



U.S. Department
of Transportation
Federal Railroad
Administration

TRESPASSER BULLETIN

VOLUME 3
CALENDAR YEAR 1993



TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Introduction	1
1. Trespasser Fatalities and Injuries, Charts and Tables	
Fatalities Reported by Railroads.....	2
Fatalities and Injuries by Year	3
Fatalities and Injuries by Month	3
Fatalities by Age (1984 - 1993)	4
Trespasser Fatalities.....	5
Trespasser Injuries.....	6
1993 versus 1992 Fatalities and Injuries by State	7
Fatalities Reported (1975 - 1993).....	8
Fatalities and Injuries by Railroad	9
Fatalities and Injuries by Type of Railroad ...	10
Fatalities and Injuries by Accident/Incident ..	11
Nature of Trespasser Injuries	12
National Fatality Rates (1984 - 1993).....	13
Fatality Rates by State (1984 - 1993)	14
2. Definitions	15-17

INTRODUCTION

The third annual report, issued by the Federal Railroad Administration's (FRA) Office of Safety, provides information concerning trespassers who were killed or injured as a result of railroad operations and includes all reportable situations.

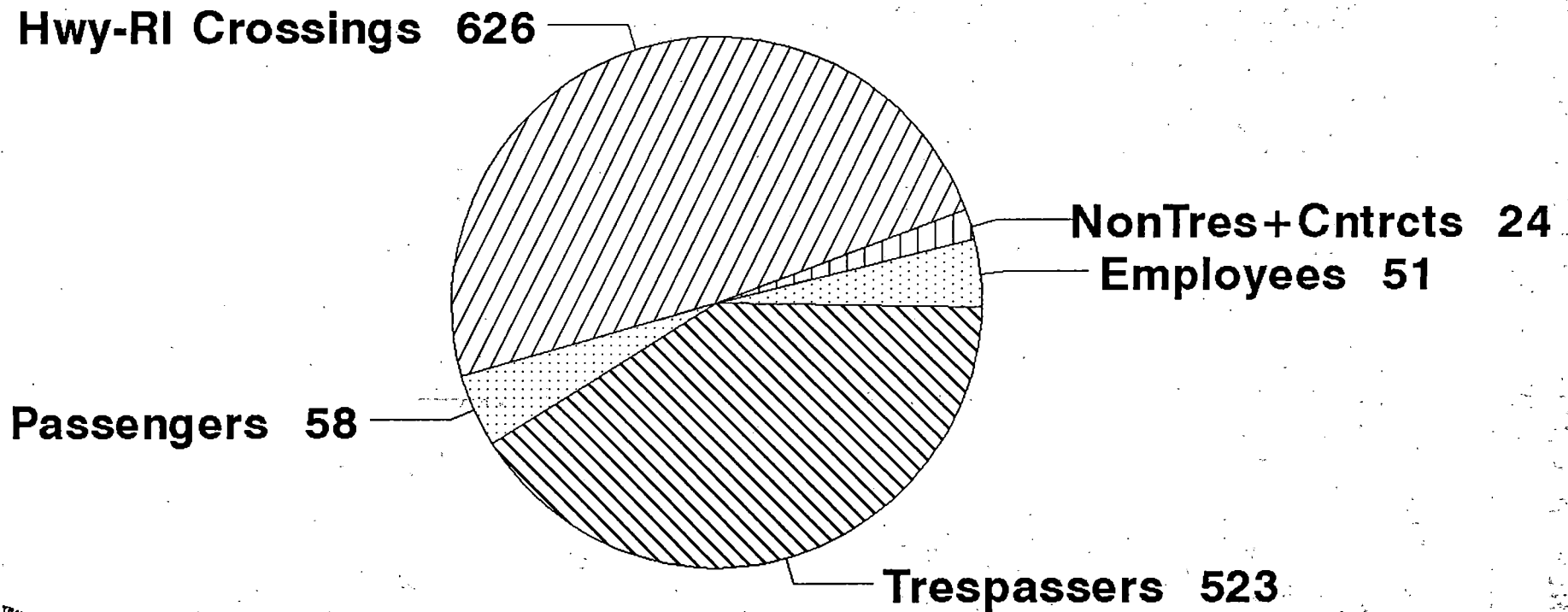
In 1993, 523 people were killed and another 509 seriously injured while trespassing on railroad property. Trespassers are defined as people who are on private property used in railroad operations (e.g., walking on a track) and whose presence is prohibited or unlawful. For purposes of this bulletin, trespassers killed or injured at highway-rail crossings are excluded.

Under the Federal Railroad Safety Act (45 U.S.C. 38-34), all railroads must file with the FRA an Injury and Illness Summary report of all operating incidents which result in fatalities and injuries. This bulletin, derived from submitted reports, does not include data regarding suicides and attempted suicides (as determined by a coroner or other public authority) or casualties resulting from accidents at highway-rail crossings.

Information is presented relating to fatalities and injuries resulting from trespassing by State, railroad, age, extent of injuries, and fatality rates.

