 415	466 40	1,752 139	196 30	70 3	78 6
TOTAL	4,910	579	1,975	4,684	506	1,891	226	73	84
<u>1993</u>									
PUBLIC PRIVATE	4,437 455	584 42	1,744 93	4,240 421	517 37	1,677 83	197 34	67 5	67 10
TOTAL	4,892	626	1,837	4,661	554	1,760	231	72	77
<u>1994</u>									
PUBLIC PRIVATE	4,503 476		1,829 132	4,296 450	501 41		207 26	71 2	65 11
TOTAL	4,979	615	1,961	4,746	542	1,885	233	73	76
<u>1995</u>									
PUBLIC PRIVATE	4,153 480	524 55	1,754 140	3,972 444	455 53	1,696 129	181 36	69 2	58 11
TOTAL	4,633	579	1,894	4,416	508	1,825	217	71	69

# (DATA)

# HISTORICAL ACCIDENT TRENDS

## **FOR**

# **PUBLIC CROSSINGS ONLY**

# TABLE 1. SUMMARY OF ACCIDENTS/INCIDENTS AND CASUALTIES AT HIGHWAY-RAIL PUBLIC CROSSINGS

YEAR	NUMBER OF ACCIDENTS	KILLED	TOTAL INJURED	CASUALTIES	CASUALTIES PER ACCIDENT
1990	5,233	648	2,254	2,902	0.55
1991	4,861	565	1,923	2,488	0.51
1992	4,465	536	1,830	2,366	0.52
1993	4,437	584	1,744	2,328	0.52
1994	4,503	572	1,829	2,401	0.53
1995	4,153	524	1,754	2,278	0.55

TABLE 2. SUMMARY OF ACCIDENTS/INCIDENTS AND ACCIDENT RATES AT HIGHWAY-RAIL PUBLIC CROSSINGS INVOLVING MOTOR VEHICLES

YEAR	ACCIDENTS	MOTOR VEHICLES REGISTERED (000) <sup>1</sup>	ACCIDENTS PER MILLION VEHICLES
1990	5,022	192,123	26.14
1991	4,677	191,743	24.39
1992	4,269	193,430	22.07
1993	4,240	197,254	21.49
1994	4,296	198,045	21.69
1995	3,972	200,446 <sup>2</sup>	19.81

Registration figures for Hawaii are omitted because it does not have any reporting railroads.

Figures supplied by the Federal Highway Administration.

<sup>1995</sup> MOTOR VEHICLE NUMBERS ARE PRELIMINARY.

(DATA)

**OVERVIEW** 

**OF CURRENT** 

**YEAR** 

**AT** 

**PUBLIC CROSSINGS** 

**ONLY** 

TABLE 3. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS,
BY STATE, 1995

						Tota	
	No. Of		i l l ed		ured	- Casual	
State	Acc/I nc	No.	%	No.	%	No.	% 
Al abama	168	16	3. 05	84	4. 79	100	4. 39
Al aska	3			5	. 29	5	. 22
Ari zona	34	2	. 38	10	. 57	12	. 53
Arkansas	150	22	4. 20	68	3. 88	90	3. 95
Cal i forni a	169	25	4. 77	58	3. 31	83	3. 64
Col orado	53	10	1. 91	30	1.71	40	1. 76
Connecti cut	6	1	. 19	4	. 23	5	. 22
Del aware	3			1	. 06	1	. 04
Dist. of Columbia							
Fl ori da	88	22	4. 20	50	2. 85	72	3. 16
Georgi a	147	16	3. 05	65	3. 71	81	3. 56
I daho	33	7	1. 34	15	. 86	22	. 97
Illinois	268	47	8. 97	130	7.41	177	7. 77
I ndi ana	255	29	5. 53	89	5. 07	118	5. 18
I owa	118	8	1. 53	67	3. 82	75	3. 29
Kansas	92	14	2. 67	42	2. 39	56	2. 46
Kentucky	87	6	1. 15	43	2. 45	49	2. 15
Loui si ana	205	28	5. 34	97	5. 53	125	5. 49
Mai ne	6			3	. 17	3	. 13
Maryl and	11			6	. 34	6	. 26
Massachusetts	13	1	. 19			1	. 04
Mi chi gan	126	5	. 95	67	3.82	72	3. 16
Mi nnesota	139	17	3. 24	29	1.65	46	2. 02
Mi ssi ssi ppi	146	29	5. 53	46	2. 62	75	3. 29
Mi ssouri	113	22	4. 20	50	2.85	72	3. 16
Montana	13	4	. 76	4	. 23	8	. 35
Nebraska	71	7	1. 34	26	1.48	33	1. 45
Nevada	5	1	. 19	2	. 11	3	. 13
New Hamshire	4			2	. 11	2	. 09
New Jersey	20	4	. 76	2	. 11	6	. 26
New Mexico	15	4	. 76	10	. 57	14	. 61
New York	42	8	1. 53	10	. 57	18	. 79
North Carolina	122	10	1. 91	38	2. 17	48	2. 11
North Dakota	34	6	1. 15	17	. 97	23	1. 01
0hi o	220	34	6. 49	79	4. 50	113	4. 96
0kl ahoma	108	15	2. 86	63	3. 59	78	3. 42
0regon	29	3	. 57	5	. 29	8	. 35
Pennsyl vani a	70	9	1. 72	12	. 68	21	. 92
Rhode Island	1			1	. 06	1	. 04
South Carolina	99	6	1. 15	62	3. 53	68	2. 99
South Dakota	41	4	. 76	15	. 86	19	. 83
Tennessee	91	11	2. 10	30	1.71	41	1. 80
Texas	423	48	9. 16	207	11. 80	255	11. 19
Utah	30	7	1. 34	14	. 80	21	. 92
Vermont	3			2	. 11	2	. 09
Vi rgi ni a	57	5	. 95	13	. 74	18	. 79
Washi ngton	50	1	. 19	12	. 68	13	. 57
West Virginia	33	1	. 19	9	. 51	10	. 44
Wi sconsi n	132	9	1. 72	59	3. 36	68	2. 99
Wyomi ng	7			1	. 06	1	. 04
Unknown							
Total	4, 153	524	100. 00	1, 754	100.00	2, 278	100. 00

TABLE 4. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY STATE, 1995

	No. Of		Casualti	es	Vehi cl es	Per 10, 0	000 Regist	ration
State	Acc/Inc	Kl d	I nj	Total	Registered	Acc/Inc	Kl d	I nj
Al abama	164	15	83	98	31, 600	51. 90	4. 75	26. 27
Al aska	3		5	5	5, 690	5. 27		8. 79
Ari zona	27		9	9	28, 270	9. 55		3. 18
Arkansas	149	22	68	90	16, 310	91. 35	13. 49	41. 69
Cal i forni a	156	16	54	70	229, 160	6. 81	. 70	2. 36
Col orado	53	10	30	40	27, 760	19. 09	3. 60	10. 81
Connecti cut	6	1	4	5	26, 310	2. 28	. 38	1. 52
Del aware	3		1	1	6, 010	4. 99		1. 66
Dist. of Columbia					2, 430			
Fl ori da	80	17	45	62	107, 340	7. 45	1. 58	4. 19
Georgi a	138	13	61	74	62, 370	22. 13	2. 08	9. 78
I daho	32	7	15	22	10, 800	29. 63	6. 48	13. 89
Illinois	251	40	124	164	91, 120	27. 55	4. 39	13. 61
I ndi ana	247	25	89	114	51, 260	48. 19	4. 88	17. 36
I owa	114	6	67	73	29, 430	38. 74	2. 04	22. 77
Kansas	89	13	41	54	21, 870	40. 70	5. 94	18. 75
Kentucky	84	6	41	47	27, 090	31. 01	2. 21	15. 13
Loui si ana	201	26	96	122	35, 120	57. 23	7. 40	27. 33
Mai ne	6		3	3	9, 610	6. 24		3. 12
Maryl and	10		5	5	36, 640	2. 73		1. 36
Massachusetts	12	1		1	41, 600	2. 88	. 24	
Mi chi gan	120	4	64	68	77, 770	15. 43	. 51	8. 23
Mi nnesota	128	15	27	42	42, 470	30. 14	3. 53	6. 36
Mi ssi ssi ppi	145	29	46	75	21, 290	68. 11	13. 62	21. 61
Mi ssouri	107	19	49	68	43, 590	24. 55	4. 36	11. 24
Montana	12	4	3	7	9, 780	12. 27	4. 09	3. 07
Nebraska	63	4	24	28	14, 920	42. 23	2. 68	16. 09
Nevada	5	1	2	3	10, 340	4. 84	. 97	1. 93
New Hamshire	4		2	2	10, 310	3. 88		1. 94
New Jersey	17	2	2	4	59, 670	2. 85	. 34	. 34
New Mexi co	15	4	10	14	14, 860	10. 09	2. 69	6. 73
New York	38	4	10	14	103, 710	3. 66	. 39	. 96
North Carolina	119	9	37	46	54, 910	21. 67	1.64	6. 74
North Dakota	29	5	13	18	7, 080	40. 96	7. 06	18. 36
0hi o	207	32	73	105	100, 320	20. 63	3. 19	7. 28
0kl ahoma	105	15	61	76	28, 710	36. 57	5. 22	21. 25
0regon	26		5	5	29, 430	8. 83		1. 70
Pennsyl vani a	68	7	12	19	87, 920	7. 73	. 80	1. 36
Rhode Island	1		1	1	7, 190	1. 39		1. 39
South Carolina	98	5	61	66	27, 730	35. 34	1. 80	22. 00
South Dakota	39	4	14	18	7, 890	49. 43	5. 07	17. 74
Tennessee	87	10	30	40	51, 680	16. 83	1. 93	5. 80
Texas	408	42	202	244	139, 110	29. 33	3. 02	14. 52
Utah	30	7	14	21	14, 770	20. 31	4. 74	9. 48
Vermont	2		2	2	5, 090	3. 93		3. 93
Vi rgi ni a	56	5	12	17	56, 600	9. 89	. 88	2. 12
Washi ngton	48	1	11	12	47, 100	10. 19	. 21	2. 34
West Virginia	33	1	9	10	15, 110	21.84	. 66	5. 96
Wi sconsi n	130	8	58	66	41, 210	31. 55	1. 94	14. 07
Wyomi ng	7		1	1	5, 120	13. 67		1. 95
Unknown								
Total	3, 972	455	1, 696	2, 151	2, 033, 470	19. 53	2. 24	8. 34

Note: Vehicle registration figures are for 1995 and were supplied by the Federal Highway Administration. Registration figures for Hawaii are ommitted because it does not have any reporting railroads.

TABLE 5. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TYPE OF MOTOR VEHICLE, 1995

State	Au A/I	itomol Kld	bile Inj	A/I	- Truck Kl d	Inj	- Tru	ck Tra	iler- Inj	 A/I	Bus- Kl d	 Inj	S A/I	chool Kl d	Bus Inj	M A/I	otorcy	cl e I nj
																	MI U	
Al abama	116	12	56	31	2	18	16	1	9							1		
Al aska	3		5															
Ari zona	18		7	8		2	1											
Arkansas	78	10	38	46	9	24	24	2	6							1	1	
Cal i forni a	100	10	41	39	4	13	15	1		1						1	1	
Col orado	35	10	21	10		6	8		3									
Connecti cut	4	1	2	1			1		2									
Del aware	1			1		1	1											
Dist. of Columbia																		
Fl ori da	49	6	10	19	6	4	9	1		1	4	1	1		29	1		1
Georgi a	78	8	32	31	4	18	29	1	11									
I daho	15	4	9	11	3	5	6		1									
Illi noi s	164	22	65	64	11	22	19		6				2	7	29	2		2
Indi ana	169	16	59	55	8	19	22	1	10							1		1
I owa	80	5	50	27	1	14	7		3									
Kansas	54	8	27	24	4	13	11	1	1									
Kentucky	56	5	29	21	1	8	7		4									
Loui si ana	119	12	64	62	9	21	19	4	11							1	1	
Mai ne	5		2	1		1												
Maryl and	3		1	6		3	1		1									
Massachusetts	8	1		4														
Mi chi gan	80	2	40	35	2	23	4									1		1
Mi nnesota	78	11	17	37	2	10	13	2										
Mi ssi ssi ppi	91	24	34	38	4	9	16	1	3									
Mi ssouri	66	15	32	32	4	13	8		3							1		1
Montana	6	1	3	5	3		1											
Nebraska	35	3	17	17		6	11	1	1									
Nevada	2	1		2		2	1											
New Hamshire	4		2															
New Jersey	11	2	1	1			5		1									
New Mexico	11	4	8	3		1	1		1									
New York	25	3	8	8	1	2	5											
North Carolina	78	4	22	25	3	9	15	1	6							1	1	
North Dakota	15	3	8	12	2	5	2											
0hi o	148	23	59	47	9	11	11		2							1		1
0kl ahoma	66	11	41	28	3	17	11	1	3									
0regon	15		2	8		3	3											
Pennsyl vani a	48	5	9	8	1	1	11	1	2	1								
Rhode Island	1		1															
South Carolina	62	5	19	18		5	18		37									
South Dakota	24	1	8	9	2	3	5		3							1	1	
Tennessee	58	8	24	16	2	5	13		1									
Texas	235	27	131	145	13	67	28	2	4									
Utah	16	6	9	10	1	4	4		1									
Vermont				1			1		2									
Vi rgi ni a	41	4	7	10	1	4	5		1									
Washi ngton	28		6	12	1	3	8		2									
West Virginia	18		6	10	1	3	5											
Wi sconsi n	84	6	41	35	1	15	10		2							1	1	
Wyomi ng	4			2		1	1											
Unknown																		
Total	2, 505	299	1, 073	1, 035	118	414	412	21	143	3	4	1	3	7	58	14	6	7

TABLE 6. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TYPE OF CONSIST, 1995

	1	Frei «l	nt	1	Passen	ger	, Va	rd Swit	chi na		- Other	
State	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kld	Inj	A/I	Kl d	Inj
	11/1	ni u	1111	A/ I	ni u	1111	A/ I	AI U	- 119	11/1	nı u	
Al abama	148	11	74	2		3	6		3	8	4	3
Al aska	1		3	1		2	1					
Ari zona	15		2	1			6		6	5		1
Arkansas	121	22	50	3		6	8		1	17		11
Cal i forni a	94	10	30	35	5	12	11		3	16	1	9
Col orado	38	10	17	3			6		5	6		8
Connecti cut	2	1		3		4				1		
Del aware	1									2		1
Dist. of Columbia												
Fl ori da	56	13	10	12	4	4	7			5		31
Georgi a	109	11	51	4	2		14		3	11		7
I daho	24	7	14	1			2		1	5		
Illinois	161	21	73	49	18	38	18	1	4	23		9
Indi ana	207	23	79	8	2		13		3	19		7
Iowa	81	6	53				14		3	19		11
Kansas	73	12	36	1			8	1	3	7		2
Kentucky	70	5	34	1		1	4	î	1	9		5
Loui si ana	155	19	82	4	5	1	18		5	24	2	8
Mai ne	2		2	1			10			2		1
wai ne	2		۵	1			1			2		1
Maryl and	8		4				2		1			
Massachusetts	6			5	1					1		
Mi chi gan	101	4	53	2			9		3	8		8
Mi nnesota	91	13	22				15	1	2	22	1	3
Mi ssi ssi ppi	114	28	40	8	1	3	11		2	12		1
Mi ssouri	88	16	38	3	3	1	7		2	9		8
Montana	5	4	1				4			3		2
Nebraska	52	3	24	3			5			3	1	
Nevada	5	1	2									
New Hamshire	4		2									
New Jersey	9		1	2	2		3		1	3		
New Mexico	12	2	10	2	2					1		
New York	24	2	5	11	2	5	2			1		
North Carolina	86	7	31	12	2	1	10		1	11		4
North Dakota	22	5	10				4		1	3		2
0hi o	186	31	72	1			8	1		12		1
0kl ahoma	94	15	59				5		1	6		1
0regon	19		5	2			2			3		
Pennsyl vani a	52	5	10	4		1	4			8	2	1
Rhode Island	1		1									
South Carolina	79	4	24	3	1	32	10		4	6		1
South Dakota	30	4	11				4		2	5		1
Tennessee	65	10	21				16		9	6		
Texas	316	36	156	10	3	5	47	3	19	35		22
Utah	21	4	13	2	3		5			2		1
Vermont	1			1		2						
Vi rgi ni a	39	4	7	3	1		2			12		5
Washi ngton	31		7	2		1	7			8	1	3
West Virginia	24	1	5	3		1	1			5		3
Wi sconsi n	88	7	46	2	1		20		7	20		5
Wyomi ng	6		1							1		
Unknown												
Total	3, 037	377	1, 291	210	58	123	340	8	96	385	12	186

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 7. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY WARNI NG DEVI CE, 1995

Rai l road	Gates	Flashi ng Li ghts	Hwy Sig. Wigwags Bells	Speci al	Cross- Bucks	Stop Si gns	Other Si gns	No Signs Or Signals	Total
Alaska Railroad Corp.		2			1				3
Alton & Southern Railroad		1							1
Amtrak (Nat'l Railroad Passenger Corp.)	65	18	1		34	6	3	1	128
Atchison, Topeka And Santa Fe Railway Co.	61	39	1	1	76	4			182
Bangor And Aroostook Railroad		1							1
Belt Railway Co. of Chicago	4			1					5
Bessemer & Lake Erie Railroad Co.									
Birmingham Southern Railroad Co.									
Burlington Northern Railroad Co.	73	116	3		169	85			446
Chi cago And North Western Transp.	45	21	4		62	12		2	146
Chicago, Central & Pacific Railroad Co.	1	11	8		9				29
Consolidated Rail Corp.	61	52	7	4	48	15		14	201
CSX Transp.	88	146	7	14	230	45	1	5	536
Dakota, Minnesota & Eastern Railroad		3			10	2			15
Delaware And Hudson Railroad Co.	1	3			3				7
Denver And Rio Grande Western Railroad Co.	. 7	4		2	7	1			21
Duluth, Missabe & Iron Range Railway Co.					1				1
Elgin, Joliet And Eastern Railway Co.		4			3	2			9
Florida East Coast Railway Co.	20			1					21
Gateway Western Railway	2	3					1		6
Grand Trunk Western Railroad Co.	17	14			4	10			45
Houston Belt & Terminal Railway Co.	3								3
Illinois Central Railroad Co.	5		4		34	3		3	86
Indiana Harbor Belt Railroad Co.	13								17
Kansas City Southern Railway Co.	9	52	4	1	119	1			186
Long Island Rail Road	7			1					8
Metro North Commuter Railroad Co.	3	1							4
Montana Rail Link	1				3	4			8
New Jersey Transit Rail Operations	2	1							3
Norfolk Southern Corp.	125	161	1	5	199	85		6	582
Northeast Illinois Regional Commuter Rail	10	2				1			13
Northern Indiana Commuter Trans.		2	1		2	1			6
Paducah & Loui sville Railway Co.		1			2				3
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.	2	1			2				5
Soo Line Railroad Co.	11	19	2	1	20	12		1	66
Southeastern Pennsylvania Transp.	3				20				4
Southern Pacific Transp. Co.	84	28	6	3	66	2			189
Southern Pacific, Chicago-St. Louis Corp.					5				5
Springfield Terminal Railway Co.	1	3							4
St. Louis Southwestern Railway Co.	12	17		1	36	1			67
Terminal Railroad Assoc. of St. Louis					1				1
Texas Mexican Railway Co.		1			1				2
Union Pacific Railroad Co.	103	100	3	8	182	54	2	6	458
Union Railroad Company (Pittsburgh)		100			102				436
Wheeling & Lake Erie Railway Co.		3			15				18
Wisconsin Central Ltd.	6	31	1		26	13			77
All Other Railroads			13	10	161	32	3	1	354
Total	. 881	1, 001	66	53	1, 531	391	10	39	3, 972

Note: "Special" are crossings protected by watchmen or members of train crew.

The totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

TABLE 7A. ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY RAI LROAD, 1995

n · 1 1	Mo			Other			Total l Acc/Inc Killed Injur		
Rai l road	Acc/Inc	Killed	Injured	Acc/Inc	Killed	I nj ured	Acc/Inc	Killed	Injure 
Alaska Railroad Corp.	3		5				3		5
Alton & Southern Railroad	1						1		
Amtrak (Nat'l Railroad Passenger Corp.)	128	41	62	10	8	2	138	49	64
Atchison, Topeka And Santa Fe Railway Co.	182	36	76	11	2	6	193	38	82
Bangor And Aroostook Railroad	1		2				1		2
Belt Railway Co. of Chicago	5		1				5		1
Bessemer & Lake Erie Railroad Co.									
Birmingham Southern Railroad Co.									
Burlington Northern Railroad Co.	446	69	161	28	8	12	474	77	173
Chicago And North Western Transp.	146	15	85	7	6	2	153	21	87
Chicago, Central & Pacific Railroad Co.	29		18	2			31		18
Consolidated Rail Corp.	201	27	50	11	7	1	212	34	51
CSX Transp.	536	65	247	16	4	10	552	69	257
Dakota, Minnesota & Eastern Railroad	15	1	10	2		1	17	1	11
Delaware And Hudson Railroad Co.	7		2				7		2
Denver And Rio Grande Western Railroad Co		1	15				21	1	15
Duluth, Missabe & Iron Range Railway Co.	1						1		
Elgin, Joliet And Eastern Railway Co.	9		3				9		3
Florida East Coast Railway Co.	21	4	5	5	2	2	26	6	7
Gateway Western Railway	6		1				6		1
Grand Trunk Western Railroad Co.	45	3	24	2		1	47	3	25
Houston Belt & Terminal Railway Co.	3	1	2				3	1	23
Illinois Central Railroad Co.	86	7	38	2		2	88	7	40
Indiana Harbor Belt Railroad Co.	17		8				17		8
	186	12	91	2	1		188	13	91
Kansas City Southern Railway Co.	8	12	2	3	3		11	4	2
Long Island Rail Road	4		5				4		5
Metro North Commuter Railroad Co.	_		-						
Montana Rail Link	8	1	3	1			9	1	3
New Jersey Transit Rail Operations	3	2		3	2		6	4	
Norfolk Southern Corp.	582	59	193	26	7	11	608	66	204
Northeast Illinois Regional Commuter Rail		3	1	2	1	1	15	4	2
Northern Indiana Commuter Trans.	6						6		
Paducah & Louisville Railway Co.	3		1	1			4		1
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.	5						5		
Soo Line Railroad Co.	66	3	28	7	2	1	73	5	29
Southeastern Pennsylvania Transp.	4		1				4		1
Southern Pacific Transp. Co.	189	19	85	12	5	2	201	24	87
Southern Pacific, Chicago-St. Louis Corp.	5		1				5		1
Springfield Terminal Railway Co.	4	1		1			5	1	
St. Louis Southwestern Railway Co.	67	9	33	4	4	4	71	13	37
Terminal Railroad Assoc. of St. Louis	1						1		
Texas Mexican Railway Co.	2						2		
Union Pacific Railroad Co.	458	60	229	10	5		468	65	229
Union Railroad Company (Pittsburgh)									
Wheeling & Lake Erie Railway Co.	18		10	1			19		10
Wisconsin Central Ltd.	77	5	45	1			78	5	45
All Other Railroads	354	10	153	11	2		365	12	153
Total	3, 972	455	1, 696	181	69	58	4, 153	524	1, 754

Note: A/I totals on this table are slightly higher than those shown on other tables. The reporting rules require that when an Amtrak train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of an accident/incident. In all other tables these accidents/incidents are only counted once.

TABLE 8. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, AT WARNING DEVICE BY STATE, 1995

		Fl ashi ng	Hwy Sig. Wigwags		Cross-	Stop	0ther	No Signs Or	
State	Gates	Li ghts	Bells	Speci al	Bucks	Signs	Si gns	Si gnal s	Tota
A1 -1	15	30	1	3	75	37		3	164
Al abama		2			1				3
Ari zona	5	15			7				27
Arkansas	3 16	35	3		77	17		1	149
Cal i forni a	91	21	5 5	4	27	7		1	156
Col orado	11	10	3		23	6			53
Connecti cut	1	3			1	1			6
Del aware		1	1					1	3
Dist. of Columbia									
Fl ori da	45	14	1	1	16	1	1	1	80
Georgi a	48	15		3	44	27		1	138
Idaho	1	4		1	4	21	1		32
Illinois	107	67	4	1	62	5		5	251
Indi ana	50	75	4	2	73	38		5	247
Iowa	16	25	7	1	54	11			114
Kansas	14	16		1	54	2	1	1	89
Kentucky	8	42	1		29	3		1	84
Loui si ana	25	62	8	1	98	6		1	201
Mai ne		3			2	1			6
Maryl and	2	1		2	4			1	10
Massachusetts	4	6						2	12
Mi chi gan	24	34	3		39	19	1		120
Mi nnesota	17	26		2	38	44		1	128
Mi ssi ssi ppi	6	52	2	3	69	12		1	145
Mi ssouri	17	27	2		49	11		1	107
Montana	2				3	7			12
Nebraska	18	7		1	29	6	1	1	63
Nevada	2				2	1			5
New Hamshire	1	2			1				4
New Jersey	4	9		1	3				17
New Mexico	2	3			10				15
New York	25	3	1	1	5	2	1		38
North Carolina	35	18		1	59	3		3	119
North Dakota	4	2		1	13	9			29
0hi o	32	49	3	6	100	15	2		207
0kl ahoma	6	38	2		54	5			105
0regon	9	5			8	4			26
Pennsyl vani a	18	23	1	2	20	1		3	68
Rhode Island		1							1
South Carolina	12	30			47	9			98
South Dakota		7			19	13			39
Tennessee	13	36	4		30	4			87
Texas	115	93	2	7	171	20			408
Utah	10	4		2	8	3	2	1	30
Vermont		1			1				2
Vi rgi ni a	15	18	1	5	14	3			56
Washi ngton	13	8	1	1	24	1			48
West Virginia	8	8	1		13			3	33
Wi sconsi n	13	48	5		48	15		1	130
Wyomi ng	1	2			3	1			7
Unknown									
	881		66						

Note: "Special" are crossings protected by watchmen or members of train crew.

TABLE 9. ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY HI GHWAY USER, 1995

	Acc/	Inc	Ki 1 1	ed	I nj ure	ed	Fatal	Inj ury
Type Of Vehicle	No.	%	No.	%	No.	%	Acc/Inc	Acc/Inc
Automobile	2, 505	60. 32	299	57. 06	1, 073	61. 1	7 231	736
Truck	1, 035	24. 92	118	22. 52	414	23. 6		
Truck-trailer	412	9. 92	21	4. 01	143	8. 1	5 19	77
Bus	3	. 07	4	. 76	1	. 0	6 1	
School bus	3	. 07	7	1. 34	58	3. 3	1 1	1
Motorcycle	14	. 34	6	1. 15	7	. 4	0 6	5 7
Pedestri an	73	1. 76	47	8. 97	27	1. 5	4 45	25
0ther	108	2. 60	22	4. 20	31	1. 7	7 18	3 22
Total	4, 153	100. 00	524	100. 00	1, 754	100. 0	0 419	1, 186

TABLE 10. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY CI RCUMSTANCE, 1995

	Acc	c/I nc	Ki	lled	I nj	ured	Fatal	I nj ury	
Circumstance	No.	%	No.	%	No.	%	Acc/Inc	Acc/I nc	
Struck by consist	2, 947	74. 19	391	85. 93	1. 197	70. 58	302	769	
Ran into consist.	1, 025	25. 81	64	14. 07	499	29. 42	54	370	
Total	3, 972	100. 00	455	100. 00	1, 696	100. 00	356	1, 139	

TABLE 11. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS BY TYPE OF VEHICLE AND NUMBER OF OCCUPANTS, 1995

Vehi cl e	# of A/I	# of Occupants	Occupants Per A/I	Killed	Killed Per A/I	I nj ured	Inj ured Per A/I	Vehi cl e Damage	Damage Per A/I
Automobile	2, 505	3, 221	1. 29	299	. 12	1, 051	. 42	6, 806, 817	2, 717
Truck	1, 035	1, 206	1. 17	117	. 11	387	. 37	4, 247, 201	4, 104
Truck-trailer	412	388	. 94	21	. 05	67	. 16	4, 720, 707	11, 458
Bus	3	6	2.00	4	1. 33	1	. 33	25, 000	8, 333
School bus	3	65	21.67	7	2. 33	58	19. 33	40, 000	13, 333
Motorcycl e	14	13	. 93	6	. 43	7	. 50	36, 950	2, 639
Total	3, 972	4, 899	1. 23	454	. 11	1, 571	. 40	15, 876, 675	3, 997

		Dawn-			Day-			Dusk			- Dark-	
Type Of Vehicle	A/I	Kl d	Inj	A/I	Kl d	Inj	A/I	Kl d	Inj	A/I	Kl d	I nj
RAIL CONSI	ST	STRU	J С К	H I G	H W A	Y U	SER					
Automobile	46	3	12	993	154	453	74	14	38	702	89	239
Truck	21	1	5	522	80	194	26	8	7	186	11	67
Truck-trailer	9		4	306	20	79	9			43		37
Bus				2	4	1				1		
School bus	2	7	29	1		29						
Motorcycl e				4		3						
Total	78	11	50	1, 828	258	759	109	22	45	932	100	343
HIGHWAY US	ER S	STRU	J C K	R A I	L C (	O N S	I S T					
Automobile	16		8	296	19	142	21		10	357	20	171
Truck	7		2	154	5	75	8		4	111	13	60
Truck-trailer				29		12	1		1	15	1	10
Bus												
School bus												
Motorcycl e				3	2	1	2	1	1	5	3	2
Total	23		10	482	26	230	32	1	16	488	37	243
GRAND TOTA	L											
Automobile	62	3	20	1, 289	173	595	95	14	48	1, 059	109	410
Truck	28	1	7	676	85	269	34	8	11	297	24	127
Truck-trailer	9		4	335	20	91	10		1	58	1	47
Bus				2	4	1				1		
School bus	2	7	29	1		29						
Motorcycl e				7	2	4	2	1	1	5	3	2
Total	101	11	60	2. 310	284	989	141	23	61	1. 420	137	586

TABLE 13. ACCI DENTS/INCI DENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TYPE OF PERSON, 1995

	E	EOD	E	ENOD	P	SGR	N	ONT	T	RES	C	ONT		- Total -	
Type Of Vehicle	Kl d	I nj	Kl d	I nj	Kl d	I nj	Kl d	I nj	Kl d	I nj	Kl d	I nj	Kl d	I nj	A/I
RAIL CONSI	S T	STRI	U С К	H I G	H W A	Y U S	E R								-
Automobile		18					189	614	71	109		1	260	742	1, 815
Truck		20				2	81	210	19	41			100	273	755
Truck-trailer		40		3		28	18	45	2	4			20	120	367
Bus							3	1	1				4	1	3
School bus							7	58					7	58	3
Motorcycle								2		1				3	4
Pedestri an							10	10	36	14			46	24	69
0ther	1	6					11	20	9	4			21	30	102
Total	1	84		3		30	319	960	138	173		1	458	1, 251	3, 118
H I G H W A Y U S	E R	STRI	U C K	R A I	L C	0 N S I	ST								
Automobile		4					33	293	6	34			39	331	690
Truck		5					15	119	3	17			18	141	280
Truck-trailer		5					1	13		5			1	23	45
Bus															
School bus															
Motorcycle							6	3		1			6	4	10
Pedestri an									1	3			1	3	4
0ther							1	1					1	1	6
Total		14					56	429	10	60			66	503	1, 035
G R A N D T O T A	L														
Automobile		22					222	907	77	143		1	299	1, 073	2, 505
Truck		25				2	96	329	22	58			118	414	1, 035
Truck-trailer		45		3		28	19	58	2	9			21	143	412
Bus							3	1	1				4	1	3
School bus							7	58					7	58	3
Motorcycle							6	5		2			6	7	14
Pedestri an							10	10	37	17			47	27	73
0ther	1	6					12	21	9	4			22	31	108
Total	1	98		3		30	375	1, 389	148	233		1	524	1, 754	4, 153

Note: EOD = Employee on duty PSGR = Passenger on train

TRES = Trespasser

ENOD = Employee not on duty NONT = Nontrespasser

CONT = Contractor employee

TABLE 14. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY VEHI CLE SPEED, CI RCUMSTANCE, AND VI SI BI LI TY, 1995

		Dawn-			Day-			Dusk-			Dark			- Tot al	
Speed Of Vehicle	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I	Kl d	I nj
RAIL CONSI	S T S	STRI	J С К	H I G	H W A	Y U S	E R								
Standi ng	31	7	34	585	23	152	35	3	12	395	8	77	1, 046	41	275
1-9	15	1	5	464	73	211	23	6	12	150	9	70	652	89	298
10- 19	7		4	349	76	139	24	11	8	163	33	78	543	120	229
20- 29	11	3	2	160	31	109	14		5	87	13	45	272	47	161
30-39	4		1	107	21	68	3	1	3	51	14	36	165	36	108
40- 49	2		1	43	9	24	3			34	7	16	82	16	41
50- 59	2			28	10	17				7	11	4	37	21	21
60 and over	1		1	2		1				3	1		6	1	2
Unknown	5		2	90	15	38	7	1	5	42	4	17	144	20	62
Total	78	11	50	1, 828	258	759	109	22	45	932	100	343	2, 947	391	1, 197
H I G H W A Y U S	E R S	STRI	U C K	R A I	L C O	N S I	S T								
Standi ng															
1-9	8		3	95		20	7		1	81		18	191		42
10- 19	3		2	95	1	36	12		5	112	2	43	222	3	86
20- 29	1			91	4	54	2			71	3	36	165	7	90
30- 39	8		3	66	1	24	1			88	7	36	163	8	63
40- 49				55	7	45	4		4	55	6	49	114	13	98
50- 59	2		1	35	7	25	1		2	29	10	25	67	17	53
60 and over				10	4	6				13	7	12	23	11	18
Unknown	1		1	35	2	20	5	1	4	39	2	24	80	5	49
Total	23		10	482	26	230	32	1	16	488	37	243	1, 025	64	499
G R A N D T O T A	L														
Standi ng	31	7	34	585	23	152	35	3	12	395	8	77	1, 046	41	275
1-9	23	1	8	559	73	231	30	6	13	231	9	88	843	89	340
10- 19	10		6	444	77	175	36	11	13	275	35	121	765	123	315
20- 29	12	3	2	251	35	163	16		5	158	16	81	437	54	251
30- 39	12		4	173	22	92	4	1	3	139	21	72	328	44	171
40- 49	2		1	98	16	69	7		4	89	13	65	196	29	139
50- 59	4		1	63	17	42	1		2	36	21	29	104	38	74
60 and over	1		1	12	4	7				16	8	12	29	12	20
Unknown	6		3	125	17	58	12	2	9	81	6	41	224	25	111
Total	101	11	60	2, 310	284	989	141	23	61	1, 420	137	586	3, 972	455	1, 696

TABLE 15. (MV) ACCI DENTS/I NCI DENTS AT PUBLIC HI GHWAY-RAI L CROSSI NGS, BY POSI TI ON AND TYPE OF VEHI CLE, 1995

			]	Positi	on On	Cross	i ng		
	St	alled	0n	St	opped	0n	Mo	ving 0	ver
Vehi cl e	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I	Kl d	Inj
Automobile	244	4	33	460	20	119	1, 801	275	921
Truck	78	1	11	152	9	37	805	108	366
Truck-trailer	37		38	70		7	305	21	98
Bus				1			2	4	1
School bus	1			1	7	29	1		29
Motorcycl e	1			1		1	12	6	6
Total	361	5	82	685	36	193	2. 926	414	1. 421

TABLE 16. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY CONSI ST SPEED, CI RCUMSTANCE, AND VI SI BI LI TY, 1995

		Dawn			- Day		Du	ısk		Dar	k		Total		_
Speed Of Consist	A/I	Kl d	Inj	A/I	Klď		A/I Kl							Inj	
RAIL CONSI	S T	S T R	U C K	H I G I	H W A	Y USI	E R								_
Standi ng															
1-9	12			285		42	26		5	179	3	46	502	3	93
10- 19	10		3	243	2	51	15		1	139		39	407	2	94
20- 29	16	1	4	282	7		15	2	8	159	6	80	472	16	247
30- 39	13		4	329	33	174	20	8	13	166	18	61	528	59	252
40- 49	16		6	404	102	218	18	4	11	168	46	56	606	152	291
50- 59	5		3	182	81	78	11	7	6	75	14	21	273	102	108
	4	8	30	72	20	32		1		32	8	4		37	
60-69							1						109		66
70-79	2	2		30	13	9	3		1	14	5	36	49	20	46
80-89				1									1		
90 and over															
Unknown															
Total	78	11	50	1, 828	258	759	109	22	45	932	100	343	2, 947	391	1, 197
H I G H W A Y U S	E R	S T R	U C K	RAII	L C O	NSI	S T								
Standing	2			12		5				84	1	45	98	1	50
1-9	4		1	119	2	34	9		3	145	5	60	277	7	98
10- 19	6		3	81		38	6		6	94	15	49	187	15	96
20- 29				83	1	49	6	1	2	61	2	34	150	4	85
30-39	4		2	73	6	49	4		1	37	4	21	118	10	73
40- 49	4		2	78	8		5		2	43	5	25	130	13	66
50- 59	2		1	24	5	9	1		2	13	2	5	40	7	17
60-69				6	2	5				8	2	2	14	4	7
70- 79	1		1	5		2	1			3	1	2	10	1	5
80-89				1	2	2							1	2	2
90 and over															
Unknown															
Total	23		10	482	26	230	32	1	16	488	37	243	1, 025	64	499
GRAND TOTA	L														
Standing	2			12		5				84	1	45	98	1	50
1-9	16		1	404	2	76	35		8	324	8	106	779	10	191
10- 19	16		6	324	2	89	21		7	233	15	88	594	17	190
20- 29	16	1	4	365	8	204	21	3	10	220	8	114	622	20	332
30- 39	17		6	402	39	223	24	8	14	203	22	82	646	69	325
40- 49	20		8	482	110	255	23	4	13	211	51	81	736	165	357
50- 59	7		4	206	86		12	7	8	88	16	26	313	109	125
60- 69	4	8	30	78	22		1	1		40	10	6	123	41	73
70- 79	3	2	1	35	13		4		1	17	6	38	59	21	51
80-89				2	2	2							2	2	2
90 and over															
Unknown															
Total	101	11	60	2, 310	284	989	141	23	61	1, 420	137	586	3, 972	455	1, 696

TABLE 17. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS BY RAI LROAD EQUI PMENT I NVOLVED, 1995

	Consi st	Vehi cl e		Pa	rt Of C	onsist	Struck	[				
	Struck	Struck	Lead		Quar	ter				Vi si l	bility-	
Type Consist	Vehi cl e	Consist	Uni t	1	2	3	4	Unknown	Dawn	Day	Dusk	Dark
Train (Units Pulling).	2, 543	739	449	115	53	53	56	13	77	1, 980	111	1, 114
Train (Units Pushing).	166	77	41	5	6	10	15		11	109	12	111
Train (Standing)		87	15	19	18	13	18	4	2	8		77
Cars (Moving)	44	24	19			1	3	1	1	58	4	5
Cars (Standing)		4	4							2		2
Light Locos (Moving)	194	86	81			3	2		10	150	14	106
Light Locos (Standing)		7	6				1			2		5
0ther		1	1							1		
Total	2, 947	1, 025	616	139	77	80	95	18	101	2, 310	141	1, 420

Note: The "Lead" unit is the first unit to occupy the crossing.

