

# **TRUCKS INVOLVED IN FATAL ACCIDENTS FACTBOOK 1999**

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16. Abstract <b>This document presents aggregate statistics on trucks involved in traffic accidents in 1999. The statistics are derived from the Trucks Involved in Fatal Accidents (TIFA) file, compiled by the University of Michigan Transportation Research Institute. The TIFA database provides coverage of all medium and heavy trucks recorded in the Fatality Analysis Reporting System (FARS) file. TIFA combines vehicle, accident, and occupant records from FARS with information about the physical configuration and operating authority of the truck from the TIFA survey.</b>			
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## SI\* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS					APPROXIMATE CONVERSIONS FROM SI UNITS				
Symbol	When You Know	Multiply By	To Find	Symbol	Symbol	When You Know	Multiply By	To Find	Symbol
<b>LENGTH</b>					<b>LENGTH</b>				
	inches	25.4	millimeters	mm	mm	millimeters	0.039	inches	in
in					m	meters	3.28	feet	ft
ft	feet	0.305	meters	m	m	meters	1.09	yards	yd
yd	yards	0.914	meters	m	km	kilometers	0.621	miles	mi
mi	miles	1.61	kilometers	km					
<b>AREA</b>					<b>AREA</b>				
in <sup>2</sup>	square inches	645.2	square millimeters	mm <sup>2</sup>	mm <sup>2</sup>	square millimeters	0.0016	square inches	in <sup>2</sup>
ft <sup>2</sup>	square feet	0.093	square meters	m <sup>2</sup>	m <sup>2</sup>	square meters	10.764	square feet	ft <sup>2</sup>
yd <sup>2</sup>	square yards	0.836	square meters	m <sup>2</sup>	ha	hectares	2.47	acres	ac
ac	acres	0.405	hectares	ha	km <sup>2</sup>	square kilometers	0.386	square miles	mi <sup>2</sup>
mi <sup>2</sup>	square miles	2.59	square kilometers	km <sup>2</sup>					
<b>VOLUME</b>					<b>VOLUME</b>				
fl oz	fluid ounces	29.57	milliliters	mL	mL	milliliters	0.034	fluid ounces	fl oz
gal	gallons	3.785	liters	L	L	liters	0.264	gallons	gal
ft <sup>3</sup>	cubic feet	0.028	cubic meters	m <sup>3</sup>	m <sup>3</sup>	cubic meters	35.71	cubic feet	ft <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.765	cubic meters	m <sup>3</sup>	m <sup>3</sup>	cubic meters	1.307	cubic yards	yd <sup>3</sup>
NOTE: Volumes greater than 1000 L shall be shown in m <sup>3</sup> .									
<b>MASS</b>					<b>MASS</b>				
oz	ounces	28.35	grams	g	g	grams	0.035	ounces	oz
lb	pounds	0.454	kilograms	kg	kg	kilograms	2.202	pounds	lb
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")	Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
<b>TEMPERATURE (exact)</b>					<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celcius temperature	°C	°C	Celcius temperature	1.8C + 32	Fahrenheit temperature	°F
<b>ILLUMINATION</b>					<b>ILLUMINATION</b>				
fc	foot-candles	10.76	lux	lx	lx	lux	0.0929	foot-candles	fc
fl	foot-Lamberts	3.426	candela/m <sup>2</sup>	cd/m <sup>2</sup>	cd/m <sup>2</sup>	candela/m <sup>2</sup>	0.2919	foot-lamberts	fl
<b>FORCE and PRESSURE or STRESS</b>					<b>FORCE and PRESSURE or STRESS</b>				
lbf	poundforce	4.45	newtons	N	N	newtons	0.225	poundforce	lbf
lbf/in <sup>2</sup>	poundforce per square inch	6.89	kilopascals	kPa	kPa	kilopascals	0.145	poundforce per square inch	lbf/in <sup>2</sup>

\* SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380.

(Revised September 1993)

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## ***Introduction***

This report, *Trucks Involved in Fatal Accidents Factbook, 1999*, provides descriptive statistics about medium and heavy trucks involved in fatal accidents. The data come from the Trucks Involved in Fatal Accidents (TIFA) survey program of the Center for National Truck Statistics (CNTS) at the University of Michigan Transportation Research Institute (UMTRI). All records in the TIFA file are for trucks with a Gross Vehicle Weight Rating (GVWR) over 10,000 pounds.

