HIGHWAY-RAIL CROSSING ACCIDENT/INCIDENT AND INVENTORY BULLETIN

NO. 19 CALENDAR YEAR 1996

U.S. Department of Transportation Federal Railroad Administration

Office of Safety

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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 nineteenth 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 1996 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, 1997.

Summary of 1996 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 <u>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.</u>

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

WAI	RNING DEVICE	CURRENT	PRIOR YEARS
GROUPS		1992	1990 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 FATAL	INJ	MOTOR VEHICLE ACCI	FATAL	NON-MOTO	R VEHICLES ACCI	FATAL	INJ
<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
1992									
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
1993									
PUBLIC	4,437	584	1,744	4,240	517	1,677	197	67	67
PRIVATE	455	42	93	421	37	83	34	5	10
TOTAL	4,892	626	1,837	4,661	554	1,760	231	72	77
<u>1994</u>									
PUBLIC PRIVATE	4,503 476	572 43	1,829 132	4,296 450	501 41	1,764 121	207 26	71 2	65 11
TOTAL	4,979	615			542	1,885	233	73	76
IOIAL	4,979	613	1,961	4,746	342	1,883	233	/3	/6
<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
1996									
PUBLIC	3,788	449	1,486	3,612	377	1,428	176	72	58
PRIVATE	469	39	124	442	38	117	27	1	7
TOTAL	4,257	488	1,610	4,054	415	1,545	203	73	65

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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 INJURED CASUALTIES		ACCIDENT	CASUALTIES PER
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
1996	3,788	449	1,486	1,935	0.51

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

YEAR	ACCIDENTS	MOTOR VEHICLES REGISTERED (000) ¹	ACCIDENTS PER MILLION VEHICLES	
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	19.81	
1996	3,612	204,482 ²	17.66	

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

(D A T A)

OVERVIEW

OF CURRENT

YEAR

AT

PUBLIC CROSSINGS

ONLY

TABLE 3. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY STATE, 1996

	No. Of	Ki 1	lod	Inju	nod	Total -Casualt	ins
State	Acc/Inc	No.	%	No.	%	No.	%
Alabama	142	17	3.79	67	4.51	84	4.34
Alaska	5						-, -, -,
Arizona	25	4	. 89	3	. 20	7	. 36
Arkansas	131	20	4.45	36	2.42	56	2.89
California	172	20	4.45	47	3.16	67	3.46
Colorado	25	2	. 45	11	. 74	13	. 67
Connecticut	9			3	. 20	3	. 16
Delaware	4			2	. 13	2	. 10
Dist. of Columbia	2						
Florida	93	14	3.12	33	2.22	47	2.43
Georgia	136	18	4.01	37	2.49	55	2.84
Idaho	43	6	1.34	14	. 94	20	1.03
Illinois	210	37	8.24	83	5.59	120	6.20
Indiana	211	28	6.24	76	5.11	104	5.37
Iowa	114	6	1.34	35	2.36	41	2.12
Kansas	101	13	2.90	39	2.62	52	2.69
Kentucky	69	3	. 67	20	1.35	23	1.19
Louisiana	213	29	6.46	115	7.74	144	7.44
Maine	6			1	. 07	1	. 05
Maryland	9			7	. 47	7	. 36
Massachusetts	19			27	1.82	27	1.40
Michigan	136	17	3.79	85	5.72	102	5.27
Minnesota	132	13	2.90	45	3.03	58	3.00
Mississippi	120	15	3.34	63	4.24	78	4.03
Missouri	107	17	3.79	32	2.15	49	2.53
Montana	23	2	. 45	11	. 74	13	. 67
Nebraska	54	8	1.78	20	1.35	28	1.45
Nevada	6	1	. 22	4	. 27	5	. 26
New Hamshire	1						
New Jersey	27	2	. 45	8	. 54	10	. 52
New Mexico	23	7	1.56	19	1.28	26	1.34
New York	31	4	. 89	13	. 87	17	. 88
North Carolina	112	9	2.00	45	3.03	54	2.79
North Dakota	30	4	. 89	11	. 74	15	. 78
Ohio	174	13	2.90	61	4.10	74	3.82
Oklahoma	75	22	4.90	34	2.29	56	2.89
0regon	28	1	. 22	5	. 34	6	.31
Pennsylvania	64	3	. 67	23	1.55	26	1.34
Rhode Island							
South Carolina	83	5	1.11	39	2.62	44	2.27
South Dakota	20	2	. 45	9	. 61	11	. 57
Tennessee	113	8	1.78	26	1.75	34	1.76
Texas	391	50	11.14	161	10.83	211	10.90
Utah	31	11	2.45	6	. 40	17	. 88
Vermont	3	1	. 22	3	. 20	4	.21
Virginia	50	4	.89	18	1.21	22	1.14
Washington	51	6	1.34	16	1.08	22	1.14
West Virginia	17	2	. 45	5 65	. 34	7	. 36
Wisconsin	144 3	5	1.11	65 3	4.37 .20	70 3	3.62
Wyoming							. 16
Unknown							
Total	3,788	449	100.00	1,486	100.00	1,935	100.00

TABLE 4. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY STATE, 1996

	No. Of		Casualties-		Vehicles	Per 10,0	00 Regists	ration
State	Acc/Inc	K1d	Inj	Total	Registered	Acc/Inc	Kld	Inj
Alabama	138	15	66	81	3,590,761	. 38	. 04	. 18
Alaska	3				555,103	. 05		
Arizona	21	1	2	3	2,942,495	.07		.01
Arkansas	128	20	35	55	1,630,416	. 79	. 12	. 21
California	154	9	43	52	22,963,802	.07		.02
Colorado	24	2	11	13	2,899,910	.08	.01	.04
Connecticut	9		3	3	2,671,221	.03		.01
Delaware	4		2	2	601,076	.07		.03
Dist. of Columbia	2				244,318	.08		
Florida	85	11	29	40	10,559,507	.08	.01	.03
Georgia	135	17	37	54	6,192,515	. 22	.03	.06
Idaho	40	5	14	19	1,076,563	. 37	. 05	. 13
Illinois	191	24	80	104	9,157,225	. 21	. 03	.09
Indiana	208	28	75	103	5,168,356	. 40	. 05	. 15
Iowa	111	6	34	40	2,925,521	. 38	.02	. 12
Kansas	98	11	36	47	2,127,628	. 46	. 05	. 17
Kentucky	66	2	19	21	2,664,392	. 25	.01	.07
Louisiana	211	29	112	141	3,322,357	. 64	.09	.34
Maine	6		1	1	992,817	.06		.01
Maryland	9		7	7	3,693,032	.02		.02
Massachusetts	19		27	27	4,576,212	.04		.06
	131	14	85	99	7,801,992	. 17	.02	.11
Michigan	123	9	44	53		.31	.02	.11
Minnesota			62	77	3,999,720	. 54	.02	. 29
Mississippi	118	15			2,173,189			
Missouri	102	15	26	41	4,309,962	. 24	.03	.06
Montana	22	2	11	13	989,398	. 22	.02	.11
Nebraska	48	6	18	24	1,485,586	. 32	.04	. 12
Nevada	5	1	4	5	1,068,898	. 05	.01	. 04
New Hamshire	1				1,171,473	.01		
New Jersey	21		6	6	5,994,950	. 04		.01
New Mexico	22	7	18	25	1,514,907	. 15	. 05	. 12
New York	23	2	9	11	10,443,715	. 02		.01
North Carolina	108	6	44	50	5,749,462	. 19	.01	. 08
North Dakota	25	3	9	12	711,569	. 35	.04	. 13
Ohio	166	10	60	70	10,028,772	. 17	.01	.06
0klahoma	72	21	34	55	2,911,559	. 25	. 07	. 12
0regon	24		5	5	2,846,208	. 08		.02
Pennsylvania	62	1	23	24	8,651,861	. 07		.03
Rhode Island					716,189			
South Carolina	78	4	36	40	2,867,901	. 27	.01	. 13
South Dakota	18	2	8	10	733,797	. 25	.03	.11
Tennessee	109	7	26	33	5,470,351	. 20	.01	. 05
Texas	386	50	159	209	13,811,852	. 28	.04	. 12
Utah	30	10	6	16	1,469,037	. 20	.07	.04
Vermont	3	1	3	4	510,372	.06	.02	.06
	46	2	16	18	5,671,332	.08	.02	.03
Virginia	48	4			4,598,573	. 10	.01	.03
Washington			14	18				
West Virginia	16	1	4	5	1,443,703	. 11	.01	.03
Wisconsin	140	4	62	66	4,162,265	. 34	.01	. 15
Wyoming	3		3	3	617,895	. 05		. 05
Unknown								
Total	3,612	377	1,428	1,805	204,481,715	. 18	.02	.07

Note: Vehicle registration figures are for 1996 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, 1996

		-Auton	obile-		Truc	k	- T 1	ruck Tra	ailer-]	Bus		Sch	oo1 Bu	s	-Motor	cycle
State	A/I	K1d	Inj	A/I	K1d	Inj	A /	I K1d	Inj	A.	/I K	1d I	nj A					1ď Inj
Alabama	94	7	45	25	5	10	19	3	11									
A1aska	1			2														
Arizona	12		2	8	1					1								
Arkansas	79	14	22	37	5	11	12	1	2									
California	95	7	33	40	2	8	19		2									
Colorado	17	2	7	7		4												
Connecticut	8		3				1											
Delaware	4		2															
Dist. of Columbia	2																	
Florida	54	9	13	19	2	13	11		2	1		1						
Georgia	70	8	20	43	5	9	21	4	8							1		
Idaho	22	4	7	13	1	6	5		1									
Illinois	133	17	55	49	7	23	9		2									
Indiana	144	19	55	49	8	17	13		3	1						1	1	
Iowa	62	5	16	43	1	17	6		1									
Kansas	56	7	17	28	1	15	13	2	4							1	1	
Kentucky	34		10	23	2	9	9											
Louisiana	129	23	67	56	5	30	23	1	11	1		1	1		2	1		1
Maine	5		1	1														
Maryland	4		1	1			4		6									
Massachusetts	15		4	1		1	3		22									
Michigan	94	10	60	27	4	22	9		2							1		1
Minnesota	72	5	28	38	4	13	13		3									
Mississippi	85	15	47	20		13	13		2									
Missouri	56	7	18	39	8	8	6									1		
Montana	14	1	7	6	1	3	2		1									
Nebraska	28	4	11	15	2	7	5											
Nevada	1		1	2	1		2		3									
New Hamshire	1																	
New Jersey	18		6	2			1											
New Mexico	11		8	10	7	10	1											
New York	20	2	8	1			2		1									
North Carolina	74	4	31	20	2	10	14		3									
North Dakota	15	3	7	7		2	3											
Ohio	104	6	38	48	2	19	13	2	2							1		1
0k1ahoma	45	14	26	20	6	7	7	1	1									
0regon	14		3	4		1	6		1									
Pennsylvania Rhode Island	39	1	18	12		3	11		2									
6 4 6 11	50		07			_	10											
South Carolina	52	3	27	14	1	5	10	1	2	1			1		2			
South Dakota	13	1	7	4	1	1	1											
Tennessee	77	5 27	20	19	2	4	10		2				1			2		
Texas	224	27	106	123	20	37 3	38	3	16	1								
Utah	21	8	3	7	2		2											
Vermont	1	1	14	1	1	2	1		3									
Virginia	33 30	1	14 9	9	1 2	5	4 3	1										
Washington		1	1	14 4		3				1								
West Virginia	10				1		16											
Wisconsin	86	3	48	37	1	12	16		2				1					
Wyoming Unknown	1		3	2														
UIIKIIOWII																		
Total 2	,279	244	935	950	112	363	363	19	121	7		2	4		4	9	2	3

TABLE 6. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TYPE OF CONSIST, 1996

			ht		asseng			d Swit			-Other	
State	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Alabama	119	13	58	3	2	2	11		4	5		2
Alaska	1						2					
Arizona	11	1	1				1			9		1
Arkansas	101	17	25	6		2	11	1	3	10	2	5
California	100	5	34	22	4	3	17		2	15		4
Colorado	21	2	10	1						2		1
Connecticut	2			4		3	1			2		
Delaware	3		1	1		1						
Dist. of Columbia	1			1								
Florida	60	6	21	19	5	7	3			3		1
Georgia	113	16	31	4	1		15		5	3		1
Idaho	34	5	12	1		1	1			4		1
Illinois	140	21	58	26	3	19	10			15		3
Indiana	155	22	58	19	3	5	12		1	22	3	11
Iowa	74	6	25	1			16		3	20		6
Kansas	76	10	30				11		3	11	1	3
Kentucky	56	1	16	1			4		2	5	1	1
Louisiana	166	27	81	10	1	12	20	1	9	15		10
Maine	4		1	1						1		
Manuland	6		2	1		4				2		1
Maryland Massachusetts	10		3	4		23	1		1	4		
	105	10	68	5	4	5	14		8	7		4
Michigan		9		2		1			4			3
Minnesota	92 96	7	36 48	9	7	5	18 7		2	11 6	1	3 7
Mississippi	76	15	21	1		1	14		3	11		1
Missouri Montana	19	2	10				1			2		1
Nebraska	42	4	17	1	2	1	1			4		
Nevada	42	1	2	1		2						
New Hamshire	1											
New Hamsmire	•											
New Jersey	8		4	7		2				6		
New Mexico	18	4	16	2	3	1	1		1	1		
New York	12		6	10	2	3				1		
North Carolina	94	6	36	5		2	5		4	4		2
North Dakota	20	3	9	1			3			1		
Ohio	145	9	47	6		1	3		3	12	1	9
0k1ahoma	63	19	29				5	1	1	4	1	4
0regon	18		5							6		
Pennsylvania	48	1	19	2		1	4		1	8		2
Rhode Island												
South Carolina	64	3	31	6	1	3	4			4		2
South Dakota	10	2	8				4			4		
Tennessee	86	4	23	2			3			18	3	3
Texas	317	48	128	8	1	5	32	1	17	29		9
Utah	24	9	5							6	1	1
Vermont				3	1	3						
Virginia	38	2	13	2		1	3			3		2
Washington	26	3	9	2	1	1	12		1	8		3
West Virginia	15	1	4							1		
Wisconsin	109	3	44	3		3	14	1	1	14		14
Wyoming	3		3									
Unknown												
Total	2,806	317	1,108	203	41	123	284	5	79	319	14	118

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

TABLE 7. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY WARNING DEVICE, 1996

Rai 1 road	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross- Bucks	Stop Signs	Other Signs	No Sign: Or Signals	s Total
Alaska Railroad Corp.	1	1			1				3
Alton & Southern Railroad	1								1
Amtrak (Nat'l Railroad Passenger Corp.)	54	14	4		37	10		1	120
Bangor And Aroostook Railroad		1							1
Belt Railway Co. of Chicago									
Bessemer & Lake Erie Railroad Co.					2				2
Birmingham Southern Railroad Co.									
Burlington Northern Santa Fe	110	122	2	1	184	74		1	494
Chicago, Central & Pacific Railroad Co.	1	6	1		8				16
Consolidated Rail Corp.	68	47	6	1	63	10	3	7	205
CSX Transp.	93	117	2	10	153	56		3	434
Dakota, Minnesota & Eastern Railroad		4			5				9
Delaware And Hudson Railroad Co.	2	3		1					6
Denver And Rio Grande Western Railroad Co.	1	2	2	2	5	3			15
Duluth, Missabe & Iron Range Railway Co.	1	1			1				3
Duluth, Winnipeg & Pacific Railway		1				1			2
Elgin, Joliet And Eastern Railway Co.	3	1			1	1		1	7
Florida East Coast Railway Co.	21	1		1					23
Gateway Western Railway	1				6				7
Grand Trunk Western Railroad Co.	16	7			2	13		1	39
Guilford Railroad System	4	3	1		1				9
Houston Belt & Terminal Railway Co.	1				1	2			4
Illinois Central Railroad Co.	8	36	2	2	56	2			106
Indiana Harbor Belt Railroad Co.	8	3			1				12
Kansas City Southern Railway Co.	8	44	8	1	98	2	1	1	163
Long Island Rail Road	5								5
Massachusettes Bay Transit Authority	1								1
Metro North Commuter Railroad Co.	2	3	1						6
Montana Rail Link	1				3	6		1	11
New Jersey Transit Rail Operations	7	1		1					9
Norfolk Southern Corp.	104	136	7	7	161	67		3	485
Northeast Illinois Regional Commuter Rail	11	4				1			16
Northern Indiana Commuter Trans.	2	3	2		1	1			9
Paducah & Louisville Railway Co.		3			1				4
Peninsular Commuter									
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.	1	1			2				4
Soo Line Railroad Co.	13	15			37	7		1	73
Southeastern Pennsylvania Transp.		13						1	1
	8					1			9
Southern California Regional Rail	82	38	6	1	56	3		3	189
Southern Pacific Transp. Co.	2				1				4
Southern Pacific, Chicago-St. Louis Corp.	12	1							66
St. Louis Southwestern Railway Co.		12		1	40		1		
Terminal Railroad Assoc. of St. Louis	102	107			2				2
Union Pacific Railroad Co.	103	137	3	9	230	66	1	9	558
Union Railroad Company (Pittsburgh)					10				
Wheeling & Lake Erie Railway Co.		5		1	13				19
Wisconsin Central Ltd.	8	30		2	49	12			101
All Other Railroads	34	92	5	8	184	32	1	3	359
Total	798	896	52	49	1,405	370	7	35	3,612

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 train is being operated by a crew of another railroad, both Amtrak and the operating carrier must make a report of accident/incident. In all other tables these accidents/incidents are only counted once.