TABLE 18. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TRAIN SPEED AND TYPE OF TRAIN, 1995

		Frei gh	t	Pa	assenge	er	- Yar	d Swite	chi ng		- Other			- Total	
Speed Of Consist	A/I	Kl d	I nj	A/I	Kl d	Inj	A/I	Kl d	Inj	A/I	Kl d	Inj	A/I	Kl d	Inj
Standi ng	71	1	41				16		7	11		2	98	1	50
1-9	370	7	73	3			248	3	68	158		50	779	10	191
10- 19	416	15	127	21		8	62	2	16	95		39	594	17	190
20-29	545	18	266	21	1	4	8	1	3	48		59	622	20	332
30-39	577	63	291	25	2	14	4		2	40	4	18	646	69	325
40-49	685	156	339	27	5	9	1	2		23	2	9	736	165	357
50- 59	273	89	108	31	14	10	1			8	6	7	313	109	125
60-69	90	27	38	31	14	33				2		2	123	41	73
70- 79	10	1	8	49	20	43							59	21	51
80-89				2	2	2							2	2	2
90 and over															
Unknown															
Total	3, 037	377	1, 291	210	58	123	340	8	96	385	12	186	3, 972	455	1, 696

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars.

TABLE 19. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY LENGTH OF CONSIST, 1995

	F	rei ght		Pas	ssenger-		Yard S	Swi tchi	ng -	<b>0</b> t	her		Total		
Number Of Cars	A/I	Kl d	Inj	A/I	Kld I	nj A	\/I	Kld I	nj A	/I K	ld Inj	A/I	Kl d	Inj	
1-9	406	38	140	156	40	78	195	5	50	87	5	44	844	88	-
10- 19	335	29	147	40	17	39	65	1	21	4			444	47	
20- 29	279	40	106				34	1	13	5		1	318	41	
30- 39	291	47	135				19		4	1			311	47	
40- 49	212	28	93	4	1	1	10		4				226	29	
50- 59	225	33	100				6			2			233	33	
60- 69	241	34	110				3		3	1		1	245	34	
70- 79	231	32	106				1						232	32	
30- 89	184	22	87				3		1				187	22	
90- 99	170	19	73				1						171	19	
100- 109	158	20	67				1	1					159	21	
110-119	176	27	81				1						177	27	
120- 129	57	3	20										57	3	
130-139	24	1	8										24	1	
140-149	15	2	2										15	2	
150 And over	17	2	11										17	2	
Locomotives only.	16		5	10		5	1			285	7	140	312	7	
Total	3, 037	377	1, 291	210	58	123	340	8	96	385	12	186	3, 972	455	1,

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 20. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY LENGTH OF CONSIST AND VISIBILITY, 1995

Number Of Cars	A/I	- Dawn Kl d	Inj		Day Kl d			usk Ild I		/Dai			Total I Kld	I nj	
RAIL CONSI	S T	S T R	и с к	ніс	H W A	Y U S	E R								
1-9	14	7	33	423	46	129	24	5	7	155	21	47	616	79	216
10- 19	9	2	2	191	21	68	18	2	9	108	11	71	326	36	150
20- 29	3			157	29	64	3		1	63	3	20	226	32	85
30-39	6	1	1	162	33	81	6		6	70	9	29	244	43	117
40-49	6		2	98	18	43	10	4	3	54	4	19	168	26	67
50-59	3		1	121	24	47	3			63	3	21	190	27	69
60-69	5		2	111	25	64	3	1	2	69	6	20	188	32	88
70- 79	4		1	95	14	43	11	4	4	55	7	17	165	25	65
80-89	3			77	8	38	8	4	5	51	6	16	139	19	59
90-99	5		3	73	11	33	2		2	47	3	14	127	14	52
100-109	5		2	65	14	25	4	1		44	3	20	118	18	47
110-119	3			90	9	42	4	1	1	42	16	14	139	26	57
120-129	2			25	1	6	1		3	13	1	3	41	2	12
130-139				11		6				12	1	2	23	1	8
140-149	1			5	1	1				8	1	1	14	2	2
150 And over	1		3	6		2 67	2		1 1	2 76	2 3		11	2 7	100
Locomotives only.	8			118	4		10					29	212		100
Total	78		50	1, 828	258	759	109	22	45	932	100	343	2, 947	391	1, 197
HIGHWAY US	ER	STR	UCK	RAI	L C O	NSI	ST								
1-9	3			136	4	56	7		7	82	5	33	228	9	96
10- 19	2		1	53	6	25	2		2	61	5	29	118	11	57
20- 29	2		2	42	4	15	2			46	5	18	92	9	35
30-39	4		3	31	2	11	2	1	1	30	1	7	67	4	22
40-49	1			26	1	14	1		1	30	2	16	58	3	31
50- 59				18	2	18	2			23	4	13	43	6	31
60-69	1		1	23	2	11	1			32		14	57	2	26
70-79				33	3 2	15 15	2 4		1	32	4	26	67 48	7	41
80- 89	1 4		2	25 17		10				18 23	1 5	13 9	46	3 5	29 21
100-109	1			13		5	2		1	25 25	3	14	41	3	20
110-119	1			11		13	1			25	1	11	38	1	24
120-129				4		4				12	1	4	16	1	8
130-139				1									1		
140-149										1			1		
150 And over				1			1		1	4		7	6		8
Locomotives only.	3		1	48		18	5		2	44		29	100		50
Total	23		10	482	26	230	32	1	16	488	37	243	1, 025	64	499
GRAND TOTA	L														
1-9	17	7	33	559	50	185	31	5	14	237	26	80	844	88	312
10- 19	11	2	3	244	27	93	20	2	11	169	16	100	444	47	207
20- 29	5		2	199	33	79	5		1	109	8	38	318	41	120
30-39	10		4	193	35	92	8	1	7	100	10	36	311	47	139
40-49	7		2	124	19	57	11	4	4	84	6	35	226	29	98
50- 59	3		1	139	26	65	5			86	7	34	233	33	100
60-69	6		3	134	27	75	4	1	2	101	6	34	245	34	114
70-79	4		1	128	17	58	13	4	4	87	11	43	232	32	106
80-89	4			102	10	53	12	4	6	69	7	29	187	22	88
90-99	9		5	90	11	43	2		2	70	8	23	171	19	73
100-109	6		2	78	14	30	6	1	1	69	6	34	159	21	67
110-119	4			101	9	55	5	1	1	67	17	25	177	27	81
120-129	2			29	1	10	1		3	25	2	7	57	3	20
130-139				12		6				12	1	2	24	1	8
140-149	1 1			5 7	1	1 2	3		2	9 6	1 2	1 7	15 17	2 2	2 11
150 And over Locomotives only.	11		4	166	4	85	15		3	120	3	58	312	7	150
Total	101	11	60	2, 310	284	989	141	23	61	1, 420	137	586	3, 972	455	1, 696

TABLE 21. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY TYPE AND CLASS OF TRACK, 1995

		- Mai n-			- Yard		Si	di ng	]	ndust	ry		Unknov	vn	 - Total -		
Track Class								_							Kl d		
1	274	5	74	164	2	42	21		7	152		42			 611	7	16
2	596	20	262	31			6		4	16	1	6			 649	21	28
3	989	90	467	9					3	12		2			 1,017	90	47
4	1, 444	301	680	4		4	2		1	6		1			 1, 456	301	68
5	165	32	68												 165	32	6
6	4	1	3												 4	1	
Unknown	47	3	12	13		1	2			8		2			 70	3	1
Total	3, 519	452	1, 566	221	2	62	38		15	194	1	53			 3, 972	455	1, 69

TABLE 22. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY WARNI NG DEVI CE AND MOTORI ST ACTI ON, 1995

	Dro	ve Arc	ound-	Sto	pped A	nd												
	-0r T	hru Ga	ite	- Then	Proce	eded	-Did 1	Not Sto	p	0tl	ier		Unknow	/n		Total		
Warning Device	A/I	Kl d	Inj	A/I	Kl d	Inj	A/I	Kl d	Înj <i>l</i>	A/I KI	d In	j A/I	Kl d	Inj	A/I	Kl d	Inj	
Gates	493	3 74	1 200	2			13		8	370	20	66	3		1	881	94	 275
Cantilever flshrs				28	2	10	227	20	128	50		15	2		1	307	22	154
Standard flashers				43	10	15	501	81	240	140	8	23	10		4	694	99	282
Hwy Sig, W W, Bells				6			42	3	19	18		4				66	3	23
Special Devices				5			42	2	15	5			1			53	2	15
Crossbucks				66	8	26	1, 117	169	609	335	14	122	13		5	1, 531	191	762
Stopsi gns				39	8	14	241	31	129	107	4	33	4		1	391	43	177
Other Signs							6		2	4	1					10	1	2
No Signs Or Signl							23		6	16						39		6
Total	493	3 74	200	189	28	65	2, 212	306	1, 156	1, 045	47	263	33		12	3, 972	455	1, 696

Note: "Special" are crossings protected by watchmen or members of train crew. "Hwy Sig" = Highway signals, W W = Wigwags.

TABLE 23. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS BY OPERATI ONAL STATUS OF WARNI NG DEVI CE,
CI RCUMSTANCE, AND VI SI BI LI TY, 1995

							Hi ghwa					
	- Devi c	e Work	i ng	St	ruck B	y Consi	st	R	an I	nto Con	sist	
Warning Device	Yes	No	N/A	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	
Gates	857	3	21	26	343	25	5 341		3	62	5	70
Cantilever flshrs	302	1	4	2	131	:	3 70		3	56	2	4
Standard flashers	682	3	9	13	311	16	3 139		3	103	5	10
Hwy Sig, W W, Bells	66			1	20	1	1 19		1	16	1	
Special Devices			53		9	:	3 12		2	7		20
Crossbucks			1, 531	28	760	52	2 273		8	188	17	20
Stopsi gns			391	5	241		62		3	46	1	2
Other Signs			10		2		4		-	2		:
No Signs Or Signl			39	3	11	4	1 12		-	2	1	(
Total	1, 907	7	2, 058	78	1, 828	109	932	2	3	482	32	488

Note: If a rail consist is intentionally grounded to prevent activation of the warning device, these are reported as "N/A."

TABLE 24. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, DURING DUSK AND DARK HOURS BY ILLUMINATION OF CROSSING AND CIRCUMSTANCE, 1995

	Struc	ck By	Consi st	Ran	Into	Consi s	t	Total			
	A/I	KÌ d	Inj	A/I	Kl d	Inj	A/I	Kl d	Inj		
Li ghted	612	67	232	233	10	107	845	77	339		
Not Lighted	1, 760	263	758	601	46	307	2, 361	309	1, 065		
Not Reported	568	61	206	186	7	81	754	68	287		
Total	2, 947	391	1, 197	1, 025	64	499	3, 972	455	1, 696		

TABLE 25. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY CROSSI NG PROTECTI ON, 1995

Warning Device	A/I	Dawn- Kl d	Inj	A/I	Day- Kl d	I nj	 A/I	Dusk Kl d	Inj	A/I	Dark- Kl d	Inj	A/I	- Total Kl d	Inj
RAIL CONSIST STR	и с к	ні	G H W	A Y U	SER										
Automatic, Both Sides	41	11	42	785	92	251	43	6	10	556	73	189	1, 425	182	492
Automatic, Side Of Approach.	1			19	2	4	2	1	1	12			34	3	5
Automatic, Opposite Side															
Automatic, Side Not Reported				1						1		1	2		1
Manual, Both Sides				9		2	2			10		2	21		4
Manual, Si de Of Approach							1						1		
Manual, Opposite Side															
Manual, Si de Not Reported										2			2		
Other, Both Sides	32		8	967	159	488	53	15	30	326	24	144	1, 378	198	670
	32 1			28	3	6	4		3	10	3	5	43	6	14
Other, Side Of Approach				4		4				2		2	43 6		6
Other, Opposite Side				4	2										
Other, Side Not Reported				_						1			5	2	
No Signs Or Signals	3			11		4	4		1	12			30		5
Total	78	11	50	1, 828	258	759	109	22	45	932	100	343	2, 947	391	1, 197
HIGHWAY USER STR	U C K	R A	I L C	0 N S	I S T										
Automatic, Both Sides	10		5	229	14	124	13		10	223	19	94	475	33	233
Automatic, Side Of Approach.				6						2		1	8		1
Automatic, Opposite Side				2		1				1			3		1
Automatic, Side Not Reported										1		1	1		1
Manual, Both Sides	1			5	2	1				18		8	24	2	9
										1		1	1		1
Manual, Side Of Approach															
Manual, Opposite Side				2											
Manual, Side Not Reported	1					1				1			4		1
Other, Both Sides	11		5	224	10	98	17	1	5	225	17	134	477	28	242
Other, Side Of Approach				10		4				8		4	18		8
Other, Opposite Side				1			1			1			3		
Other, Side Not Reported				1		1				1	1		2	1	1
No Signs Or Signals				2			1		1	6			9		1
Total	23		10	482	26	230	32	1	16	488	37	243	1, 025	64	499
G R A N D T O T A L															
Automatic, Both Sides	51	11	47	1, 014	106	375	56	6	20	779	92	283	1, 900	215	725
Automatic, Side Of Approach.	1			25	2	4	2	1	1	14		1	42	3	6
Automatic, Opposite Side				2		1				1			3		1
Automatic, Side Not Reported				1						2		2	3		2
Manual, Both Sides	1			14	2	3	2			28		10	45	2	13
Manual, Si de Of Approach							1			1		1	2		1
Manual, Opposite Side															
Manual, Side Not Reported	1			2		1				3			6		1
Other, Both Sides	43			1, 191	169	586	70	16	35	551	41	278	1, 855	226	912
Other, Side Of Approach	43			38	3	10	4		3	18	3	9	61	6	22
				ა <b>ა</b>		4	1			3		2	9		6
Other, Opposite Side															
Other, Side Not Reported				5	2	1				2	1		7	3	1
No Signs Or Signals	3			13		4	5		2	18			39		6
Total	101	11	60	2, 310	284	989	141	23	61	1, 420	137	586	3, 972	455	1, 696

Note: Automatic devices include gates, flashing lights, and other devices which are activated by the approach of a rail Manual devices include "Watchmen" and "Flagged by crew". "Other" devices include crossbucks, stop signs, etc.

consi st.

TABLE 26. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS, BY VI SI BI LI TY AND CI RCUMSTANCE, 1995

	Struck By	y Cons	i st	Ran I	nto Coi	nsi st	To		
Visibilty	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I	Kld I	nj
D									
Dawn									60
Day	. 1, 828	258	759	482	26	230	2, 310	284	989
Dusk	. 109	22	45	32	1	16	141	23	61
Dark	. 932	100	343	488	37	243	1, 420	137	586
Total	2 047	201	1 107	1 095	6.4	400	2 072	455	1 606

TABLE 27. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TEMPERATURE AND VISIBILITY, 1995

	S	truck By	Consis	st	Ran	Into Cor	nsi st		Total				
Temperature	Dawn	Day	Dusk	Dark	Dawn	Day Du	ısk Da	ırk Dav	wn D	Day Dusk	Darl	ĸ	
0ver 100		4				2				6			
80 To 100	2	535	14	78	1	128	6	28	3	663	20	106	
60 To 79	30	634	38	279	7	155	10	140	37	789	48	419	
40 To 59	27	346	31	316	6	93	9	153	33	439	40	469	
20 To 39	16	276	23	207	8	78	5	121	24	354	28	328	
0 To 19	3	33	3	52	1	26	2	46	4	59	5	98	
-20 To -1													
Under - 20													
Not Reported													
Total	78	1, 828	109	932	23	482	32	488	101	2, 310	141	1, 420	

TABLE 28. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TIME OF DAY, 1995

	Struck	By Co	onsi st	Ran Into Consist		To	tal		
TI ME	A/I	Kľ d	I nj	A/I	Kl d	I nj	A/I K	ld I	nj
MID TO 12:59 AM.	84	14	34	45	5	26	129	19	60
1 TO 1:59 AM	69	12	20	52	3	37	121	15	57
2 TO 2:59 AM	72	7	49	44	1	22	116	8	71
3 TO 3: 59 AM	44	3	11	32	5	18	76	8	29
4 TO 4: 59 AM	47	2	15	25	2		72	4	23
5 TO 5: 59 AM	49	6	15	26	1		75	7	22
6 TO 6: 59 AM	83	4	27	39	2	16	122	6	43
7 TO 7:59 AM	135	22	78	37	1		172	23	100
8 TO 8:59 AM	136	27	79	27	1	8	163	28	87
9 TO 9:59 AM	158	19	44	39		23	197	19	67
10 TO 10: 59 AM	142	11	57	41	1	14	183	12	71
11 TO 11:59 AM.	162	26	64	58	4	27	220	30	91
NOON TO 12:59 PM	175	17	57	40	1	16	215	18	73
1 TO 1:59 PM	165	19	71	35	1	17	200	20	88
2 TO 2:59 PM	181	23	83	46	3	23	227	26	106
3 TO 3:59 PM	177	40	81	53	2	18	230	42	99
4 TO 4:59 PM	186	28	72	39	4	31	225	32	103
5 TO 5:59 PM	202	27	78	51	8	24	253	35	102
6 TO 6:59 PM	145	25	54	55	2	28	200	27	82
7 TO 7:59 PM	109	12	41	51	3	26	160	15	67
8 TO 8:59 PM	118	9	60	51	6	13	169	15	73
9 TO 9:59 PM	94	15	28	50	4	29	144	19	57
10 TO 10:59 PM	116	9	49	41	1		157	10	72
11 TO 11:59 PM	98	14	30	48	3	23	146	17	53
Unknown									
Total	2, 947	391	1, 197	1, 025	64	499	3, 972	455	1, 696

TABLE 29. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY MONTH AND CIRCUMSTANCE, 1995

	Struck	By Con	ısi st	Ran I	Ran Into ConsistTotal				
Month	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I I	Kld I	nj
_									
January	288	29	113	129	11	59	417	40	172
February	241	31	119	102	10	43	343	41	162
March	241	36	101	82	5	51	323	41	152
Apri 1	208	39	66	65	4	29	273	43	95
May	258	32	111	59	1	35	317	33	146
June	224	40	83	65	3	30	289	43	113
Jul y	211	17	87	72	5	36	283	22	123
August	263	41	114	84	7	37	347	48	151
September	250	28	73	69	3	40	319	31	113
October	257	37	119	96	3	37	353	40	156
November	229	26	109	90	5	52	319	31	161
December	277	35	102	112	7	50	389	42	152
Total	2, 947	391	1, 197	1, 025	64	499	3, 972	455	1, 696

TABLE 30. (MV) ACCI DENTS/I NCI DENTS AT PUBLI C HI GHWAY-RAI L CROSSI NGS,
BY WEATHER CIRCUMSTANCE AND VI SI BI LI TY, 1995

	St	ruck By	Consi s	t	Rar	n Into (	Consi s	t			Tot al		
Weather	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dav	vn Da	ay Dusk	a Dar	k
Cl ear	49	1, 332	76	577	11	315	5	16 2	68	60	1, 647	92	845
Cl oudy	15	364	23	196	9	103	3	9 1	00	24	467	32	296
Rai n	8	85	6	105	1	40	)	6	66	9	125	12	171
Fog	4	8		22	2	8	3		31	6	16		53
Sleet		3		5					3		3		8
Snow	2	36	4	27		16	3	1	20	2	52	5	47
Not Reported													
Total	78	1, 828	109	932	23	482	2 :	32 4	88	101	2, 310	141	1, 420

TABLE 31. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS BY OBSTRUCTION OF MOTORIST VIEW, CIRCUMSTANCE AND VISIBILITY, 1995

Type Obstruction	St Dawn	ruck By Day	Consi s Dusk	st Dark	Rar Dawn		onsist Dusk Da			-Total Day Dus		
												_
Permanent structure	2	43	1	12		17		6	2	60	1	18
Standing RR Equipment.		11		5			1	1		11	1	6
Passing Train		10		2		2		4		12		6
Topography		17		9		4				21		9
Vegetation		24	4	6	1	8	1	1	1	32	5	7
Hi ghway Vehi cl e		1	2	4		2				3	2	4
0ther		13		3	1	3	2	5	1	16	2	8
Not Obstructed	76	1, 709	102	891	21	446	28	471	97	2, 155	130	1, 362
Unknown												
Total	78	1, 828	109	932	23	482	32	488	101	2, 310	141	1, 420