The TIFA file is produced annually from a survey of truck records extracted from the Fatality Analysis Reporting System (FARS) file, compiled by the National Center for Statistics and Analysis at the National Highway Traffic Safety Administration. Accident, vehicle, and driver records that appear to involve a medium or heavy truck are selected from the FARS file. Police reports for each accident represented are requested from the appropriate states. The 1999 TIFA file is a census file, meaning there is one record for each of the 5,233 medium and heavy trucks involved in a fatal accident that year.

Trained and experienced interviewers contact individuals knowledgeable about the truck, including drivers, safety officers, police officers, emergency personnel, and witnesses. The interviewers verify that the vehicle is a truck and then collect information about the truck, truck driver, and the motor carrier that operated the truck. The interview produces a detailed description of the physical configuration of the truck, the operating authority of the truck, and the trip the truck was on at the time of the accident. Editors review each case to ensure accuracy and consistency.

The TIFA file combines the detailed physical description of the vehicle from the TIFA survey with matching accident, driver, and vehicle data from the FARS file. Almost all variables in FARS describing the accident, vehicle, and driver are included in the TIFA file. No FARS data is altered or corrected. The TIFA variables supplement the FARS data with extensive detail on the truck, including cab style; weights, lengths, and axle counts for each unit in the truck configuration; cargo body, cargo type, and cargo weight for each unit; truck operating authority; type of trip; hours driving; and the truck's role in the accident. The methodology, as well as a complete list of variables and data in the TIFA survey, is fully documented in *Trucks Involved in Fatal Accidents Codebook, 1999*.

### ***Report overview***

This report consists of seven sections. The "Trends" section provides data on fatalities and fatal accident involvements from 1995 through 1999. The "Accident conditions" section provides information about the accidents the trucks were involved in, including distributions of truck fatal involvements across states, and information about the weather, road type, and roadway condition at the time of the accident. The "Vehicle" section includes information about truck configuration, cargo body type and cargo carried, and the weights, lengths, and axle counts of

the trucks. The "Driver" section includes information about truck driver injury, licensing, previous driving record, age, sex, and other driver characteristics. The "Straight trucks" section focuses on the characteristics of straight trucks, providing more detail about truck configuration, accident environment, and the truck's role in the accident. The "Tractors" section provides similar data on tractor combinations involved in fatal accidents. Finally, the "Longer combination vehicles" section summarizes data on longer combination trucks involved in a fatal accident.

Virtually all tables present counts of involvements; that is, counts of the trucks involved in a fatal accident by various factors and conditions of interest.

## ***Trends, 1995-1999***

This section contains tables displaying trends in truck involvements in fatal traffic accidents and in the number of persons killed in those accidents. The trends are presented by truck configuration, state, and person type. The truck configurations include straight trucks with no trailers, straight trucks pulling a single trailer, bobtails (tractors with no trailers), tractors with one semitrailer, tractors with two trailers (doubles), and all other truck configurations. The "other combinations" includes both straight truck and tractor configurations that do not fit into any of the previous categories.

- An average of about 5,000 trucks are involved in a fatal traffic accident each year.
- Tractors pulling one semitrailer are the most common truck configuration, accounting for about 60% of all trucks involved in a fatal accident.
- Texas, California, and Florida had the greatest number of truck involvements over the period 1995 to 1999.
- The number of persons killed in accidents involving a truck increased from 5,091 in 1995 to 5,696 in 1999.
- The number of truck drivers killed in traffic accidents increased from 658 in 1998 to 698 in 1999.
- About 375 pedestrians and 75 bicyclists are killed each year in traffic accidents involving trucks.

The following abbreviations are used in this chapter:

<b>Abbreviation</b>	<b>Definition</b>
Strt	Straight truck
Trac	Tractor
Trlrs	Trailers
Combs/Oth combs	Combinations/other combinations
Semi	Semitrailer
Unk	Unknown
Occ	Occupant



**Annual fatal involvements**

**Table 1-1**  
**Fatal Truck Involvements by Year and Truck Configuration**  
**TIFA 1995-1999**

Accident year	Strt truck	Strt/1 trailer	Bobtail	Trac/1 semi	Trac/2 trls	Other combs	Unk.	Total
	No.	No.	No.	No.	No.	No.	No.	No.
1995	1346	160	135	2667	176	34	113	4631
1996	1377	192	164	2943	178	54	99	5007
1997	1397	202	134	3020	216	39	122	5130
1998	1420	210	135	3094	164	47	128	5198
1999	1483	224	130	3159	151	36	50	5233
Total	7023	988	698	14883	885	210	512	25199