Amtrak

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TABLE 7A. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY RAILROAD, 1996

	Motor Vehicle			Other	Highway l	sers	Total		
Railroad	Acc/Inc		Injured	Acc/Inc	Killed	Injured	Acc/Inc		Injured
Alaska Railroad Corp.	3			2			5		
Alton & Southern Railroad	1		1				1		1
Amtrak (Nat'l Railroad Passenger Corp.)	120	32	59	12	7	1	132	39	60
Bangor And Aroostook Railroad	1						1		
Belt Railway Co. of Chicago									
Bessemer & Lake Erie Railroad Co.	2						2		
Birmingham Southern Railroad Co.									
Burlington Northern Santa Fe	494	85	169	34	14	10	528	99	179
Chicago, Central & Pacific Railroad Co.	16		7	1			17		7
Consolidated Rail Corp.	205	19	85	13	6	2	218	25	87
CSX Transp.	434	33	186	12	5	3	446	38	189
Dakota, Minnesota & Eastern Railroad	9	1	6	1			10	1	6
Delaware And Hudson Railroad Co.	6		1				6		1
Denver And Rio Grande Western Railroad Co.	15	5	9				15	5	9
Duluth, Missabe & Iron Range Railway Co.	3		1				3		1
Duluth, Winnipeg & Pacific Railway	2		2				2		2
Elgin, Joliet And Eastern Railway Co.	7		2				7		2
Florida East Coast Railway Co.	23	3	7	5	2	3	28	5	10
Gateway Western Railway	7	1					7	1	
Grand Trunk Western Railroad Co.	39	6	20	4	3		43	9	20
Guilford Railroad System	9		3				9		3
Houston Belt & Terminal Railway Co.	4						4		
Illinois Central Railroad Co.	106	10	56	1		1	107	10	57
Indiana Harbor Belt Railroad Co.	12		4				12		4
	163	23	64	2	1		165	24	64
Kansas City Southern Railway Co.	5	1	2	5	2	4	103	3	6
Long Island Rail Road									
Massachusettes Bay Transit Authority	1 6		22 3	1			1 7	1	22 3
Metro North Commuter Railroad Co.		1	3					2	3
Montana Rail Link	11	1		1	1		12		2
New Jersey Transit Rail Operations	9	40	2	3	2		12	2	
Norfolk Southern Corp.	485	42	161	15	5	6	500	47	167
Northeast Illinois Regional Commuter Rail	16	1	11	5	1	2	21	2	13
Northern Indiana Commuter Trans.	9	1	1				9	1	1
Paducah & Louisville Railway Co.	4						4		
Peninsular Commuter									
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.	4		4				4		4
Soo Line Railroad Co.	73	4	27	4	1	1	77	5	28
Southeastern Pennsylvania Transp.	1		1				1		1
Southern California Regional Rail	9	2	1	1	1		10	3	1
Southern Pacific Transp. Co.	189	20	75	13	9	2	202	29	77
Southern Pacific, Chicago-St. Louis Corp.	4	1					4	1	
St. Louis Southwestern Railway Co.	66	12	30	1		1	67	12	31
Terminal Railroad Assoc. of St. Louis	2		2				2		2
Union Pacific Railroad Co.	558	59	210	25	10	15	583	69	225
Union Railroad Company (Pittsburgh)									
Wheeling & Lake Erie Railway Co.	19	1	10				19	1	10
Wisconsin Central Ltd.	101	2	42	4	1	3	105	3	45
All Other Railroads	359	11	139	11	1	4	370	12	143
Total	3,612	377	1,428	176	72	58	3,788	449	1,486

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, 1996

State	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross- Bucks	Stop Signs	Other Signs	No Signs Or Signals	Tota1
Alabama	9	28	1	2	59	39			138
Alaska	1	1			1				3
Arizona	4	14			2	1			21
Arkansas	12	38	1	1	67	9			128
California	88	22	5	2	22	11	1	3	154
Colorado	5	2	1	1	10	5			24
Connecticut	1	3	1		1	3			9
Delaware	1	3							4
Dist. of Columbia	1	1							2
		•							2
Florida	50	10		1	19	5			85
Georgia	43	13	4	3	40	30		2	135
Idaho	1	10	1		9	18		1	40
Illinois	58	57		3	70	2		1	191
Indiana	49	72	5	1	52	26		3	208
Iowa	19	34	1		50	6		1	111
Kansas	14	18		1	60	5			98
Kentucky	8	33		1	19	3		2	66
Louisiana	15	71	7		110	6	1	1	211
Maine		4			2				6
Maryland	3	2	1		3				9
Massachusetts	13	5	1						19
Michigan	23	36		2	40	30			131
Minnesota	18	32			45	27		1	123
Mississippi	1	32	6	2	63	13		1	118
Missouri	9	26		4	50	12	1		102
Montana	3	3			8	7		1	22
Nebraska	14	1		1	24	7		1	48
Nevada	1				3			1	5
New Hamshire		1							1
New Jersey	11	5	2		1			2	21
New Mexico	8	4			10				22
New York	17	2	1	1	1	1			23
North Carolina	28	23	2		52	2		1	108
North Dakota	5	1			18	1			25
Ohio	39	34	2	2	81	7	1		166
0klahoma	6	22		1	37	6			72
Oregon	8	3			5	7		1	24
Pennsylvania	13	12	1	3	21	5	3	4	62
Rhode Island									
South Carolina	12	20		2	30	14			78
South Dakota	1	9			7	1			18
Tennessee	22	37	1	2	36	10		1	109
Texas	103	86	3	3	162	26		3	386
Utah	6	3	2	2	13	3		1	30
Vermont		1			2				3
Virginia	20	8	1	3	14				46
Washington	15	7	1	1	14	8		2	48
West Virginia	7	4			4			1	16
Wisconsin	13	41	1	4	67	14			140
Wyoming		2			1				3
Unknown									
Total	798	896	52	49	1,405	370	7	35	3,612

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

TABLE 9. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY HIGHWAY USER, 1996

	Acc/Inc		K	illed	Injured		Fatal	Injury
Type Of Vehicle	No.	%	No.	%	No.	%	Acc/Inc	Acc/Inc
Automobile	2,279	60.16	244	54.34	935	62.92	198	652
Truck	950	25.08	112	24.94	363	24.43	90	296
Truck-trailer	363	9.58	19	4.23	121	8.14	18	72
Bus	7	. 18			2	. 13		2
School bus	4	.11			4	. 27		2
Motorcycle	9	. 24	2	. 45	3	. 20	2	3
Pedestrian	95	2.51	60	13.36	31	2.09	60	28
0ther	81	2.14	12	2.67	27	1.82	11	19
Total	3,788	100.00	449	100.00	1,486	100.00	379	1,074

TABLE 10. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY CIRCUMSTANCE, 1996

Circumstance	Acc/Inc No. %		I No.	Killed No. %		njured %		Injury Acc/Inc
Struck by consist	2,713	75.11	327	86.74	1.048	73.39	261	739
Ran into consist.	899	24.89	50	13.26	380	26.61	47	288
Total	3,612	100.00	377	100.00	1,428	100.00	308	1,027

TABLE 11. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS BY TYPE OF VEHICLE AND NUMBER OF OCCUPANTS, 1996

Vehic1e	# of A/I	# of Occupants	Occupants Per A/I	Ki 11ed	Killed Per A/I	Injured	Injured Per A/I	Vehicle Damage	Damage Per A/I	
Automobile	2,279	2,811	1.23	244	.11	920	. 40	6,557	,617	2,877
Truck	950	1,069	1.13	112	.12	345	. 36	4,890	,908	5,148
Truck-trailer	363	346	. 95	18	.05	62	. 17	4,025	,113	11,088
Bus	7	29	4.14	0	.00	2	. 29	68	,000	9,714
School bus	4	14	3.50	0	.00	3	.75	30	,000	7,500
Motorcycle	9	8	. 89	2	.22	3	.33	7	,000	778
Total	3,612	4,277	1.18	376	.10	1,335	. 37	15,578	,638	4,313

TABLE 12. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY CIRCUMSTANCE, 1996

		Dawn -			Day -			Dusk			Darl	.
Type Of Vehicle	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
RAIL CONSI	ST	S T R	U C K	ніс	H W A	Y U S	SER					
Automobile	48	4	13	963	145	458	64	5	27	593	56	176
Truck	27	1	11	509	70	205	22	4	6	143	26	37
Truck-trailer	14	1	1	258	13	79	11		24	52	2	8
Bus				4		1				1		
School bus				3		2						
Motorcycle										1		
Total	89	6	25	1,737	228	745	97	9	57	790	84	221
H I G H W A Y U S	S E R	S T R	U C K	R A I	L C	0 N S 1	ST					
Automobile	15		9	283	16	120	16		4	297	18	128
Truck	6	1		136	3	49	9	1	8	98	6	47
Truck-trailer				26	3	8				2		1
Bus				1			1		1			
School bus				1		2						
Motorcycle				5	2	1				3		2
Total	21	1	9	452	24	180	26	1	13	400	24	178
G R A N D T O T A	L											
Automobile	63	4	22	1,246	161	578	80	5	31	890	74	304
Truck	33	2	11	645	73	254	31	5	14	241	32	84
Truck-trailer	14	1	1	284	16	87	11		24	54	2	9
Bus				5		1	1		1	1		
School bus				4		4						
Motorcycle				5	2	1				4		2
Total	110	7	34	2,189	252	925	123	10	7 0 1	1,190	108	399

TABLE 13. ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TYPE OF PERSON, 1996

	F	EOD	E	NOD	P	SGR	N	NONT	T]	RES	C	ONT		Tota	1
Type Of Vehicle	K1d	Inj	K1d	Inj	K1d	Inj	K1d	Inj	K1d	Inj	K1d	Inj	K1d	l Inj	A/1
RAIL CONSI	S T	STR	U C K	HIG	H W A	y u s	E R								
Automobile		10		1		1	162	546	48	116			210	674	1,668
Truck		15				2	67	210	34	32			101	259	701
Truck-trailer	1	36				21	10	49	5	6			16	112	335
Bus								1						1	5
School bus								2						2	3
Motorcycle															1
Pedestrian				1			14	6	43	22			57	29	89
Other		6					6	18	5	2			11	26	7 5
Total	1	67		2		24	259	832	135	178			395	1,103	2,877
HIGHWAY US	ER	STR	UCK	RAI	L CO	NSI	ST								
Automobile		3					28	198	6	60			34	261	611
Truck		4					8	85	3	15			11	104	249
Truck-trailer		2					3	4		3			3	9	28
Bus										1				1	2
School bus		1								1				2	1
Motorcycle							2	2		1			2	3	8
Pedestrian							2	2	1				3	2	6
Other							1	1					1	1	6
Total		10					44	292	10	81			54	383	911
GRAND TOTA	L														
Automobile		13		1		1	190	744	54	176			244	935	2,279
Truck		19				2	75	295	37	47			112	363	950
Truck-trailer	1	38				21	13	53	5	9			19	121	363
Bus								1		1				2	7
School bus		1						2		1				4	4
Motorcycle							2	2		1			2	3	9
Pedestrian				1			16	8	44	22			60	31	95
Other		6					7	19	5	2			12	27	81
Total	1	77		2		24	303	1,124	145	259			449	1,486	3,788

Note: EOD = Employee on duty

PSGR = Passenger on train

TRES = Trespasser

ENOD = Employee not on duty

NONT = Nontrespasser

CONT = Contractor employee

TABLE 14. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY VEHICLE SPEED, CIRCUMSTANCE, AND VISIBILITY, 1996

		- Dawn -			Day -			Dusk			Dark			-Total	l -
Speed Of Vehicle	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
RAIL CONSI	S T	STR	U C K	H I G	HWA	Y U S	E R								
Standing	28		4	539	20	169	39	1	28	390	14	42	996	35	243
1-9	27	3	5	401	44	175	15		6	105	17	32	548	64	218
10-19	19	1	5	363	74	162	22	2	15	127	32	56	531	109	238
20-29	5	1	3	192	35	104	8	2	2	51	4	33	256	42	142
30-39	4		5	100	29	65	9	4	2	48	4	25	161	37	97
40-49	3	1	1	43	11	26	1			19	3	8	66	15	35
50-59	1		1	18	3	10				9	3	5	28	6	16
60 and over				6	2	3				3	2	2	9	4	5
Unknown	2		1	7 5	10	31	3		4	38	5	18	118	15	54
Total	89	6	25	1,737	228	745	97	9	57	790	84	221	2,713	327	1,048
Standing															
Standing															
1-9	4			108	1	20	9		4	52	1	12	173	2	36
10-19	9		7	99	4	29	4		2	85		31	197	4	69
20-29	2		1	72	4	31	9	1	5	74	3	27	157	8	64
30-39	2	1		58	4	34	2		2	69	3	50	131	8	86
40-49	1			35	2	22				27	2	21	63	4	43
50-59				27	5	23	1			31	8	10	59	13	33
60 and over				13	3	5	1			9	3	3	23	6	8
Unknown	3		1	40	1	16				53	4	24	96	5	41
Total	21	1	9	452	24	180	26	1	13	400	24	178	899	50	380
GRAND TOTA	L														
Standing	28		4	539	20	169	39	1	28	390	14	42	996	35	243
1-9	31	3	5	509	45	195	24		10	157	18	44	721	66	254
10-19	28	1	12	462	78	191	26	2	17	212	32	87	728	113	307
20-29	7	1	4	264	39	135	17	3	7	125	7	60	413	50	206
30-39	6	1	5	158	33	99	11	4	4	117	7	75	292	45	183
40-49	4	1	1	78	13	48	1			46	5	29	129	19	78
50-59	1		1	45	8	33	1			40	11	15	87	19	49
60 and over				19	5	8	1			12	5	5	32	10	13
Unknown	5		2	115	11	47	3		4	91	9	42	214	20	95
Total	110	7	34	2,189	252	925	123	10	70	1,190	108	399	3,612	377	1,428

TABLE 15. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY POSITION AND TYPE OF VEHICLE, 1996

			Pa	sition	On Cr	ossing-			
	St	alled (0n	St	opped (0n	Mov	ing Ov	er
Vehicle	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Automobile	224	7	16	463	20	144	1,592	217	775
Truck	61			152	5	32	737	105	323
Truck-trailer	26		24	66	1	19	271	18	78
Bus				2			5		2
School bus	1						3		4
Motorcycle	1						8	2	3
Total	313	9	48	683	26	195	2.616	342 1	. 185

TABLE 16. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY CONSIST SPEED, CIRCUMSTANCE, AND VISIBILITY, 1996

		- Dawn			Day -			Dusk			Dark		'	Total	
Speed Of Consist	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I		Inj
RAIL CONSI	ST	S T R	u c k	H I G	H W A	Y U S	SER								
Standing															
1-9	20		2	254		45	14			144	1	30	432	1	77
10-19	12		1	219	2	62	15		7	130	3	47	376	5	117
20-29	10		4	280	7	121	12		7	146	6	55	448	13	187
30-39	17		10	323	33	155	16	1	9	114	6	27	470	40	201
40-49	14	3	3	401	86	231	19	1	6	140	33	41	574	123	281
50-59	10	3	2	165	61	77	15	5	26	68	20	13	258	89	118
60-69	3		1	52	23	29	1			29	8	6	85	31	36
70-79	3		2	42	16	25	5	2	2	19	7	2	69	25	31
80-89				1									1		
90 and over															
Unknown															
Total	89	6	25	1,737	228	745	97	9	57	790	84	221	2,713	327	1,048
HIGHWAY US	ER	STR	U C K	RAI	L C	0 N S 1	ST								
Standing	2		1	10		4				58	4	28	70	4	33
1-9	3		1	113	2	28	7		5	115	5	42	238	7	76
10-19	2			79	1	29	3			81	3	31	165	4	60
20-29	6	1	4	80	7	39	6		2	61	2	34	153	10	79
30-39	2			65	5	30	3		2	35	4	15	105	9	47
40-49	4		3	73	8		3	1	3						
	2			24	1	32 13	3			39 8	2	27 1	119 37	11 4	65
50-59				5						2			7		14
60-69				3		3 2			1	1	1		5	1	3
70-79							1		1						
80-89															
90 and over															
Unknown															
Total	21	1	9	452	24	180	26	1	13	400	24	178	899	50	380
GRAND TOTA	L														
Standing	2		1	10		4				58	4	28	70	4	33
1-9	23		3	367	2	73	21		5	259	6	72	670	8	153
10-19	14		1	298	3	91	18		7	211	6	78	541	9	177
20-29	16	1	8	360	14	160	18		9	207	8	89	601	23	266
30-39	19		10	388	38	185	19	1	11	149	10	42	575	49	248
40-49	18	3	6	474	94	263	22	2	9	179	35	68	693	134	346
50-59	12	3	2	189	62	90	18	5	26	76	23	14	295	93	132
60-69	3		1	57	23	32	1			31	9	6	92	32	39
70-79	3		2	45	16	27	6	2	3	20	7	2	74	25	34
80-89				1									1		
90 and over															
Unknown															
Total	110	7	34	2,189	252	925	123	10	70	1,190	108	399	3,612	377	1,428

TABLE 17. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY RAILROAD EQUIPMENT INVOLVED, 1996

Visibility	Consist Struck	Vehicle Struck	Lead			nsist S er						
Type Consist		Consist	Unit	1	2	3	4	Unknown	Dawn	Day	Dusk	Dark
Train (Units Pulling).	2,362	661	410	114	40	47	44	6	90	1,884	105	944
Train (Units Pushing).	148	78	42	8	8	9	11		8	111	8	99
Train (Standing)		63	17	16	12	2	15	1	2	6		55
Cars (Moving)	37	22	22						2	55		2
Cars (Standing)		3	2				1			3		
Light Locos (Moving)	166	68	63			1	4		8	129	10	87
Light Locos (Standing)		4	3				1			1		3
0ther												
Total	2,713	899	559	138	60	59	76	7	110	2,189	123	1,190

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, 1996

	F	reight	t	Pa	ssenge	r	-Yard	Switchi	ng	Othe	r		Total		
Speed Of Consist	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d I	nj A/	I K1d	Inj	A /]	I K1d	Inj	
Standing	49	3	22				15	5 1	10	6		1	70	4	33
1-9	319	5	69	10		2	199	2	49	142	1	33	670	8	153
10-19	405	9	136	14		5	49		14	73		22	541	9	177
20-29	518	19	223	17	1	9	18	3 1	5	48	2	29	601	23	266
30-39	524	45	223	27	1	16	2		1	22	3	8	575	49	248
40-49	656	124	317	15	3	7				22	7	22	693	134	346
50-59	264	85	95	26	7	36				5	1	1	295	93	132
60-69	60	21	21	30	10	16	1	1		1		2	92	32	39
70-79	11	6	2	63	19	32							74	25	34
80-89				1									1		
90 and over															
Unknown															
Total	2,806	317	1,108	203	41	123	284	5	7 9	319	14	118	3,612	377	1,428

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, 1996

		Freig	ht	Pa	assenge	er	- Yar	d Swit	ching		-Other			Tota1	
Number Of Cars	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
1-9	381	18	142	135	23	100	155	2	39	70	2	26	741	45	307
10-19	313	22	112	53	16	18	61	2	13	6		1	433	40	144
20-29	277	33	107	2		1	26	1	8	2		1	307	34	117
30-39	258	38	101	2	1		18		11	1		1	279	39	113
40-49	237	38	103				12		3	2			251	38	106
50-59	224	29	92										224	29	92
60-69	225	31	97				3						228	31	97
70-79	182	29	60				2		3				184	29	63
80-89	156	18	69				2						158	18	69
90-99	152	21	60										152	21	60
100-109	135	12	50										135	12	50
110-119	148	21	67				1						149	21	67
120-129	56	2	20										56	2	20
130-139	19	1	10										19	1	10
140-149	16	2	5										16	2	5
150 And over	17	2	3				1						18	2	3
Locomotives only.	10		10	11	1	4	3		2	238	12	89	262	13	105
Total	2,806	317	1,108	203	41	123	284	5	79	319	14	118	3,612	377	1,428