TABLE 32. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY MOTORIST ACTION AND TYPE OF VEHICLE, 1995

Type Of Vehicle	Struck Yes			Passe Yes		g Vehicle Iknown
Automobile	34	2, 441	30	79	2, 239	187
Truck	12	1, 011	12	33	926	76
Truck-trailer	9	397	6	7	386	19
Bus		3			3	
School bus		3			3	
Motorcycle		13	1	1	11	2
Total	55	3, 868	49	120	3, 568	284

(DATA)

**HIGHWAY-RAIL** 

**CROSSING** 

**INVENTORY** 

State	Public At Grade	Public RR Under	Public RR Over	Pri vate at Grade	Pri vate Grade Separated	Pedestri an at Grade	Pedestrian Grade Separated	Total
Al abama	3, 610	486	169	1, 982	20	24	4	6, 295
Al aska	225	14	6	104	1	8	4	362
Ari zona	940	88	83	686	106	7	2	1, 912
Arkansas	3, 280	181	120	1, 507	69	10	8	5, 175
Cal i forni a	7, 956	941	566	4, 871	200	158	90	14, 782
Col orado	2, 069	209	119	1, 448	21	21	8	3, 895
Connecti cut	370	323	252	261	37	0	31	1, 274
Del aware	284	44	54	119	2	1	4	508
Dist Of Columbia	23	30	37	8	0	11	2	111
Fl ori da	4, 066	235	57	1, 480	1	67	4	5, 910
Georgi a	6, 163	569	263	2, 775	10	42	11	9, 833
Hawai i	6	0	0	0	0	0	0	. 6
I daho	1, 524	93	69	1, 376	11	13	2	3, 088
Illinois	10, 219	921	1, 905	5, 684	176	293	85	19, 283
I ndi ana	6, 587	439	557	2, 846	87	65	13	10, 594
I owa	5, 245	467	328	4, 217	45	48	11	10, 361
Kansas	7, 865	350	208	4, 232	32	33	0	12, 720
Kentucky	2, 626	440	439	2, 761	103	47	23	6, 439
Loui si ana	3, 656	224	116	3, 222	20	36	7	7, 281
Mai ne	882	128	78	934	15	11	3	2, 051
Maryl and	687	312	202	712	24	8	16	1, 961
Massachusetts	1, 192	795	436	537	52	18	84	3, 114
Mi chi gan	5, 761	327	403	2, 717	22	109	20	9, 359
Mi nnesota	5, 174	459	341	3, 133	17	52	24	9, 200
Mi ssi ssi ppi	2, 971	223	111	2, 099	14	16	2	5, 436
Missouri	4, 864	636	411	3, 291	72	61	35	9, 370
Montana	1, 533	133	82	2, 058	112	15	5	3, 938
Nebraska	4, 034	215	126	2, 836	39	14	4	7, 268
Nevada	289	64	42	2, 830 265	11	3	1	675
New Hampshire	503	118	52	344	21	7	6	1, 051
			728	596	57	42		
New Jersey	1, 863	534				42	83	3, 903
New Mexico	810	70	79	589	44		2	1, 596
New York	3, 275	1, 350	1, 096	3, 177	191	66	232	9, 387
North Carolina	4, 859	503	287	3, 580	17	51	19	9, 316
North Dakota	4, 624	79	83	2, 180	16	19	4	7, 005
Ohi o	6, 551	1, 013	1, 042	3, 704	192	32	49	12, 583
0kl ahoma	4, 561	257	193	1, 735	56	13	2	6, 817
0regon	2, 302	288	170	2, 816	114	90	12	5, 792
Pennsyl vani a	5, 583	1, 543	1, 863	3, 418	238	123	198	12, 966
Rhode Island	128	107	38	71	7	0	5	356
South Carolina	3, 109	372	123	1, 348	4	13	4	4, 973
South Dakota	2, 137	89	46	1, 361	53	5	1	3, 692
Tennessee	3, 368	502	456	1, 918	52	28	11	6, 335
Texas	12, 490	856	781	6, 363	137	33	16	20, 676
Utah	1, 009	116	48	789	2	4	3	1, 971
Vermont	496	85	83	650	44	46	4	1, 408
Vi rgi ni a	2, 138	602	445	2, 923	109	46	20	6, 283
Washi ngton	2, 854	367	304	3, 014	104	95	20	6, 758
West Virginia	1, 893	251	342	2, 220	104	75	19	4, 904
Wi sconsi n	4, 712	417	310	2, 868	84	107	38	8, 536
Wyomi ng	527	113	46	932	78	1	7	1, 704
Puerto Rico	24	0	0	2	0	0	0	26
NAL TOTALS	163, 917	18, 978	16, 195	104, 759	3, 043	2, 089	1. 258	310, 239

TABLE 34. TOTAL PUBLIC AND PRIVATE CROSSINGS BY RAILROAD AND TYPE, 1995

	Publ i c At	Publ i c	Publ i c	Pri vate at	Grade	at	Pedestrian Grade	
Rai l road	Grade	RR Under	RR Over	Grade	Separated	Grade	Separated	Total
Alaska Railroad Corp.	221	14	6	104				
Alton & Southern Railroad	21	7	1	27	7 0	0	0	56
Amtrak (Nat'l. Railroad Passenger Corp.)	185	539	489	68	3 23	2	73	1, 379
Atchison, Topeka & Santa Fe Railway Co.	6, 615	628	577	3, 660	) 191	51	22	11, 744
Bangor & Aroostook Railroad	165	12	23	385	5 0	7	0	592
Belt Railway Co. Of Chicago	38	8	62	76	3	0	1	188
Bessemer & Lake Erie Railroad Co.	140	35	49	96	3	2	0	325
Birmingham Southern Railroad Co.	46	18	7	36	3 0	0	0	107
Burlington Northern Railroad Co.	18, 827	1, 524	1, 169	12, 456	365	259	66	34, 666
Chicago and North Western Railway Co.	3, 428	403	599	2, 369	140	98	45	7, 082
Chicago, Central & Pacific Railroad Co.	890	89	79	702	2 49	15	12	1, 836
Consolidated Rail Corp.	12, 510	3, 124	3, 374	6, 939	383	170	259	26, 759
CSX Transportation	18, 047	2, 491	1, 772	10, 588			121	
Dakota, Minnesota & Eastern Railroad	805	21	33	554			0	
Delaware & Hudson Railway Co.	311	81	93	446			9	
Denver & Rio Grande Western Railroad Co.	830	140	71	673				
Duluth, Missabe & Iron Range Railway Co.	140	25	28	129			0	,
Duluth, Winnipeg & Pacific Railway	80	8	3	21			0	
Elgin, Joliet & Eastern Railway Co.	191	30	28	73			0	
Florida East Coast Railway Co.	716	33	6	113				
v	225	33 24	23			14	0	
Gateway Western Railway				156			-	
Grand Trunk Western Railroad Inc.	1, 118	101	177	446				,
Houston Belt & Terminal Railway Co.	157	23	16	43				
Illinois Central Railroad Co.	2, 664	327	332	1, 641		65	23	
Indiana Harbor Belt Railroad Co.	77	30	28	43			4	
Kansas City Southern Railway Co.	1, 748	171	121	1, 088			6	
Long Island Rail Road	304	294	105	82			80	
Metro North Commuter Railroad Co.	62	12	16	60			3	
Montana Rail Link	449	52	21	684				
New Jersey Transit Rail Operations	347	199	297	96			45	
Norfolk Southern Corp.	17, 043	1, 996	1, 644	11, 269	235	104	47	32, 338
Northeast Illinois Regional Comuter Rail Co	62	7	69	10	0	0	0	148
Northern Indiana Commuter Transportation	113	13	17	25	5 5	7	1	181
Paducah & Louisville Railway Co.	262	53	49	185	5 7	3	0	559
Port Authority Trans Hudson	0	0	0	2	9	0	0	2
Port Terminal Railroad Assoc.	66	2	9	98	3 0	1	0	176
Soo Line Railroad Co.	4, 291	363	365	2, 780	) 47	69	25	7, 940
Southeastern Pennsylvania Trans. Authority	262	114	174	53			40	.,
Southern Pacific Transportation Co.	7, 623	850	506	4, 561			56	
Southern Pacific, Chicago-St. Louis Corp.	267	19	27	78				
Springfield Terminal Railway Co.	1, 314	505	237	710			39	
St. Louis Southwestern Railway Co.	2, 019	114	77	770		2	0	
Terminal Railroad Association Of St. Louis	141	40	26	12				-,-
Union Pacific Railroad Company	18, 446	1, 600	1, 001	12, 187			67	
Union Railroad Company (Pittsburgh)	16, 440	21	33	39			8	
	600	83	161	442			6	
Wheeling & Lake Erie Railway Co.	1, 902	100	86	1, 162			6	
Wisconsin Central Ltd. (also Railway)							172	
All Other Railroads	38, 135	2, 635	2, 109	26, 522				,
NAL TOTALS	163, 917	18, 978	16, 195	104, 759	3, 043	2, 089	1, 258	310, 239

State	Urban	Rural	Total
Al abama	1, 680	1, 930	3, 610
Al aska	87	138	225
Ari zona	469	471	940
Arkansas	1, 263	2, 017	3, 280
Cal i forni a	5, 774	2, 182	7, 956
Col orado	716	1, 353	2, 069
Connecti cut	239	131	370
Del aware	83	201	284
Dist of Columbia.	23		23
Flori da	2, 354	1, 712	4, 066
Georgi a	2, 182	3, 981	6, 163
Hawai i		6	6
I daho	250	1, 274	1, 524
Illi noi s	3, 891	6, 328	10, 219
Indi ana	2, 858	3, 729	6, 587
I owa	1, 615	3, 630	5, 245
Kansas	1, 403	6, 462	7, 865
Kentucky	703	1, 923	2, 626
Loui si ana	1, 615	2, 041	3, 656
Mai ne	236	646	882
Maryl and	516	171	687
Massachusetts	843	349	1, 192
Mi chi gan	2, 341	3, 420	5, 761
Mi nnesota	1, 391	3, 783	5, 174
Mi ssi ssi ppi	1, 131	1, 840	2, 971
Mi ssouri	1, 577	3, 287	4, 864
Montana	281	1, 252	1, 533
Nebraska	497	3, 537	4, 034
Nevada	90	199	289
New Hampshire	221	282	503
New Jersey	1, 331	532	1, 863
New Mexico	237	573	810
New York	1, 512	1, 763	3, 275
North Carolina	2, 004	2, 855	4, 859
North Dakota	252	4, 372	4, 624
Ohi o	3, 094	3, 457	6, 551
0kl ahoma	302	4, 259	4, 561
Oregon	1, 005	1, 297	2, 302
Pennsyl vani a	2, 917	2, 666	5, 583
Rhode Island	123	2, 000 5	128
South Carolina			
	1, 046 261	2, 063	3, 109
South Dakota	1, 524	1, 876 1, 844	2, 137 3, 368
Tennessee	6, 608	5, 882	
Texas	544	3, 862 465	12, 490
Utah	165	331	1, 009 496
Vermont			2, 138
Vi rgi ni a	894	1, 244	
Washi ngton	1, 354	1, 500	2, 854
West Virginia	419	1, 474	1, 893
Wi sconsi n	1, 867	2, 845	4, 712 527
Wyomi ng	81	446	
Puerto Rico		24	24
Unknown		100 049	
Total	63, 869	100, 048	163, 917

TABLE 36. TOTAL CROSSINGS BY NUMBER OF MAIN AND OTHER TRACKS, 1995

0ther	Number of main tracks									
Tracks	0	1	2	3	4	5	>5	Total		
0	5	98, 241	9, 798	296	70	5	5	108, 420		
1	15, 681	21, 253	2, 611	71	16		1	39, 633		
2	3, 466	6, 374	1,000	50	14	1	1	10, 906		
3	934	1, 854	305	27	13			3, 133		
4	265	570	136	12	7	3	1	994		
5	116	231	66	5	1	1	1	421		
>5	101	236	68	2	3			410		
Total	20, 568	128, 759	13, 984	463	124	10	9	163, 917		

TABLE 37. CROSSINGS BY NUMBER OF TRACKS AND WARNING DEVICE, 1995

Number of Tracks							
Warning device	1	2	3	4	5	>5	Total
Gates	14, 200	10, 161	3, 493	1, 217	439	402	29, 912
Flashing lights	21, 003	5, 336	1, 700	543	167	161	28, 910
Hwy. signals, wigwags, bells	982	386	139	43	19	14	1, 583
Special warning devices	3, 256	933	299	119	38	46	4, 691
Stop signs	8, 032	2, 121	550	173	49	41	10, 966
Crossbucks	61, 311	14, 442	3, 726	1, 070	313	239	81, 101
Other signs	364	93	29	16	1	3	506
No signs or signals	4, 774	1, 045	279	79	36	35	6, 248
Total	113, 922	34, 517	10, 215	3, 260	1, 062	941	163, 917

TABLE 38. CROSSINGS BY TRACKS AND TRAFFIC LANES, 1995

Traffic			Nu	mber of track	s		
Lanes	1	2	3	4	5	>5	Total
1	19, 451	4, 099	684	159	33	39	24, 465
2	87, 130	27, 758	8, 655	2, 811	930	797	128, 081
3	775	350	100	28	9	12	1, 274
4	5, 670	2, 051	708	246	87	85	8, 847
5	425	118	35	8	1	4	591
>5	471	141	33	8	2	4	659
Total	113, 922	34, 517	10, 215	3, 260	1, 062	941	163, 917

TABLE 39. TOTAL CROSSINGS BY NUMBER OF TRACKS AND STATE, 1995

Number of Tracks

State	1	2	3	4	5	>5	Total
Al abama	2, 597	638	253	66	26	30	3, 610
Al aska	184	34	6	1			225
Ari zona	699	165	57	15	3	1	940
Arkansas	2, 250	715	213	62	24	16	3, 280
Cal i forni a	5, 460	1, 572	567	185	87	85	7, 956
Col orado	1, 438	424	141	40	13	13	2, 069
Connecti cut	299	59	10		2		370
Del aware	249	29	5		1		284
Dist of Columbia.	21	2					23
Fl ori da	2, 586	1. 034	289	77	39	41	4, 066
Georgi a	4, 585	1, 120	300	104	20	34	6, 163
Hawai i	6						6
Idaho	1, 072	293	108	35	10	6	1, 524
Illinois	6, 321	2, 735	768	251	89	55	10, 219
Indi ana	4, 710	1, 433	307	88	30	19	6, 587
Iowa	3, 479	1, 144	419	133	36	34	5, 245
Kansas	5, 412	1, 624	533	186	60	50	7, 865
	1, 767	641	148	48	9	13	2, 626
Kentucky	2, 734	655	180	46 51	9 15	21	3, 656
Loui si ana	2, 734 724	123	24	9	13	1	3, 636 882
Maine				9 12	2		
Maryl and	518	131	19			5	687
Massachusetts	941	187	41	15	4	4	1, 192
Mi chi gan	4, 118	1, 190	274	105	36	38	5, 761
Mi nnesota	3, 677	982	335	115	31	34	5, 174
Mi ssi ssi ppi	2, 047	599	201	77	21	26	2, 971
Mi ssouri	2, 875	1, 311	468	131	41	38	4, 864
Montana	1, 003	351	127	26	12	14	1, 533
Nebraska	2, 637	899	318	108	40	32	4, 034
Nevada	205	65	12	4	1	2	289
New Hampshire	427	66	7	2	1		503
New Jersey	1, 360	385	83	18	8	9	1, 863
New Mexico	567	172	44	16	4	7	810
New York	2, 311	731	160	47	13	13	3, 275
North Carolina	3, 619	831	261	86	31	31	4, 859
North Dakota	3, 698	678	194	40	13	1	4, 624
0hi o	3, 721	2, 025	535	179	52	39	6, 551
0kl ahoma	3, 033	1, 010	323	125	42	28	4, 561
0regon	1, 657	440	161	31	12	1	2, 302
Pennsyl vani a	3, 673	1, 344	351	137	42	36	5, 583
Rhode Island	86	36	6				128
South Carolina	2, 475	516	83	17	9	9	3, 109
South Dakota	1, 685	288	116	35	6	7	2, 137
Tennessee	2, 263	767	220	73	21	24	3, 368
Texas	8, 985	2, 390	701	262	80	72	12, 490
Utah	683	213	71	17	18	7	1, 009
Vermont	403	71	16	4		2	496
Vi rgi ni a	1, 412	508	161	40	11	6	2, 138
Washi ngton	1, 864	603	260	85	22	20	2, 138
West Virginia	1, 361	396	103	20	4	9	1, 893
U	1, 361 3, 658	396 772	103	20 63	4 16	7	1, <b>8</b> 93 4, 712
Wi sconsi n						-	
Wyomi ng	348	115	40	19	4	1	527
Puerto Rico	19	5					24
Unknown	110 000		10.015		1 000	041	100 017
Total	113, 922	34, 517	10, 215	3, 260	1, 062	941	163, 917

TABLE 40. TOTAL CROSSINGS BY TYPE OF HIGHWAY SYSTEM AND STATE, 1995

Highway System

			0 0 0		
State	01	02	03	08	Total
Al abama		163	650	2, 797	3, 610
Al aska	6	10	34	175	225
Ari zona	10	30	248	652	940
Arkansas	2	135	1, 150	1. 993	3. 280
Cal i forni a		929	1, 618	5, 409	7, 956
Col orado		83	453	1, 533	2, 069
Connecti cut		25	133	212	370
Del aware		31	118	135	284
Dist of Columbia.		3	1	19	23
Flori da	1	276	864	2, 925	4, 066
Georgi a		373	949	4, 841	6, 163
Hawai i				6	6, 103
Idaho		47	250	1, 227	1, 524
Illinois	1	617	2, 160	7, 441	10, 219
Indi ana		234	1, 575	4, 778	
	3	286	1, 186		6, 587
I owa		305		3, 770	5, 245
Kansas			1, 465	6, 095	7, 865
Kentucky	2	75	473	2, 076	2, 626
Loui si ana	5	137	667	2, 847	3, 656
Maine		72	120	690	882
Maryl and		15	33	639	687
Massachusetts		116	437	639	1, 192
Mi chi gan	9	232	1, 550	3, 970	5, 761
Mi nnesota	1	182	942	4, 049	5, 174
Mi ssi ssi ppi		133	725	2, 113	2, 971
Mi ssouri	3	93	813	3, 955	4, 864
Montana		59	177	1, 297	1, 533
Nebraska		199	702	3, 133	4, 034
Nevada		17	26	246	289
New Hampshire		7	191	305	503
New Jersey		77	350	1, 436	1, 863
New Mexico		21	116	673	810
New York		198	588	2, 489	3, 275
North Carolina		109	569	4, 181	4, 859
North Dakota	3	178	561	3, 882	4, 624
0hi o		263	1, 572	4, 716	6, 551
0kl ahoma		142	670	3, 749	4, 561
0regon		133	532	1, 637	2, 302
Pennsyl vani a	128	551	1, 818	3, 086	5, 583
Rhode Island		6	58	64	128
South Carolina	1	189	764	2, 155	3, 109
South Dakota		98	342	1, 697	2, 137
Tennessee		104	586	2, 678	3, 368
Texas	81	96	182	12, 131	12, 490
Utah	1	15	139	854	1, 009
Vermont		36	91	369	496
Vi rgi ni a		91	656	1, 391	2, 138
Washi ngton		93	558	2, 203	2, 854
West Virginia		115	373	1, 405	1, 893
Wi sconsi n		301	1, 136	3, 275	4, 712
Wyomi ng		27	72	428	527
Puerto Rico		6	2	16	24
Unknown					
Total	257	7, 733	31, 445	124, 482	163, 917
10tai	201	1, 133	31, 443	164, 406	105, 317