**Table 1-2**  
**Fatal Truck Involvements by Year and All Truck Configurations**  
**TIFA 1995-1999**

Configuration	1995	1996	1997	1998	1999	Total
	No.	No.	No.	No.	No.	No.
Straight only	1346	1377	1397	1420	1483	7023
Straight + full trailer	34	48	41	61	54	238
Straight + other	110	117	142	109	126	604
Straight + other, gooseneck hitch	16	27	19	40	44	146
Wrecker + tow	0	15	11	14	10	50
Strt + other (gooseneck) + A dolly + other	0	1	0	0	0	1
Strt + other (gooseneck) + other	0	1	0	0	0	1
Bobtail tractor	120	148	129	127	110	634
Tractor carrying cargo	13	16	5	8	20	62
Tractor + A dolly	2	0	0	0	0	2
Tractor and semitrailer	2667	2943	3020	3094	3159	14883
Tractor + other	29	27	15	18	18	107
Tractor + semi + A dolly	2	0	1	1	0	4
Tractor + fulltrailer	0	0	0	0	1	1
Double with A dolly	97	113	135	86	87	518
Double, B train	2	0	5	4	1	12
Double with unknown dolly type	1	0	0	1	0	2
Tractor + semi + full	74	65	74	73	62	348
Tractor + semi + other	2	0	2	0	1	5
Triple with A dollies	1	3	3	1	2	10
Tractor + semi + A dolly + semi + full	0	0	1	0	0	1
Tractor + semi + 2 full trailers	0	0	1	0	0	1
Tractor + jeep + semi + jeep	0	2	2	1	0	5
Tractor + semi + jeep	0	0	0	0	1	1
Tractor + jeep + full + jeep	0	0	0	0	1	1
Tractor towing tractor	0	2	1	0	0	3
Tractor towing straight truck	0	1	2	0	0	3
Tractor + 1 saddlemount tractor	0	1	1	0	0	2
Tractor + 2 saddlemount tractors	0	1	1	1	0	3
Tractor + 3 saddlemount tractors	0	0	0	4	1	5
Tractor + saddlemount + cutaway chassis	0	0	0	2	0	2
Straight truck towing straight truck	0	0	0	4	0	4
Straight truck pulling trac/semitrailer	2	0	0	0	0	2
Wrecker and doubles	0	0	0	1	0	1
Wrecker + straight + full	0	0	0	0	1	1
Straight + 2 saddlemount straights	0	0	0	0	1	1
Unknown	113	99	122	128	50	512
<b>Total</b>	<b>4631</b>	<b>5007</b>	<b>5130</b>	<b>5198</b>	<b>5233</b>	<b>25199</b>



Table 1-3: Fatal Truck Involvements by Year and State, TIFA 1995-1999

State	1995	1996	1997	1998	1999	Total
	No.	No.	No.	No.	No.	No.
Alabama	151	142	167	153	146	759
Alaska	9	8	9	2	7	35
Arizona	78	79	75	99	117	448
Arkansas	98	101	122	107	98	526
California	379	387	393	374	347	1880
Colorado	59	57	81	54	65	316
Connecticut	25	32	24	32	24	137
Delaware	10	16	17	23	10	76
Dist of Columbia	3	6	3	2	2	16
Florida	287	284	295	330	344	1540
Georgia	193	221	221	202	233	1070
Hawaii	5	12	3	3	3	26
Idaho	29	41	33	24	26	153
Illinois	167	155	177	185	204	888
Indiana	160	164	164	183	195	866
Iowa	67	88	76	84	102	417
Kansas	63	64	87	82	80	376
Kentucky	104	98	118	103	104	527
Louisiana	87	86	132	149	124	578
Maine	22	14	22	22	27	107
Maryland	52	71	92	73	65	353
Massachusetts	34	36	39	39	37	185
Michigan	174	170	133	155	144	776
Minnesota	80	67	91	86	90	414
Mississippi	107	97	110	114	118	546
Missouri	96	153	139	165	169	722
Montana	28	21	22	19	15	105
Nebraska	43	49	49	43	62	246
Nevada	32	45	24	36	44	181
New Hampshire	7	15	14	12	11	59
New Jersey	91	88	83	67	61	390
New Mexico	42	58	51	51	52	254
New York	157	157	158	135	156	763
North Carolina	188	189	210	244	204	1035
North Dakota	7	9	13	8	20	57
Ohio	211	215	207	202	214	1049
Oklahoma	89	97	103	115	97	501
Oregon	70	63	77	67	50	327
Pennsylvania	187	196	181	187	217	968
Rhode Island	6	7	3	2	9	27
South Carolina	92	110	95	133	144	574
South Dakota	14	20	16	13	19	82
Tennessee	116	167	137	135	173	728
Texas	353	440	429	462	434	2118
Utah	27	36	51	53	39	206
Vermont	14	10	15	12	8	59
Virginia	97	126	124	118	108	573
Washington	68	70	84	72	60	354
West Virginia	47	62	55	41	51	256
Wisconsin	93	98	81	94	77	443
Wyoming	13	10	25	32	27	107
Total	4631	5007	5130	5198	5233	25199