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, 1996

		Dawn -			Day-			Dusk			Dark			-Total	
Number Of Cars	A/I	K1d	Inj			Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
RAIL CONSI	s T	STR	U C K	ніс	H W A Y	USI	E R								
1-9	20	2	6	356	23	150	30	1	28	118	12	39	524	38	223
10-19	13	1	2	217	23 27	88	8		4	92	11	11	330	39	105
20-29	5	1	1	157	20	67	6	1	2	65	9	21	233	31	91
30-39	7		2	127	18	59	4	1	3	69	11	23	207	30	87
40-49	4		2	131	28	52	5	1	4	53	6	18	193	35	76
50-59	6	2	1	107	15	51	1			61	6	12	175	23	64
60-69	4			120	22	53	9		2	40	6	16	173	28	71
70-79	4			82	20	34	7		1	49	8	14	142	28	49
80-89	3		1	75	13	32	4		2	36	3	6	118	16	41
90-99	3		1	85	10	38	2	2	1	36	8	9	126	20	49
100-109	4			62	5	32	2		1	43	2	8	111	7	41
110-119	5		4	67	17	33	4			36		10	112	17	47
120-129	2		2	22	1	6	5	1	4	12			41	2	12
130-139				9	1	6	1		1	4			14	1	7
140-149				7		1	1	2		4			12	2	1
150 And over	1			8	2	1	1			5		1	15	2	2
Locomotives only.	8		3	105	6	42	7		4	67	2	33	187	8	82
Total	89	6	25	1,737	228	745	97	9	57	790	84	221	2,713	327	1,048
HIGHWAY US	E R	S T R	U C K	RAI	L C O	NSI	S T								
1-9	4		3	133	3	52	4		5	76	4	24	217	7	84
10-19				57		21	2		1	44	1	17	103	1	39
20-29	2			34	3	9	4		2	34		15	74	3	26
30-39	2	1		32	5	11	4			34	3	15	72	9	26
40-49	2			26	1	16	4		2	26	2	12	58	3	30
50-59	2		2	24	4	13	1		1	22	2	12	49	6	28
60-69	2		1	26	2	9	1			26	1	16	55	3	26
70-79	2		1	17		5				23	1	8	42	1	14
80-89	1		2	17	1	9	1			21	1	17	40	2	28
90-99				9		3	1			16	1	8	26	1	11
100-109	2			10		2				12	5	7	24	5	9
110-119	1			15	1	9	1			20	3	11	37	4	20
120-129				9		7				6		1	15		8
130-139				3						2		3	5		3
140-149				1		2				3		2	4		4
150 And over Locomotives only.	1			39	4	12	3	1	2	3 32		1 9	3 75	5	1 23
Total	21	1	9	452	24	180	26	1	13	400	24	178	899	50	380
GRAND TOTA		•	3	452	24	100	20		13	400	24	170	033	30	300
1-9	24	2	9	489	26	202	34	1	33	194	16	63	741	45	307
10-19	13	1	2	274	27	109	10		5	136	12	28	433	40	144
20-29	7	1	1	191	23	76	10	1	4	99	9	36	307	34	117
30-39	9	1	2	159	23	70	8	1	3	103	14	38	279	39	113
40-49	6		2	157	29	68	9	1	6	79	8	30	251	38	106
50-59	8 6	2	3 1	131	19	64	2		1 2	83	8	24	224	29	92
60-69	6		1	146	24	62	10			66	7	32	228	31	97
70-79 80-89	4		3	99 92	20 14	39 41	7 5		1 2	72 57	9 4	22 23	184 158	29 18	63 69
90-99	3		1	94	10	41	3	2	1	52	9	17	158	21	60
100-109	6			72	5	34	2		1	55	7	15	135	12	50
110-119	6		4	82	18	42	5			56	3	21	149	21	67
120-129	2		2	31	1	13	5	1	4	18		1	56	2	20
130-139				12	1	6	1		1	6		3	19	1	10
140-149				8		3	1	2		7		2	16	2	5
150 And over	1			8	2	1	1			8		2	18	2	3
Locomotives only.	9		3	144	10	54	10	1	6	99	2	42	262	13	105
Total	110	7	34	2,189	252	925	123	10	70	1,190	108	399	3,612	377	1,428

(MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, TABLE 21. BY TYPE AND CLASS OF TRACK, 1996

		Mai	n		Yard	1		-Sidir	ıg	I	ndustry			Unknow	n		-Total	
Track Class	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1ď	Inj	A/I	K1d	Inj	A/I	K1d	Inj
1	269	7	92	148	1	39	20	2	3	126	4	28				563	14	162
2	579	18	217				2		4	15		2				614	18	229
3	874	68	429	7		1	3			3		1				887	68	431
4	1,309	231	529	4			2			1						1,316	231	529
5	173	45	59													173	45	59
6	1															1		
Unknown	32		12	17		2	1			8	1	4				58	1	18
Total 3	3,237	369	1,338	194	1	48	28	2	7	153	5	35				3,612	377	1,428

TABLE 22. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY WARNING DEVICE AND MOTORIST ACTION, 1996

		rove Ar Thru G			opped n Proc		-Did	Not S	top		Othe	r		Unknow	n		Tota	1
Warning Device	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	İnj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Gates	412	76	158	2			15		5	363	11	79	6	1	1	798	88	243
Cantilever flshrs				21	1	3	213	21	105	68	2	12	1		1	303	24	121
Standard flashers				43	2	9	407	47	203	137	3	28	6	1	2	593	53	242
Hwy Sig,W W,Bells				5		1	32	3	15	13		1	2		1	52	3	18
Special Devices				7			36		17	6		1				49		18
Crossbucks				65	4	22	997	149	476	330	10	110	13		11	1,405	163	619
Stopsigns				54	9	19	213	30	110	96	7	29	7		2	370	46	160
Other Signs							4		1	3		1				7		2
No Signs Or Sign1				2			20		3	12		2	1			35		5
Tota1	412	76	158	199	16	54	1,937	250	935	1,028	33	263	36	2	18	3,612	377	1,428

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

TABLE 23. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS,
BY OPERATIONAL STATUS OF WARNING DEVICE, CIRCUMSTANCE,
AND VISIBILITY, 1996

			-			H	ighway l	User			
	-Dev	ice Wo	rking		Struck					Consis	
Warning Device	Yes	No	N/A	Dawr	n Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Gates	778	6	14	23	315	28	283	4	62	4	79
Cantilever flshrs	301		2	7	134	8	63	2	43	1	45
Standard flashers	580	3	10	12	270	5	117	4	100	5	80
Hwy Sig,W W,Bells	52			1	22	4	9		6		10
Special Devices			49	1	16		10	1	8		13
Crossbucks			1,405	36	741	39	241	9	185	13	141
Stopsigns			370	8	222	11	57	1	41	2	28
Other Signs			7		3	1	1		1		1
No Signs Or Signl			35	1	14	1	9		6	1	3
Total	1,711	9	1,892	89	1,737	97	790	21	452	26	400

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

TABLE 24. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, DURING
DUSK AND DARK HOURS BY ILLUMINATION OF CROSSING AND CIRCUMSTANCE, 1996

	Struck By Consist			Ran	Into C	onsist		Tota1			
	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj		
Lighted	539	47	193	200	11	81	739	58	274		
Not Lighted	1,586	205	628	529	28	233	2,115	233	861		
Not Reported	573	72	225	167	11	66	740	83	291		
Total	2,713	327	1,048	899	50	380	3,612	377	1,428		

TABLE 25. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY CROSSING PROTECTION, 1996

	Dawn		Day		Dusk		Dark			Total					
Warning Device	A/I	K1d	Inj	A/I	K1d		A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
RAIL CONSIST STR	иск	ні	G H W	AY U	SER										
Automatic, Both Sides	42	4	10	722	80	248	44	3	37	464	49	121	1,272	136	416
Automatic, Side Of Approach.				16	2	5				8		2	24	2	7
Automatic, Opposite Side				3		1							3		1
Automatic, Side Not Reported	1						1						2		
Manual, Both Sides	1			14		1				7			22		1
Manual, Side Of Approach										2			2		
Manual, Opposite Side				1		2				1			2		2
Manual, Side Not Reported				1									1		
Other, Both Sides	44	2	15	929	143	474	47	6	20	291	35	95	1,311	186	604
Other, Side Of Approach				26	3	9	3			6		1	35	3	10
Other, Opposite Side				6		1							6		1
Other, Side Not Reported				5			1			2		1	8		1
No Signs Or Signals	1			14		4	1			9		1	25		5
							97	9	57						
Total	89	6		1,737	228	745	97	9	57	790	84	221	2,713	321	1,048
HIGHWAY USER STR	UCK	RA	I L C	0 N S	IST										
Automatic, Both Sides	10	1	1	208	15	99	10		4	207	13	89	435	29	193
Automatic, Side Of Approach.				3		2				4		1	7		3
Automatic, Opposite Side										1		1	1		1
Automatic, Side Not Reported										2	1	3	2	1	3
Manual, Both Sides	1			6		3				11		6	18		9
Manual, Side Of Approach				1		1				1		4	2		5
Manual, Opposite Side				1									1		
Manual, Side Not Reported										1		1	1		1
Other, Both Sides	10		8	217	9	73	15	1	9	163	9	69	405	19	159
Other, Side Of Approach				6		1				7	1	4	13	1	5
Other, Opposite Side				3		1							3		1
Other, Side Not Reported				1									1		
No Signs Or Signals				6			1			3			10		
Tota1	21	1	9	452	24	180	26	1	13	400	24	178	899	50	380
GRAND TOTAL															
Automatic, Both Sides	52	5	11	930	95	347	54	3	41	671	62	210	1,707	165	609
Automatic, Side Of Approach.				19	2	7				12		3	31	2	10
Automatic, Opposite Side				3		1				1		1	4		2
Automatic, Side Not Reported	1						1			2	1	3	4	1	3
Manual, Both Sides	2			20		4				18		6	40		10
Manual, Side Of Approach				1		1				3		4	4		5
Manual, Opposite Side				2		2				1			3		2
Manual, Side Not Reported				1						1		1	2		1
Other, Both Sides	54	2	23	1,146	152	547	62	7	29	454	44	164	1,716	205	763
Other, Side Of Approach				32	3	10	3			13	1	5	48	4	15
Other, Opposite Side				9		2							9		2
Other, Side Not Reported				6			1			2		1	9		1
No Signs Or Signals	1			20		4	2			12		1	35		5
Tota1	110	7	34	2,189	252	925	123	10	70	1,190	108	399	3,612	377	1,428

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.

consist.

TABLE 26. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY VISIBILTY AND CIRCUMSTANCE, 1996

	Struck By Consist			Ran	Into Co	onsist	Tota1			
Visibilty	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	
Dawn	89	6	25	21	1	9	110	7	34	
Day	1,737	228	745	452	24	180	2,189	252	925	
Dusk	97	9	57	26	1	13	123	10	70	
Dark	790	84	221	400	24	178	1,190	108	399	
Total	2,713	327	1,048	899	50	380	3,612	377	1,428	

TABLE 27. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TEMPERATURE AND VISIBILITY, 1996

		Struck By	y Consis	st	Ra	n Into	Consis	t	Total				
Temperature	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	
0ver 100		4				2		1		6		- 1	
80 To 100	6	494	16	50		95	4	22	6	589	20	72	
60 To 79	33	583	43	263	8	152	6	117	41	735	49	380	
40 To 59	24	347	25	261	7	91	10	120	31	438	35	381	
20 To 39	18	239	10	173	6	77	6	102	24	316	16	275	
0 To 19	8	70	3	43		35		38	8	105	3	81	
-20 To -1													
Under -20													
Not Reported													
Total	89	1,737	97	790	21	452	26	400	110	2,189	123	1,190	

TABLE 28. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY TIME OF DAY, 1996

	Struck By Consist		Ran	Into Co	nsist	Tota1				
TIME	A/I	KĬd		A/I		Inj		K1d		
MID TO 12:59 AM	62	3	16	36	2	11	98	5	27	
1 TO 1:59 AM	44	6	14	47	4	24	91	10	38	
2 TO 2:59 AM	62	6	17	37	6	18	99	12	35	
3 TO 3:59 AM	49	4	9	22		12	71	4	21	
4 TO 4:59 AM	45	1	4	16	1	8	61	2	12	
5 TO 5:59 AM	46	6	9	15		5	61	6	14	
6 TO 6:59 AM	85	8	23	34	2	9	119	10	32	
7 TO 7:59 AM	124	21	51	36	2	14	160	23	65	
8 TO 8:59 AM	138	17	56	35	1	15	173	18	71	
9 TO 9:59 AM	157	17	55	29	3	8	186	20	63	
10 TO 10:59 AM.	138	15	46	50	4	18	188	19	64	
11 TO 11:59 AM.	163	14	66	39	1	20	202	15	86	
NOON TO 12:59 PM.	135	19	58	34	3	15	169	22	73	
1 TO 1:59 PM	156	19	76	37	3	12	193	22	88	
2 TO 2:59 PM	174	30	72	41	2	13	215	32	85	
3 TO 3:59 PM	162	29	69	54	1	26	216	30	95	
4 TO 4:59 PM	167	19	76	41	2	21	208	21	97	
5 TO 5:59 PM	170	24	99	45	2	18	215	26	117	
6 TO 6:59 PM	158	16	70	56		23	214	16	93	
7 TO 7:59 PM	128	13	43	37		19	165	13	62	
8 TO 8:59 PM	108	14	32	36	1	17	144	15	49	
9 TO 9:59 PM	85	5	38	41	4	15	126	9	53	
10 TO 10:59 PM.	73	10	27	48	2	20	121	12	47	
11 TO 11:59 PM.	84	11	22	33	4	19	117	15	41	
Unknown										
Total	2,713	327	1,048	899	50	380	3,612	377	1,428	

TABLE 29. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY MONTH AND CIRCUMSTANCE, 1996

	Struck	By Co	onsist	Ran	Into C	onsist		Tota1			
Month	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj		
January	274	20	108	105	1	38	379	21	146		
February	234	24	117	90	5	49	324	29	166		
March	233	36	104	95	7	34	328	43	138		
April	193	30	64	69	5	23	262	35	87		
May	194	25	55	64	2	25	258	27	80		
June	199	20	102	53	4	11	252	24	113		
July	193	16	71	67	8	32	260	24	103		
August	229	29	88	69	2	32	298	31	120		
September	229	35	88	56	7	26	285	42	114		
October	264	35	92	69	4	38	333	39	130		
November	240	31	68	76	2	34	316	33	102		
December	231	26	91	86	3	38	317	29	129		
Total	2.713	327	1.048	899	50	380	3.612	377	1.428		

TABLE 30. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY WEATHER, CIRCUMSTANCE AND VISIBILITY, 1996

		Struck B	y Consi	st	R	an Int	o Consi	st		Tota	a1	
Weather	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Clear	54	1,278	56	489	10	314	15	226	64	1,592	71	715
Cloudy	22	345	27	168	7	95	6	85	29	440	33	253
Rain	2	68	11	74	2	18	3	50	4	86	14	124
Fog	7	14	1	27		7		16	7	21	1	43
Sleet		2	1	4		1		7		3	1	11
Snow	4	30	1	28	2	17	2	16	6	47	3	44
Not Reported												
Total	89	1,737	97	790	21	452	26	400	110	2,189	123	1,190

TABLE 31. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY OBSTRUCTION OF MOTORIST VIEW, CIRCUMSTANCE AND VISIBILITY, 1996

	S	truck By	y Consi	st	Ra	n Into	Consist	t		To t	ta1	
Type Obstruction	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
				4.0								
Permanent structure	2	41	2	12		7	1	5	2	48	3	17
Standing RR Equipment.		11		2						11		2
Passing Train		8		3		1		2		9		5
Topography	1	21	1	10		3		1	1	24	1	11
Vegetation	2	31	4	2		9	1	2	2	40	5	4
Highway Vehicle	1	2		1		1		1	1	3		2
0ther	1	14		3		2		5	1	16		8
Not Obstructed	82	1,609	90	757	21	429	24	384	103	2,038	114	1,141
Unknown												
Total	89	1,737	97	790	21	452	26	400	110	2,189	123	1,190

TABLE 32. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY MOTORIST ACTION AND TYPE OF VEHICLE, 1996

Type Of Vehicle	Struck Yes	•	nd Train Unknown	Passe Yes	d Standii No	ng Vehicle Unknown
Automobile	24	2,223	32	7 9	2,016	184
Truck	10	931	9	20	877	53
Truck-trailer	7	353	3	6	341	16
Bus		6	1	1	5	1
School bus		4			4	
Motorcycle		9		1	8	
Total	41	3,526	45	107	3,251	254

(D A T A)