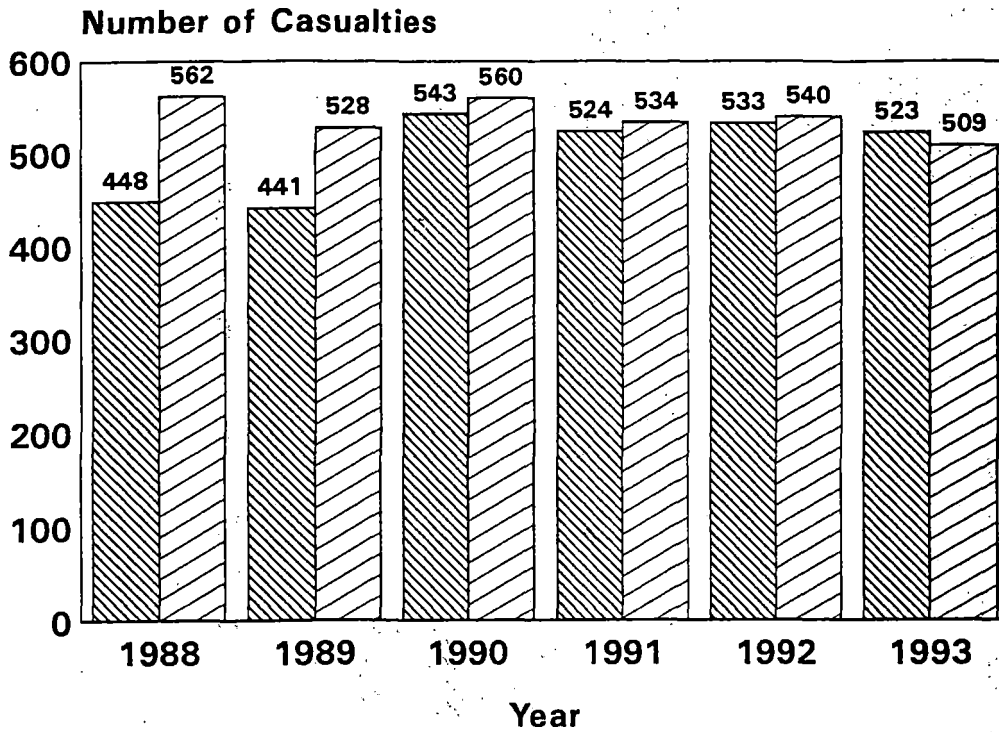
This publication is available on an individual basis offered by the Highway-Rail Crossing and Trespasser Programs Division of the Office of Safety Analysis. To order, call (202) 366-0533, or write to Federal Railroad Administration, Room 8301, RRS-23, 400 Seventh Street N.W., Washington, DC 20590.

1993 FATALITIES Reported by Railroads

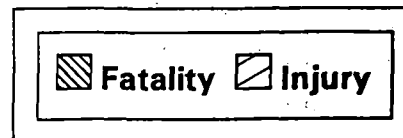
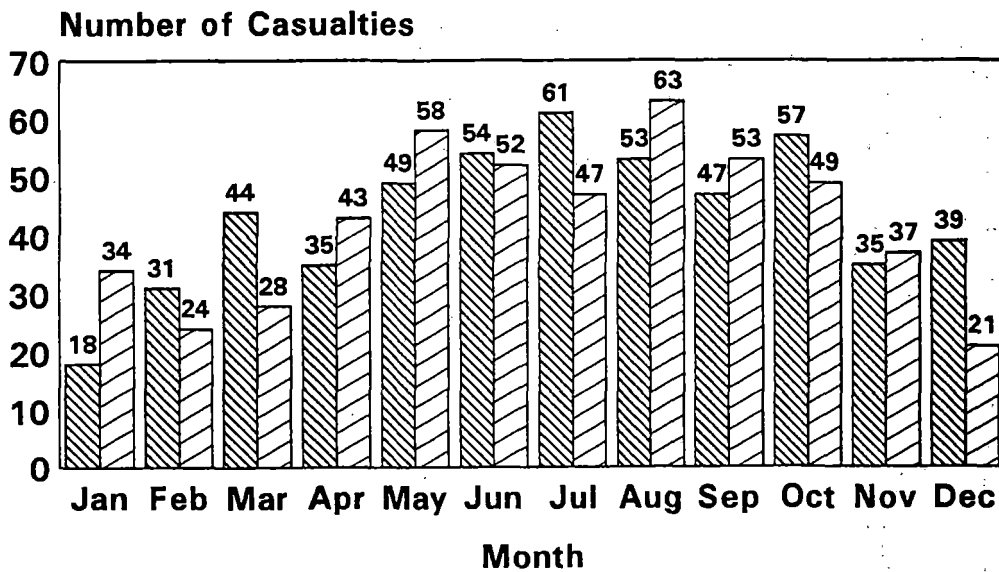


Source: Federal Railroad Administration
626 crossing fatalities incl 3 employees

TRESPASSER FATALITIES AND INJURIES BY YEAR (1988-1993)