Table 1-4: Fatal Truck Involvements by Year and State – STRAIGHT TRUCKS ONLY, TIFA 1995-1999

State	1995	1996	1997	1998	1999	Total
	No.	No.	No.	No.	No.	No.
Alabama	42	37	38	45	29	191
Alaska	2	1	2	2	4	11
Arizona	24	20	22	27	27	120
Arkansas	16	16	19	17	27	95
California	134	115	139	136	118	642
Colorado	26	16	23	17	20	102
Connecticut	6	13	12	17	10	58
Delaware	2	2	5	10	3	22
Dist of Columbia	3	3	2	1	2	11
Florida	116	112	112	138	125	603
Georgia	59	68	73	69	87	356
Hawaii	3	6	1	3	3	16
Idaho	7	13	14	15	8	57
Illinois	60	40	61	44	54	259
Indiana	47	41	39	43	52	222
Iowa	20	22	24	26	16	108
Kansas	17	20	24	13	21	95
Kentucky	36	45	50	42	45	218
Louisiana	24	25	33	43	38	163
Maine	6	9	7	10	11	43
Maryland	20	24	31	30	35	140
Massachusetts	17	15	17	12	15	76
Michigan	62	66	37	57	55	277
Minnesota	27	19	22	28	26	122
Mississippi *	0	2	0	0	11	13
Missouri	32	48	46	44	57	227
Montana	8	10	3	7	5	33
Nebraska	13	15	12	10	15	65
Nevada	6	15	6	9	11	47
New Hampshire	2	3	7	1	5	18
New Jersey	44	37	35	30	24	170
New Mexico	7	11	10	14	9	51
New York	96	78	82	74	76	406
North Carolina	70	68	63	77	78	356
North Dakota	2	2	5	2	5	16
Ohio	72	61	61	62	76	332
Oklahoma	21	35	31	30	30	147
Oregon	30	20	22	25	7	104
Pennsylvania	74	76	69	72	81	372
Rhode Island	3	5	3	2	8	21
South Carolina	19	37	24	30	30	140
South Dakota	2	4	3	4	11	24
Tennessee	32	42	47	38	52	211
Texas	86	128	109	128	172	623
Utah	6	14	14	18	8	60
Vermont	6	6	7	3	5	27
Virginia	33	47	49	41	28	198
Washington	18	26	39	32	27	142
West Virginia	12	17	21	14	22	86
Wisconsin	35	28	29	29	32	153
Wyoming	3	3	6	8	3	23
Total	1508	1586	1610	1649	1719	8072

Note: Table includes all truck combinations where the power unit was a straight truck.

\* Mississippi does not provide police reports, so in most years all truck data are unknown.

Table 1-5: Fatal Truck Involvements by Year and State – TRACTOR-SEMITRAILERS ONLY, TIFA 1995-1999