HIGHWAY-RAIL

CROSSING

INVENTORY

TABLE 33. TOTAL PUBLIC AND PRIVATE CROSSINGS BY STATE AND TYPE, 1996

State	Public At	Public	Public	Private at	Private Grade	at	Pedestrian Grade	T-4-1
State	Grade	RR Under	RR Over	Grade	Separated	Grade	Separated	Total
Alabama	3,579	491	170	1,990	20	23	4	6,277
Alaska	225	14	6	104	1	8	4	362
Arizona	941	88	83	682	106	7	2	1,909
Arkansas	3,232	177	118	1,508	68	10	7	5,120
California	7,925	943	567	4,849	198	158	90	14,730
Colorado	1,942	204	126	1,309	15	21	6	3,623
Connecticut	370	323	252	261	37	0	31	1,274
Delaware	287	47	55	119	2	1	4	515
Dist Of Columbia	23	30	37	8	0	11	2	111
Florida	4,048	235	57	1,451	1	66	5	5,863
Georgia	6,151	570	263	2,742	10	42	11	9,789
Hawai i	6	0	0	0	0	0	0	6
Idaho	1,482	92	69	1,318	11	12	2	2,986
Illinois	10,144	920	1,902	5,620	172	294	84	19,136
Indiana	6,568	442	552	2,815	85	64	13	10,539
Iowa	5,231	469	327	4,213	45	48	11	10,344
Kansas	7,828	349	208	4,214	32	32	0	12,663
Kentucky	2,604	440	442	2,690	106	43	23	6,348
Louisiana	3,587	228	112	3,204	20	34	7	7,192
Maine	882	128	78	934	15	11	3	2,051
Maryland	685	312	202	708	24	8	16	1,955
Massachusetts	1,192	795	436	537	52	18	84	3,115
Michigan	5,756	327	403	2.698	22	108	20	9,334
Minnesota	5,151	457	341	3,116	17	52	24	9,158
Mississippi	2,867	221	109	2,041	13	15	2	5,268
Missouri	4,864	638	411	3,292	72	61	35	9,373
Montana	1,456	131	82	2,051	111	15	5	3,851
Nebraska	3,964	215	131	2,805	39	14	4	7,172
Nevada	289	64	42	265	11	3	1	675
New Hampshire	503	118	52	344	21	7	6	1,051
New Jersey	1,860	534	728	599	57	45	83	3,906
New Mexico	810	70	79	591	45	2	2	1,599
New York	3,274	1,350	1,096	3,178	191	66	232	9,387
North Carolina	4,748	489	284	3,501	17	53	20	9,112
North Dakota	4,624	79	83	2,181	16	19	4	7,006
Ohio	6,389	982	1,028	3,246	179	31	48	11,903
0klahoma		255	193	1,661	55	13	2	6,618
	4,439 2,301	288	170	2,810	114	89	12	5,784
Oregon				3,416	235	123	197	12,956
Pennsylvania	5,574 128	1,541 107	1,861 38	3,416 71	233 7	0	5	356
Rhode Island		370	124	1,330	4	13	4	4,889
South Carolina	3,044	89			_		_	3,692
South Dakota	2,137		46	1,361	53	5	1	
Tennessee	3,351	500	456	1,890	52	22	11	6,282
Texas	12,444	861	786	6,301	137	34	16	20,579
Utah	1,009	116	48	789	2	4	3	1,971
Vermont	496	85	83	650	44	46	4	1,408
Virginia	2,110	602	445	2,864	109	45	20	6,195
Washington	2,854	367	304	3,014	104	95	20	6,758
West Virginia	1,855	256	339	2,193	106	72	19	4,840
Wisconsin	4,646	403	306	2,827	83	105	38	8,408
Wyoming	527	113	46	932	78	1	7	1,704
FINAL TOTALS	162,426	18,925	16,176	103,295	3,014	2,069	1,254	307,169

TABLE 34. TOTAL PUBLIC AND PRIVATE CROSSINGS BY RAILROAD AND TYPE, 1996

Railroad		Public			Private			an Pedestria	ın
Alaska Railroad Corporation Alaska Railroad Corporation Alaska Railroad Corporation Alaska Railroad Corporation Alaska Railroad Southern Railroad Alton & Southern Railroad Compary Alton & Southern Railroad Compary Alton & Southern Railroad Company Alton & Southern Railroad Incorporated Company Alton & Southern Railroad Incorporated Company Alton & Southern Railroad Incorporated Company Alton & Southern Railroad Incorporated Company Alton & Southern Railroad Company Alton & Southern Railroad Company Alton & Southern Railroad Company Alton & Southern Railroa	P 11 1	At	Public	Public	at	Grade	at	Grade	T . 1
Alton & Southern Railroad Passenger Corpora 214 574 520 68 26 14 77 1,523 8 8 62 76 3 0 0 56 58 8 62 76 3 0 0 592 8 7 16 502 8 8 62 76 3 0 1 188 8 68 2 76 3 0 1 188 8 68 58 68 14 77 1,523 3 3 5 0 0 107 3 592 8 68 14 68 68 68 68 68 68 68 6	Kailroad	Grade	KK Under	KK Over	Grade	Separated	Grade	Separated	Total
Alton & Southern Railroad Passenger Corpora 214 574 520 68 26 14 77 1,523 8 8 62 76 3 0 0 56 58 8 62 76 3 0 0 592 8 7 16 502 8 8 62 76 3 0 1 188 8 68 2 76 3 0 1 188 8 68 58 68 14 77 1,523 3 3 5 0 0 107 3 592 8 68 14 68 68 68 68 68 68 68 6							_		
Astraka (National Railroad Passenger Corpora 244 574 520 68 26 14 77 1.523 Bangor & Arrosotsok Railroad Company 165 12 23 385 0 7 0 592 Belt Railway Company Of Chicago 38 8 62 76 3 0 1 188 Bessemer & Lake Erie Railroad Company 140 35 49 96 3 2 0 325 Birningham Southern Railroad Company 46 18 7 36 0 0 0 0 107 Burlington Northern Santa Fe 24,944 2,115 1,726 15,849 546 305 80 45,565 Burlington Northern Santa Fe 24,944 2,115 1,726 15,849 546 305 80 45,565 Burlington Northern Santa Fe 24,944 2,115 1,726 15,849 546 305 80 45,565 Chicago, Central & Pacific Railroad Company 2,501 1,776 10,261 300 319 123 33,097 Bakota, Minnesota & Eastern Railroad Company 17,817 2,501 1,776 10,261 300 319 123 33,097 Bakota, Minnesota & Eastern Railroad Company 181 81 93 446 30 16 9 986 Denver & Rio Grande Western Railroad Company 140 25 28 129 4 1 0 327 Duluth, Winnipeg & Pacific Railway Company 180 30 28 74 2 3 1,613 Duluth, Winnipeg & Pacific Railway Company 189 30 28 74 2 3 0 32 Florida East Coast Railway Company 189 30 28 74 2 3 0 383 Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Cuilford Rail System 1,320 505 237 720 59 14 39 2,894 Houston Belt & Ferminal Railroad Company 157 23 16 43 0 4 1 24 11 10 Holdman Railroad Felt Railroad Company 2,597 324 328 1,588 42 63 22 4,664 11 11 1,485 11 1,485 11 1,485 11 1,485 11 1,485 11 1,485 11 1,485 11 1,485 1,586 1 2 0 0 0 1 1,585 1,586 1 2 0 0 0 1 1,585 1,586 1 2 0 0 0 1 1,585 1,586 1 0 0 0 0 0 0 0 0 0	•								
Bangor & Aroostook Railroad Company 165 12 23 385 0 7 0 592 Belt Railway Company Of Chicago 38 8 862 76 3 0 1 1888 Bessemer & Lake Erie Railroad Company 140 35 49 96 3 2 0 325 Birmingham Southern Railroad Company 140 35 49 96 3 2 0 325 Birmingham Southern Railroad Company 24,944 2,115 1,76 15,849 546 305 80 45,565 Chicago, Central & Pacific Railroad Company 890 90 79 702 49 15 12 1,837 Consolidated Rail Corporation 17,817 2,501 1,776 10,261 300 319 123 33,097 Bakota, Minnesota & Eastern Railroad 803 21 33 556 38 2 0 1,453 Belaware & Hudson Railway Company 311 81 93 446 30 16 9 986 Denver & Rio Grande Western Railroad Compan 784 135 74 611 4 2 3 1,613 Duluth, Missabe & Iron Range Railway Company 189 30 28 74 2 3 0 327 Duluth, Minnipeg & Pacific Railway Company 189 30 28 74 2 3 0 326 Florida East Coast Railway Company 189 30 28 74 2 3 0 326 Florida East Coast Railway Company 178 33 6 113 0 13 0 883 Grand Trunk Western Railroad Companny 177 23 16 43 0 4 1 44 24 Grand Trunk Western Railroad Company 157 23 16 43 0 4 1 244 Illinios Central Railroad Company 76 31 28 43 0 2 4 1 44 Illinios Central Railroad Company 76 31 28 43 0 2 4 4 1 44 Illinios Central Railroad Company 76 31 28 43 0 2 4 4 1 4 4 Illinios Central Railroad Company 78 33 28 43 0 2 4 4 1 4 4 Illinios Central Railroad Company 2,891 313 31 32 34 34 3 3 3 3 3 3 3									
Bell Railway Company Of Chicago 38 8 62 76 3 0 1 188 88 682 76 3 0 0 325 81 81 96 3 2 0 325 81 81 193 46 81 87 36 0 0 0 0 107									
Bessemer & Lake Erie Railroad Company									
Birmingham Southern Railroad Company 46									
Burlington Northern Santa Fe	1 5							_	
Chicago Central & Pacific Railroad Company Source Consolidated Rail Corporation 12, 286 3,094 3,370 6,748 365 168 254 26, 285 CSX Transportation 17, 817 2,501 1,776 10,261 300 319 123 33,097 Dakota, Minnesota & Eastern Railroad 803 21 33 556 38 2 0 1,453 Dakota, Minnesota & Eastern Railroad Company 311 81 93 446 30 16 9 986 Denver & Rio Grande Western Railroad Compan 140 25 28 129 4 1 0 327 32 101 141 25 28 129 4 1 0 327 32 101 141 124 124 141									
Consolidated Rail Corporation	0								
CSX Transportation 17,817 2,501 1,776 10,261 300 319 123 33,097 Dakota, Minnesota & Eastern Railroad 803 21 33 556 38 2 0 1,453 Denver & Rio Grande Western Railroad Compan 784 135 74 611 4 2 3 1,613 Duluth, Winnipeg & Pacific Railway 140 25 28 129 4 1 0 327 Duluth, Winnipeg & Pacific Railway 81 8 3 20 0 0 0 112 Elgin, Joliet & Eastern Railway Company 718 33 6 113 0 13 0 883 Gateway Western Railway Company 718 33 6 113 0 13 0 883 Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Dakota, Minnesota & Eastern Railroad 803 21 33 556 38 2 0 1,453	•								
Delaware & Hudson Railway Company 311	•								
Denver & Rio Grande Western Railroad Compan 784 135 74 611 4 2 3 3 1,613 Duluth, Missabe & Iron Range Railway Compan 140 25 28 129 4 1 0 327 Duluth, Winnipeg & Pacific Railway 81 8 3 20 0 0 0 112 Elgin, Joliet & Eastern Railway Company 189 30 28 74 2 3 0 326 Florida East Coast Railway Company 189 30 28 74 2 3 0 326 Florida East Coast Railway Company 228 24 23 156 1 2 0 434 Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 14 39 2,894 Guiston Belt & Terminal Railway Company 157 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Harbor Belt Railroad Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 Now Jersey Transit Rail Operations 46,817 1,971 1,644 10,987 231 101 46 31,797 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 13 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 263 114 174 53 22 10 40 676 Southern Pacific Transportation Au 263 114 174 53 22 10 40 676 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 10 5 5 21 3,887 Southern Pacific Califorad Company 2,099 114 77 763 29 2 0 0 20 Union Pacific Railroad Company 2,1479 1,981 1,589 14,344 305 215 111 40,024 Union Railroad C									
Duluth, Missabe & Iron Range Railway Compan 140 25 28 129 4 1 0 327									
Duluth, Winnipeg & Pacific Railway									
Elgin, Joliet & Eastern Railway Company 189 30 28 74 2 3 0 326 Florida East Coast Railway Company 718 33 6 113 0 13 0 883 Florida East Coast Railway Company 718 33 6 113 0 13 0 883 Cateway Western Railway 228 24 23 156 1 2 0 0 434 Crand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 14 39 2,894 Houston Belt & Terminal Railway Company 157 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Harbor Belt Railroad Company 76 31 28 43 0 2 4 184 Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 7 1 181 Paducah & Louisville Railway Company 4,251 361 363 2,758 45 70 25 7,873 Southeastern Pennsylvania Transportation Au 263 114 174 53 22 10 40 676 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 10 5 52 13,687 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 10 5 52 13,687 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 10 40 676 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 1 415 Coultino Pacific Railroad Company 21,479 1,981 1,589 14,344 305 215 111 40,024 Union Pacific Railroad Company (Pittsburgh) 14 20 30 39 7 6 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232									
Florida East Coast Railway Company 718 33 6 113 0 13 0 883 Gateway Western Railway 228 24 23 156 1 2 0 434 Gateway Western Railway 228 24 23 156 1 2 0 434 Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 14 39 2,894 Houston Belt & Terminal Railway Company 157 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Harbor Belt Railroad Company 76 31 28 43 0 2 4 184 Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 10,196 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 2 0 0 0 2 5						_	_	_	
Cateway Western Railway 228 24 23 156 1 2 0 434 Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 14 39 2,894 Houston Belt & Terminal Railway Company 157 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Barbor Belt Reil Railroad Company 76 31 28 43 0 2 4 184 Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td></td>						_	_	_	
Grand Trunk Western Railroad Incorporated 908 90 162 297 4 13 11 1,485 Guilford Rail System 1,320 505 237 720 59 14 39 2,894 Houston Belt & Terminal Railway Company 1,57 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Barbor Belt Railroad Company 76 31 28 43 0 2 4 184 Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3								_	
Cuilford Rail System	5								
Houston Belt & Terminal Railway Company 157 23 16 43 0 4 1 244 Illinois Central Railroad Company 2,597 324 328 1,588 42 63 22 4,964 Indiana Harbor Belt Railroad Company 76 31 28 43 0 2 4 184 Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 2 0 0 0 2 Soo Line Railroad Company 4,251 361 363 2,758 45 70 25 7,873 Southeastern Pennsylvania Transportation Au 263 114 174 53 22 10 40 676 Southern Pacific Transportation Company 7,503 824 475 4,525 203 105 52 13,687 Southern Pacific Transportation Company 2,009 114 77 763 29 2 0 2,994 Terminal Railroad Association Of St. Louis 141 40 26 12 1 0 0 220 Union Railroad Company 21,479 1,981 1,589 14,344 305 215 111 40,024 Union Railroad Company (Pittsburgh) 1,44 20 30 39 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232									
Illinois Central Railroad Company									
Indiana Harbor Belt Railroad Company 76									
Kansas City Southern Railway Company 2,851 313 187 1,857 38 12 7 5,265 Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Long Island Rail Road 304 294 105 82 0 8 80 873 Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 2 0 0 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Metro North Commuter Railroad Company 62 12 16 60 2 0 3 155 Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Iludson 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0									
Montana Rail Link 428 52 21 681 10 3 1 1,196 New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 2 0 0 0 2 Soo Line Railroad Company 4,251 361 363 2,758 45 70 25 7,873 Southeastern Pennsylvania Transportation Au 263 114 174 53 22 10	0								
New Jersey Transit Rail Operations 346 199 297 97 13 22 45 1,019 Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 0 2 0 0 0 2 Sou Line Railroad Company 4,251 361 363 2,758 45 70 25 7,873 Southeastern Pennsylvania Transportation Au 263 114 174 53 22 10 40 676 Southern Pacific Transportation Company 7,503 824 475 4,525 203 105 52 13,687 Sot. Louis Corpora 267 19 27 <td< td=""><td>1 5</td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td></td<>	1 5						_		
Norfolk Southern Corporation 16,817 1,971 1,644 10,987 231 101 46 31,797 Northeast Illinois Regional Comuter Rail Co 62 7 69 10 0 0 0 148 Northern Indiana Commuter Transportation Di 113 13 17 25 5 7 1 181 Paducah & Louisville Railway Company 257 53 49 185 7 3 0 554 Port Authority Trans Hudson 0 0 0 0 2 0 0 0 2 Soo Line Railroad Company 4,251 361 363 2,758 45 70 25 7,873 Southeastern Pennsylvania Transportation Au 263 114 174 53 22 10 40 676 Southern Pacific Transportation Company 7,503 824 475 4,525 203 105 52 13,687 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
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Southern Pacific Transportation Company 7,503 824 475 4,525 203 105 52 13,687 Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 1 415 St. Louis Southwestern Railway Company 2,009 114 77 763 29 2 0 2,994 Terminal Railroad Association Of St. Louis 141 40 26 12 1 0 0 220 Union Pacific Railroad Company 21,479 1,981 1,589 14,344 305 215 111 40,024 Union Railroad Company (Pittsburgh) 14 20 30 39 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232			361						
Southern Pacific, Chicago-St. Louis Corpora 267 19 27 78 3 20 1 415 St. Louis Southwestern Railway Company 2,009 114 77 763 29 2 0 2,994 Terminal Railroad Association Of St. Louis 141 40 26 12 1 0 0 220 Union Pacific Railroad Company 21,479 1,981 1,589 14,344 305 215 111 40,024 Union Railroad Company (Pittsburgh) 14 20 30 39 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232									
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Union Pacific Railroad Company 21,479 1,981 1,589 14,344 305 215 111 40,024 Union Railroad Company (Pittsburgh) 14 20 30 39 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232	St. Louis Southwestern Railway Company	2,009	114		763	29		_	
Union Railroad Company (Pittsburgh) 14 20 30 39 7 6 7 129 Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232	Terminal Railroad Association Of St. Louis		40	26	12		_	0	
Wheeling & Lake Erie Railway Company 566 76 157 390 28 9 6 1,232	Union Pacific Railroad Company	21,479	1,981	1,589	14,344	305	215	111	40,024
	Union Railroad Company (Pittsburgh)	14	20	30	39	7	6	7	129
Wisconsin Central Ltd. (also Railway) 1,902 97 84 1,162 7 32 6 3,290	Wheeling & Lake Erie Railway Company	566	7 6	157	390	28	9	6	1,232
	Wisconsin Central Ltd. (also Railway)	1,902	97	84	1,162	7	32	6	3,290
All Other Railroads 37,667 2,567 2,091 26,037 581 471 183 69,601	All Other Railroads	37,667	2,567	2,091	26,037	581	471	183	69,601
FINAL TOTALS 162,426 18,925 16,176 103,295 3,014 2,069 1,254 307,169	FINAL TOTALS	162,426	18,925	16,176	103,295	3,014	2,069	1,254	307,169