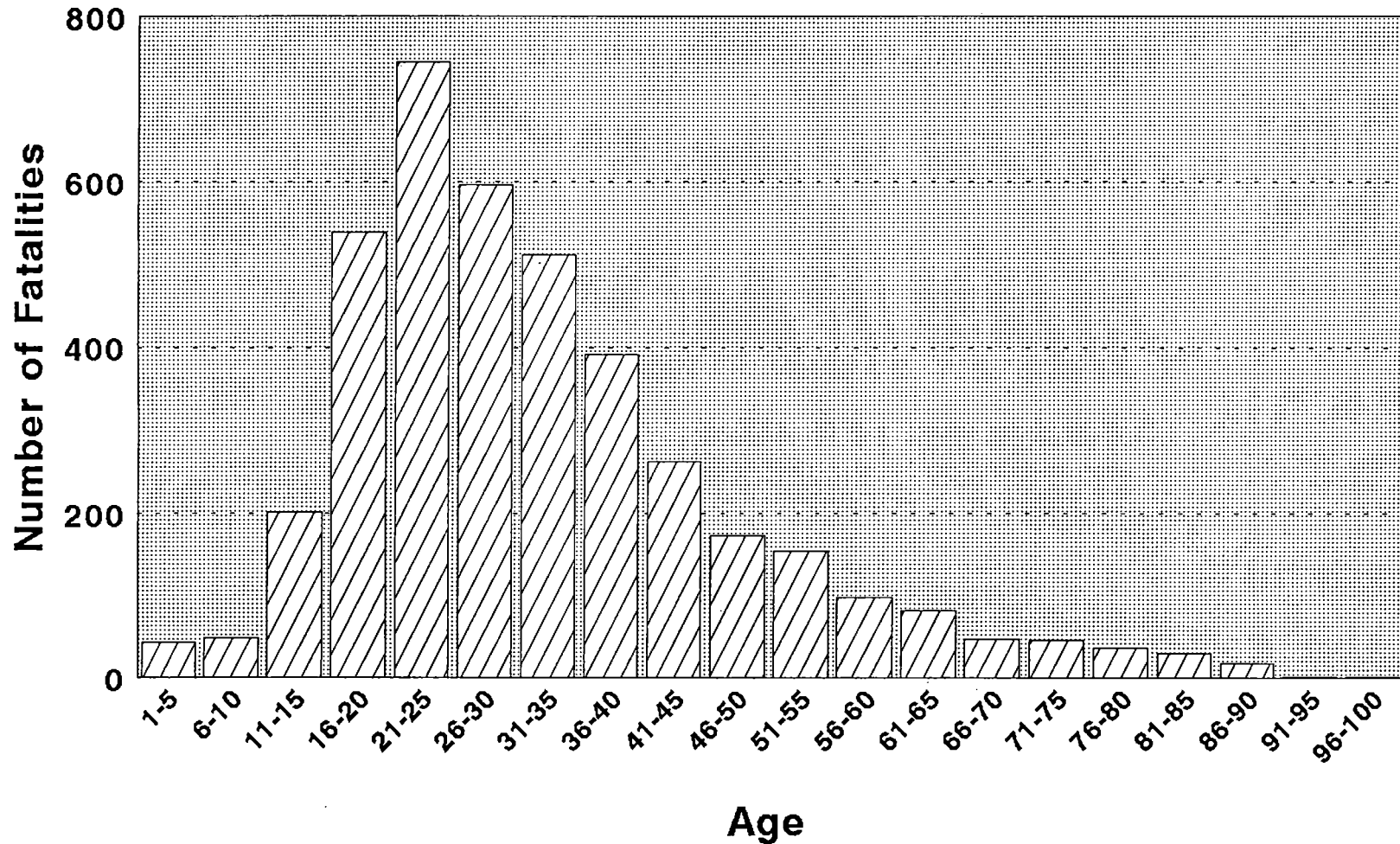
1993 TRESPASSER FATALITIES AND INJURIES BY MONTH



Source:
Federal Railroad Administration

TRESPASSER FATALITIES BY AGE

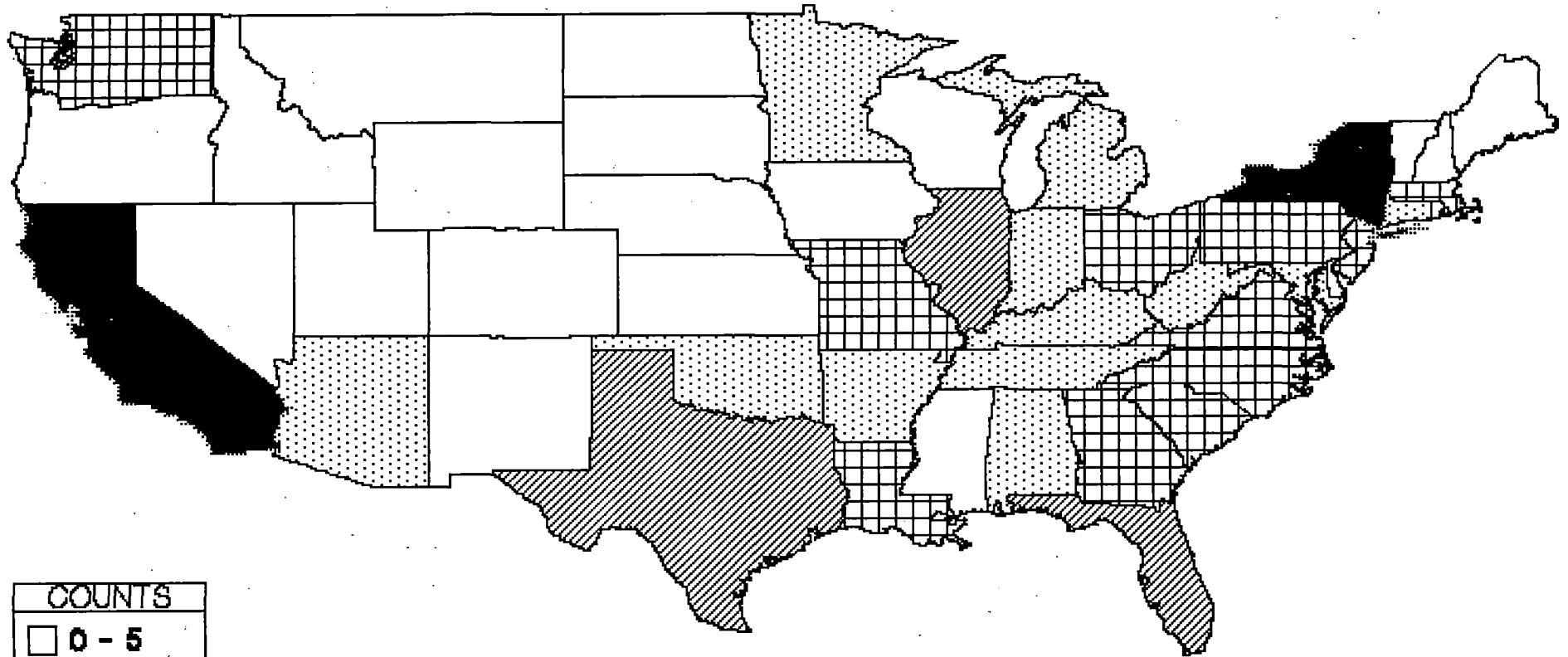
(1984-1993)



Ages 16 thru 35 comprised 50 percent of fatalities.