State	1995	1996	1997	1998	1999	Total
	No.	No.	No.	No.	No.	No.
Alabama	101	95	121	100	109	526
Alaska	6	4	5	0	3	18
Arizona	46	51	40	63	83	283
Arkansas	78	77	95	81	57	388
California	173	179	172	168	170	862
Colorado	30	35	50	31	40	186
Connecticut	17	14	11	15	13	70
Delaware	8	14	10	13	7	52
Dist of Columbia	0	3	1	1	0	5
Florida	163	162	170	177	197	869
Georgia	120	141	136	120	138	655
Hawaii	2	4	2	0	0	8
Idaho	14	23	14	5	15	71
Illinois	93	110	104	133	145	585
Indiana	98	108	112	129	133	580
Iowa	43	65	47	58	76	289
Kansas	45	43	57	67	57	269
Kentucky	65	50	63	54	55	287
Louisiana	55	53	92	100	81	381
Maine	13	5	15	11	15	59
Maryland	28	46	57	38	26	195
Massachusetts	17	20	22	25	21	105
Michigan	93	80	82	87	67	409
Minnesota	47	45	67	56	63	278
Mississippi *	0	8	0	0	67	75
Missouri	58	97	90	109	99	453
Montana	13	10	17	10	7	57
Nebraska	29	34	36	31	45	175
Nevada	19	23	11	22	27	102
New Hampshire	5	12	7	11	6	41
New Jersey	45	45	41	36	33	200
New Mexico	33	42	35	35	42	187
New York	59	73	71	57	78	338
North Carolina	114	114	129	156	115	628
North Dakota	5	7	7	6	15	40
Ohio	126	148	140	125	133	672
Oklahoma	65	57	67	80	64	333
Oregon	34	36	40	36	34	180
Pennsylvania	102	107	103	104	127	543
Rhode Island	3	2	0	0	1	6
South Carolina	68	64	61	94	106	393
South Dakota	10	16	12	9	7	54
Tennessee	74	110	79	89	114	466
Texas	239	275	293	314	251	1372
Utah	16	15	31	23	26	111
Vermont	8	4	8	7	3	30
Virginia	60	71	71	74	73	349
Washington	38	34	32	25	20	149
West Virginia	31	38	33	27	28	157
Wisconsin	52	67	45	63	44	271
Wyoming	6	7	16	19	23	71
Total	2667	2943	3020	3094	3159	14883

\* Mississippi does not provide police reports, so in most years all truck data are unknown.

Table 1-6: Fatal Truck Involvements by Year and State – DOUBLES ONLY, TIFA 1995-1999

State	1995	1996	1997	1998	1999	Total
	No.	No.	No.	No.	No.	No.
Alabama	4	3	2	0	0	9
Alaska	1	3	2	0	0	6
Arizona	6	5	9	6	3	29
Arkansas	1	2	3	4	5	15
California	51	59	61	56	40	267
Colorado	2	3	5	4	1	15
Connecticut	0	1	0	0	0	1
Delaware	0	0	1	0	0	1
Dist of Columbia	0	0	0	0	0	0
Florida	1	1	3	2	3	10
Georgia	2	3	3	3	1	12
Hawaii	0	0	0	0	0	0
Idaho	5	3	3	4	2	17
Illinois	8	1	3	5	3	20
Indiana	6	6	7	5	7	31
Iowa	3	0	1	0	3	7
Kansas	0	0	5	2	0	7
Kentucky	1	1	3	1	1	7
Louisiana	1	5	0	1	1	8
Maine	0	0	0	1	0	1
Maryland	0	0	3	0	1	4
Massachusetts	0	0	0	0	1	1
Michigan	11	13	14	5	15	58
Minnesota	2	1	1	0	1	5
Mississippi *	0	0	0	0	2	2
Missouri	3	3	2	6	9	23
Montana	7	1	2	2	2	14
Nebraska	0	0	0	1	1	2
Nevada	4	6	6	2	5	23
New Hampshire	0	0	0	0	0	0
New Jersey	1	0	2	1	0	4
New Mexico	1	4	5	1	1	12
New York	0	1	1	3	0	5
North Carolina	1	3	5	0	4	13
North Dakota	0	0	1	0	0	1
Ohio	4	1	4	4	4	17
Oklahoma	2	3	4	1	0	10
Oregon	4	5	8	3	7	27
Pennsylvania	3	8	5	4	3	23
Rhode Island	0	0	0	0	0	0
South Carolina	1	5	1	1	5	13
South Dakota	1	0	1	0	1	3
Tennessee	6	8	5	3	4	26
Texas	8	8	7	2	1	26
Utah	5	6	6	12	3	32
Vermont	0	0	0	0	0	0
Virginia	3	1	4	3	2	13
Washington	11	2	11	11	6	41
West Virginia	1	3	1	0	1	6
Wisconsin	2	0	3	0	1	6
Wyoming	3	0	3	5	1	12
Total	176	178	216	164	151	885

\* Mississippi does not provide police reports, so in most years all truck data are unknown.