TABLE 35. TOTAL OF CROSSINGS BY STATE AND LOCATION: URBAN OR RURAL, 1996

State	Urban	Rura1	Total
Alabama	1,652	1,927	3,579
Alaska	87	138	225
Arizona	508	433	941
Arkansas	1,228	2,004	3,232
California	5,750	2,175	7,925
Colorado	654	1,288	1,942
Connecticut	239	131	370
Delaware	86	201	287
Dist of Columbia.	23		23
Florida	2,352	1,696	4,048
Georgia	2,182	3,969	6,151
Hawaii		6	6
Idaho	249	1,233	1,482
Illinois	3,873	6,271	10,144
Indiana	2,856	3,712	6,568
Iowa	1,601	3,630	5,231
Kansas	1,384	6,444	7,828
Kentucky	699	1,905	2,604
Louisiana	1,592	1,995	3,587
Maine	236	646	882
Maryland	516	169	685
Massachusetts	843	349	1,192
Michigan	2,337	3,419	5,756
Minnesota	1,383	3,768	5,151
Mississippi	1,056	1,811	2,867
Missouri	1,577	3,287	4,864
Montana	241	1,215	1,456
Nebraska	480	3,484	3,964
Nevada	90	199	289
New Hampshire	221	282	503
New Jersey	1,329	531	1,860
New Mexico	237	573	810
New York	1,512	1,762	3,274
North Carolina	1,942	2,806	4,748
North Dakota	252	4,372	4,624
Ohio	3,031	3,358	6,389
0k1ahoma	303	4,136	4,439
Oregon	1,004	1,297	2,301
Pennsylvania	2,910	2,664	5,574
Rhode Island	123	5	128
South Carolina	1,030	2,014	3,044
South Dakota	261	1,876	2,137
Tennessee	1,517	1,834	3,351
Texas	6,585	5,859	12,444
Utah	543	466	1,009
Vermont	165	331	496
Virginia	868	1,242	2,110
Washington	1,354	1,500	2,854
West Virginia	410	1,445	1,855
Wisconsin	1,839	2,807	4,646
Wyoming	84	443	527
Puerto Rico		24	24
Unknown			
Total	63,294	99,132	162,426
	,	,	,

TABLE 36. TOTAL CROSSINGS BY NUMBER OF MAIN AND OTHER TRACKS, 1996

Other				Numb	er of main	tracks		
Tracks	0	1	2	3	4	5	>5	Total
0	5	98,155	9,616	299	69	5	5	108,154
1	15,463	20,896	2,488	71	15			38,933
2	3,404	6,159	927	49	13	1	1	10,554
3	920	1,778	289	28	14			3,029
4	263	560	125	12	7	3	1	971
5	117	217	63	5	1	1	1	405
>5	96	217	62	2	3			380
Total	20,268	127,982	13,570	466	122	10	8	162,426

TABLE 37. CROSSINGS BY NUMBER OF TRACKS AND WARNING DEVICE, 1996

Number of Tracks							
Warning device	1	2	3	4	5	>5	Tota1
Gates	15,006	10,337	3,470	1,189	431	380	30,813
Flashing lights	20,981	5,198	1,621	504	160	150	28,614
Hwy. signals, wigwags, bells	983	364	136	42	18	14	1,557
Special warning devices	3,258	934	296	114	36	45	4,683
Stop signs	7,983	2,089	512	164	48	36	10,832
Crossbucks	60,444	13,869	3,529	1,006	307	221	79,376
Other signs	361	93	29	14	1	3	501
No signs or signals	4,602	1,032	273	75	34	34	6,050
Total	113,618	33,916	9,866	3,108	1,035	883	162,426

TABLE 38. CROSSINGS BY TRACKS AND TRAFFIC LANES, 1996

Traffic				N	lumber of	tracks	
Lanes	1	2	3	4	5	>5	Total
1	19,292	3,948	645	148	32	35	24,100
2	86,962	27,326	8,374	2,680	907	746	126,995
3	779	345	97	28	9	12	1,270
4	5,677	2,038	683	237	84	82	8,801
5	430	119	34	7	1	4	595
>5	478	140	33	8	2	4	665
Total	113,618	33,916	9,866	3,108	1,035	883	162,426

TABLE 39. TOTAL CROSSINGS BY NUMBER OF TRACKS AND STATE, 1996

Number of Tracks

State	1	2	3	4	5	>5	Total
Alabama	2,578	636	250	62	26	27	3,579
Alaska	184	34	6	1			225
Arizona	700	165	57	15	3	1	941
Arkansas	2,228	695	210	62	21	16	3,232
California	5,435	1,585	551	185	86	83	7,925
Colorado	1,417	380	99	30	9	7	1,942
Connecticut	299	59	10		2		370
Delaware	251	29	6		1		287
Dist of Columbia.	21	2					23
Florida	2,604	1,007	283	75	39	40	4,048
Georgia	4,578	1,117	299	103	20	34	6,151
Hawaii	6	-,					6
Idaho	1,035	294	102	36	9	6	1,482
Illinois	6,379	2,649	736	244	82	54	10,144
Indiana	4,694	1,438	302	85	30	19	6,568
Iowa	3,468	1,145	416	133	36	33	5,231
Kansas	5,402	1,609	528	183	58	48	7,828
Kentucky	1,778	614	143	47	9	13	2,604
Louisiana	2,708	627	170	48	13	21	3,587
Maine	724	123	24	9	1	1	882
Maryland	518	129	19	12	4	3	685
Massachusetts	941	187	41	15	4	4	1,192
Michigan	4,114	1,192	273	104	36	37	5,756
Minnesota	3,662	980	332	114	30	33	5,151
Mississippi	2,069	552	160	48	20	18	2,867
Missouri	2,875	1,311	468	131	41	38	4,864
Montana	969	319	118	25	12	13	1,456
Nebraska	2,592	936	290	86	36	24	3,964
Nevada	205	65	12	4	1	2	289
New Hampshire	427	66	7	2	1		503
New Jersey	1,358	386	82	17	8	9	1,860
New Mexico	567	172	44	16	4	7	810
New York	2,310	731	160	47	13	13	3,274
North Carolina	3,521	822	260	82	31	32	4,748
North Dakota	3,698	678	194	40	13	1	4,624
Ohio	3,910	1,812	449	140	47	31	6,389
0klahoma	2,940	994	314	124	41	26	4,439
Oregon	1,655	441	161	31	12	1	2,301
Pennsylvania	3,675	1,337	351	135	41	35	5,574
Rhode Island	86	36	6				128
South Carolina	2,446	483	81	17	9	8	3,044
South Dakota	1,685	288	116	35	6	7	2,137
Tennessee	2,272	754	213	69	22	21	3,351
Texas	8,954	2,385	698	258	81	68	12,444
Utah	683	213	71	17	18	7	1,009
Vermont	403	71	16	4		2	496
Virginia	1,392	507	156	38	11	6	2,110
Washington	1,862	605	260	85	22	20	2,854
West Virginia	1,344	381	102	16	5	7	1,855
Wisconsin	3,629	755	180	59	17	6	4,646
Wyoming	348	115	40	19	4	1	527
Puerto Rico	19	5					24
Unknown							
Total	113,618	33,916	9,866	3,108	1,035	883	162,426

TABLE 40. TOTAL CROSSINGS BY TYPE OF HIGHWAY SYSTEM AND STATE, 1996

Highway System

State	01	02	03	08	Total
Alabama		161	649	2,769	3,579
Alaska	6	10	34	175	225
Arizona	9	71	252	609	941
Arkansas	1	133	1,126	1,972	3,232
California		912	1,627	5,386	7,925
Colorado		7 5	418	1,449	1,942
Connecticut		25	133	212	370
Delaware		31	119	137	287
Dist of Columbia.		3	1	19	23
Florida	1	272	857	2,918	4,048
Georgia		371	949	4,830	6,150
Hawaii				6	6
Idaho		43	245	1,194	1,482
Illinois	1	612	2,159	7,372	10,144
Indiana		234	1,568	4,766	6,568
Iowa	3	284	1,179	3,765	5,231
Kansas		304	1,460	6,064	7,828
Kentucky	2	74	472	2,056	2,604
Louisiana	5	138 72	661 120	2,783 690	3,587 882
Maine		15	33	637	685
Maryland Massachusetts		116	437	639	1,192
Michigan	9	231	1,549	3,967	5,756
Minnesota	1	180	940	4,030	5,750
Mississippi		129	688	2,050	2,867
Missouri	3	93	813	3,955	4,864
Montana		58	164	1,234	1,456
Nebraska		197	691	3,076	3,964
Nevada		17	26	246	289
New Hampshire		7	191	305	503
New Jersey		77	349	1,434	1,860
New Mexico		21	116	673	810
New York		198	588	2,488	3,274
North Carolina		109	551	4,088	4,748
North Dakota	3	178	561	3,882	4,624
Ohio		256	1,546	4,587	6,389
0klahoma		136	655	3,648	4,439
Oregon		133	532	1,636	2,301
Pennsylvania	128	551	1,813	3,082	5,574
Rhode Island		6	58	64	128
South Carolina	1	186	754	2,103	3,044
South Dakota		98	342	1,697	2,137
Tennessee		103	584	2,664	3,351
Texas	81	95	182	12,086	12,444
Utah	1	15	138	854	1,008
Vermont		36	91	369	496
Virginia		88	651 558	1,371	2,110
Washington		93	558	2,203	2,854
West Virginia		112 290	367	1,376	1,855
Wisconsin		290	1,119 75	3,237 425	4,646 527
Wyoming Puerto Rico		6	2	16	24
Unknown					
Total	255	7,682	31,193	123,294	162,424
10001	200	7,002	31,133	120,204	152, 424

HIGHWAY SYSTEM CODES

CODE SYSTEM	CODE SYSTEM
01 T-44-4-	02 041 NIIC

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, 1996

State	On-State	Off-State	Total
Alabama	243	3,336	3,579
Alaska	56	169	225
Arizona	52	889	941
Arkansas	539	2,693	3,232
California	324	7,601	7,925
Colorado	204	1,738	1,942
Connecticut	83	287	370
Delaware	253	34	287
Dist of Columbia.	10	13	23
Florida	451	3,597	4,048
Georgia	716	5,435	6,151
Hawaii		6	6
Idaho	101	1,381	1,482
Illinois	1,276	8,868	10,144
Indiana	602	5,966	6,568
Iowa	289	4,942	5,231
Kansas	416	7,412	7,828
Kentucky	762	1,842	2,604
Louisiana	828	2,759	3,587
Maine	171	711	882
Maryland	114	571	685
Massachusetts	45	1,147	1,192
Michigan	334	5,422	5,756
Minnesota	277	4,874	5,151
Mississippi	371	2,496	2,867
Missouri	705	4,159	4,864
Montana	217	1,239	1,456
Nebraska	303	3,661	3,964
Nevada	43	246	289
New Hampshire	112	391	503
New Jersey	175	1,685	1,860
New Mexico	180	630	810
New York	346	2,928	3,274
North Carolina	3,047	1,701	4,748
North Dakota	219	4,405	4,624
Ohio	851	5,538	6,389
0klahoma	345	4,094	4,439
Oregon	142	2,159	2,301
Pennsylvania	1,785	3,789	5,574
Rhode Island	46	82	128
South Carolina	2,196	848	3,044
South Dakota	146	1,991	2,137
Tennessee	296	3,055	3,351
Texas	2,021	10,423	12,444
Utah	108	901	1,009
Vermont	111	385	496
Virginia	1,412	698	2,110
Washington	157	2,697	2,854
West Virginia	1,124	731	1,855
Wisconsin	357	4,289	4,646
Wyoming	72	455	527
Puerto Rico	19	5	24
Unknown		===	
Total	25,052	137,374	162,426

TABLE 42. CROSSINGS BY FUNCTIONAL CLASSIFICATION OF ROAD, 1996

Rura1	Crossings	Urban	Crossings
Interstate	37	Interstate	145
Other principal arterial	1,188	Other freeway/expressway	364
Minor arterial	3,713	Other principal arterial	5,725
Major collector	11,091	Minor arterial	10,336
Minor collector	9,282	Collector	10,665
Local	73,819	Local	36,059
Total	99,130	Total	63,294

TABLE 43. TOTAL CROSSINGS BY NUMBER OF TRAFFIC LANES AND STATE, 1996

Number of Lanes

State	1	2	3	4	5	>5	Total
Alabama	679	2,691	33	160	6	10	3,579
Alaska	12	193	1	17	2		225
Arizona	11	759	15	107	25	24	941
Arkansas	702	2,445	15	64	5	1	3,232
California	405	5,448	194	1,524	148	206	7,925
Colorado	168	1,598	21	137	9	9	1,942
Connecticut	5	330	16	17	2		370
Delaware	15	252	4	14		2	287
Dist of Columbia.		16	2	2	1	2	23
Florida	160	3,328	83	369	34	74	4,048
Georgia	1,168	4,722	27	213	12	9	6,151
Hawaii		6					6
Idaho	251	1,177	7	43	1	3	1,482
Illinois	2,025	7,382	57	642	16	22	10,144
Indiana	853	5,346	57	280	18	14	6,568
Iowa	608	4,402	36	179	5	1	5,231
Kansas	1,852	5,666	17	288	3	2	7,828
Kentucky	809	1,745	6	43		1	2,604
Louisiana	532	2,817	20	192	14	12	3,587
Maine	44	820	2	15	1		882
Maryland	69	557	8	44	3	4	685
Massachusetts	43	1,084	8	56	1		1,192
Michigan	347	4,798	74	453	51	33	5,756
Minnesota	855	4,031	14	247	3	1	5,151
Mississippi	361	2,403	9	88	2	4	2,867
Missouri	1,205	3,521	11	119	5	3	4,864
Montana	143	1,287	3	20	2	1	1,456
Nebraska	851	3,056	4	52	1		3,964
Nevada	67	180	1	39	1	1	289
New Hampshire	32	449	2	17	2	1	503
New Jersey	88	1,621	15	129	1	6	1,860
New Mexico	261	502	1	39	3	4	810
New York	304	2,836	19	110	2	3	3,274
North Carolina	263	4,246	35	184	11	9	4,748
North Dakota	1,041	3,558	1	23	1		4,624
0hio	650	5,422	46	255	9	7	6,389
0klahoma	883	3,296	6	249	2	3	4,439
Oregon	265	1,883	46	81	24	2	2,301
Pennsylvania	849	4,403	118	176	2	26	5,574
Rhode Island	2	102		24			128
South Carolina	318	2,498	36	158	23	11	3,044
South Dakota	641	1,450		39	4	3	2,137
Tennessee	439	2,693	31	151	31	6	3,351
Texas	2,109	9,021	67	1,079	64	104	12,444
Utah	183	749	1	71	1	4	1,009
Vermont	108	376	5	7			496
Virginia	25	1,955	24	87	10	9	2,110
Washington	251	2,275	55	233	32	8	2,854
West Virginia	871	965	7	10	1	1	1,855
Wisconsin	169	4,224	8	225	1	19	4,646
Wyoming	107	388	2	30			527
Puerto Rico	1	23					24
Unknown			4 070				
Total	24,100	126,995	1,270	8,801	595	665	162,426

TABLE 44. CROSSINGS BY NUMBER OF TRAFFIC LANES AND WARNING DEVICE, 1996

Warning device	1	2	3	4	5	>5	Tota1
Gates	865	25.199	492	3.628	306	323	30.813
Flashing lights	795	24,101	355	2,946	208	209	28,614
Hwy. signals, wigwags, bells	121	1,158	63	167	17	31	1,557
Special warning devices	311	3,850	108	362	26	26	4,683
Stop signs	1,756	8,920	29	119	2	6	10,832
Crossbucks	18,653	59,144	175	1,315	29	60	79,376
Other signs	123	365	2	11			501
No signs or signals	1,476	4,258	46	253	7	10	6,050
Total	24,100	126,995	1,270	8,801	595	665	162,426

TABLE 45. TOTAL CROSSINGS BY WARNING DEVICE CATEGORY AND STATE, 1996

			ш с.		ing Device	Category		N 6.	
		Flashing	Hwy.Sig. Wigwags	•	Stop	Cross-	0ther	No Signs or	•
State	Gates	Lights	Bells	Specia1	Signs	Bucks	Signs	Signals	Total
Alabama	352	638	9	32	773	1,595	15	165	3,579
Alaska	46	35		7	26	102		9	225
Arizona	365	72	4	53	93	328		26	941
Arkansas	316	457	24	70	182	2.049		134	3.232
California	3,177	995	291	115	332	2,828	14	173	7,925
Colorado	376	249	36	56	254	904	3	64	1,942
Connecticut	99	140	5	24	50	33		19	370
Delaware	47	154		20	3	51		12	287
Dist of Columbia.		4	2	12	2	1		2	23
Florida	2,112	635	13	96	156	964	7	65	4,048
Georgia	1,576	335	21	162	1,070	2,733	6	248	6,151
Hawaii					1	5			6
Idaho	113	190	6	6	561	575		31	1,482
Illinois	2,177	2,629	123	211	76	4,554	2	372	10,144
Indiana	1,208	1,636	96	177	826	2,492	7	126	6,568
Iowa	637	1,014	29	46	410	3,018	1	76	5,231
Kansas	921	696	59	198	233	5,581	2	138	7,828
Kentucky	388	803	13	55	50	1,154		141	2,604
Louisiana	484	691	32	40	238	1,864	14	224	3,587
Maine	71	388		80	18	325			882
Maryland	102	203	21	30	35	257	6	31	685
Massachusetts	197	462	30	212	5	232	3	51	1,192
Michigan	831	1,451	39	125	870	2,359	4	77	5,756
Minnesota	606	609	9	19	687	3,118	2	101	5,151
Mississippi	172	492	11	52	735	1,178	10	217	2,867
Missouri	491	995	69	94	136	2,842	1	236	4,864
Montana	179	165	5	11	99	971		26	1,456
Nebraska	562	305	12	14	269	2,688		114	3,964
Nevada	121	21	1	4	5	129		8	289
New Hampshire	31	146	11	108	50	133	7	17	503
New Jersey	411	654	17	236	19	399	2	122	1,860
New Mexico	198	94	5	9	12	466	5	21	810
New York	1,396	641	71	244 207	17 56	810	21 8	74	3,274
North Carolina	1,161 337	709	20		78	2,273		314	4,748
North Dakota Ohio	1,939	123 1,230	1 33	1 76	167	3,914 2,865	5	170 74	4,624 6,389
0k1ahoma	445	710	24	112	131	2,803	7	62	4,439
Oregon	560	136	43	90	435	872	44	121	2,301
Pennsylvania	749	1,286	108	650	142	1,905	275	459	5,574
Rhode Island	15	33	19	23	7	9		22	128
South Carolina	638	522		158	443	1,256		27	3,044
South Dakota	18	173	2		28	1,840		76	2,137
Tennessee	317	639	19	198	176	1,613	2	387	3,351
Texas	2,671	1,869	65	101	279	6,905	15	539	12,444
Utah	171	166	5	87	58	441	5	76	1,009
Vermont	27	196	3	44	25	199		2	496
Virginia	728	500	19	106	7	680	4	66	2,110
Washington	476	408	27	50	101	1,526	2	264	2,854
West Virginia	218	455	4	21	36	934	2	185	1,855
Wisconsin	466	1,335	96	122	338	2,223		66	4,646
Wyoming	111	124	4	1	32	235		20	527
Puerto Rico	4	1	1	18					24
Unknown									
Tota1	30,813	28,614	1,557	4,683	10,832	79,376	501	6,050	162,426