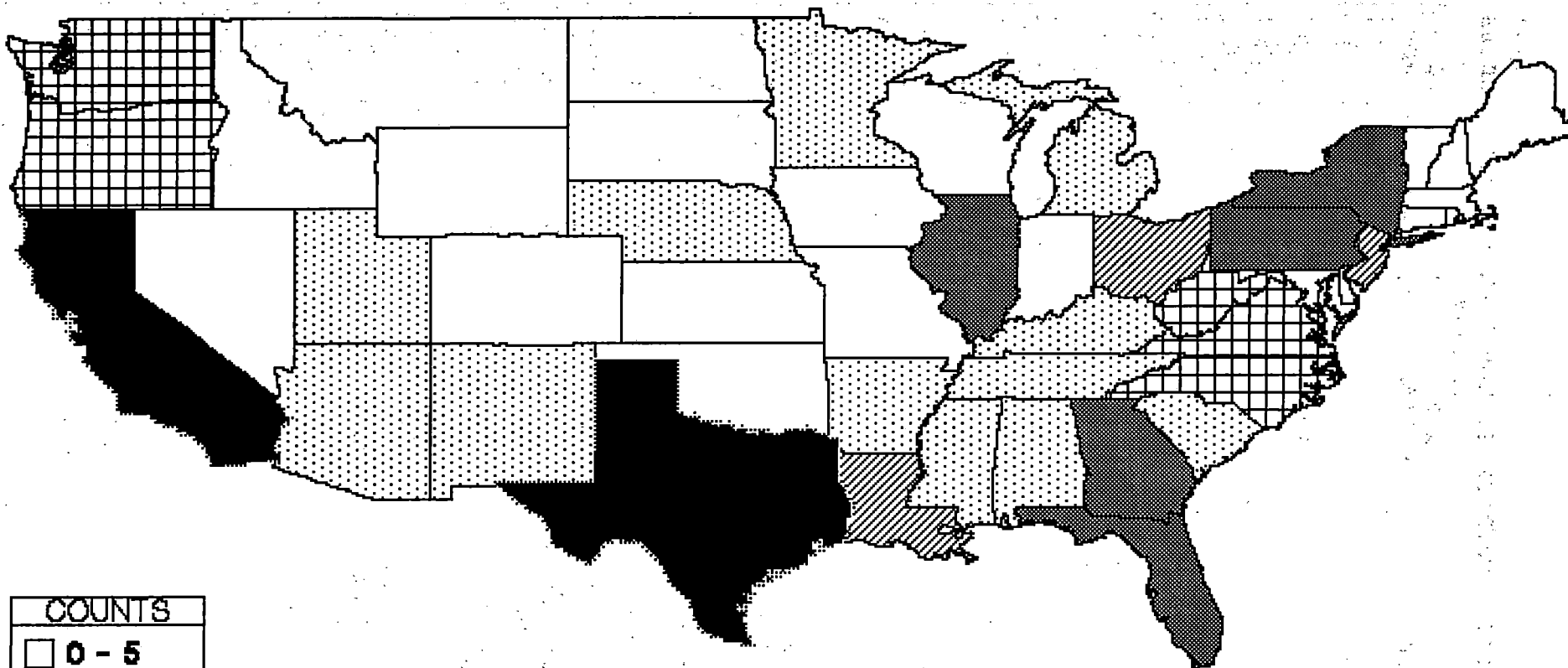
Source: Federal Railroad Administration

1993 TRESPASSER FATALITIES



COUNTS	
□	0 - 5
▤	6 - 10
▣	11 - 15
▨	16 - 20