## Annual fatalities

**Table 1-7**  
**Fatalities in Truck Involvements by Year and Person Type**  
**TIFA 1995-1999**

Vehicle/Person type	1995		1996		1997		1998		1999	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Truck</i>										
Driver	571	11.2	569	10.5	668	11.9	658	11.7	698	12.3
Passenger	97	1.9	90	1.7	106	1.9	119	2.1	136	2.4
Unk occ type	3	0.1	2	0.0	1	0.0	2	0.0	2	0.0
Truck total	671	13.2	661	12.3	775	13.8	779	13.8	836	14.7
<i>Other vehicle</i>										
Drivers	2851	56.0	3055	56.6	3069	54.7	3119	55.4	3169	55.6
Passengers	1127	22.1	1197	22.2	1290	23.0	1255	22.3	1216	21.3
Unk occ type	3	0.1	5	0.1	3	0.1	10	0.2	6	0.1
Other vehicle total	3981	78.2	4257	78.9	4362	77.7	4384	77.9	4391	77.1
<i>Non-motorists</i>										
In parked vehicle	11	0.2	29	0.5	18	0.3	14	0.2	12	0.2
Pedestrian	345	6.8	378	7.0	375	6.7	386	6.9	371	6.5
Bicyclist	79	1.6	65	1.2	81	1.4	63	1.1	71	1.2
Other/unknown	4	0.1	5	0.1	4	0.1	3	0.1	15	0.3
Non-motorist total	439	8.6	477	8.8	478	8.5	466	8.3	469	8.2
Total	5091	100.0	5395	100.0	5615	100.0	5629	100.0	5696	100.0



## ***Accident conditions***

This section provides statistics that describe conditions at the scene of fatal traffic accidents involving trucks. Tables present various accident characteristics, including the geographic distribution of truck involvements, temporal and environmental conditions, as well as distributions of collision type and the truck's role in the accident. Though the tables focus on accident-level characteristics, all tables show counts of trucks involved in fatal accidents, rather than counts of accidents. Some fatal traffic accidents include more than one truck.

- August had the greatest number of fatal involvements with 519, while January had the fewest with 340.
- About two-thirds of fatal accident involvements occur in rural areas.
- About two-thirds of fatal accident involvements occur in daylight.
- 83.6% of fatal accident involvements occur on dry roads.
- 86.8% of fatal accident involvements occur in “normal” (i.e., no precipitation) weather conditions.
- 27.9% of fatal involvements occur on state highways, 26.1% on U.S. highways, and 26.1% on Interstate highways.
- In 11.1% of fatal involvements, the other vehicle crossed the center line of the road and struck the truck head on.

The following abbreviations are used in this chapter:

<b>Abbreviation</b>	<b>Definition</b>
Strt	Straight truck
Trac	Tractor
Trlrs	Trailers
Combs/Oth combs	Combinations/Other combinations
Semi	Semitrailer
Veh	Vehicle
Equip	Equipment
Opp	Opposite