#### HI GHWAY SYSTEM CODES

CODE SYSTEM	CODE SYSTEM
01 Interstate	02 Other NHS
03 Other Fed-Aid Non NHS	08 Non Fed-Aid

TABLE 41. TOTAL CROSSINGS BY HIGHWAY SYSTEM GROUP AND STATE, 1995

State	0n-State	0ff-State	Total
A1 -b	044	0.000	2 610
Al abama	244	3, 366	3, 610
Al aska	56 50	169	225
Ari zona	52	888	940
Arkansas	543	2, 737	3, 280
California	324	7, 632	7, 956
Col orado	231	1, 838	2, 069
Connecti cut	83	287	370
Delaware	252	32	284
Dist of Columbia.	10	13	23
Flori da	454	3, 612	4, 066
Georgi a	717	5, 446	6, 163
Hawai i	107	6	6
Idaho	105	1, 419	1, 524
Illinois	1, 281	8, 938	10, 219
Indi ana	603	5, 984	6, 587
I owa	291	4, 954	5, 245
Kansas	417	7, 448	7, 865
Kentucky	766	1, 860	2, 626
Loui si ana	832	2, 824	3, 656
Maine	171	711	882
Maryl and	114	573	687
Massachusetts	45	1, 147	1, 192
Mi chi gan	334	5, 427	5, 761
Mi nnesota	278	4, 896	5, 174
Mi ssi ssi ppi	374	2, 597	2, 971
Mi ssouri	705	4, 159	4, 864
Montana	234	1, 299	1, 533
Nebraska	307	3, 727	4, 034
Nevada	43	246	289
New Hampshire	112 176	391 1, 687	503 1, 863
New Jersey	180	630	810
New Mexico	346		
New York		2, 929 1, 747	3, 275
North Carolina North Dakota	3, 112 219	1, 747 4, 405	4, 859 4, 624
	875	5, 676	
Ohi o	356	4, 205	6, 551
Okl ahoma	142		4, 561
Oregon	1, 787	2, 160 3, 796	2, 302 5, 583
Pennsyl vani a Rhode Island	46	3, 790 82	128
South Carolina	2, 216	893	3, 109
South Dakota	146	1, 991	2, 137
	298	3, 070	3, 368
Tennessee Texas	2, 028	10, 462	12, 490
Utah	109	900	1, 009
Vermont	111	385	496
	1, 414	724	2, 138
Vi rgi ni a	157	2, 697	2, 854
West Virginia	1, 150	743	1, 893
Wi sconsi n	369	4, 343	4, 712
Wyomi ng	72	4, 343	527
Puerto Rico	19	433 5	24
Unknown			24
Total	25, 306	138, 611	163, 917
10001	20, 000	100, 011	100, 017

TABLE 42. CROSSINGS BY FUNCTIONAL CLASSIFICATION OF ROAD, 1995

Rural	Crossi ngs	Urban	Crossi ngs
Interstate	35	Interstate	148
Other principal arterial	1, 182	Other freeway/expressway	369
Minor arterial	3, 758	Other principal arterial	5, 772
Major collector	11, 186	Minor arterial	10, 401
Minor collector	9, 378	Collector	10, 755
Local	74, 509	Local	36, 424
Total	100, 048	Total	63, 869

TABLE 43. TOTAL CROSSINGS BY NUMBER OF TRAFFIC LANES AND STATE, 1995

Number of Lanes

State	1	2	3	4	5	>5	Total
Al abama	688	2, 710	33	163	6	10	3, 610
Al aska	12	193	1	17	2		225
Ari zona	11	758	15	107	25	24	940
Arkansas	712	2, 481	17	65	4	1	3, 280
Cal i forni a	406	5, 468	195	1, 532	149	206	7, 956
Col orado	172	1, 715	21	145	10	6	2, 069
Connecti cut	5	330	16	17	2		370
Del aware	14	253	4	12		1	284
Dist of Columbia.		16	2	2	1	2	23
Fl ori da	161	3, 347	83	367	34	74	4, 066
Georgi a	1, 173	4, 731	27	212	12	8	6, 163
Hawai i		6					6
I daho	263	1, 208	7	43	1	2	1, 524
Illinois	2, 044	7, 439	57	641	16	22	10, 219
Indi ana	864	5, 352	59	280	18	14	6, 587
I owa	609	4, 417	36	177	5	1	5, 245
Kansas	1, 864	5, 691	16	290	2	2	7, 865
Kentucky	820	1, 756	6	43		1	2, 626
Loui si ana	553	2, 868	20	189	14	12	3, 656
Mai ne	44	820	2	15	1		882
Maryl and	71	557	8	44	3	4	687
Massachusetts	43	1, 084	8	56	1		1, 192
Mi chi gan	348	4, 801	74	454	52	32	5, 761
	859	4, 048	15	248	3	1	5, 174
Minnesota	372	2, 490	9	95	2	3	2, 971
Mi ssi ssi ppi	1, 206	2, 490 3, 520	11	119	5	3 3	4, 864
	1, 200		2	23	2	3 1	1, 533
Montana	868	1, 357	5	52	1		,
Nebraska	67	3, 108 180	1	32 39	1	1	4, 034 289
Nevada	32	180 449	2	39 17	2	1	289 503
New Hampshire				17 129			
New Jersey	87	1, 625	15		1 3	6	1, 863
New Mexi co	261	502	1	39	3 2	4	810
New York	305	2, 836	19	110		3	3, 275
North Carolina	265	4, 348	36	188	12	10	4, 859
North Dakota	1, 041	3, 558	1	23	1		4, 624
0hi o	753	5, 466	53	263	9	7	6, 551
0kl ahoma	883	3, 417	7	248	2	4	4, 561
Oregon	265	1, 884	46	81	24	2	2, 302
Pennsyl vani a	851	4, 409	118	177	2	26	5, 583
Rhode Island	2	102		24			128
South Carolina	364	2, 527	28	159	21	10	3, 109
South Dakota	641	1, 450		39	4	3	2, 137
Tennessee	443	2, 705	31	152	31	6	3, 368
Texas	2, 138	9, 045	66	1, 076	60	105	12, 490
Utah	183	750	1	71	1	3	1, 009
Vermont	108	376	5	7			496
Vi rgi ni a	26	1, 976	23	92	11	10	2, 138
Washi ngton	251	2, 276	55	233	31	8	2, 854
West Virginia	893	982	7	9	1	1	1, 893
Wi sconsi n	168	4, 283	8	233	1	19	4, 712
Wyomi ng	107	388	2	30			527
Puerto Rico	1	23					24
Unknown							
Total	24, 465	128, 081	1, 274	8, 847	591	659	163, 917

TABLE 44. CROSSINGS BY NUMBER OF TRAFFIC LANES AND WARNING DEVICE, 1995

Number of Traffic Lanes Warning device	1	2	3	4	5	>5	Total
Gates	811	24, 419	481	3, 577	305	319	29, 912
Flashing lights	786	24, 374	357	2, 978	203	212	28, 910
Hwy. signals, wigwags, bells	121	1, 181	64	171	17	29	1, 583
Special warning devices	312	3, 862	107	359	27	24	4, 691
Stop signs	1, 761	9, 044	30	123	2	6	10, 966
Crossbucks	19, 037	60, 437	185	1, 353	30	59	81, 101
Other signs	123	366	2	14		1	506
No signs or signals	1, 514	4, 398	48	272	7	9	6, 248
Total	24, 465	128, 081	1, 274	8, 847	591	659	163, 917

TABLE 45. TOTAL CROSSINGS BY WARNING DEVICE CATEGORY AND STATE, 1995

				Warn	ning Device	Category			
		<b>-1</b>	Hwy. Si g.		<b>a</b> .		0.1	No Signs	
G	<b>a</b> .	Fl ashi ng	Wi gwags		Stop	Cross-	0ther	or	m . 1
State	Gates	Li ghts	Bells	Speci al	Si gns	Bucks	Si gns	Si gnal s	Total
Al abama	322	641	9	33	788	1, 633	15	169	3, 610
Al aska	46	35		7	26	102		9	225
Ari zona	362	72	4	53	95	328		26	940
Arkansas	312	459	24	70	179	2, 106		130	3, 280
Cal i forni a	3, 161	1, 003	301	115	338	2, 850	14	174	7, 956
Col orado	337	267	42	27	233	1, 078	3	82	2, 069
Connecti cut	98	141	5	24	50	33		19	370
Del aware	47	154		20	3	51		9	284
Dist of Columbia.		4	2	12	2	1		2	23
Fl ori da	2, 094	659	13	95	160	972	7	66	4, 066
Georgi a	1, 570	333	21	165	1, 076	2, 744	6	248	6, 163
Hawai i					1	5			6
I daho	106	196	6	6	591	587		32	1, 524
Illinois	2, 144	2, 637	125	216	77	4, 639	4	377	10, 219
Indi ana	1, 194	1, 640	98	180	827	2, 513	7	128	6, 587
I owa	624	1, 010	29	46	418	3, 041	1 2	76 140	5, 245
Kansas	915 390	703 805	58 14	199	238	5, 610		140 146	7, 865
Kentucky	390 444	698	14 27	56 44	50 251	1, 165 1, 938	14	240	2, 626 3, 656
Loui si ana	71	388	21	80	18	325		240	3, 636 882
Mai ne	102	203	21	30	35	258	6	32	687
Massachusetts	102	462	30	212	5	232	3	52 51	1, 192
Mi chi gan	830	1, 451	39	125	873	2, 362	4	77	5, 761
Mi nnesota	590	614	9	19	684	3, 153	2	103	5, 174
Mi ssi ssi ppi	140	460	13	53	814	1, 225	11	255	2, 971
Mi ssouri	486	999	69	94	136	2, 843	1	236	4, 864
Montana	161	187	1	13	83	1, 063	1	24	1, 533
Nebraska	569	305	12	14	280	2, 736		118	4, 034
Nevada	121	21	1	4	5	129		8	289
New Hampshire	31	146	11	108	50	133	7	17	503
New Jersey	402	659	17	236	18	407	2	122	1, 863
New Mexico	198	94	5	9	12	466	5	21	810
New York	1, 395	641	71	244	17	812	21	74	3, 275
North Carolina	1, 140	727	19	211	56	2, 362	9	335	4, 859
North Dakota	337	123	1	1	78	3, 914		170	4, 624
0hi o	1, 633	1, 358	36	76	177	3, 175	5	91	6, 551
0kl ahoma	430	720	24	114	132	3, 068	7	66	4, 561
Oregon	556	137	43	90	438	873	44	121	2, 302
Pennsyl vani a	753	1, 278	108	650	142	1, 917	276	459	5, 583
Rhode Island	15	33	19	23	7	9		22	128
South Carolina	611	528		158	427	1, 359		26	3, 109
South Dakota	18	173	2		28	1, 840		76	2, 137
Tennessee	308	641	19	198	177	1, 631	2	392	3, 368
Texas	2, 494	1, 913	67	101	281	7, 044	14	576	12, 490
Utah	171	166	5	87	58	441	5	76	1, 009
Vermont	27	196	3	44	25	199		2	496
Vi rgi ni a	694	516	19	111	8	711	4	75	2, 138
Washington	470	407	27 4	50 22	105	1, 529 976	2 2	264	2, 854
West Virginia	218 463	448	4 105	22 127	35 327			188	1, 893
Wi sconsi n	463 111	1, 334 124	105 4	127	32 7 32	2, 278 235		78 20	4, 712 527
Wyomi ng	4	124	1	18	32	233		20	327 24
Unknown			1						
Total	29, 912	28, 910	1, 583	4, 691	10, 966	81, 101	506	6, 248	163, 917
10(a1	23, 312	۵۵, 310	1, 363	4, 031	10, 300	01, 101	300	0, 240	105, 317

				Hwy. Sig.					No Signs	
			Fl ashi ng	, ,		Stop	Cross-	0ther	0r	
	Rai l road	Gates	Li ghts	0 0	Speci al	Si gns	Bucks	Si gns	Si gnal s	Total
ARR	Alaska Railroad Corp.	46	35	0	7	26	99	0	8	221
ALS	Alton & Southern Railroad	6	7	0	1	0	6	0	1	21
ATK	Amtrak (Nat'l. Railroad Passenger Corp.)	145	9	0	5	6	11	4	5	185
ATSF	Atchison, Topeka & Santa Fe Railway Co.	2, 065	831	72	276	78	3, 264	5	24	6, 615
BAR	Bangor & Aroostook Railroad	4	89	0	8	11	53	0	0	165
BRC	Belt Railway Company Of Chicago	10	8	0	1	0	18	0	1	38
BLE	Bessemer & Lake Erie Railroad Co.	37	29	0	2	0	70	0	2	140
BS	Birmingham Southern Railroad Co.	3	22	0	0	5	15	0	1	46
BN	Burlington Northern Railroad Co.	2, 692	2, 478	77	216	1, 042	11, 869	15	438	18, 827
CNW	Chicago and North Western Railway Co.	426	731	93	59	134	1, 841	1	143	3, 428
CC	Chicago, Central & Pacific Railroad Co.	68	264	11	31	40	452	0	24	890
CR	Consolidated Rail Corp.	2, 907	3, 304	167	1, 023	430	3, 715	258	706	12, 510
CSX	CSX Transportation	4, 680	3, 857	79	514	1, 456	6, 702	22	737	18, 047
DME	Dakota, Minnesota & Eastern Railroad	14	107	3	0	48	603	0	30	805
DH	Delaware & Hudson Railway Co.	143	83	3	1	3	71	5	2	311
DRGW	Denver & Rio Grande Western Railroad Co.	136	152	5	8	70	418	3	38	830
DMI R	Duluth, Missabe & Iron Range Railway Co.	10	20	0	2	30	76	2	0	140
DWP	Duluth, Winnipeg & Pacific Railway	10	11	0	1	15	43	0	0	80
EJE	Elgin, Joliet & Eastern Railway Co.	78	65	2	9	4	33	0	0	191
FEC	Flori da East Coast Railway Co.	601	30	0	27	3	46	0	9	716
GWWR	Gateway Western Railway	7	45	20	0	7	142	0	4	225
GTW	Grand Trunk Western Railroad Inc.	412	243	4	39	207	210	0	3	1, 118
HBT	Houston Belt & Terminal Railway Co.	58	28	1	0	2	53	0	15	157
IC	Illinois Central Railroad Co.	363	599	16	66	398	1, 041	3	178	2, 664
I HB	Indiana Harbor Belt Railroad Co.	26	22	0	16	0	10	0	3	77
KCS	Kansas City Southern Railway Co.	139	196	3	1	14	666	4	64	1, 087
LI	Long Island Rail Road	298	0	0	0	0	6	0	0	304
MNCW	Metro North Commuter Railroad Co.	18	36	1	1	0	3	0	3	62
MRL	Montana Rail Link	52	68	1	0	41	280	0	7	449
NJTR	New Jersey Transit Rail Operations	211	88	1	10	1	29	0	7	347
NS	Norfolk Southern Corp.	3, 670	3, 005	77	496	1, 555	7, 447	14	779	17, 043
NI RC	Northeast Illinois Regional Comuter Rail	53	5	1	1	1	0	0	1	62
NI CD	Northern Indiana Commuter Transportation	41	37	7	0	27	1	0	0	113
PAL	Paducah & Louisville Railway Co.	20	105	4	0	10	120	0	3	262
PTRA	Port Terminal Railroad Assoc.	20	12	0	0	1	27	0	6	66
S00	Soo Line Railroad Co.	510	599	26	57	359	2, 541	1	198	4, 291
SEPA	Southeastern Pennsylvania Trans. Authority		77	21	18	17	32	2	45	262
SP	Southern Pacific Transportation Co.	2, 750	875	224	34	365	3, 004	10	361	7, 623
SSWN	Southern Pacific, Chicago-St. Louis Corp.	108	85	2	11	0	58	0	3	267
ST	Springfield Terminal Railway Co.	65	188	- 1	41	18	116	0	0	429
SSW	St. Louis Southwestern Railway Co.	299	254	8	10	123	1, 215	0	110	2, 019
TRRA	Terminal Railroad Association Of St. Loui	45	14	0	56	3	20	0	3	141
UP	Union Pacific Railroad Co.	3, 307	2, 842	118	186	1, 108	10, 074	23	788	18, 446
URR	Union Railroad Company (Pittsburgh)	3, 307	1	10	0	0	0	0	0	10, 440
WE	Wheeling & Lake Erie Railway Co.	51	164	3	2	25	348	0	7	600
WC	Wisconsin Central Ltd. (also Railway)	152	495	13	18	156	1, 052	0	16	1, 902
	All Other Railroads	3, 103	6, 695	509	1. 437	3, 127	23, 201	134	1, 475	39, 681
FINAL T		29, 912	-,	1, 583	4, 691	10, 966	81, 101	506	6, 248	163, 917
		~0, UI&	20, 010	1, 000	1, 001	10, 000	51, 101	550	0, ~ 10	100, 017

TABLE 47. TOTAL CROSSINGS BY PAVEMENT MARKINGS AND STATE, 1995

	Stop	RR X-ing		N	one	
State	Li nes	Symbol	Both	Paved	Unpaved	Total
Al abama	44	504	423	1, 986	653	3, 610
Al aska	8	9	55	65	88	225
Ari zona	25	27	411	247	230	940
Arkansas	57	110	322	1, 647	1, 144	3, 280
Cal i forni a	984	202	4, 727	1, 743	300	7, 956
Col orado	21	37	261	994	756	2, 069
Connecti cut	12	13	254	90	1	370
Del aware	43	29	89	120	3	284
Dist of Columbia.			9	14		23
Fl ori da	268	372	1, 843	1, 144	439	4, 066
Georgi a	64	108	2, 793	1, 647	1, 551	6, 163
Hawai i	2			4		6
I daho	8	5	269	673	569	1, 524
Illinois	78	165	1, 259	4, 320	4, 397	10, 219
Indi ana	78	259	1, 345	4, 041	864	6, 587
I owa	53	153	533	2, 002	2, 504	5, 245
Kansas	7	24	900	2, 053	4, 881	7, 865
Kentucky	46	328	736	899	617	2, 626
Loui si ana	47	206	578	1, 940	885	3, 656
Maine	3	3	569	228	79	882
Maryl and	10	25	252	357	43	687
Massachusetts	55	45	125	933	34	1, 192
Mi chi gan	70	277	1, 357	2, 633	1, 424	5, 761
Mi nnesota	124 27	171	491	1, 826	2, 562	5, 174
Mi ssi ssi ppi	65	44	478 561	1, 585	837	2, 971
Mi ssouri	5	110 18		2, 066 395	2, 062 957	4, 864
Montana	35	274	158 192	955		1, 533
Nebraska					2, 578	4, 034
Nevada	11 10	11 28	129 59	54 354	84 52	289 503
New Hampshire New Jersey	39	232	252	1, 251	32 89	1, 863
New Mexico	5 5	232 29	252 47	338	391	810
New York	126	29 216	453	2, 202	278	3, 275
North Carolina	46	33	3, 607	2, 202 566	607	4, 859
North Dakota	17	29	137	595	3, 846	4, 624
Ohi o	338	612	3, 341	1, 841	419	6, 551
0kl ahoma	31	92	411	2, 029	1, 998	4, 561
Oregon	346	890	147	490	429	2, 302
Pennsyl vani a	67	352	159	4, 398	607	5, 583
Rhode Island			80	48		128
South Carolina	91	106	1, 147	1, 329	436	3, 109
South Dakota	30	12	132	540	1, 423	2, 137
Tennessee	20	115	919	1, 784	530	3, 368
Texas	9	12	6, 297	3, 025	3, 147	12, 490
Utah	23	33	195	534	224	1, 009
Vermont	36	10	88	214	148	496
Vi rgi ni a	95	147	947	724	225	2, 138
Washi ngton	121	69	546	1, 554	564	2, 854
West Virginia	18	12	86	1, 167	610	1, 893
Wi sconsi n	77	28	754	3, 364	489	4, 712
Wyomi ng	7	21	53	157	289	527
Puerto Rico	3	7		12	2	24
Unknown						
Total	3, 805	6, 614	40, 976	65, 177	47, 345	163, 917
	•	-		-	*	

 $\hbox{\it NOTE:}\quad \hbox{\it The Manual On Uniform Traffic Control Devices does not require pavement markings at all crossings}.$ 

TABLE 48. CROSSINGS BY RAILROAD ADVANCE WARNING AND STATE, 1995

State	Yes	No	Total
Al abama	1, 716	1, 894	3, 610
Al aska	150	75	225
Ari zona	580	360	940
Arkansas	909	2, 371	3, 280
Cal i forni a	6, 392	1, 564	7, 956
Col orado	1, 103	966	2, 069
Connecti cut	326	44	370
Del aware	242	42	284
Dist of Columbia.	6	17	23
Fl ori da	2, 550	1, 516	4, 066
Georgi a	3, 176	2, 987	6, 163
Hawai i	1	5	6
I daho	913	611	1, 524
Illi noi s	5, 301	4, 918	10, 219
Indi ana	5, 657	930	6, 587
I owa	3, 595	1, 650	5, 245
Kansas	4, 277	3, 588	7, 865
Kentucky	1, 532	1, 094	2, 626
Loui si ana	2, 417	1, 239	3, 656
Maine	870	12	882
Maryl and	445	242	687
Massachusetts	882	310	1, 192
Mi chi gan	4, 711	1, 050	5, 761
Mi nnesota	3, 404	1, 770	5, 174
Mi ssi ssi ppi	741	2, 230	2, 971
Mi ssouri	1, 447	3, 417	4, 864
Montana	973	560	1, 533
Nebraska	2, 877	1, 157	4, 034
Nevada	225	64	289
New Hampshire	297	206	503
New Jersey	963	900	1, 863
New Mexico	179	631	810
New York	2, 594	681	3, 275
North Carolina	3, 763	1, 096	4, 859
North Dakota	1, 703	2, 921	4, 624
0hi o	4, 860	1, 691	6, 551
0kl ahoma	1, 762	2, 799	4, 561
Oregon	1, 004	1, 298	2, 302
Pennsyl vani a	2, 070	3, 513	5, 583
Rhode Island	81	47	128
South Carolina	2, 249	860	3, 109
South Dakota	1, 407	730	2, 137
Tennessee	2, 088	1, 280	3, 368
Texas	9, 883	2, 607	12, 490
Utah	592	417	1,009
Vermont	409	87	496
Vi rgi ni a	1, 641	497	2, 138
Washi ngton	2, 061	793	2, 854
West Virginia	454	1, 439	1, 893
Wi sconsi n	3, 239	1, 473	4, 712
Wyomi ng	291	236	527
Puerto Rico	17	7	24
Unknown	101 005		100 017
Total	101, 025	62, 892	163, 917

NOTE: The Manual On Uniform Traffic Control Devices does not require pavement markings at all crossings.