■	21 - 40
■	Over 40

1993 TRESPASSER INJURIES



COUNTS

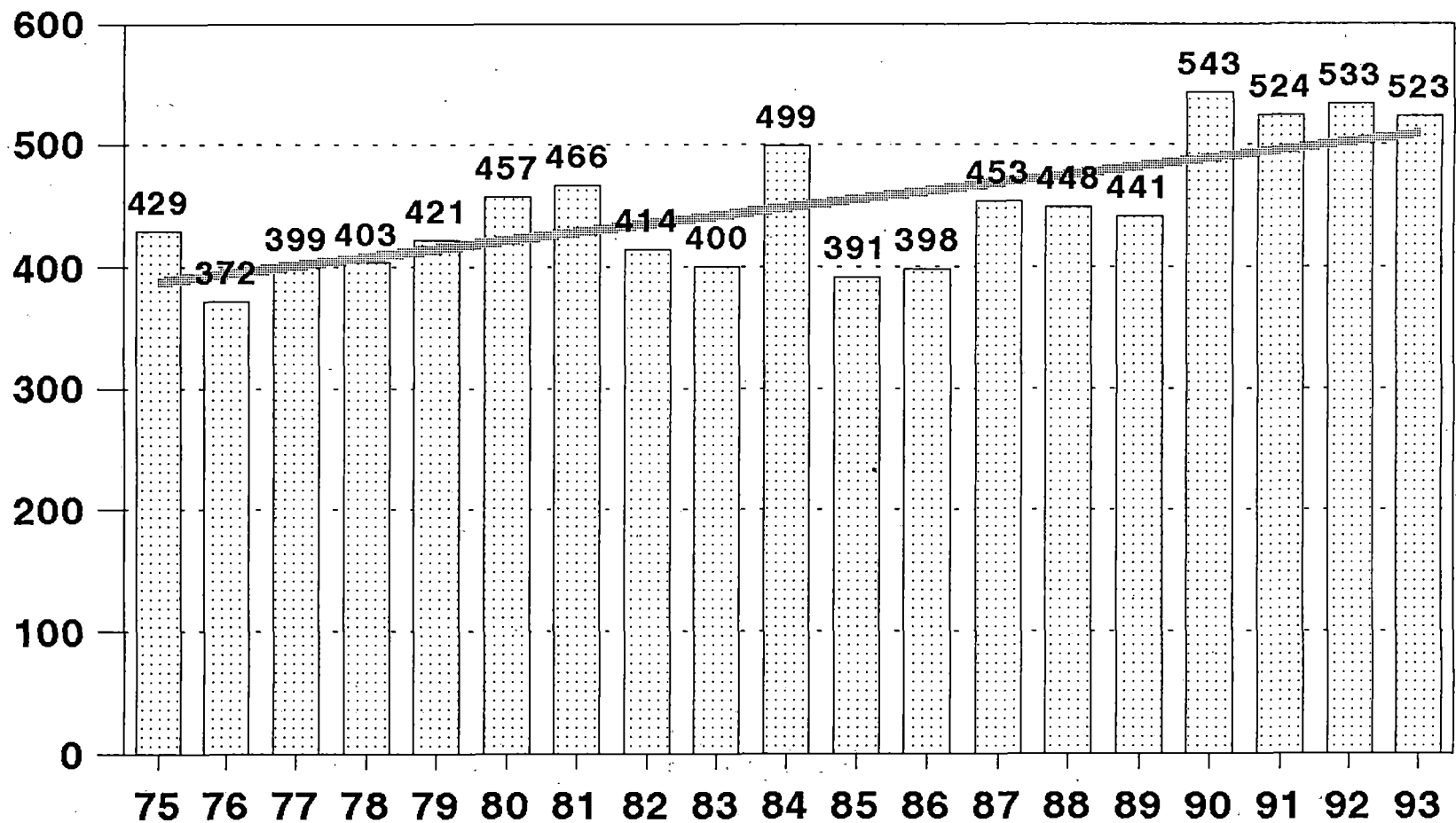
□	0 - 5
▤	6 - 10
▧	11 - 15
▨	16 - 20
▩	21 - 40
■	Over 40