### Geographic distributions

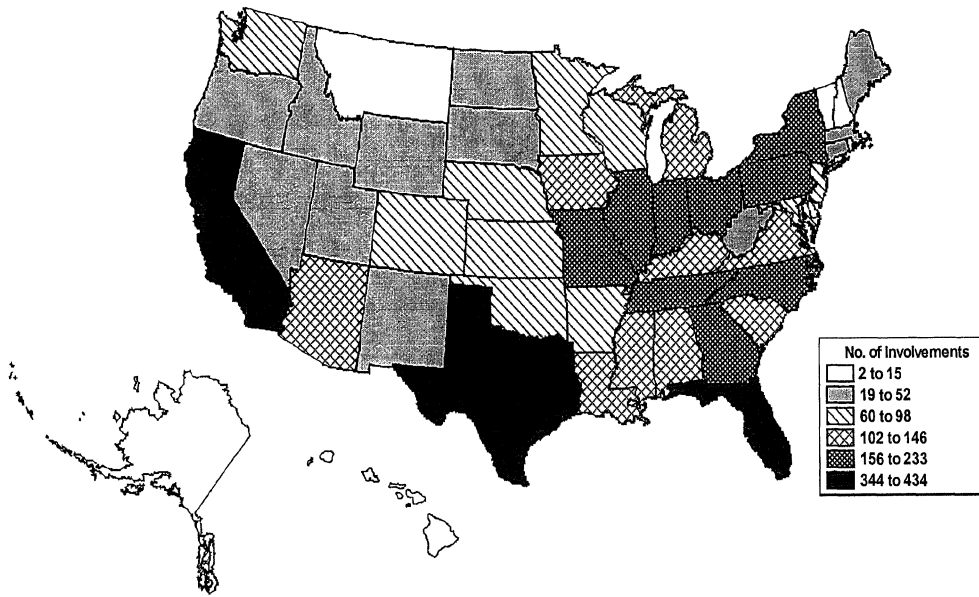


Figure 2-1: Fatal Truck Involvements by State, TIFA 1999

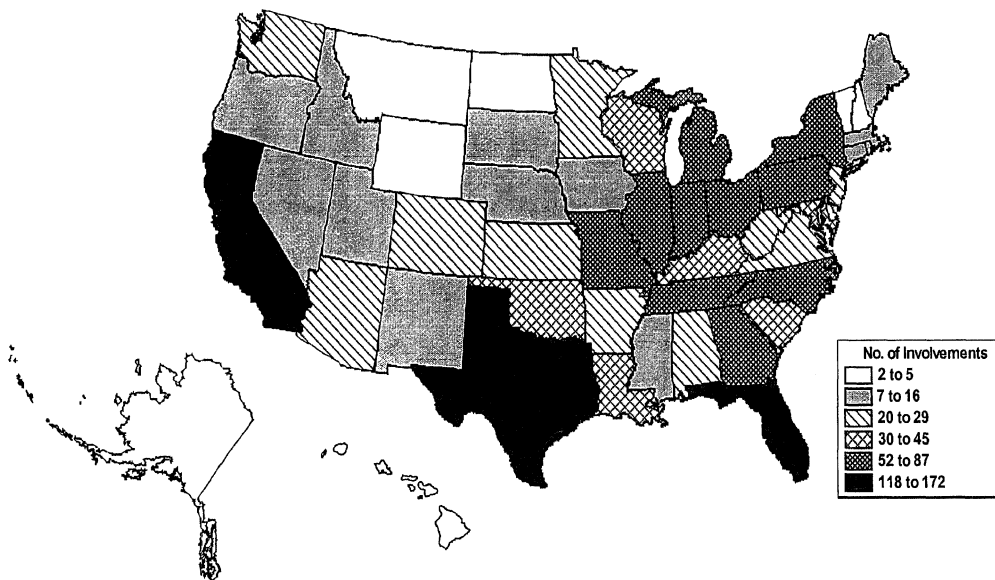


Figure 2-2: Fatal Truck Involvements by State – STRAIGHT TRUCKS ONLY, TIFA 1999

Note: Mississippi does not provide police reports, so most truck data are unknown.