TABLE 49. CROSSINGS MEETING THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' STANDARD FOR CROSSBUCKS BY STATE, 1995

	Acti ve		et standards	
State	Warni ng	Yes	No	Total
Al abama	972	1. 972	666	2 610
Al abama	81	1, 972	38	3, 610 225
Ari zona	438	394	108	940
Arkansas	795	1, 776	709	3, 280
Cal i forni a	4, 465	1, 601	1, 890	7, 956
Col orado	646	1, 055	368	2, 069
Connecti cut	244	88	38	370
Del aware	201	59	24	284
Dist of Columbia.	6	12	5	23
Flori da	2, 766	944	356	4, 066
Georgi a	1, 924	3, 567	672	6, 163
Hawai i		4	2	6
I daho	308	1, 025	191	1, 524
Illinois	4, 906	4, 169	1, 144	10, 219
Indi ana	2, 932	3, 075	580	6, 587
I owa	1, 663	2, 753	829	5, 245
Kansas	1, 676	2, 871	3, 318	7, 865
Kentucky	1, 209	1, 115	302	2, 626
Loui si ana	1, 169	1, 987	500	3, 656
Mai ne	459	410	13	882
Maryl and	326	191	170	687
Massachusetts	689	296	207	1, 192
Mi chi gan	2, 320	3, 107	334	5, 761
Mi nnesota	1, 213	3, 658	303	5, 174
Mi ssi ssi ppi	613	1, 488	870	2, 971
Mi ssouri	1, 554	1, 773	1, 537	4, 864
Montana	349	956	228	1, 533
Nebraska	886	2, 760	388	4, 034
Nevada	143	93	53	289
New Hampshire	188	210	105	503
New Jersey	1, 078	324	461	1, 863
New Mexico	297	289	224	810
New York	2, 107	826	342	3, 275
North Carolina	1, 886	1, 681	1, 292	4, 859
North Dakota	461	2, 850	1, 313	4, 624
0hi o	3, 027	2, 525	999	6, 551
0kl ahoma	1, 174	2, 301	1, 086	4, 561
Oregon	736	1, 077	489	2, 302
Pennsyl vani a	2, 139	1, 250	2, 194	5, 583
Rhode Island	67	2	59	128
South Carolina	1, 139	1, 857	113	3, 109
South Dakota	193	1, 762	182	2, 137
Tennessee	968	1, 149	1, 251	3, 368
Texas	4, 474	3, 744	4, 272	12, 490
Utah	342	469	198	1, 009
Vermont	226	254	16	496
Vi rgi ni a	1, 229	627	282	2, 138
Washi ngton	904	1, 132	818	2, 854
West Virginia	670	724	499	1, 893
Wi sconsi n	1, 902	2, 432	378	4, 712
Wyomi ng	239	182	106	527
Puerto Rico	6	6	12	24
Unknown				
Total	60, 405	70, 978	32, 534	163, 917
	*	•	•	•

NOTE: The manual requires two reflectorized crossbucks to be placed at all crossings.

For crossings with active warning devices, a determination has not been made as to whether crossbucks which are part of the device meet the MUTCD standard.

TABLE 50. TOTAL CROSSINGS BY TOTAL NUMBER OF TRAINS PER DAY, 1995

Trai ns	Crossi ngs
<1	25, 113
1-5	69, 650
6- 10	27, 372
11-15	12, 047
16-20	10, 890
21-25	6, 262
26-30	3, 874
31-35	2, 145
36-40	1, 581
41-45	859
46-50	957
51-55	886
56-60	679
61-65	309
66-70	198
71-75	211
76-80	276
81-85	51
86-90	23
91-95	261
96-100	59
>100	214
Total	163, 917

TABLE 51. TOTAL CROSSINGS BY NUMBER OF THRU TRAINS AND SWITCHING TRAINS PER DAY, 1995

Switchi ng				Thi	ough trains				
Trains	<1	1-2	3-5	6- 10	11-15	16-20	21-25	>25	Total
<1	25, 113	24, 466	11, 053	11, 124	5, 071	5, 049	2, 637	4, 272	88, 785
1-2	16, 850	9, 181	5, 834	6, 388	2, 551	2, 746	922	2, 771	47, 243
2-3	5, 401	1, 674	2, 054	2, 858	1, 386	921	326	1, 386	16, 006
6- 10	2, 407	724	737	1, 355	817	872	349	793	8, 054
11-15	408	111	114	239	108	70	73	680	1, 803
16-20	425	102	86	126	166	74	87	90	1, 156
21-25	98	25	22	35	35	16	23	42	296
>25	179	58	38	67	66	43	31	92	574
Total	50, 881	36, 341	19, 938	22, 192	10, 200	9, 791	4, 448	10, 126	163, 917

TABLE 52. TOTAL CROSSINGS BY NUMBER OF DAY AND NIGHT TRAINS PER DAY, 1995

Day	Ni ght trains												
Trai ns	<1	1-2	3- 5	6- 10	11- 15	16-20	21-25	>25	Total				
<1	25, 113	6, 457	915	158	6	8	4	5	32, 666				
1-2	25, 910	25, 276	2, 769	346	21	10	1	3	54, 336				
2-3	4, 389	9, 342	15, 298	1, 741	136	35	36	2	30, 979				
6- 10	1, 369	1, 882	6, 052	14, 188	1, 692	90	42	14	25, 329				
11-15	199	228	723	3, 667	5, 115	585	25	21	10, 563				
16-20	104	39	167	687	1, 164	2, 074	206	37	4, 478				
21-25	16	26	10	82	361	293	914	165	1, 867				
>25	70	11	54	137	264	293	786	2, 084	3, 699				
Total	57, 170	43, 261	25, 988	21, 006	8, 759	3, 388	2, 014	2, 331	163, 917				

TABLE 53. CROSSINGS BY NUMBER OF TRAINS PER DAY AND WARNING DEVICE, 1995

Number of Trains Per Day

Warning device	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	Total
Gates	1. 064	2, 577	3, 258	5, 403	3, 618	4, 283	3, 060	6, 649	29. 912
Flashing lights	3, 319	6, 915	5, 314	6, 297	2, 552	2, 053	944	1, 516	28, 910
Hwy. signals, wigwags, bells	213	404	292	279	127	96	34	138	1, 583
Special warning devices	1, 827	1, 540	552	389	127	110	32	114	4, 691
Stop signs	997	2, 744	2, 175	2, 170	736	882	382	880	10, 966
Crossbucks	15, 315	26, 651	14, 171	12, 146	4, 668	3, 312	1, 746	3, 092	81, 101
Other signs	150	169	82	56	12	18	1	18	506
No signs or signals	2, 228	2,006	800	632	207	136	63	176	6, 248
Total	25, 113	43, 006	26, 644	27, 372	12, 047	10, 890	6, 262	12, 583	163, 917

TABLE 54. TOTAL CROSSINGS BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC, 1995

			Avera	ge annual dai	ly traffic		
	1-	251-	501-	1, 001-	5, 001-	>	
Trai ns	250	500	1, 000	5, 000	10, 000	10, 000	Total
<1	10, 765	2, 971	2, 817	5, 524	1, 820	1, 216	25, 113
1-2	20, 917	5, 030	4, 601	8, 285	2, 453	1, 720	43, 006
2-3	11, 996	3, 217	2, 946	5, 486	1, 672	1, 327	26, 644
6- 10	12, 081	3, 308	3, 144	5, 787	1, 723	1, 329	27, 372
11-15	5, 262	1, 317	1, 335	2, 720	779	634	12, 047
16-20	4, 451	1, 300	1, 288	2, 463	832	556	10, 890
21-25	2, 476	691	699	1, 503	491	402	6, 262
>25	5, 124	1, 363	1, 324	2, 868	1, 064	840	12, 583
Total	73, 072	19, 197	18, 154	34, 636	10, 834	8, 024	163, 917

TABLE 55. CROSSINGS BY MAXIMUM TIMETABLE SPEED, 1995

Timetable	
Speed	Crossi ngs
1-5	5, 309
6- 10	29, 982
11-15	8, 490
16-20	12, 738
21-25	21, 219
26-30	16, 084
31-35	9, 890
36-40	17, 053
41-45	3, 604
46-50	13, 681
51-55	2, 809
56-60	10, 565
61-65	1, 208
66-70	4, 703
71-75	560
76-80	5, 463
81-85	1
86-90	464
91-95	1
96-100	8
>100	85
Total	163, 917

TABLE 56. TOTAL CROSSINGS BY TYPICAL TRAIN SPEED VARIATION, 1995

Speed	
Vari ati on	Crossi ng
<1	13, 582
1-5	42, 175
6- 10	36, 218
11-15	16, 851
16-20	16, 407
21-25	9, 894
26-30	8, 869
31-35	4, 512
36-40	4, 477
41-45	2, 409
46-50	3, 358
51-55	810
56-60	1, 951
61-65	659
66-70	351
71-75	620
76-80	653
81-85	13
86-90	2
91-95	
96-100	
>100	106
Total	163, 917

TABLE 57. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC, 1995

AADT	Crossi ngs
1- 100	51, 298
101-200	15, 118
201-300	11, 533
301-400	7, 267
401-500	7, 053
501-600	4, 571
601-700	3, 486
701-800	3, 925
801-900	2, 595
901-1,000	3, 577
1, 001-2, 000	15, 849
2, 001-3, 000	8, 683
3, 001-4, 000	5, 437
4, 001-5, 000	4, 667
5, 001-6, 000	3, 040
6, 001-7, 000	2, 289
7, 001-8, 000	2, 223
8, 001-9, 000	1, 589
9, 001-10, 000	1, 693
10, 001-20, 000	6, 092
>20, 000	1, 932
Total	163, 917

TABLE 58. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC AND WARNING DEVICE CATEGORY, 1995

 $\hbox{Annual Average Daily Traffic} \\$ 

Warning device	1-250	251- 500	501- 1, 000	1, 001- 5, 000	5, 001- 10, 000	> 10, 000	Total
Gates	4, 225	3, 164	3, 910	10, 651	4, 264	3, 698	29, 912
Flashing lights	3, 990	3, 363	4, 355	10, 756	3, 677	2, 769	28, 910
Hwy. signals, wigwags, bells	410	186	188	433	194	172	1, 583
Special warning devices	971	585	624	1, 539	550	422	4, 691
Stop signs	6, 474	1, 740	1, 223	1, 307	164	58	10, 966
Crossbucks	53, 577	9, 294	7, 089	8, 717	1, 660	764	81, 101
Other signs	207	90	81	96	23	9	506
No signs or signals	3, 218	775	684	1, 137	302	132	6, 248
Total	73, 072	19, 197	18, 154	34, 636	10, 834	8, 024	163, 917

TABLE 59. TOTAL CROSSINGS BY TRUCK TRAFFIC AS A PERCENTAGE OF ANNUAL AVERAGE DAILY TRAFFIC, 1995

%	Crossi ngs
<1	6, 033
1-5	75, 254
6- 10	49, 404
11-15	15, 387
16-20	8, 228
21-25	2, 105
26-30	4, 567
31-35	493
36-40	963
41-45	102
46-50	898
51-55	19
56-60	157
61-65	9
66-70	49
71-75	104
76-80	70
81-85	9
86-90	46
91-95	3
96-99	17
Total	163. 917
iotal	103. 917

TABLE 60. PUBLIC CROSSINGS BY CROSSING SURFACE, 1995

State	Ti mber	Full Wood Plank	Asphal t	Concrete Sl ab	Concrete Pavement	Rubber	Metal Sections	Metal	Unconsol - i dated	Other
Al abama	124	170	3, 017	7	1	49	1		1 23	9 1
Al aska	11	92	52	6	0	59	0		0	1 4
Ari zona	175	183	383	3	1	132	0		0 6	1 2
Arkansas	863	235	1, 478	130	7	11	2		2 54	8 4
Cal i forni a	811	1, 244	5, 446	144	30	120	0		0 12	9 32
Col orado	697	415	607	31	4	132	7	2	3 14	3 10
Connecti cut	109	0	115	2	0	142	2		0	0 0
Del aware	3		216			48				1 0
Dist Of Columbia	6		10			2				0
Fl ori da	1, 203		2, 085	302		239			1 10	
Georgi a	120		5, 384	15		16			1 48	
Hawai i	0		6			0				0
Idaho	286		408			31	0		0 6	
Illinois	1, 863		4, 790			874	7		7 1, 08	
I ndi ana	809		5, 032	28		391	9		0 20	
I owa	121	,	2, 158			332	1		2 1, 30	
Kansas	2, 293		1, 114	120		129	7		1 1, 88	
Kentucky	299		1, 455	1		87	1		3 46	
Loui si ana	691		1, 402	150		450	1		4 39	
Maine	53		598			9	0			7 0 5 3
Maryl and	200 64		329 992			63 84	0		0 1 0 1	
Massachusetts	1, 384		3, 018			439	90		1 36	
Mi chi gan Mi nnesota	1, 364 264		1, 742	17		439 284	1		1 28	
Mi ssi ssi ppi	160	,	1, 742	10		136	1		1 74	
Mi ssouri	1, 508		1, 598			80	2		1 88	
Montana	28		285	17		11	0		8 2	
Nebraska	844		641	123		56	2		2 1, 58	
Nevada	19		65	67		44	1		0 2	
New Hampshire	12		419	1		7	0			6 1
New Jersey	153		1, 430			83	0		8 6	
New Mexico	444		49			34	0		0 9	
New York	416		2, 283			287	0		2 9	
North Carolina	22	47	4, 434	6	12	32	1		1 29	8 6
North Dakota	126	3, 546	476	19	2	39	0		2 41	0 4
0hi o	1, 410	117	4, 591	13	12	239	0		2 14	8 19
0kl ahoma	1, 793	619	951	124	15	55	0		6 97	0 28
0regon	477	118	1, 313	17	23	60	0		0 4	1 253
Pennsyl vani a	949	77	3, 779	59	243	100	1	1	6 35	5 4
Rhode Island	1		79			36	0			0 0
South Carolina	31	1	2, 962	25	5	8	0		1 7	0 6
South Dakota	13	,	444	1		118	0		0 8	
Tennessee	105		2, 687	5		106	3		0 21	
Texas	4, 632		4, 157	398		303	5		8 1, 66	
Utah	219		383			29	3		2 8	
Vermont	34		331	0		11	0		0 7	
Vi rgi ni a	228		1, 689	4		16	4		8 11	
Washi ngton	124	,	1, 299	77		173	0		0 3	
West Virginia	803		738			10	0		1 32	
Wi sconsi n	60		3, 728			310	1		1 22	
Wyomi ng	40		137	2		29	0		0 11	
Puerto Rico FINAL TOTALS	27, 100		22 84, 361	0 2, 208		0 6, 535	0 162	17		2 0 0 834

TABLE 61. TOTAL CROSSINGS BY MAXIMUM TIME TABLE SPEED, WARNING DEVICE CATEGORY AND NUMBER OF TRACKS, 1995

SINGLE TRACK					MA	XIMUM TI	ME TABLE	SPEED					
WARNING DEVICES	00- 10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	>110	TOTAL
GATES	1327	1770	2551	2407	2034	1828	1186	1051	41	4	1	0	14200
FLASHING LIGHTS	4468	3061	5367	3627	2373	1460	307	331	12	0	0	0	21006
HWY. SIGNALS, WIGWAGS, BELLS	376	162	196	123	49	54	11	9	1	0	1	0	982
SPECIAL WARNING DEVICES	2274	523	252	80	58	21	13	21	12	2	0	0	3256
STOP SIGNS	1195	847	1879	1627	1072	810	259	341	2	0	0	0	8032
CROSSBUCKS	12766	7125	16870	11609	6273	4484	918	1146	121	0	1	0	61313
OTHER SIGNS	175	94	62	15	12	0	3	3	0	0	0	0	364
NO SIGNS OR SIGNALS		930	735	315	120	103	35	28	4	0	0	0	4774
TOTAL	25085	14512	27912	19803	11991	8760	2732	2930	193	6	3	0	113927
MULTI PLE TRACKS							TIME TABI						
WARNI NG DEVI CES		11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	>110	TOTAL
GATES	985	1523	2380	2419	2283	2188	1891	1895	144	2	2	0	15712
FLASHING LIGHTS	1718	1181	1795	1338	845	635	207	177	8	0	0	0	7904
HWY. SI GNALS, WI GWAGS, BELLS	168	114	123	72	38	38	28	16	4	0	0	0	601
SPECIAL WARNING DEVICES	942	235	139	45	26	26	6	12	3	1	0	0	1435
STOP SIGNS	517	371	511	469	356	282	197	229	2	0	0	0	2934
CROSSBUCKS	5081	2947	4267	2713	1688	1407	833	741	111	0	0	0	19788
OTHER SIGNS	55	32	22	17	14	1	1	0	0	0	0	0	142
NO SIGNS OR SIGNALS	820	313	154	67	44	37	16	23	0	0	0	0	1474
TOTAL	10286	6716	9391	7140	5294	4614	3179	3093	272	3	2	0	49990
ALL ODOGGLNGG					,		TIME TAB	LE CREER					
ALL CROSSINGS	00 10	11-20	91 90	31-40			TIME TABI 61-70		01 00	01 100	101-110	. 110	TOTAL
WARNI NG DEVI CES		11-20	21-30	31-40	41-50	51-60	01-70	71-80	81-90	91-100	101-110	>110	TOTAL
GATES	2312	3293	4931	4826	4317	4016	3077	2946	185	6	3	0	29912
FLASHING LIGHTS	6186	4242	7162	4965	3218	2095	514	508	20	0	0	0	28910
HWY. SI GNALS, WI GWAGS, BELLS		276	319	195	87	92	39	25	5	0	1	0	1583
SPECIAL WARNING DEVICES	3216	758	391	125	84	47	19	33	15	3	0	0	4691
STOP SIGNS		1218	2390	2096	1428	1092	456	570	4	0	0	0	10966
CROSSBUCKS		10072	21137	14322	7961	5891	1751	1887	232	0	1	0	81101
OTHER SIGNS	230	126	84	32	26	1	4	3	0	0	0	0	506
NO SIGNS OR SIGNALS		1243	889	382	164	140	51	51	4	0	0	0	6248
TOTAL	35371	21228	37303	26943	17285	13374	5911	6023	465	9	5	0	163917