**TRESPASSER FATALITIES AND INJURIES 1993 VERSUS 1992
BY STATE**

STATE	1992 KILLED	1992 INJURED	1993 KILLED	1993 INJURED
Alabama	4	10	8	8
Alaska	1			
Arizona	10	11	7	10
Arkansas	6	8	7	8
California	63	59	98	42
Colorado	9	6	3	2
Connecticut	2	3	7	2
Delaware			2	1
Dist. of Columbia	1			
Florida	17	27	27	24
Georgia	17	21	12	21
Idaho	3	5	2	5
Illinois	34	34	30	37
Indiana	14	14	10	4
Iowa	6	9	1	2
Kansas	6	13	4	3
Kentucky	8	8	6	7
Louisiana	7	9	16	20
Maryland	9	3	6	5
Massachusetts	7	10	12	5
Michigan	14	16	8	10
Minnesota	8	6	6	8
Mississippi	12	6	1	6
Missouri	13	3	15	4
Montana	5	4	5	2
Nebraska	4	4	5	6
Nevada	2	5	1	
New Jersey	25	18	18	18
New Mexico	4	5	2	7
New York	30	33	42	32
North Carolina	19	20	20	15
North Dakota	1	4		1
Ohio	15	16	17	17
Oklahoma	14	3	7	3
Oregon	4	12	4	13
Pennsylvania	23	15	17	33
Rhode Island			1	
South Carolina	14	14	16	10
South Dakota		1	1	1
Tennessee	14	3	9	7
Texas	46	58	28	61
Utah		4	3	7
Vermont				1
Virginia	12	12	15	11
Washington	13	8	13	13
West Virginia	5	8	6	11
Wisconsin	5	6	4	4
Wyoming	7	6	1	2
FINAL TOTALS	533	540	523	509



Trespasser Fatalities U.S. Railroads



— Trend

Source: Federal Railroad Administration

1993 TRESPASSER FATALITIES AND INJURIES BY RAILROAD

	<u>FATALITIES</u>	<u>INJURIES</u>
ATLANTIC & EAST CAROLINA RAILWAY	1	1
ALABAMA GREAT SOUTHERN RAILROAD (NSX)	4	2
ARKANSAS & MISSOURI RAILROAD COMPANY	0	2
AMTRAK (NATIONAL RAILROAD PASSENGER CORP)	96	20
ATCHISON, TOPEKA & SANTA FE RAILWAY CO.	20	26
BURLINGTON NORTHERN RAILROAD CO.	35	29
CENTRAL OF GEORGIA RAILROAD COMPANY (NSX)	2	2
CENTRAL MICHIGAN RAILWAY COMPANY	1	0
CINCINNATI, NEW ORLEANS & TEXAS PACIFIC	3	0
CHICAGO & NORTH WESTERN TRANSPORTATION CO.	11	11
CONSOLIDATED RAIL CORPORATION	49	44
CSX TRANSPORTATION	54	59
CENTRAL VERMONT RAILWAY, INC.	1	0
DELAWARE & HUDSON RAILWAY CO.	7	11
DENVER & RIO GRANDE WESTERN RAILROAD CO.	2	0
ELGIN, JOLIET & EASTERN RAILWAY CO.	1	0
EASTERN SHORE RAILROAD INCORPORATED	1	0
FLORIDA EAST COAST RAILWAY COMPANY	13	13
FOX RIVER VALLEY RAILROAD CORP.	1	1
GREEN MOUNTAIN RAILROAD CORPORATION	0	1
GEORGIA SOUTHERN & FLORIDA COMPANY (NXS)	1	2
GRAND TRUNK WESTERN RAILROAD INCORPORATED	5	6
IOWA INTERSTATE RAILROAD	0	1
ILLINOIS CENTRAL RAILROAD COMPANY	3	5
INDIANA HARBOR BELT RAILROAD COMPANY	0	7
JAXPORT TERMINAL RAILWAY COMPANY	0	1
KANSAS CITY SOUTHERN RAILWAY COMPANY	9	8
LONG ISLAND RAIL ROAD	11	10
LAKE STATE RAILWAY COMPANY	1	0
METRO NORTH COMMUTER RAILROAD COMPANY	6	5
MONTANA RAIL LINK	4	2
MISSISSIPPI EXPORT RAILROAD COMPANY	1	0
MIDSOUTH RAILROAD CORPORATION	0	1
NORTHEAST ILLINOIS REGIONAL COMMUTER RAIL	2	5
NEW JERSEY TRANSIT RAIL OPERATIONS	11	11
NEW ORLEANS TERMINAL COMPANY	9	1
NORFOLK SOUTHERN CORPORATION	30	37
NORFOLK & WESTERN RAILWAY COMPANY	17	26
NEW YORK, SUSQUEHANNA & WESTERN RAILROAD	3	3
OCTORARO RAILWAY INCORPORATED	0	1
PADUCAH & LOUISVILLE RAILWAY COMPANY	0	1
PORT TERMINAL RAILROAD ASSOCIATION	0	1
SOUTHERN CALIFORNIA REGIONAL RAIL AUTH.	6	2
SANTA CRUZ, BIG TREE & PACIFIC RAILROAD	0	1
SAN DIEGO & IMPERIAL VALLEY	1	0
SOUTHEASTERN PENNSYLVANIA TRANSP. AUTHORITY	4	2
SAN JOAQUIN VALLEY RAILROAD COMPANY	0	1
SOUTH KANSAS & OKLAHOMA RAILROAD COMPANY	0	1
SOO LINE RAILROAD COMPANY	1	5
SOUTHERN PACIFIC TRANSPORTATION COMPANY	43	45
SOUTHRAIL CORPORATION	0	1
ST. LOUIS SOUTHWESTERN RAILWAY COMPANY	2	2
SPRINGFIELD TERMINAL RAILWAY COMPANY	2	1
TRI-COUNTY COMMUTER RAIL AUTHORITY	3	0
TEXAS MEXICAN RAILWAY COMPANY	0	1
TEXAS, OKLAHOMA & EASTERN RAILROAD CO.	1	0
TRANSKENTUCKY TRANSPORTATION RAILROAD, INC.	0	1
UNION PACIFIC RAILROAD COMPANY	53	87
WISCONSIN CENTRAL LTD.	0	3
WINCHESTER & WESTERN RAILROAD COMPANY	1	0
TOTALS	523	509