TABLE 46. TOTAL CROSSINGS BY WARNING DEVICE CATEGORY AND RAILROAD, 1996

				Hwy. S	ig.				No Signs	•
			Flashing	Wigwag	S	Stop	Cross-	0ther	0r	
	Railroad	Gates	Lights	Bells	Specia	1 Sign	s Bucks	Signs	Signals	Total
ARR	Alaska Railroad Corporation	46	35	0	7	26	99	0	8	221
ALS	Alton & Southern Railroad	6	7	0	1	0	6	0	1	21
ATK	Amtrak (National Railroad Passenger Corpora	201	9	0	5	6	12	4	7	244
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 Company	37	29	0	2	0	70	0	2	140
BS	Birmingham Southern Railroad Company	3	22	0	0	5	15	0	1	46
BNSF	Burlington Northern Santa Fe	4,719	3,269	151	498	1,118	14,709	20	460	24,944
CC	Chicago, Central & Pacific Railroad Company	69	266	10	30	40	451	0	24	890
CR	Consolidated Rail Corporation	2,973	3,210	166	1,017	425	3,548	257	690	12,286
CSX	CSX Transportation	4,802	3,784	77	508	1,438	6,472	22	714	17,817
DME	Dakota, Minnesota & Eastern Railroad	14	106	3	0	48	602	0	30	803
DH	Delaware & Hudson Railway Company	143	83	3	1	3	71	5	2	311
DRGW	Denver & Rio Grande Western Railroad Compan	154	140	4	16	85	358	3	24	784
DMIR	Duluth, Missabe & Iron Range Railway Compan	10	20	0	2	32	74	2	0	140
DWP	Duluth, Winnipeg & Pacific Railway	12	10	0	1	15	43	0	0	81
EJE	Elgin, Joliet & Eastern Railway Company	80	63	2	9	4	31	0	0	189
FEC	Florida East Coast Railway Company	603	30	0	27	3	46	0	9	718
GWWR	Gateway Western Railway	8	47	20	0	7	142	0	4	228
GTW	Grand Trunk Western Railroad Incorporated	374	211	4	37	193	87	0	2	908
GRS	Guilford Rail System	238	390	18	220	45	357	4	48	1,320
HBT	Houston Belt & Terminal Railway Company	58	28	1	0	2	53	0	15	157
IC	Illinois Central Railroad Company	406	579	16	60	363	1,000	4	169	2,597
IHB	Indiana Harbor Belt Railroad Company	25	22	0	16	0	10	0	3	76
KCS	Kansas City Southern Railway Company	248	499	4	3	217	1,718	4	158	2,851
LI	Long Island Rail Road	298	0	0	0	0	6	0	0	304
MNCW	Metro North Commuter Railroad Company	19	35	1	1	0	3	0	3	62
MRL	Montana Rail Link	60	62	1	0	46	253	0	6	428
NJTR	New Jersey Transit Rail Operations	218	80	1	10	1	29	0	7	346
NS	Norfolk Southern Corporation	3,857	2,936	76	485	1,535	7,162	11	755	16,817
NIRC	Northeast Illinois Regional Comuter Rail Co	53	5	1	1	1	0	0	1	62
NICD	Northern Indiana Commuter Transportation Di	41	37	7	0	27	1	0	0	113
PAL	Paducah & Louisville Railway Company	20	103	3	0	10	118	0	3	257
S00	Soo Line Railroad Company	515	576	25	48	359	2,530	1	197	4,251
SEPA	Southeastern Pennsylvania Transportation Au	50	77	21	19	17	32	2	45	263
SP	Southern Pacific Transportation Company	2,715	862	214	34	358	2,951	10	359	7,503
SSWN	Southern Pacific, Chicago-St. Louis Corpora	108	86	2	11	0	57	0	3	267
SSW	St. Louis Southwestern Railway Company	304	252	8	10	121	1,206	0	108	2,009
TRRA	Terminal Railroad Association Of St. Louis	45	14	0	56	3	20	0	3	141
UP	Union Pacific Railroad Company	3,900	3,445	199	246	1,215	11,573	25	876	21,479
URR	Union Railroad Company (Pittsburgh)	3	1	10	0	0	0	0	0	14
WE	Wheeling & Lake Erie Railway Company	90	148	3	2	23	290	0	10	566
WC	Wisconsin Central Ltd. (also Railway)	153	500	13	18	159	1,043	0	16	1,902
DIM	All Other Railroads	3,121	6,439	493	1,273	2,871	22,057	127	1,286	37,667
FINA	IL TOTALS	30,813	28,614	1,557	4,683	10,832	79,376	501	6,050	162,426

TABLE 47. TOTAL CROSSINGS BY PAVEMENT MARKINGS AND STATE, 1996

	Stop	RR X-ing		None					
State	Lines	Symbo1	Both	Paved	Unpaved	Total			
Alabama	45	502	424	1,960	648	3,579			
Alaska	8	9	55	65	88	225			
Arizona	25	27	413	246	230	941			
Arkansas	58	109	333	1,603	1,129	3,232			
California	967	199	4,745	1,718	296	7,925			
Colorado	20	22	383	829	688	1,942			
Connecticut	12	13	254	90	1	370			
Delaware	43	29	90	122	3	287			
Dist of Columbia.			9	14		23			
Florida	265	374	1,827	1,140	442	4,048			
Georgia	64	112	2,789	1,639	1,546	6,150			
Hawaii	2			4		6			
Idaho	9	5	267	656	545	1,482			
Illinois	78	171	1,258	4,284	4,353	10,144			
Indiana	77	261	1,364	4,007	859	6,568			
Iowa	53	153	539	1,982	2,504	5,231			
Kansas	7	24	904	2,030	4,863	7,828			
Kentucky	49	325	733	889	608	2,604			
Louisiana	52	190	619	1,887	839	3,587			
Maine	3	3	569	228	79	882			
Maryland	10	25	253	355	42	685			
Massachusetts	55	45	125	933	34	1,192			
Michigan	70	277	1,357	2,629	1,423	5,756			
Minnesota	126	177	493	1,808	2,547	5,151			
Mississippi	28	54	499	1,481	805	2,867			
Missouri	65	110	561	2,066	2,062	4,864			
Montana	5	32	158	352	909	1,456			
Nebraska	36	314	189	941	2,484	3,964			
Nevada	11	11	129	54	84	289			
New Hampshire	10	28	59	354	52	503			
New Jersey	38	229	261	1,244	88	1,860			
New Mexico	5	29	47	338	391	810			
New York	126	216	453	2,202	277	3,274			
North Carolina	46	32	3,534	546	590	4,748			
North Dakota	17	29	137	595	3,846	4,624			
Ohio	213	636	3,562	1,638	340	6,389			
0klahoma	31	92	423	1,976	1,917	4,439			
_	348	884	151	489	429	2,301			
Oregon Pennsylvania	67	353	162	4.386	606	5,574			
Rhode Island			80	4,366		128			
	91	109	1,199	1,250	395	3,044			
South Carolina						2,137			
South Dakota	30 20	12	132	540	1,423				
Tennessee		115	914	1,777	525	3,351			
Texas	11	18	6,312	3,003	3,100	12,444			
Utah	22	33	195	534	224	1,008			
Vermont	36	10	88	214	148	496			
Virginia	93	150	942	700	225	2,110			
Washington	122	68	546	1,554	564	2,854			
West Virginia	18	11	84	1,149	593	1,855			
Wisconsin	68	28	771	3,298	481	4,646			
Wyoming	7	21	53	157	289	527			
Puerto Rico	3	7		12	2	24			
Unknown									
Total	3,665	6,683	41,444	64,016	46,616	162,424			

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

TABLE 48. CROSSINGS BY RAILROAD ADVANCE WARNING AND STATE, 1996

State	Yes	No	Total
Alabama	1,722	1,857	3,579
Alaska	150	7 5	225
Arizona	582	359	941
Arkansas	911	2,321	3,232
California	6,387	1,538	7,925
Colorado	1,123	819	1,942
Connecticut	326	44	370
Delaware	242	45	287
Dist of Columbia.	6	17	23
Florida	2,533	1,515	4,048
Georgia	3,176	2,975	6,151
Hawaii	1	5	6
Idaho	882	600	1,482
Illinois	5,259	4,885	10,144
Indiana	5,654	914	6,568
Iowa	3,586	1,645	5,231
Kansas	4,271	3,557	7,828
Kentucky	1,515	1,089	2,604
Louisiana	2,393	1,194	3,587
Maine	870	12	882
Maryland	445	240	685
Massachusetts	882	310	1,192
Michigan	4,707	1,049	5,756
Minnesota	3,403	1,748	5,151
Mississippi	845	2,022	2,867
Missouri	1,448	3,416	4,864
Montana	997	459	1,456
Nebraska	2,924	1,040	3,964
Nevada	225	64	289
New Hampshire	297	206	503
New Jersey	962	898	1,860
New Mexico	179	631	810
New York	2,593	681	3,274
North Carolina	3,692	1,056	4,748
North Dakota	1,703	2,921	4,624
Ohio	5,166	1,223	6,389
0klahoma	1,720	2,719	4,439
Oregon	1,005	1,296	2,301
Pennsylvania Rhode Island	2,069 81	3,505 47	5,574 128
South Carolina	2,270	774	3,044
South Dakota	1,407	730	•
Tennessee	2,079	1,272	2,137 3,351
Texas	9,882	2,562	12,444
Utah	591	418	1,009
Vermont	409	87	496
Virginia	1,629	481	2,110
Washington	2,061	793	2,854
West Virginia	454	1,401	1,855
Wisconsin	3,244	1,401	4,646
Wyoming	291	236	527
Puerto Rico	17	7	24
Unknown			
Total	101,266	61,160	162,426
10001	101,200	01,100	102,420

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

TABLE 49. CROSSINGS MEETING THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' STANDARD FOR CROSSBUCKS BY STATE, 1996

	A - 4 !	V 11		
Stata	Active		et standards No	Total
State	Warning	Yes	NO	Tota1
Alabama	999	1,933	647	3,579
Alaska	81	106	38	225
Arizona	441	392	108	941
Arkansas	797	1,733	702	3,232
California	4,463	1,590	1,872	7,925
Colorado	661	1,035	246	1,942
Connecticut	244	88	38	370
Delaware	201	60	26	287
Dist of Columbia.	6	12	5	23
Florida	2,760	935	353	4,048
Georgia	1,932	3,553	666	6,151
Hawaii		4	2	6
Idaho	309	991	182	1,482
Illinois	4,929	4,104	1,111	10,144
Indiana	2,940	3,054	574	6,568
Iowa	1,680	2,728	823	5,231
Kansas	1,676	2,866	3,286	7,828
Kentucky	1,204	1,100	300	2,604
Louisiana	1,207	1,915	465	3,587
	459	410	13	882
Maine Maryland	326	190	169	685
Massachusetts	689	296	207	1,192
Michigan	2,321	3,101	334	5,756
Minnesota	1,224	3,628	299	5,151
Mississippi	675	1,449	743	2,867
Missouri	1,555	1,772	1,537	4,864
Montana	349	824	283	1,456
Nebraska	879	2,703	382	3,964
Nevada	143	93	53	289
New Hampshire	188	210	105	503
New Jersey	1,082	323	455	1,860
New Mexico	297	289	224	810
New York	2,108	824	342	3,274
North Carolina	1,890	1,627	1,231	4,748
North Dakota	461	2,850	1,313	4,624
Ohio	3,202	2,364	823	6,389
0klahoma	1,179	2,208	1,052	4,439
Oregon	739	1,075	487	2,301
Pennsylvania	2,143	1,240	2,191	5,574
Rhode Island	67	2	59	128
South Carolina	1,160	1,774	110	3,044
South Dakota	193	1,762	182	2,137
Tennessee	975	1,149	1,227	3,351
Texas	4,605	3,850	3,989	12,444
Utah	342	469	198	1,009
Vermont	226	254	16	496
Virginia	1,247	596	267	2,110
Washington	911	1,125	818	2,854
West Virginia	677	696	482	1,855
Wisconsin	1,897	2,407	342	4,646
Wyoming	239	182	106	527
Puerto Rico	6	6	12	24
Unknown	 CO 084	 CO 047	21 405	162 426
Total	60,984	69,947	31,495	162,426

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, 1996

Trains	Crossings
<1	24,521
1-5	68,962
6-10	26,925
11-15	11,722
16-20	10,701
21-25	6,519
26-30	3,958
31-35	2,449
36-40	1,544
41-45	751
46-50	854
51-55	855
56-60	950
61-65	347
66-70	213
71-75	275
76-80	283
81-85	50
86-90	23
91-95	168
96-100	56
>100	300
Total	162,426

TABLE 51. TOTAL CROSSINGS BY NUMBER OF THRU TRAINS AND SWITCHING TRAINS PER DAY, 1996

Switching	Through trains								
Trains	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	Tota1
<1	24,521	24,115	10,857	10,966	5,087	4,867	2,959	4,307	87,679
1-2	16,829	9,059	5,831	6,367	2,394	2,774	971	3,040	47,265
2-3	5,387	1,527	2,077	2,628	1,514	892	326	1,603	15,954
6-10	2,404	698	724	1,308	686	798	365	800	7,783
11-15	393	107	110	229	105	74	74	674	1,766
16-20	417	99	85	126	139	72	89	91	1,118
21-25	98	25	22	37	34	17	23	41	297
>25	177	53	37	68	62	44	31	92	564
Total	50,226	35,683	19,743	21,729	10,021	9,538	4,838	10,648	162,426

TABLE 52. TOTAL CROSSINGS BY NUMBER OF DAY AND NIGHT TRAINS PER DAY, 1996

Day		Night trains									
Trains	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	Total		
<1	24,521	6,322	880	162	6	8	4	5	31.908		
1-2	25,663	25,363	2,676	345	21	10	1	3	54,082		
2-3	4,357	8,971	15,092	1,732	134	35	36	2	30,359		
6-10	1,390	1,903	5,733	14,121	1,635	91	38	15	24,926		
11-15	198	225	630	3,324	5,541	548	25	20	10,511		
16-20	98	37	181	795	1,225	2,059	181	36	4,612		
21-25	17	29	10	228	496	299	736	169	1,984		
>25	69	12	56	142	272	291	794	2,408	4,044		
Total	56,313	42,862	25,258	20,849	9,330	3,341	1,815	2,658	162,426		

TABLE 53. CROSSINGS BY NUMBER OF TRAINS PER DAY AND WARNING DEVICE, 1996

Number of Trains Per Day

Warning device	<1	1-2	3-5	6-10	11-15	16-20	21-25	>25	Total
Gates	1,075	2,638	3,357	5,524	3,661	4,225	3,239	7,094	30,813
Flashing lights	3,275	6,918	5,269	6,176	2,467	2,059	963	1,487	28,614
Hwy. signals, wigwags, bells	214	393	283	274	127	94	38	134	1,557
Special warning devices	1,812	1,538	555	387	119	108	37	127	4,683
Stop signs	925	2,778	2,118	2,154	717	845	385	910	10,832
Crossbucks	14,930	26,319	13,822	11,745	4,411	3,223	1,791	3,135	79,376
Other signs	150	167	81	56	12	16	1	18	501
No signs or signals	2,140	1,963	763	609	208	131	65	171	6,050
Total	24,521	42,714	26,248	26,925	11,722	10,701	6,519	13,076	162,426

TABLE 54. TOTAL CROSSINGS BY NUMBER OF TRAINS PER DAY AND ANNUAL AVERAGE DAILY TRAFFIC, 1996

				Avera	ge annual	daily trai	ffic
	1-	251 -	501 -	1,001-	5,001-	>	
Trains	250	500	1,000	5,000	10,000	10,000	Tota1
<1	10,430	2,922	2,766	5,420	1,780	1,203	24,521
1-2	20,768	4,994	4,577	8,239	2,435	1,701	42,714
2-3	11,725	3,186	2,903	5,412	1,680	1,342	26,248
6-10	11,744	3,290	3,134	5,728	1,713	1,316	26,925
11-15	5,092	1,307	1,297	2,666	754	606	11,722
16-20	4,390	1,283	1,276	2,412	804	536	10,701
21-25	2,586	735	748	1,565	487	398	6,519
>25	5,318	1,377	1,375	2,965	1,122	919	13,076
Total	72,053	19,094	18,076	34,407	10,775	8,021	162,426

TABLE 55. CROSSINGS BY MAXIMUM TIMETABLE SPEED, 1996

Timetable	
Speed	Crossings
1-5	5,189
6-10	29,917
11-15	8,277
16-20	12,642
21-25	21,115
26-30	15,582
31 - 35	9,885
36-40	16,911
41 - 45	3,325
46-50	13,532
51-55	3,046
56-60	10,638
61-65	1,147
66-70	4,488
71 - 75	639
76-80	5,568
81-85	1
86-90	466
91-95	1
96-100	8
>100	49
Total	162,426

TABLE 56. TOTAL CROSSINGS BY TYPICAL TRAIN SPEED VARIATION, 1996

Speed Variation	Crossings
<1	13,474
1-5	41,150
6-10	35,733
11-15	17,079
16-20	16,468
21-25	9,902
26-30	8,809
31-35	4,661
36-40	4,443
41-45	2,365
46-50	3,292
51-55	784
56-60	1,939
61-65	656
66-70	346
71-75	580
76-80	682
81-85	9
86-90	2
91-95	
96-100	
>100	52
Total	162,426

TABLE 57. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC, 1996

AADT	Crossings
1 - 100	50,443
101 - 200	15,039
201 - 300	11,402
301 - 400	7,228
401 - 500	7,035
501-600	4,551
601 - 700	3,474
701-800	3,889
801-900	2,597
901 - 1,000	3,565
1,001-2,000	15,724
2,001-3,000	8,637
3,001-4,000	5,413
4,001-5,000	4,633
5,001-6,000	3,002
6,001-7,000	2,291
7,001-8,000	2,189
8,001-9,000	1,591
9,001-10,000	1,702
10,001-20,000	6,072
>20,000	1,949
Total	162,426

TABLE 58. TOTAL CROSSINGS BY ANNUAL AVERAGE DAILY TRAFFIC AND WARNING DEVICE CATEGORY, 1996

Annual Average Daily Traffic

		251 -	501 -	1,001-	5,001-	>	
Warning device	1-250	500	1,000	5,000	10,000	10,000	Total
Gates	4,430	3,301	4,079	10,914	4,347	3,742	30,813
Flashing lights	3,956	3,355	4,341	10,574	3,634	2,754	28,614
Hwy. signals, wigwags, bells	404	176	194	423	186	174	1,557
Special warning devices	961	587	624	1,540	551	420	4,683
Stop signs	6,410	1,736	1,215	1,269	143	59	10,832
Crossbucks	52,586	9,084	6,885	8,481	1,606	734	79,376
Other signs	205	88	81	97	22	8	501
No signs or signals	3,101	767	657	1,109	286	130	6,050
Total	72,053	19,094	18,076	34,407	10,775	8,021	162,426