## ( D A T A )

## SUMMARY OF ACCIDENT/INCIDENT

AND

**INVENTORY** 

FOR

PRI VATE CROSSI NGS

TABLE 62. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS BY TYPE OF CONSISTS, 1995

	Fr	ei ght-		Pass	enger-		-Yard Sw	i t.chi ng	j	Oth	er	_
State		Kl d					A/I Kl	-				
Alabama	7		2	·			1			2		_
Al abama												
Ari zona	4		1									
Arkansas	8		4							3		1
Cal i forni a	18	2	10		1		6		1	4		1
Col orado	4		1		1					1		1
Connecti cut												
Del aware	2											
Dist. of Columbia												
Fl ori da	3		1	. 2	1	2				1		
Georgi a	9		3		1					2		
I daho	1											
Illi noi s	14	1	6			2				3		1
Indi ana	8						7		2	1		
Iowa	3	1					2					
Kansas	4	1	2							5		3
Kentucky	14	1	4									
Loui si ana	11		4				4		3	3		1
Mai ne	1						3			1		
Maryl and							1					
$Massachusetts.\dots$				1		1						
Mi chi gan	3			1						2		2
Mi nnesota	6	2	2				3			1		
Mi ssi ssi ppi	9	1	3		1		1		1			
Mi ssouri	10		2							2		2
Montana	4						1					
Nebraska	7	1	1				2		1	5		
Nevada New Hamshi re	3	4										
New Jersey	1		1	. 2	1		1					
New Mexi co	2	1										
New York	3					3			1	1		
North Carolina	9				1		1			1		2
North Dakota	2		1									
0hi o	13	2	2				2		1	1		
0kl ahoma	4						1		1			
0regon	3	2		1	7		1					
Pennsyl vani a	7	3								2		
Rhode Island												
South Carolina	7		1				2			1		
South Dakota												
Tennessee	9	2	2				1					
Texas	40	7	14				5		2	4		3
Utah	3		1									
Vermont	1		1							 9		
Vi rgi ni a Washi ngton	16 16	1 2	7		1	4	1 11		1	2 1		2
West Virginia	5		1				1			1		
Wi sconsi n	6	4	2				1					
Wyomi ng	5		1									
Unknown										-, -, -,		
Total	305	38	84	22	15	12	67		14	50		19

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 63. (MV) ACCI DENTS/I NCI DENTS AT PRI VATE HI GHWAY-RAI L CROSSI NGS, BY STATE AND WARNI NG DEVI CE, 1995

State	Gates	Fl ashi ng Li ghts	Hwy Sig. Wigwags Bells	Speci al	Cross- Bucks	Stop Si gns	Other Si gns	No Si gns Or Si gnal s	Total
Al abama					2	2		6	10
Al aska									
Ari zona				1		3			4
Arkansas					4	3		4	11
			1	3	3	3 16		6	30
Cal i forni a		1			4			1	30 6
Col orado						1			
Connecti cut									2
Delaware Dist. of Columbia		1			1				
DISC. OF COLUMDIA									
Fl ori da					3	2		1	6
Georgi a		1			11				12
Idaho					1				1
Illi noi s		1		1	7	5		12	26
Indi ana	1			3	2	1		9	16
I owa		1			1			3	5
Kansas					7			2	9
Kentucky					7			7	14
Loui si ana					11	2	1	4	18
Mai ne				2		1		2	5
Maryl and								1	1
Massachusetts								1	1
Mi chi gan		1			2			3	6
Mi nnesota				1		3		6	10
Mi ssi ssi ppi		2			7	1		2	12
Mi ssouri					3	2		7	12
Montana					1	2	1	1	5
Nebraska						3		11	14
Nevada					1	2			3
New Hamshi re									
New Jersey	1	1						2	4
New Mexi co					2				2
New York		1	1					6	8
North Carolina					7			5	12
North Dakota						2			2
Ohi o	1	1		1	3	1		9	16
Okl ahoma				1	3	1			5
0regon			1		1	2		1	5
Pennsyl vani a					2	2	1	4	9
Rhode Island									
South Carolina		1			7			2	10
South Dakota									
Tennessee	1	1		1	2	1		4	10
TD.	1	2		1	20	20		5	49
Texas					20 1	20 	1	յ 1	49
Utah								1	3 1
Vermont		1			9	2		7	
Vi rgi ni a				1		16		10	19
Washington					4				31
West Virginia		1			2	1		3	7
Wi sconsi n		1			2	3		1	7
Wyomi ng						5			5
Total	5	18	3	16	143	105	4	150	444

Note: "Special" are crossings protected by watchmen or members of train crew

TABLE 64. ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY HIGHWAY USER, 1995

	Ac	cc/I nc	K	i l l ed	I n	ij ured	Fatal	I nj ury
Type Of Vehicle	No.	%	No.	%	No.	%	Acc/I nc	Acc/Inc
Automobile	198	41. 25	25	45. 45	56	40. 00	19	45
Truck	154	32. 08	26	47. 27	51	36. 43	14	32
Truck-trailer	92	19. 17	2	3. 64	22	15. 71	2	16
Bus								
School bus								
Motorcycl e								
Pedestri an	1	. 21			1	. 71		1
0ther	35	7. 29	2	3. 64	10	7. 14	2	8
Total	480	100. 00	55	100. 00	140	100. 00	37	102

(MV) ACCI DENTS/INCI DENTS AT PRI VATE HI GHWAY-RAIL CROSSINGS, BY WARNING DEVI CE TABLE 65. CATEGORY AND MOTORIST ACTION, 1995

		ove Ar			pped Ar		D. 1 W			0.1			** 1			m . 1		
	- 0r	Thru Ga	ate	- Then	Procee	eded	-Did No	ot Stop		Ot I	her		<ul> <li>Unknov</li> </ul>	vn		- Tot al		
Warning Device	A/I	Kl d	I nj	A/I	Kl d	I nj	A/I K	ld I	nj A	/I Kl	ld Inj	A/I	Kl d	I nj	A/I	Kl d	Inj	
Gates	1									4						5		
Cantilever flshrs							1			2						3		
Standard flashers							10	1	5	5						15	1	5
Hwy Sig, W W, Bells							1		3	2						3		3
Special Devices				1			15		3							16		3
Crossbucks				7			79	5	40	54	4	4	3	1		143	10	44
Stopsi gns				13	1	4	59	27	32	26	1	4	7			105	29	40
Other Signs							3	1		1						4	1	
No Signs Or Signl				11		2	75	7	17	60	4	15	4	1		150	12	34
Total	1			32	1	6	243	41	100	154	9	23	14	2		444	53	129

Note: "Special" are crossings protected by watchmen or members of train crew. "Hwy Sig" = Highway signals, W W = Wigwags.

TABLE 66. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY SPEED OF TRAIN, CIRCUMSTANCE AND VISIBILITY, 1995

			- Dawn			- Day			- Dusk-		D	ark		- Tot al		
Speed 0f	Vehi cl e	A/I	Kl d	I nj	A/I	Klď	I nj	A/I	Kl d	I nj A	/I K	ld I	nj A/I	Kl c	l Inj	
RAIL	C O N S I	S T	S T R	U C K	ніс	H W A	YUS	SER								
Standi ng.		3		2	74	9	13	8			71	2	4	156	11	19
1-9		1		1	114	14	50	3		1	24	3	4	142	17	56
10- 19		1			54	18	23	2		1	15	1	5	72	19	2
20- 29		2		1	5	2	2				4		1	11	2	
30-39					5	1	4	1		1	3		2	9	1	
40- 49					2		1							2		
50- 59					1		1							1		
60 and ov	ver															
Unknown					11	2					2		1	13	2	
Total.		7		4	266	46	94	14		3	119	6	17	406	52	118
HIGHV	NAY US	ER	S T R	U C K	R A I	L C	0 N S	ST								
Standi ng.																
		2			6		1				1			9		
10- 19		1			9	1	4	1			6		3	17	1	
					1						1			2		
30-39											1			1		
10- 49					1						1		1	2		
50- 59											1		1	1		
60 and ov	ver															
Unknown					4		1				2			6		
Total.		3			21	1	6	1			13		5	38	1	1
GRANI	о тота	L														
Standi ng.		3		2	74	9	13	8			71	2	4	156	11	19
1-9		3		1	120	14	51	3		1	25	3	4	151	17	5
10- 19		2			63	19	27	3		1	21	1	8	89	20	3
20- 29		2		1	6	2	2				5		1	13	2	
30- 39					5	1	4	1		1	4		2	10	1	
					3		1				1		1	4		
					1		1				1		1	2		
30 and ov	ver															
U <b>nknown.</b> .					15	2	1				4		1	19	2	:
Total.		10		4	287	47	100	15		3	132	6	22	444	53	129

TABLE 67. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY RAILROAD AND WARNING DEVICE CATEGORY, 1995

Rai l road	Gates	Fl ashi ng Li ghts	Hwy Sig. Wigwags Bells	Speci al	Cross- Bucks	St op Si gns	Other Si gns	No Signs Or Signals	Total	
										-
Alaska Railroad Corp.										
Alton & Southern Railroad										
Amtrak (Nat'l Railroad Passenger Corp.)			2		6	;	3		4	15
Atchison, Topeka And Santa Fe Railway Co.				2	15		2		4	23
Bangor And Aroostook Railroad									2	2
Belt Railway Co. of Chicago										
Bessemer & Lake Erie Railroad Co.					1					1
Birmingham Southern Railroad Co.										
Burlington Northern Railroad Co.			1	3	10	)	35		25	74
Chicago And North Western Transp.					1				2	3
Chicago, Central & Pacific Railroad Co.									1	1
Consolidated Rail Corp.	1	3		2	2		2	1	12	23
CSX Transp.		2			20	)	3		16	41
Dakota, Minnesota & Eastern Railroad									1	1
Delaware And Hudson Railroad Co.		1							4	5
Denver And Rio Grande Western Railroad Co.					2					2
Duluth, Missabe & Iron Range Railway Co.										
Elgin, Joliet And Eastern Railway Co.				1	1		1		3	6
Florida East Coast Railway Co.										
Gateway Western Railway									1	1
Grand Trunk Western Railroad Co.		1								1
Houston Belt & Terminal Railway Co.										
Illinois Central Railroad Co.					3	;	1	1	3	8
Indiana Harbor Belt Railroad Co.									1	1
Kansas City Southern Railway Co.		3			15					18
Long Island Rail Road										
Metro North Commuter Railroad Co.										
Montana Rail Link					1		1	1	1	4
New Jersey Transit Rail Operations	1								1	2
Norfolk Southern Corp.	1	3		2	32		7		33	78
Northeast Illinois Regional Commuter Rail		1			1				1	3
Northern Indiana Commuter Trans.										
Paducah & Louisville Railway Co.										
Port Authority Trans Hudson										
Port Terminal Railroad Assoc.		1			2		1			4
Soo Line Railroad Co.		1			1		1		5	8
Southeastern Pennsylvania Transp.										
Southern Pacific Transp. Co.	1	1		3	8	;	21		5	39
Southern Pacific, Chicago-St. Louis Corp.										
Springfield Terminal Railway Co.				2			1			3
St. Louis Southwestern Railway Co.					1		2			3
Terminal Railroad Assoc. of St. Louis										
Texas Mexican Railway Co.										
Union Pacific Railroad Co.				1	12		16	1	17	47
Union Railroad Company (Pittsburgh)										
Wheeling & Lake Erie Railway Co.					1					1
Wisconsin Central Ltd.		1			2		2			5
All Other Railroads	. 1				6	i	6		8	21
Total	. 5	18	3	16	143	;	105	4	150	444

Note: "Special" are crossings protected by watchmen or members of train crew.

TABLE 68. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY RAILROAD, 1995

	Acc/Inc		Injured	Acc/Inc		Users Injured	Acc/I nc			
Alaska Railroad Corp.									. =	
Alton & Southern Railroad										
Amtrak (Nat'l Railroad Passenger Corp.)	15	14	6	1			16	. 1	14	
Atchison, Topeka And Santa Fe Railway Co		3	7	3		2	26		3	
Bangor And Aroostook Railroad	2						2			
Belt Railway Co. of Chicago										
Bessemer & Lake Erie Railroad Co.	1						1			
Birmingham Southern Railroad Co.										
Burlington Northern Railroad Co.	74	10	16	5			79	. 1	10	1
Chi cago And North Western Transp.	3						3			
Chicago, Central & Pacific Railroad Co.	1						1			
Consolidated Rail Corp.	23	2	1	1			24		2	
CSX Transp.	41	2	11	2			43		2	1
Dakota, Minnesota & Eastern Railroad	1						1			
Delaware And Hudson Railroad Co.	5	1	2	1	1		6		2	
		1	1	1			2			
Denver And Rio Grande Western Railroad (										
Duluth, Missabe & Iron Range Railway Co.										
Elgin, Joliet And Eastern Railway Co.	6		2				6			
Florida East Coast Railway Co.										
Gateway Western Railway	1						1			
Grand Trunk Western Railroad Co.	1		2	2		1	3			
Houston Belt & Terminal Railway Co.									-	
Illinois Central Railroad Co.	8		2				8		-	1
Indiana Harbor Belt Railroad Co.	1						1		-	
Kansas City Southern Railway Co.	18		4	1		3	19		-	
Long Island Rail Road									-	
Metro North Commuter Railroad Co.									-	
Montana Rail Link	4						4		· <b>-</b>	
New Jersey Transit Rail Operations	2	1					2		1	
Norfolk Southern Corp.	78	6	22	5		1	83		6	2
Northeast Illinois Regional Commuter Rai	il 3		2				3		-	:
Northern Indiana Commuter Trans.									-	
Paducah & Louisville Railway Co.				1		1	1			
Port Authority Trans Hudson										
Port Terminal Railroad Assoc.	4		2				4			
Soo Line Railroad Co.	8	2	2	4		1	12		2	:
Southeastern Pennsylvania Transp.										
Southern Pacific Transp. Co.	39	6	18				39		6	1
Southern Pacific, Chicago-St. Louis Corp										
Springfield Terminal Railway Co.	3						3			
St. Louis Southwestern Railway Co.	3	1					3		1	
Terminal Railroad Assoc. of St. Louis										
Texas Mexican Railway Co.										
Union Pacific Railroad Co.	47	5	23	2		1	49		5	2
	47		23	ــــــــــــــــــــــــــــــــــــــ			49			
Union Railroad Company (Pittsburgh)	1			1		1	2			
Wheeling & Lake Erie Railway Co.				1		1				
Wisconsin Central Ltd.	5		4				5			
All Other Railroads	21		2	7	1		28		1	:
Total	. 444	53	129	36	2	11	480		55	14

TABLE 69. (MV) ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY SPEED OF CONSIST, 1995

	F	rei ght-		Pas	senge:	r	Yard Sv	wi tchi ng		Othe	er		- Total		
Speed Of Consist	A/I				Kl d			ld Inj	A/I				Kl d	I nj	
Standing	4						2						6		
1-9	42		3	1		1	54		10	28		4	125		18
10- 19	26		3	1			9		3	12		4	48		10
20-29	34		11	3		4	2		1	2		3	41		19
30-39	63	1	19	2		2				4		5	69	1	26
40-49	86	25	33	3	1					3		3	92	26	36
50-59	33	9	8	1						1			35	9	8
60-69	14	2	6	3	3								17	5	6
70-79	3	1	1	6	10								9	11	1
80-89				1	1	2							1	1	2
90 and over				1		3							1		3
Unknown															
Total	305	38	84	22	15	12	67		14	50		19	444	53	129

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 70. (MV) ACCI DENTS/I NCI DENTS AND CASUALTI ES AT PRI VATE
HI GHWAY- RAI L CROSSI NGS, BY LENGTH OF CONSI ST, 1995

	F	rei ght		Pas	ssenger-		Yard S	wi tchi	ng	0the	r		- Total		
Number Of Cars	A/I	Kl d		A/I	Kld I			ld I				A/I	Kl d	I nj	
1-9	40	1	7	18		12	37		8	4		3	99	13	30
10- 19	27	2	6	3	2		12		2	2		1	44	4	9
20-29	31	5	8				8		2				39	5	10
30-39	27	6	9				4		2				31	6	11
40-49	23	1	6	1	1		1						25	2	6
50-59	26	2	11				2						28	2	11
60-69	12	5	5				1						13	5	5
70-79	21	4	5										21	4	5
80-89	18	1	6										18	1	6
90-99	23	2	5										23	2	5
100-109	18	2	4										18	2	4
110-119	25	7	8										25	7	8
120-129	4												4		
130-139	3		1										3		1
140- 149	3		1										3		1
150 And over	2		1										2		1
$Locomotives\ only.$	2		1				2			44		15	48		16
Total	305	38	84	22	15	12	67		14	50		19	444	53	129

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars

TABLE 71. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS,
BY OPERATIONAL STATUS OF WARNING DEVICE,
CIRCUMSTANCE AND VISIBILITY, 1995

	D	Wl		Struck By Consist									
	- pevi	ce Work		St	ruck b	,		Ra	an into	Consis	ι		
Warning Device	Yes	No	N/A	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark		
Gates	5				2		2				1		
Cantilever flshrs	2		1		1		1	1					
Standard flashers	15				7		3		3		2		
Hwy Sig, W W, Bells	3				3								
Special Devices			16	1	4		5		2		4		
Crossbucks			143	1	84	9	35	2	8		4		
Stopsi gns			105	3	68	2	27		4		1		
Other Signs			4		4								
No Signs Or Signl			150	2	93	3	46		4	1	1		
Total	25		419	7	266	14	119	3	21	1	13		

Note: If a rail consist is intentionally grounded to prevent activation of the warning device, these are reported as "N/A."