1993 TRESPASSER FATALITIES AND INJURIES BY TYPE OF RAILROAD

	<u>FATALITIES</u>	<u>INJURIES</u>
TRAIN ACCIDENTS		
CLASS I RAILROADS	3	2
GROUP II RAILROADS*	0	1
ALL OTHER RAILROADS	0	0
<hr/>		
TOTALS	3	3
<hr/>		
TRAIN INCIDENTS		
CLASS I RAILROADS	423	398
GROUP II RAILROADS*	58	50
ALL OTHER RAILROADS	20	14
<hr/>		
TOTALS	501	462
<hr/>		
NON-TRAIN INCIDENTS		
CLASS I RAILROADS	15	18
GROUP II RAILROADS*	3	24
ALL OTHER RAILROADS	1	2
<hr/>		
TOTALS	19	44
<hr/>		
OVERALL TOTALS		
CLASS I RAILROADS	441	418
GROUP II RAILROADS*	61	75
ALL OTHER RAILROADS	21	16
<hr/>		
GRAND TOTALS	523	509

*GROUP II RAILROADS: Railroads, excluding CLASS I, with annual accumulation of over 400,000 employee hours worked

1993 TRESPASSER FATALITIES AND INJURIES BY ACCIDENT/INCIDENT

	<u>FATALITIES</u>	<u>INJURIES</u>
TRAIN ACCIDENTS		
DERAILMENTS	3	
MISCELLANEOUS		3
<hr/>		
TOTAL	3	3
<hr/>		
TRAIN INCIDENTS		
GETTING ON OR OFF CARS OR LOCOMOTIVES	6	44
COLLISIONS/DERAILMENTS	16	10
STRUCK BY/RAN INTO CAR OR LOCOMOTIVE	470	365
WINDOWS, DOORS ON ON-TRACK EQUIPMENT		2
STUMBLING/SLIPPING/FALLING/CAUGHT	2	15
FLYING OR FALLING OBJECTS	1	2
OPERATION OF ON-TRACK EQUIPMENT		3
OTHER	6	21
<hr/>		
TOTAL	501	462
<hr/>		
NONTRAIN INCIDENTS		
GETTING ON OR OFF CARS OR LOCOMOTIVES		1
STRUCK BY/RAN INTO CAR OR LOCOMOTIVE	6	4
STUMBLING/SLIPPING/FALLING	3	16
FLYING OR FALLING OBJECTS	1	4
WINDOWS, DOORS ON ON-TRACK EQUIPMENT		1
ASSAULT		1
OTHER	9	17
<hr/>		
TOTAL	19	44
<hr/>		
GRAND TOTAL	523	509

*Note: Nontrain incident involving "car or locomotive" implies stationary equipment.

NATURE OF TRESPASSER INJURIES

<u>NATURE OF INJURY</u>	<u>NUMBER OF INJURIES</u>	
	<u>1992</u>	<u>1993</u>
BRUISE/CONTUSION	49	62
SPRAIN/STRAIN	8	5
CUT/LACERATION/ABRASION	117	110
PUNCTURE WOUND	1	2
ELECTRICAL SHOCK/BURN	11	6
DISLOCATION	1	5
FRACTURE	92	106
DENTAL RELATED	2	
AMPUTATION	131	131
CONCUSSION	11	3
NERVOUS SHOCK	2	
INTERNAL INJURY	23	15
REACTION/CHEMICALS	1	
OTHER	91	64
<hr/>		
TOTAL	540	509
<hr/>		