TABLE 59. TOTAL CROSSINGS BY TRUCK TRAFFIC AS A PERCENTAGE OF ANNUAL AVERAGE DAILY TRAFFIC, 1996

%	Crossings
<1	5,832
1-5	74.592
6-10	48,943
11-15	15,286
16-20	8,198
21-25	2,084
26-30	4,550
31-35	490
36-40	959
41-45	102
46-50	898
51-55	19
56-60	160
61-65	9
66-70	49
71-75	105
76-80	70
81-85	10
86-90	47
91-95	6
96-99	17
Total	162,426

TABLE 60. PUBLIC CROSSINGS BY CROSSING SURFACE, 1996

State	Timber	Full Wood Plank	Aspha1t	Concrete Slab	Concrete Pavement	Rubber	Metal Sections	Other Metal	Unconsol- idated	0ther
Alabama	124	160	2,997	7	1	51	1	1	235	2
Alaska	114	92	52	6	0	59	0	0	233	4
Arizona	175	185	381	4	1	132	0	0	61	2
Arkansas	920	210	1,379	198	8	9	2	2	499	5
California	795	1,226	5,386	167	30	145	0	0	128	48
Colorado	834	219	503	84	1	169	4	6	120	2
Connecticut	109	0	115	2	0	142	2	0	0	0
Delaware	3	0	216	19	1	47	0	0	1	0
Dist Of Columbia	6	4	10	0	1	2	0	0	0	0
Florida	1,196	50	2,063	304	33	241	9	1	111	40
Georgia	121	122	5,371	15	18	16	1	1	482	3
Hawaii	0	0	6	0	0	0	0	0	0	0
Idaho	276	619	398	95	0	31	0	0	56	7
Illinois	1,831	1,505	4,729	72	39	871	7	7	1,064	19
Indiana	804	98	5,022	28	13	389	9	0	200	5
Iowa	118	1,201	2,138	13	10	340	1	2	1,306	102
Kansas	2,295	2,236	1,076	166	38	126	7	1	1,867	162
Kentucky	2,293	306	1,070	1	6	87	1	3	463	0
Louisiana	673	475	1,440	200	8	437	1	4	357	1
Maine	53	215	598	0	0	9	0	0	7	0
Maryland	196	70	332	1	5	63	0	0	15	3
Massachusetts	64	29	992	8	0	84	0	0	15	0
Michigan	1,384	419	3,016	11	11	438	90	1	368	18
Minnesota	261	2,545	1,721	19	10	298	1	1	283	12
Mississippi	153	294	1,721	45	3	181	2	1	658	3
Missouri	1,506	750	1,598	23	3	80	2	1	883	18
Montana	25	1,107	208	29	2	72	0	3	7	3
Nebraska	830	727	636	165	40	54	2	1	1,495	14
Nevada	19	59	65	66	0	44	1	0	20	15
New Hampshire	12	5 7	419	1	0	7	0	0	6	1
New Jersey	153	8	1,428	13	16	84	0	57	66	35
New Mexico	444	184	49	1	2	34	0	0	96	0
New York	416	156	2,283	8	15	287	0	2	91	16
North Carolina	22	47	4,340	5	12	32	1	0	283	6
North Dakota	126	3,546	476	19	2	39	0	2	410	4
Ohio	1,069	72	4,774	16	12	291	1	2	117	35
0k1ahoma	1,745	597	922	182	15	53	0	5	895	25
Oregon	472	118	1,314	25	23	60	0	0	41	248
Pennsylvania	944	77	3,776	60	240	101	1	16	355	4
Rhode Island	1	1	79	0	10	36	0	1	0	0
South Carolina	18	1	2,923	21	2	10	0	1	64	4
South Dakota	13	1,424	444	1	1	118	0	0	86	50
Tennessee	105	236	2,677	5	4	107	3	0	208	6
Texas	4,673	1,221	3,993	535	106	306	5	14	1,555	36
Utah	219	230	382	51	5	29	3	2	83	4
Vermont	34	43	331	0	1	11	0	0	75	1
	226	54	1,660	3	2	19	4	8	118	16
Virginia Washington	120	1,134	1,000	84	12	174	0	0	30	3
Washington West Virginia	789	1,134	713	2	3	174	0	1	315	3
Wisconsin	53	345	3,625	26	3 14	358	0	1	223	1
	33 40	345 197	137	20	14	338 29	0	0	115	6
Wyoming FINAL TOTALS	26,773	24,681	83,470	2,808	780	6,821	161	148	15,936	846

TABLE 61. TOTAL CROSSINGS BY MAXIMUM TIME TABLE SPEED,
WARNING DEVICE CATEGORY AND NUMBER OF TRACKS, 1996

SINGLE TRACK WARNING DEVICES	00-10	11-20	21-30	31 - 40	MAX 41 - 50	IMUM TIM 51-60	TABLE 61-70	SPEED 71-80	81-90	91 - 100	101-110	>110	TOTAL
GATES	1364	1844	2662	2546	2165	2000	1188	1166	66	4	1	0	15006
FLASHING LIGHTS		3028	5358	3611	2300	1512	299	342	14	0	0	0	20984
HWY. SIGNALS, WIGWAGS, BELLS	371	171	194	122	51	53	11	8	1	0	1	0	983
SPECIAL WARNING DEVICES		528	252	80	58	27	12	21	12	2	0	0	3258
STOP SIGNS	1200	827	1860	1648	1025	822	250	348	3	0	0	0	7983
CROSSBUCKS	12713	6969	16529	11528	6015	4520	885	1149	137	0	1	0	60446
OTHER SIGNS	176	93	59	15	12	0	3	3	0	0	0	0	361
NO SIGNS OR SIGNALS	2421	901	701	295	118	101	35	29	1	0	0	0	4602
TOTAL	25031	14361	27615	19845	11744	9035	2683	3066	234	6	3	0	113623
MULTIPLE TRACKS					WAY	типи тти	E TABLE	CDEED					
WARNING DEVICES	00-10	11-20	21-30	31-40		51-60	61-70	71-80	81-90	91-100	101-110	>110	TOTAL
GATES	998	1530	2376	2401	2277	2259	1863	1976	123	2	2	0	15807
FLASHING LIGHTS	1727	1135	1722	1276	798	630	168	168	6	0	0	0	7630
HWY. SIGNALS, WIGWAGS, BELLS	162	111	120	71	33	30	27	16	4	0	0	0	574
SPECIAL WARNING DEVICES	931	232	141	46	26	27	6	12	3	1	0	0	1425
STOP SIGNS	500	361	500	455	334	294	183	219	3	0	0	0	2849
CROSSBUCKS	4948	2842	4056	2623	1584	1368	688	727	94	0	0	0	18930
OTHER SIGNS	53	32	22	16	15	1	1	0	0	0	0	0	140
NO SIGNS OR SIGNALS	800	315	145	63	46	40	16	23	0	0	0	0	1448
TOTAL	10119	6558	9082	6951	5113	4649	2952	3141	233	3	2	0	48803
ALL CROSSINGS					MAX	IMUM TIM	E 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	2362	3374	5038	40.47	4449	4250	2051	21.42	100	6	2	0	30813
FLASHING LIGHTS	6247	4163	7080	4947 4887	4442 3098	4259 2142	3051	3142	189	6 0	3 0	0	28614
HWY. SIGNALS, WIGWAGS, BELLS	533	282	314	193	84	83	467 38	510 24	20 5	0	1	0	1557
SPECIAL WARNING DEVICES		760	393	126	84	54	18	33	15	3	0	0	4683
STOP SIGNS		1188	2360	2103	1359	1116	433	567	6	ა 0	0	0	10832
CROSSBUCKS		9811	20585	14151	7599	5888	1573	1876	231	0	1	0	79376
OTHER SIGNS		125	81	31	27	1	4	3	0	0	0	0	501
NO SIGNS OR SIGNALS		1216	846	358	164	141	51	52	1	0	0	0	6050
TOTAL		20919	36697	26796	16857	13684	5635	6207	467	9	5	0	162426
	20100	20010	30001	20.00	-000	10001	0000	OLO.		3		9	- 00 100

(D A T A)

SUMMARY OF ACCIDENT/INCIDENT

AND

INVENTORY

FOR

PRIVATE CROSSINGS

TABLE 62. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY TYPE OF CONSIST, 1996

		Freight		1	Passeng	er	-Yard	1 Swit	ching	Other		
State	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Alabama	8	1	2				5			1		
Alaska												
Arizona	3		2				1			1		
Arkansas	11		3				2			1		
California	19	3	7	4	1	2	5			1		
Colorado	7	3	1							1		1
Connecticut				2						1		
Delaware												
Dist. of Columbia												
Florida	7	2	2	1		1				1		
Georgia	13	1	6				4		1	1		
Idaho	2		1							4		
Illinois	8	2	3	2			8		2	4		
Indiana	9		4				2		1	1		
Iowa	5	1	2				3		1			
Kansas	9		1				1			1		
Kentucky	7		4				1					
Louisiana	13	1	4				1			2	1	
Maine	1		1				1					
			_									
Maryland							1					
Massachusetts	1									2		
Michigan	5						1					
Minnesota	11	1	1	3		1	1			6		1
Mississippi	3		1	2			3		4	2		
Missouri	17	2	4	1						1		
Montana	8	1	3				2					
Nebraska	7	1	1							1		
Nevada	1		1									
New Hamshire	1	1										
New Jersey	1		6				1			2		1
New Mexico	3											
New York	3		1	1			1					
North Carolina	8		6	1		2				1		
North Dakota	2		1	1		1						
Ohio	9	1					2					
0klahoma	4		3									
0regon	6						1			8		
Pennsylvania	3		1	1			1			3		1
Rhode Island												
South Carolina	3			1	1							
South Dakota												
Tennessee	4	1					4			2		
Texas	33	11	10	2			5		2	1		1
			10				1					
Utah Vermont	3 1			1		2	1					
							2					
Virginia	13		3				_			4		1
Washington	8		1	1			4		1	4		
West Virginia	4		1							1		
Wisconsin	3						2		1	1		
Wyoming	4	2	1							1		
Unknown												
Total	291	35	89	24	2	9	67		13	60	1	6

 ${\tt Note: "Other" includes \ mixed \ trains, \ work \ trains, \ light \ locomotives, \ single \ car \ or \ cut \ of \ cars}$

TABLE 63. (MV) ACCIDENTS/INCIDENTS AT PUBLIC HIGHWAY-RAIL CROSSINGS, BY STATE AND WARNING DEVICE, 1996

State	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Special	Cross- Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alabama		1		1	3	4		5	14
Alaska									
Arizona					1	3		1	5
Arkansas				1	6	3	1	3	14
California	1		2	2	6	11	1	6	29
Colorado				1	3	3		1	8
Connecticut					1	2			3
Delaware									
Dist. of Columbia									
Florida				1	7	1			9
Georgia		1		3	8	2	1	3	18
Idaho				1	1	3		1	6
Illinois		4		2	5	3	1	7	22
Indiana		1		1	5	2		3	12
Iowa		1			3	2		2	8
Kansas					6	1		4	11
Kentucky	1				6 8			1	8
Louisiana Maine		1 			1	3 1		4	16 2
Maryland								1	1
Maryland Massachusetts					2	1			3
Michigan					2	1	1	2	6
Minnesota		2			2	10	1	6	21
Mississippi			1	2	6	1			10
Missouri	1	2			9	4		3	19
Montana					3	5		2	10
Nebraska				1	1	3		3	8
Nevada					1				1
New Hamshire								1	1
New Jersey					1			3	4
New Mexico					2			1	3
New York					1	1		3	5
North Carolina		1		2	5			2	10
North Dakota					3				3
Ohio			1	1	4	1		4	11
0klahoma		1			1	2			4
0regon				1	2	10		2	15
Pennsylvania		1			1	1		5	8
Rhode Island									
South Carolina				1	2	1			4
South Dakota									10
Tennessee				1 1	3	20		4	10
Texas Utah	2				14	20 3	1	3 1	41 4
Vermont						3 2		1	3
Virginia				1	7	3		8	19
Washington		1		1	4	9		2	17
West Virginia					4			1	5
Wisconsin						4	1	1	6
Wyoming						4		1	5
Unknown									
Total	5	17	4	25	150	132		101	442

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

TABLE 64. ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY HIGHWAY USER, 1996

	Acc/Inc		Killed		I	njured	Fata1	Injury	
Type Of Vehicle	No.	%	No.	%	No.	%	Acc/Inc	Acc/Inc	
Automobile	184	39.23	25	64.10	60	48.39	22	39	
Truck	147	31.34	9	23.08	36	29.03	8	28	
Truck-trailer	108	23.03	3	7.69	21	16.94	2	18	
Bus	1	.21							
School bus									
Motorcycle	2	. 43	1	2.56			1		
Pedestrian									
0ther	27	5.76	1	2.56	7	5.65	1	6	
Total	469	100.00	39	100.00	124	100.00	34	91	

TABLE 65. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY WARNING DEVICE CATEGORY AND MOTORIST ACTION, 1996

	Drove Around- -Or Thru Gate			Stopped And -Then Proceeded -Did Not St							Total							
Warning Device	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Ìnj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Gates	2									3						5		
Cantilever flshrs							1		1	1			1		1	3		2
Standard flashers				1			7		2	6						14		2
Hwy Sig,W W,Bells							2		4	2						4		4
Special Devices				1		1	18		4	6		1				25		6
Crossbucks				9		6	88	14	28	50	1	6	3		3	150	15	43
Stopsigns				15	1	4	75	10	33	39	5	1	3			132	16	38
Other Signs				1			6			1						8		
No Signs Or Sign1				13			54	6	18	33	1	4	1			101	7	22
Tota1	2			40	1	11	251	30	90	141	7	12	8		4	442	38	117

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 VEHICLE, CIRCUMSTANCE AND VISIBILITY, 1996

		Dawn			Day			Dusk			Dark			-Total	
Speed Of Vehicle	A/I	K1d		A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
RAIL CONSI	S T	STR	UCK	нісн	WAY	US	E R								
Standing	3			82	2	7	8		2	47	4	3	140	6	12
1-9	7	2	2	113	12	43	7		3	19		2	146	14	50
0-19	2			52	6	16				11	1	6	65	7	22
20-29				7	1	9	1			2			10	1	9
0-39				2	1	1	1	1		2	3		5	5	1
0-49				2		2							2		2
0-59															
0 and over										1			1		
Jnknown	1			11	1	2				7		3	19	1	5
Total	13	2	2	269	23	80	17	1	5	89	8	14	388	34	101
IIGHWAY US	ER S	STR	U C K	RAIL	C O N	SI	S T								
Standing															
-9	2			17	1	7				3			22	1	7
0-19	1			8	1		1			2			12	1	
0-29				5		1				7	1	4	12	1	
0-39				2	1	1				1		2	3	1	3
0-49				1									1		
0-59															
0 and over															
Jnknown				1						3		1	4		1
Total	3			34	3	9	1			16	1	7	54	4	16
GRAND TOTA	L														
Standing	3			82	2	7	8		2	47	4	3	140	6	12
1-9	9	2	2	130	13	50	7		3	22		2	168	15	57
0-19	3			60	7	16	1			13	1	6	77	8	22
20-29				12	1	10	1			9	1	4	22	2	14
80-39				4	2	2	1	1		3	3	2	8	6	4
0-49				3		2							3		2
60-59															
0 and over										1			1		
Jnknown	1			12	1	2				10		4	23	1	6
Total	16	2	2	303	26	89	18	1	5	105	9	21	442	38	117

TABLE 67. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY RAILROAD AND WARNING DEVICE, 1996

Ra i I road	Gates	Flashing Lights	Hwy Sig. Wigwags Bells	Specia1	Cross- Bucks	Stop Signs	Other Signs	No Signs Or Signals	Total
Alaska Railroad Corp.									
Alton & Southern Railroad									
Amtrak (Nat'l Railroad Passenger Corp.)					7	5		4	16
Bangor And Aroostook Railroad					1	1			2
Belt Railway Co. of Chicago									
Bessemer & Lake Erie Railroad Co.									
Birmingham Southern Railroad Co.								2	2
Burlington Northern Santa Fe	1	5		4	35	38	1	15	99
Chicago, Central & Pacific Railroad Co.		1			1				2
Consolidated Rail Corp.		1		2	5	1		14	23
CSX Transp.				1	26	2		6	35
Dakota, Minnesota & Eastern Railroad						1			1
Delaware And Hudson Railroad Co.					1	1			2
Denver And Rio Grande Western Railroad Co.					2	3			5
Duluth, Missabe & Iron Range Railway Co.						1			1
Duluth, Winnipeg & Pacific Railway									
Elgin, Joliet And Eastern Railway Co.					1	1			2
Florida East Coast Railway Co.									
Gateway Western Railway					1			1	2
Grand Trunk Western Railroad Co.									
Guilford Railroad System									
Houston Belt & Terminal Railway Co.									
Illinois Central Railroad Co.					4	2		4	10
Indiana Harbor Belt Railroad Co.		1						1	2
Kansas City Southern Railway Co.			1	1	7	1		1	11
Long Island Rail Road									
Massachusettes Bay Transit Authority									
Metro North Commuter Railroad Co.						2			2
Montana Rail Link					3	4		2	9
New Jersey Transit Rail Operations									
Norfolk Southern Corp.		4		8	24	11	1	16	64
Northeast Illinois Regional Commuter Rail		2							2
Northern Indiana Commuter Trans.									
Paducah & Louisville Railway Co.									
Peninsular Commuter									
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.					1				1
Soo Line Railroad Co.		1		1	2			3	7
Southeastern Pennsylvania Transp.									
Southern California Regional Rail									
Southern Pacific Transp. Co.	3		2	2	6	19	2	4	38
Southern Pacific, Chicago-St. Louis Corp.							1		1
St. Louis Southwestern Railway Co.					1	4		1	6
Terminal Railroad Assoc. of St. Louis									
Union Pacific Railroad Co.		1		1	15	19	1	19	56
Union Railroad Company (Pittsburgh)								2	2
Wheeling & Lake Erie Railway Co.			1						1
Wisconsin Central Ltd.						3	2		5
All Other Railroads	1	1		5	7	13		6	33
Total	5	17	4	25	150	132	8	101	442