TABLE 72. PRIVATE CROSSINGS AT-GRADE BY STATE AND TYPE DEVELOPMENT, 1995

State	Farm	Resi denti al	Recreational	Industri al	Unknown	Total
Al abama	1, 278	227	14	463	0	1, 982
Al aska	4	14	5	81	0	104
Ari zona	395	24	13	254	0	686
Arkansas	1, 002	219	17	269	0	1, 507
Cal i forni a	2, 140	342	122	2, 258	9	4, 871
Col orado	897	258	23	264	6	1, 448
Connecti cut	49	30	32	149	1	261
Del aware	62	34	4	19	0	119
Dist Of Columbia	0	0	0	8	0	8
Fl ori da	391	206	32	446	405	1, 480
Georgi a	1, 542	647	32	554	0	2, 775
Idaho	871	61	11	433	0	1, 376
Illinois	3, 755	506	77	1, 346	0	5, 684
Indi ana	1, 887	328	29	598	4	2, 846
Iowa	3, 149	328	51	688	1	4, 217
Kansas	3, 589	207	8	427	1	4, 232
Kentucky	1, 576	755	18	412	0	2, 761
Loui si ana	1, 731	504	21	965	1	3, 222
Maine	410	118	77	329	0	934
Maryl and	404	79	17	212	0	712
Massachusetts	169	68	39	261	0	537
Mi chi gan	1, 330	395	125	867	0	2, 717
Mi nnesota	2, 261	239	50	583	0	3, 133
Mi ssi ssi ppi	1, 409	409	6	275	0	2, 099
Mi ssouri	2, 333	337	27	593	1	3, 291
Montana	1, 625	108	23	302	0	2, 058
Nebraska	2, 497	86	13	240	0	2, 836
Nevada	28	3	6	35	193	265
New Hampshi re	152	87	23	82	0	344
New Jersey	199	62	12	322	1	590
New Mexi co	442	32	4	111	0	589
New York	2, 152	338	99	588	0	3, 177
North Carolina	1, 753	905	34	887	1	3, 580
North Dakota	1, 956	26	10	188	0	2, 180
Ohi o	2, 428	334	42	899	1	3, 704
0kl ahoma	1, 327	151	10	247	0	1, 735
Oregon	1, 350	334	41	1, 091	0	2, 810
Pennsyl vani a	1, 453	520	157	1, 288	0	3, 418
Rhode Island	7	18	9	37	0	71
South Carolina	726	299	15	308	0	1, 348
South Dakota	1, 143	81	3	134	0	1, 340
Tennessee	1, 111	394	22	391	0	1, 918
Texas	4, 257	508	36	1, 559	3	6, 36
Utah	524	46	10	209	0	789
Vermont	450	62	29	109	0	650
Vi rgi ni a	645	189	13	303	1, 773	2, 92
Washi ngton	1, 446	401	55	1, 112	1, 773	3, 01
0	888	658	46	627	1	
West Virginia Wisconsin	1, 886	222	46 59	701	0	2, 22 2, 86
Wyomi ng	779	16	9	137	0	2, 80 93
wyoming Puerto Rico	779	0	0	137	0	93
					U	

TABLE 73. PRIVATE CROSSINGS AT-GRADE BY STATE AND TYPE WARNING DEVICE, 1995

<b>G</b>	G.	G. I	No Si gns		<b></b>
State	Si gns	Si gnal s	or Signals	Unknown	Total
Al abama	665	20	1. 296	1	1. 982
Al aska	68	0	36	0	104
Ari zona	416	5	265	0	686
Arkansas	237	6	1, 264	0	1, 507
Cal i forni a	3, 586	104	1, 181	0	4, 871
Col orado	764	11	673	0	1, 448
Connecti cut	211	42	8	0	261
Del aware	10	1	108	0	119
Dist Of Columbia	0	0	8	0	8
Fl ori da	973	52	455	0	1, 480
Georgi a	1, 424	12	1, 338	1	2, 775
I daho	291	11	1, 074	0	1, 376
Illinois	573	104	5, 007	0	5, 684
I ndi ana	265	38	2, 543	0	2, 846
Iowa	676	15	3, 526	0	4, 217
Kansas	273	5	3, 954	0	4, 232
Kentucky	564 409	31 31	2, 166 2, 782	0	2, 761 3, 222
Loui si ana Mai ne	409 291	31 16	2, 782 627	0	934
Maryl and	143	9	560	0	712
Massachusetts	174	13	350	0	537
Mi chi gan	315	35	2, 367	0	2, 717
Mi nnesota	1, 101	19	2, 013	0	3, 133
Mi ssi ssi ppi	202	5	1, 892	0	2, 099
Mi ssouri	249	26	3, 016	0	3, 291
Montana	512	9	1, 537	0	2, 058
Nebraska	157	6	2, 673	0	2, 836
Nevada	108	6	150	1	265
New Hampshire	49	4	291	0	344
New Jersey	157	13	426	0	596
New Mexico	230	3	356	0	589
New York	324	33	2, 820	0	3, 177
North Carolina	1, 258	20	2, 302	0	3, 580
North Dakota	368	1	1, 811	0	2, 180
Ohi o	323	40	3, 341	0	3, 704
0kl ahoma	266	9	1, 459	1	1, 735
0regon	933	23	1, 859	1	2, 816
Pennsyl vani a	760	38	2, 620	0	3, 418
Rhode Island	41	1	29	0	71
South Carolina	970	12	366	0	1, 348
South Dakota Tennessee	235 339	2 12	1, 123 1, 567	1 0	1, 361 1, 918
Texas	1, 440	81	4, 842	0	6, 363
Utah	173	5	611	0	789
Vermont	72	6	572	0	650
Vi rgi ni a	473	41	2, 409	0	2, 923
Washi ngton	584	17	2, 413	0	3, 014
West Virginia	318	15	1, 887	0	2, 220
Wi sconsi n	400	20	2, 448	0	2, 868
Wyomi ng	308	5	619	0	932
Puerto Rico	1	1	0	0	2
FINAL TOTALS	24, 679	1, 034	79, 040	6	104, 759

TABLE 74. PRIVATE CROSSINGS AT-GRADE BY TYPE DEVELOPMENT AND WARNING DEVICE, 1995

			No Signs		
State	Si gns	Si gnal s	or Signals	Unknown	Total
F	11 201	107	E0 071		69 960
Farm	11, 381	107	52, 371	1	63, 860
Resi denti al .	3, 983	80	8, 152	0	12, 215
Recreati onal	677	28	916	0	1, 621
Industri al	8, 124	797	15, 735	5	24, 661
Unknown	514	22	1, 866	0	2, 402
FINAL TOTALS	24, 679	1, 034	79, 040	6	104, 759

TABLE 75. PRIVATE CROSSINGS AT-GRADE BY RAILROAD AND TYPE DEVELOPMENT, 1995

Rai l road		Farm Resi	dential Re	ecreational Ind	ustrial Unl	known Total
Alaska Railroad Corp.	4	14	5	81	0	104
Alton & Southern Railroad	8	5	0	14	0	27
Amtrak (Nat'l Railroad Passenger Corp.)	35	13	3	16	1	68
Atchi son, Topeka & Santa Fe Railway Co.	2, 323	209	20	1, 106	2	3, 660
Bangor & Aroostook Railroad	184	35	48	118	0	385
Belt Railway Company Of Chicago	0	0	0	76	0	76
Bessemer & Lake Erie Railroad Co.	38	12	2	44	0	96
Birmingham Southern Railroad Co.	0	0	0	36	0	36
Burlington Northern Railroad Co.	9, 110	973	132	2, 239	2	12, 456
Chicago and North Western Railway Co.	1, 613	160	31	565	0	2, 369
Chicago, Central & Pacific Railroad Co.	525	24	3	150	0	702
Consolidated Rail Corp.	3, 842	886	214	1, 995	2	6, 939
CSX Transportation	5, 106	1, 862	158	2, 639	823	10, 588
Dakota, Minnesota & Eastern Railroad	480	7	1	66	0	554
Delaware & Hudson Railway Co.	305	49	37	55	0	446
Denver & Rio Grande Western Railroad Co.	310	175	16	168	4	673
Duluth, Missabe & Iron Range Railway Co.	24	17	1	87	0	129
Duluth, Winnipeg & Pacific Railway	4	5	7	5	0	21
Elgin, Joliet & Eastern Railway Co.	39	1	0	33	0	73
Florida East Coast Railway Co.	5	3	1	18	86	113
Gateway Western Railway	135	1	1	19	0	156
Grand Trunk Western Railroad Inc.	351	24	4	67	0	446
Houston Belt & Terminal Railway Co.	0	1	0	42	0	43
Illinois Central Railroad Co.	1, 073	216	8	344	0	1, 641
Indiana Harbor Belt Railroad Co.	0	2	0	41	0	43
Kansas City Southern Railway Co.	291	44	5	154	0	494
Long Island Rail Road	67	4	3	8	0	82
Metro North Commuter Railroad Co.	12	8	7	33	0	60
Montana Rail Link	467	63	15	139	0	684
New Jersey Transit Rail Operations	43	15	5	33	0	96
Norfolk Southern Corp.	6, 016	2, 128	74	1, 911	1, 140	11, 269
Northeast Illinois Regional Comuter Rail Co.	3	3	1	3	0	10
Northern Indiana Commuter Transportation	8	2	0	15	0	25
Paducah & Louisville Railway Co.	118	30	1	36	0	185
Port Authority Trans Hudson	1	0	0	1	0	2
Port Terminal Railroad Assoc.	1	0	0	97	0	98
Soo Line Railroad Co.	2, 002	255	51	472	0	2, 780
Southeastern Pennsylvania Transportation	22	12	2	17	0	53
Southern Pacific Transportation Co.	2, 035	328	104	2, 007	87	4, 561
Southern Pacific, Chicago-St. Louis Corp.	55	5	0	18	0	78
Springfield Terminal Railway Co.	108	31	6	138	0	283
St. Louis Southwestern Railway Co.	605	75	4	86	0	770
Terminal Railroad Association Of St. Louis	3	0	0	9	0	12
Union Pacific Railroad Co.	8, 726	900	79	2, 378	104	12, 187
Union Railroad Company (Pittsburgh)	0	0	0	39	0	39
Wheeling & Lake Erie Railway Co.	231	42	6	163	0	442
Wisconsin Central Ltd. (also Railway)	715	100	24	323	0	1, 162
All Unknown Railroads	16, 817	3, 476	542	6, 557	151	27, 543
FINAL TOTALS	63, 860	12, 215	1, 621	24, 661	2, 402	104, 759

TABLE 76. PRIVATE CROSSINGS AT-GRADE BY RAILROAD AND WARNING DEVICE, 1995

	No Signs						
Rai l road	Si gns	Signals or Signals		r Signals	Unknown	Total	
Alaska Railroad Corp.	68		0	36		0	104
Alton & Southern Railroad	4		0	23		0	27
Amtrak (Nat'l Railroad Passenger Corp.)	31		8	29		0	68
Atchison, Topeka & Santa Fe Railway Co.	1, 160	4	17	2, 453		0	3, 660
Bangor & Aroostook Railroad	86		5	294		0	385
Belt Railway Company Of Chicago	25		2	49		0	76
Bessemer & Lake Erie Railroad Co.	11		0	85		0	96
Birmingham Southern Railroad Co.	11		3	22		0	36
Burlington Northern Railroad Co.	2, 845	11	16	9, 494		1	12, 456
Chicago and North Western Railway Co.	363		13	1, 993		0	2, 369
Chicago, Central & Pacific Railroad Co.	268		2	432		0	702
Consolidated Rail Corp.	890	7	71	5, 978		0	6, 939
CSX Transportation	4, 135	18	37	6, 265		1	10, 588
Dakota, Minnesota & Eastern Railroad	52		0	501		1	554
Del aware & Hudson Rail way Co.	33		9	404		0	446
Denver & Rio Grande Western Railroad Co.	564		3	106		0	673
Duluth, Missabe & Iron Range Railway Co.	115		2	12		0	129
Duluth, Winnipeg & Pacific Railway	15		1	5		0	21
Elgin, Joliet & Eastern Railway Co.	16		3	54		0	73
Florida East Coast Railway Co.	54		5	54		0	113
Gateway Western Railway	5		0	151		0	156
Grand Trunk Western Railroad Inc.	32	1	12	402		0	446
Houston Belt & Terminal Railway Co.	5 5	,	0	38		0	43
Illinois Central Railroad Co.	221	9	21	1, 399		0	1, 641
Indiana Harbor Belt Railroad Co.	19	-	1	23		0	43
Kansas City Southern Railway Co.	90		4	400		0	494
Long Island Rail Road	3		5	74		0	82
Metro North Commuter Railroad Co.	42	1	13	5		0	60
Montana Rail Link	149		4	531		0	684
	36		3	57		0	96
New Jersey Transit Rail Operations	1, 857	4	ა 39	9, 342		1	
Norfolk Southern Corp.	*	,	0	9, 342		0	11, 269 10
Northeast Illinois Regional Comuter Rail	5 8		7	10		0	25
Northern Indiana Commuter Transportation			3			0	
Paducah & Louisville Railway Co.	44		0	138		0	185 2
Port Authority Trans Hudson Port Terminal Railroad Assoc.				0		0	98
Soo Line Railroad Co.	36		13	49		-	
	260	1	18	2, 502		0	2, 780
Southeastern Pennsylvania Transportation	1		1	51		0	53
Southern Pacific Transportation Co.	2, 011	,	96	2, 454		0	4, 561
Southern Pacific, Chicago-St. Louis Corp.	5		1	72		0	78
Springfield Terminal Railway Co.	108		9	166		0	283
St. Louis Southwestern Railway Co.	196		5	569		0	770
Terminal Railroad Association Of St. Louis	4		0	8		0	12
Union Pacific Railroad Co.	1, 834	8	88	10, 264		1	12, 187
Union Railroad Company (Pittsburgh)	19		0	20		0	39
Wheeling & Lake Erie Railway Co.	77		2	363		0	442
Wisconsin Central Ltd. (also Railway)	190		3	969		0	1, 162
All Unknown Railroads	6, 674		79	20, 689		1	27, 543
L TOTALS	24, 679	1, 03	34	79, 040		6	104, 759

**APPENDIX A** 

**REPORTING** 

**REQUIREMENTS** 

**AND** 

**DEFINITIONS** 

#### ACCIDENT/INCIDENT REPORTABILITY REQUIREMENTS

The rules governing monthly reporting of railroad accidents/incidents in effect in 1992 define a reportable accident/incident as an event arising from the operation of a railroad that results in one or more stated circumstances.

- (a) An impact occurs between railroad on-track equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle, pedestrian or other highway user at a highway-rail crossings.
- (b) Any collision, derailment, fire, explosion, act of <u>GOD</u> or other event involving the operation of railroad on-track equipment (standing or moving) which results in more than \$6,300 in damages to railroad on-track equipment, signals, track and/or track structures, and roadbed.
- (c) Any event arising from the operation of a railroad which results in:
  - (i) death of one or more persons;
  - (ii) injury to one or more persons, other than railroad employees, requiring medical treatment;
  - (iii) injury to one or more employees requiring medical treatment or resulting in restriction of work or motion for one or more days, one or more lost work days, transfer to another job, termination of employment or loss of consciousness;
  - (iv) any occupational illness of railroad employee diagnosed by a physician.

#### **DEFINITIONS**

Annual Average Daily Traffic. An estimate of the annual average daily highway traffic in both traffic directions.

Active Warning Devices. A warning system activated by an approaching train: gates, flashing lights, highway signal, wigwags, or bells.

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

Class I Railroad. A railroad with an annual gross operating revenue in excess of \$250 million based on 1991 dollars.

Commercial Power. A source of commercial power within 500 feet of a crossing.

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

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

#### **Crossing Surfaces.**

- 1. Sectional treated timber. Prefabricated units approximately eight feet long, made of treated timber, individually installed, and removable for maintenance and replacement purpose.
- 2. Full wood plank. A wood surface, other than sectional treated timber, covering the entire crossing area above crossties.
- 3. Asphalt. A surface over the entire crossing area or the area between plants or other material which forms flange way openings with or without single planks on the outside of running rails.
- 4. Concrete slab. Precast concrete slabs which are installed and individually removable for maintenance and replacement.

- 5. Concrete pavement. A continuous concrete surface over the track area which cannot be removed except by destruction of the surface.
- 6. Rubber slabs. Performed rubber sections which can be installed and removed individually for maintenance and replacement.
- 7. Metal sections. Preformed sections of steel or other metal which can be individually installed and removed for maintenance and replacement.
- 8. Other metal. A crossing area completed with covered rails or other permanent metal materials in limited sectional units.
- 9. Unconsolidated. Ballast or other unconsolidated material placed above the tops of crossties with or without planks on one or both sides of running rail.

Daylight Train Movements. Train movements between 6 a.m. and 6 p.m.

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

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

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

Highway-rail Crossing. A location where one or more railroad tracks intersect a public or private thoroughfare, a sidewalk, or a pathway.

Highway Signals. Train-activated highway lights (red-amber-green) that control highway traffic over the crossing.

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

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

Maximum Timetable Speed. Maximum train speed permitted over a crossing.

Nearby Intersecting Highway. A highway intersection within 75 feed of the crossing.

Night Train Movements. Train movements between 6 p.m. and 6 a.m.

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

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

Number Of Crossbucks. Masts with crossbucks; a mast with two or more crossbucks is counted as one. A crossbuck on an active device is not counted.

On-Track Equipment. Railroad rolling stock used to transport freight or passenger. It included locomotives, railroad cars, maintenance equipment, and one or more locomotives coupled to one or more cars.

Other Signs. Signs other than crossbucks or stop signs.

Other Stop Signs. Stop signs other than standard highway stop signs.

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

Passive Warning Device. A warning system not automatically activated by an approaching train: signs (crossbucks or standard highway signs) or special warning devices (manually operated gates, flood lights, etc.).

Pavement Markings. Markings prescribed or generally similar to those in highway traffic manuals, in particular, stoplines and railroad crossing symbols.

Percentage Trucks. The percentage of total daily highway traffic represented by trucks.

Public Crossing. A location open to public travel where railroad tracks cross a road that is under the jurisdiction and maintenance of a public authority.

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

- Railroad Advance Warning. Advance warning signs on any highway approach.
- Rural Crossing. A crossing classification derived from the Functional Classification Code.
- Signals For Train Operation. Automatic signals or interlocks which control train operations in the vicinity of a crossing.
- Smallest Crossing Angle. The smallest angle between the highway and the track.
- Special Warning Devices. Non-train-activated devices other than signs including manually operated gates, train crews flagging a crossing, watchmen, and flood lights.
- Speed Selection For Trains. A uniform warning time for the speed range of trains normally encountered at the crossing.
- Standard Highway Stop Sign. Octagonal red sign with white lettering STOP.
- Stop Signs. The standard highway stop sign or other stop signs.
- Switch Trains. All trains other than thru trains, including locals, industrial runs, and switch engines.
- Thru Trains. Trains whose primary responsibility is to move cars over the road; they may have a limited number of pickups and setouts along the route.
- Total Train Movements. All train movements for the reporting company and all other railroads operating over the crossing.
- Traffic Lanes. Number of highway traffic lanes not including shoulders or parking lanes.
- Train Accident. A collision, derailment, or other event involving the operation of railroad on-track equipment resulting in damages that exceed the reporting threshold.
- Train Incident. Any event involving the movement of railroad on-track equipment that results in a death, a reportable injury, or a reportable illness, but in which railroad property damage does not exceed the reporting threshold.
- Trespasser. Any person whose presence on railroad property used in railroad operations, is prohibited or unlawful.
- Truck Pullout Lane. A special lane designed to accommodate vehicles which are required to stop at a crossing.

#### Type of Development.

- 1. Open space. An area that is undeveloped, sparsely developed, very lightly populated, or agricultural.
- 2. Residential. An area comprised of private residences.
- 3. Commercial. An area with retail stores, businesses, offices, and personal service offices.
- 4. Industrial. An area with manufacturing, construction, heavy products, factories, and warehouses.
- 5. Institutional. An area with schools, churches, hospitals, parks, and other community facilities.

Urban Crossing. A crossing classification derived from Functional Classification Code.

Warning Device Category. At crossings which have more than one warning device, the warning category is determined by the following method:

Highest 8) Gates<sup>3</sup>

- 7) Flashing lights
- 6) Highway signals, wigwags or bells
- 5) Special warning devices
- 3) Stop signs
- 4) Crossbucks
- 2) Other signs

Lowest 1) No signs or signals

When cantilevered flashing lights are categorized separately, they are ranked eighth and gates are ranked ninth.

# **APPENDIX B**

**REPORTING** 

**FORMS** 

### **FORMS**

Three separate forms may be required to properly report a highway-rail crossing accident/incident:

FRA F 6180-57	Grade Crossing Accident/Incident Report
FRA F 6180-55	Railroad Injury and Illness Summary
FRA F 6180-54	Rail Equipment Accident/Incident Report

For all reportable highway-rail crossing accidents/incidents, Form FRA F 6180-57 must be submitted by the carrier which has on-track equipment involved. If reportable casualties result, they must be individually reported on Form F 6180-55. If the accident resulted in more than \$6,300 in damages to railroad on-track equipment, signals, track, track structures, or roadbed, Form FRA 6180-54 must also be submitted.