TRESPASSER FATALITY RATES
(FATALITY RATES X 100 / ROW MILES) 1984-1993

<u>STATE</u>	<u>10-YEAR FATALITIES</u>	<u>ROW MILES</u>	<u>FATALITY RATE</u> <u>1/</u>
Alabama	74	3,180	2.32
Arizona	89	1,413	6.29
Arkansas	47	2,036	2.30
California	559	5,537	10.09
Colorado	43	3,267	1.31
Connecticut	44	192	22.91
Delaware	17	226	7.52
District of Col.	8	37	21.62
Florida	272	2,037	13.35
Georgia	135	3,909	3.45
Idaho	20	1,665	1.20
Illinois	299	7,104	4.20
Indiana	111	3,492	3.17
Iowa	27	3,238	.83
Kansas	43	4,830	.89
Kentucky	75	2,425	3.09
Louisiana	80	2,401	3.33
Maine	6	-	0.00
Maryland	71	792	8.96
Massachusetts	86	441	19.50
Michigan	76	2,458	3.09
Minnesota	72	4,509	1.59
Mississippi	44	1,463	3.00
Missouri	79	4,669	1.69
Montana	37	2,266	1.63
Nebraska	35	3,810	.91
Nevada	18	1,352	1.33
New Hampshire	1	-	0.00
New Jersey	246	957	25.70
New Mexico	41	1,893	2.16
New York	317	2,413	13.13
North Carolina	176	2,614	6.73
North Dakota	15	3,276	.45
Ohio	156	4,543	3.43
Oklahoma	68	2,886	2.35
Oregon	54	2,361	2.28
Pennsylvania	206	3,606	5.71
Rhode Island	6	-	0.00
South Carolina	115	2,184	5.26
South Dakota	1	1,173	.08
Tennessee	81	2,199	3.68
Texas	382	10,315	3.70
Utah	18	1,396	1.28
Vermont	1	-	0.00
Virginia	129	3,261	3.95
Washington	151	2,767	5.45
West Virginia	61	2,700	2.25
Wisconsin	43	1,765	2.43
Wyoming	14	1,785	.78
TOTAL	4,749	122,843	3.86

1/ The fatality rates shown here were calculated by multiplying the total number of fatalities which occurred in each state during the 10-year period 1984-1993 by 100 then dividing by the total number of right-of-way track miles for Class I railroads within the state.

Definitions

Accident/Incident

The term used to identify the group of events or situations related to a railroad's operation that are required to be reported. These include fatalities, injuries and illnesses; collisions, derailments, and similar events involving the operation of on-track equipment which resulted in monetary damage above an established threshold; and impacts between rail on-track equipment and highway users at crossings.

Classification of Class I Carriers

Carriers having annual carrier operating revenue of \$251.4 million or more after applying the railroad revenue deflator formula.

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 cross a public highway, road, street, or a private roadway, including sidewalks, pathways, shoulders, etc., at or associated with the crossing site.

Injury

Physical harm to a person resulting from a single event, activity, occurrence, etc. Any injury that requires medical treatment is reportable on that basis alone. However, medical treatment of a first aid nature is not reportable.

Medical Treatment

Includes treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first-aid treatment (one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, etc., which do not normally require medical care) or precautionary measures even when these services are performed by a physician or registered professional personnel.

Note: Further clarification on the definition of medical treatment is cited in the FRA Guide for Preparing Accident/Incident Reports.

Nontrain Incident

An event that results in a reportable casualty, but does not involve the movement of on-track equipment or cause reportable damage above the threshold established for train accidents.

Reporting Threshold

The level of railroad property damage, resulting from a train accident involving on-track equipment, over which a railroad company must report the accident to the Federal Railroad Administration.

Note: The threshold for accidents occurring after December 31, 1990, is \$6,300.

Road-mile

The length in miles of the single or first main track, measured by the distance between terminals or stations, or both. Road miles does not include industrial and yard tracks, sidings, and all other tracks not regularly used by road trains operated in such specific service, and lines operated under a trackage rights agreement.

Train

For purposes of accident/incident reporting, a train is a locomotive or locomotives coupled with or without cars and with or without markers displayed.

Train Accident

An event such as a collision or a derailment that involves the operation of on-track equipment and results in reportable damage to track or equipment above an established threshold.

Train Incident

An event involving the movement of on-track equipment that results in a reportable casualty but does not cause reportable damage above the threshold established for train accidents.

Train-mile

The movement of a train for a distance of one mile measured by the distance between terminals and/or stations. Mileage is not to be increased because of the presence of multiple locomotives in the train.

Note: The movement of a train for a distance of one mile multiplied by the frequency of the schedule equates to the total train-miles for a specified period of time.

Trespassers

Persons who are on that part of railroad property used in railroad operation and whose presence is prohibited, forbidden, or unlawful.

Note: A person on a highway-rail crossing would not normally be classified as a trespasser unless the crossing is protected by gates, or other similar barriers that were closed when the person went on the crossing, or unless the person attempted to pass over, under or between cars or locomotives of a consist occupying the crossing. For purposes of this bulletin, trespassers killed or injured at highway-rail crossings are excluded.