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 68. ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY RAILROAD, 1996

	Mc	otor Vehic	1e	Other	Highway	Users		Tota1	
Ra i 1 road	Acc/Inc	Ki 11ed	Injured	Acc/Inc	Killed	Injured	Acc/Inc	Ki 11ed	Injured
Alaska Railroad Corp.				1			1		
Alton & Southern Railroad									
Amtrak (Nat'l Railroad Passenger Corp.) 16	2	6	2			18	2	6
Bangor And Aroostook Railroad	2		1				2		1
Belt Railway Co. of Chicago									
Bessemer & Lake Erie Railroad Co.									
Birmingham Southern Railroad Co.	2						2		
Burlington Northern Santa Fe	99	8	18	5			104	8	18
Chicago, Central & Pacific Railroad Co			2				2		2
Consolidated Rail Corp.	23		10	1			24		10
CSX Transp.	35	4	7				35	4	7
Dakota, Minnesota & Eastern Railroad	1						1		
Delaware And Hudson Railroad Co.	2		1				2		1
Denver And Rio Grande Western Railroad		1	3				5	1	3
							1		
Duluth, Missabe & Iron Range Railway Co	o. 1								
Duluth, Winnipeg & Pacific Railway									
Elgin, Joliet And Eastern Railway Co.	2						2		
Florida East Coast Railway Co.									
Gateway Western Railway	2	2					2	2	
Grand Trunk Western Railroad Co.									
Guilford Railroad System									
Houston Belt & Terminal Railway Co.									
Illinois Central Railroad Co.	10	1	1				10	1	1
Indiana Harbor Belt Railroad Co.	2		3				2		3
Kansas City Southern Railway Co.	11		5	2			13		5
Long Island Rail Road									
Massachusettes Bay Transit Authority									
Metro North Commuter Railroad Co.	2						2		
Montana Rail Link	9	1	2	1			10	1	2
New Jersey Transit Rail Operations									
Norfolk Southern Corp.	64	2	22	4		3	68	2	25
Northeast Illinois Regional Commuter Ra	ail 2						2		
Northern Indiana Commuter Trans.									
Paducah & Louisville Railway Co.									
Peninsular Commuter									
Port Authority Trans Hudson									
Port Terminal Railroad Assoc.	1						1		
Soo Line Railroad Co.	7	1	3	1			8	1	3
Southeastern Pennsylvania Transp.									
Southern California Regional Rail									
Southern Pacific Transp. Co.	38	7	13				38	7	13
Southern Pacific, Chicago-St. Louis Co.	rp. 1						1		
St. Louis Southwestern Railway Co.	6	4	2	2		1	8	4	3
Terminal Railroad Assoc. of St. Louis									
Union Pacific Railroad Co.	56	4	13	5	1	2	61	5	15
Union Railroad Company (Pittsburgh)	2						2		
Wheeling & Lake Erie Railway Co.	1						1		
Wisconsin Central Ltd.	5						5		
All Other Railroads	_	1	5	3		1	36	1	6
mi che milloud	00		J	3		•	50	•	U
Total	442	38	117	27	1	7	469	39	124

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 69. (MV) ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY SPEED OF CONSIST, 1996

		Freigh	t	P	assenge	er	-Yar	d Swit	ching		-Other			-Total	
Speed Of Consist	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
Standing	2	1	1							3			5	1	1
1-9	48		16	2			55		5	23		2	128		23
10-19	27		1	2		2	8		3	15		1	52		7
20-29	38		5	4		1	2		4	9		1	53		11
30-39	57	8	22				2		1	2			61	8	23
40-49	73	16	29	1						6	1	1	80	17	30
50-59	34	6	11							2		1	36	6	12
60-69	11	4	4	5		2							16	4	6
70-79	1			10	2	4							11	2	4
80-89															
90 and over															
Unknown															
Total	291	35	89	24	2	9	67		13	60	1	6	442	38	117

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

TABLE 70. (MV) ACCIDENTS/INCIDENTS AND CASUALTIES AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY LENGTH OF CONSIST, 1996

		Freigh	t		Passen	ger	- Yaı	d Swit	ching		-Other			-Total	
Number Of Cars	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj	A/I	K1d	Inj
1-9	47	4	11	17	1	7	36		3	7			107	5	21
10-19	22	2	9	7	1	2	16		9	1			46	3	20
20-29	25	3	9				8						33	3	9
30-39	29	10	8				1						30	10	8
40-49	16	2	4				1						17	2	4
50-59	32	5	7				2		1				34	5	8
60-69	22		7										22		7
70-79	18	1	6										18	1	6
80-89	17	3	6										17	3	6
90-99	13		7										13		7
100-109	19	2	4				1						20	2	4
110-119	18	2	6										18	2	6
120-129	4		2										4		2
130-139	3	1	1										3	1	1
140-149							1						1		
150 And over	4												4		
Locomotives only.	2		2				1			52	1	6	55	1	8
Tota1	291	35	89	24	2	9	67		13	60	1	6	442	38	117

Note: "Other" includes mixed trains, work trains, light locomotives, single car or cut of cars $% \left(1\right) =\left(1\right) \left(1\right)$

TABLE 71. (MV) ACCIDENTS/INCIDENTS AT PRIVATE HIGHWAY-RAIL CROSSINGS, BY OPERATIONAL STATUS OF WARNING DEVICE, CIRCUMSTANCE AND VISIBILITY, 1996

						Н	ighway l	ser			
	-Dev	ice Wor	king			Consis				Consis	
Warning Device	Yes	No	N/A	Dawn	Day	Dusk	Dark	Dawn	Day	Dusk	Dark
Gates	5			2	2		1				
Cantilever flshrs	1	1	1				2				1
Standard flashers	14				8		3		2		1
Hwy Sig,W W,Bells	4				1	1	1		1		
Special Devices			25		12		7		2		4
Crossbucks			150	1	99	5	27	1	11		6
Stopsigns			132	6	83	8	26	1	7		1
Other Signs			8		4		3				1
No Signs Or Signl			101	4	60	3	19	1	11	1	2
Total	24	1	417	13	269	17	89	3	34	1	16

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, 1996

State	Farm		Recreational		Unknown	Total
Alabama	1,283	230	14	463	0	1,990
Alaska	4	14	5	81	0	104
Arizona	392	24	13	253	0	682
Arkansas	1,002	220	17	269	0	1,508
California	2,130	341	123	2,246	9	4,849
Colorado	781	249	19	258	2	1,309
Connecticut	49	30	32	149	1	261
Delaware	62	34	4	19	0	119
Dist Of Columbia	0	0	0	8	0	8
Florida	400	188	29	444	390	1,451
Georgia	1,519	641	31	551	0	2,742
Idaho	829	61	11	417	0	1,318
Illinois	3,705	492	77	1,346	0	5,620
Indiana	1,861	326	30	594	4	2,815
Iowa	3,149	328	48	687	1	4,213
Kansas	3,588	201	8	417	0	4,214
Kentucky	1,530	745	18	397	0	2,690
Louisiana	1,728	505	21	950	0	3,204
Maine	410	118	77	329	0	934
Maryland	404	78	16	210	0	708
Massachusetts	169	67	39	262	0	537
Michigan	1,325	393	125	855	0	2,698
Minnesota	2,244	238	50	584	0	3,116
	1,377	405	5	254	0	2,041
Mississippi Missouri	2,333	337	27	594	1	3,292
Montana	1,620	107	23	301	0	2,051
Nebraska	2.474	83	12	236	0	2,031
Nevada	28	3	6	36	192	265
New Hampshire	152	87	23	82	0	344
•	199	63	12	324	1	599
New Jersey New Mexico	445	32	4	110	0	599 591
New York		338	99	588	0	
North Carolina	2,153 1,721	878	31	870	1	3,178 3,501
North Dakota	1,721	26	10	189	0	
Ohio	2,137	283	38	788	0	2,181 3,246
	1,252	153	10	246	0	
Oklahoma	•	335	41	1,087	0	1,661
Oregon	1,347		158		0	2,810
Pennsylvania Rhode Island	1,453 7	519 18	9	1,286 37	0	3,416 71
	699	298	17		0	
South Carolina South Dakota		81	3	316 134	0	1,330
	1,143	390	22	384	0	1,361
Tennessee	1,094		36		3	1,890
Texas	4,211	507		1,544		6,301
Utah	524	46	10	209	0	789
Vermont	450	62	29	109	0	650
Virginia Washington	631	186	14	302	1,731	2,864
Washington	1,446	401	55 46	1,112	0	3,014
West Virginia	885 1 860	641	46	620	1	2,193
Wisconsin	1,860	219	58	690	0	2,827
Wyoming	779	16	0	137	0	932
Puerto Rico	2	0	0	0	0	2
FINAL TOTALS	62,942	12,037	1,605	24,374	2,337	103,295

State	Signs	Signals	No Signs or Signals	Unknown	Total
Alabama	674	22	1,293	1	1,990
Alaska	68	0	36	0	104
Arizona	413	5	264	0	682
Arkansas	254	8	1,246	0	1,508
California	3,562	106	1,181	0	4,849
Colorado	740	18	551	0	1,309
Connecticut	211	42	8	0	261
Delaware	10	1	108	0	119
Dist Of Columbia	0	0	8	0	8
Florida	937	53	461	0	1,451
Georgia	1,391	12	1,338	1	2,742
Idaho	274	10	1,034	0	1,318
Illinois	569	104	4,947	0	5,620
Indiana	263	38	2,514	0	2,815
Iowa	675	15	3,523	0	4,213
Kansas	272	5	3,937	0	4,214
Kentucky	632	33	2,025	0	2,690
Louisiana	413	34	2,757	0	3,204
Maine	291	16	627	0	934
Maryland	140	10	558	0	708
Massachusetts	174	13	350	0	537
Michigan	314	34	2,350	0	2,698
Minnesota	1,101	18	1,997	0	3,116
Mississippi	193	5	1,843	0	2,041
Missouri	249	26	3,017	0	3,292
Montana	512	9	1,530	0	2,051
Nebraska	220	6	2,579	0	2,805
Nevada	107	7	150	1	265
New Hampshire	49	4	291	0	344
New Jersey	157	15	427	0	599
New Mexico	230	2	359	0	591
New York	325	33	2,820	0	3,178
North Carolina	1,331	29	2,141	0	3,501
North Dakota	368	2	1,811	0	2,181
Ohio	287	39	2,920	0	3,246
0klahoma	307	10	1,343	1	1,661
0regon	933	23	1,853	1	2,810
Pennsylvania	759	37	2,620	0	3,416
Rhode Island	41	1	29	0	71
South Carolina	976	11	343	0	1.330
South Dakota	235	2	1,123	1	1,361
Tennessee	338	12	1,540	0	1,890
Texas	1,638	85	4,578	0	6,301
Utah	173	5	611	0	789
Vermont	72	6	572	0	650
Virginia	466	43	2,355	0	2,864
Washington	584	17	2,413	0	3,014
West Virginia	321	17	1,855	0	2,193
Wisconsin	400	20	2,407	0	2,827
Wyoming	309	5	618	0	932
Puerto Rico	1	1	0	0	2
FINAL TOTALS	24,959	1,069	77,261	6	103,295
	21,000	1,000	,201	· ·	100,200

TABLE 74. PRIVATE CROSSINGS AT-GRADE BY TYPE DEVELOPMENT AND WARNING DEVICE, 1996

State	C: ama	Ci ano la	No Signs	Unknown	Tota1
State	Signs	Signals	or Signals	Unknown	Iotai
Farm	11,630	112	51,199	1	62,942
Residential.	4,042	81	7,914	0	12,037
Recreational	673	31	901	0	1,605
Industrial	8,128	823	15,418	5	24,374
Unknown	486	22	1,829	0	2,337
FINAL TOTALS	24.959	1.069	77.261	6	103.295

TABLE 75. PRIVATE CROSSINGS AT-GRADE BY RAILROAD AND TYPE DEVELOPMENT, 1996

Total	Unknown	Industrial	Recreational	Residential	Farm	Railroad
104	0	81	5	14	4	Alaska Railroad Corporation
27	0	14	0	5	8	Alton & Southern Railroad
68	1	16	3	13	35	Amtrak (National Railroad Passenger Corpora
385	0	118	48	35	184	Bangor & Aroostook Railroad
76	0	76	0	0	0	Belt Railway Company Of Chicago
96	0	44	2	12	38	Bessemer & Lake Erie Railroad Company
36	0	36	0	0	0	Birmingham Southern Railroad Company
15,849	3	3,316	146	1,172	11,212	Burlington Northern Santa Fe
702	0	150	3	24	525	Chicago, Central & Pacific Railroad Company
6,748	1	1,975	214	864	3,694	Consolidated Rail Corporation
10,261	794	2,562	154	1,821	4,930	CSX Transportation
556	0	67	1	8	480	Dakota, Minnesota & Eastern Railroad
446	0	55	37	49	305	Delaware & Hudson Railway Company
611	1	174	12	165	259	Denver & Rio Grande Western Railroad Compan
129	0	87	1	17	24	Duluth, Missabe & Iron Range Railway Compan
20	0	5	7	4	4	Duluth, Winnipeg & Pacific Railway
74	0	34	0	1	39	Elgin, Joliet & Eastern Railway Company
113	86	18	1	3	5	Florida East Coast Railway Company
156	0	19	1	1	135	Gateway Western Railway
297	0	67	4	19	207	Grand Trunk Western Railroad Incorporated
720	0	339	25	90	266	Guilford Rail System
43	0	42	0	1	0	Houston Belt & Terminal Railway Company
1,588	0	330	8	210	1,040	Illinois Central Railroad Company
43	0	41	0	2	0	Indiana Harbor Belt Railroad Company
1,857	0	351	9	265	1,232	Kansas City Southern Railway Company
82	0	8	3	4	67	Long Island Rail Road
60	0	33	7	8	12	Metro North Commuter Railroad Company
681	0	138	15	62	466	Montana Rail Link
97	0	33	5	16	43	New Jersey Transit Rail Operations
10,987	1,112	1,867	73	2,068	5,867	Norfolk Southern Corporation
10	0	3	1	3	3	Northeast Illinois Regional Comuter Rail Co
25	0	15	0	2	8	Northern Indiana Commuter Transportation Di
185	0	36	1	30	118	Paducah & Louisville Railway Company
2	0	1	0	0	1	Port Authority Trans Hudson
2,758	0	472	47	253	1,986	Soo Line Railroad Company
53	0	17	2	12	22	Southeastern Pennsylvania Transportation Au
4,525	86	1,988	104	328	2,019	Southern Pacific Transportation Company
78	0	18	0	5	55	Southern Pacific, Chicago-St. Louis Corpora
763	0	84	4	74	601	St. Louis Southwestern Railway Company
12	0	9	0	0	3	Terminal Railroad Association Of St. Louis
14,344	102	2,896	108	1,050	10,188	Union Pacific Railroad Company
39	0	39	0	0	0	Union Railroad Company (Pittsburgh)
390	0	133	5	36	216	Wheeling & Lake Erie Railway Company
1,162	0	323	24	100	715	Wisconsin Central Ltd. (also Railway)
26,037	151	6,244	525	3,191	15,926	All Unknown Railroads

TABLE 76. PRIVATE CROSSINGS AT-GRADE BY RAILROAD AND WARNING DEVICE, 1996

Rai 1 road	Signs	Signals	No Signs or Signals	Unknown	Tota1
	00		00	0	104
Alaska Railroad Corporation	68	0	36	0	104
Alton & Southern Railroad	4	0	23	0	27
Amtrak (National Railroad Passenger Corpora	31	8	29	0	68
Bangor & Aroostook Railroad	86	5	294	0	385
Belt Railway Company Of Chicago	25	2	49	0	76
Bessemer & Lake Erie Railroad Company	11	0	85	0	96
Birmingham Southern Railroad Company	11	3	22	0	36
Burlington Northern Santa Fe	3,929	165	11,754	1	15,849
Chicago, Central & Pacific Railroad Company	268	2	432	0	702
Consolidated Rail Corporation	901	73	5,774	0	6,748
CSX Transportation	4,103	189	5,968	1	10,261
Dakota, Minnesota & Eastern Railroad	54	0	501	1	556
Delaware & Hudson Railway Company	33	9	404	0	446
Denver & Rio Grande Western Railroad Compan	509	7	95	0	611
Duluth, Missabe & Iron Range Railway Compan	115	2	12	0	129
Duluth, Winnipeg & Pacific Railway	15	0	5	0	20
Elgin, Joliet & Eastern Railway Company	16	3	55	0	74
Florida East Coast Railway Company	54	5	54	0	113
Gateway Western Railway	5	0	151	0	156
Grand Trunk Western Railroad Incorporated	32	13	252	0	297
Guilford Rail System	200	22	498	0	720
Houston Belt & Terminal Railway Company	5	0	38	0	43
Illinois Central Railroad Company	213	23	1,352	0	1,588
Indiana Harbor Belt Railroad Company	19	1	23	0	43
Kansas City Southern Railway Company	226	8	1,623	0	1,857
Long Island Rail Road	3	5	74	0	82
Metro North Commuter Railroad Company	42	13	5	0	60
Montana Rail Link	150	4	527	0	681
New Jersey Transit Rail Operations	36	4	57	0	97
Norfolk Southern Corporation	1,926	79	8,981	1	10,987
Northeast Illinois Regional Comuter Rail Co	5	0	5	0	10
Northern Indiana Commuter Transportation Di	8	7	10	0	25
Paducah & Louisville Railway Company	44	3	138	0	185
Port Authority Trans Hudson	2	0	0	0	2
Soo Line Railroad Company	256	19	2,483	0	2,758
Southeastern Pennsylvania Transportation Au	1	1	51	0	53
Southern Pacific Transportation Company	1,987	99	2,439	0	4,525
Southern Pacific, Chicago-St. Louis Corpora	5	1	72	0	78
St. Louis Southwestern Railway Company	187	6	570	0	763
Terminal Railroad Association Of St. Louis	4	0	8	0	12
Union Pacific Railroad Company	2,531	105	11,707	1	14,344
Union Railroad Company (Pittsburgh)	19	0	20	0	39
Wheeling & Lake Erie Railway Company	67	2	321	0	390
Wisconsin Central Ltd. (also Railway)	190	3	969	0	1,162
		_	000	_	-,
All Unknown Railroads	6,563	178	19,295	1	26,037

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:

 $Gates^3$ Highest 8) Flashing lights 7) Highway signals, wigwags or bells 6) 5) Special warning devices 3) Stop signs Crossbucks 4) 2) Other signs No signs or signals 1) Lowest

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.