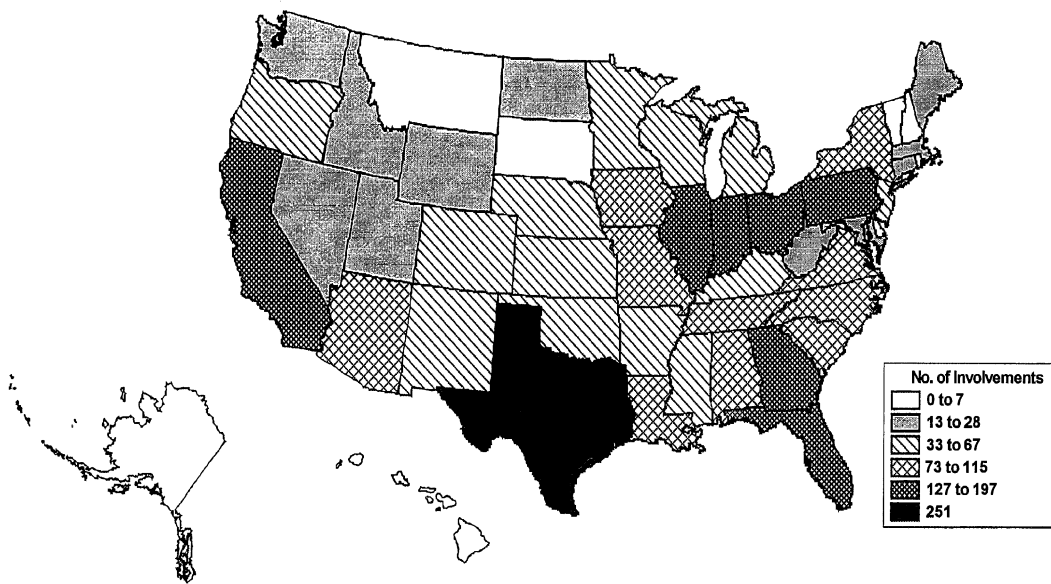


Figure 2-3: Fatal Truck Involvements by State – TRACTOR-SEMITRAILERS ONLY, TIFA 1999

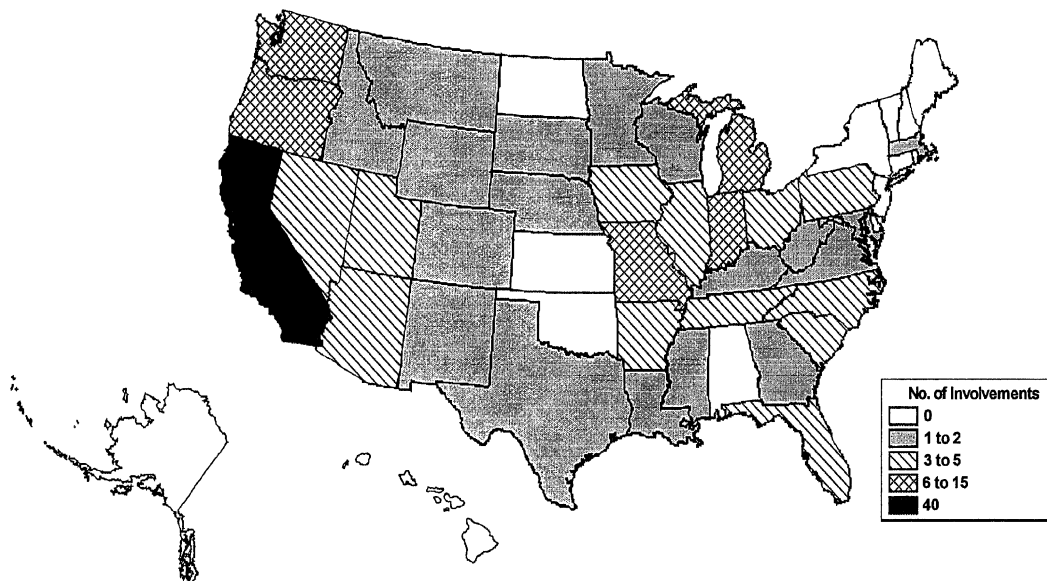


Figure 2-4: Fatal Truck Involvements by State – DOUBLES ONLY, TIFA 1999

Note: Mississippi does not provide police reports, so most truck data are unknown.

Table 2-1: Fatal Truck Involvements by State and Truck Configuration, TIFA 1999

State	Strt Truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Alabama	28	1.9	0	0.0	6	4.6	109	3.5	0	0.0	2	5.6	1	2.0	146	2.8
Alaska	4	0.3	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	7	0.1
Arizona	19	1.3	8	3.6	2	1.5	83	2.6	3	2.0	2	5.6	0	0.0	117	2.2
Arkansas	23	1.6	4	1.8	8	6.2	57	1.8	5	3.3	1	2.8	0	0.0	98	1.9
California	92	6.2	24	10.7	19	14.6	170	5.4	40	26.5	2	5.6	0	0.0	347	6.6
Colorado	18	1.2	2	0.9	1	0.8	40	1.3	1	0.7	2	5.6	1	2.0	65	1.2
Connecticut	10	0.7	0	0.0	1	0.8	13	0.4	0	0.0	0	0.0	0	0.0	24	0.5
Delaware	3	0.2	0	0.0	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	10	0.2
Dist of Columbia	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Florida	108	7.3	16	7.1	15	11.5	197	6.2	3	2.0	3	8.3	2	4.0	344	6.6
Georgia	79	5.3	8	3.6	6	4.6	138	4.4	1	0.7	1	2.8	0	0.0	233	4.5
Hawaii	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
Idaho	7	0.5	1	0.4	1	0.8	15	0.5	2	1.3	0	0.0	0	0.0	26	0.5
Illinois	49	3.3	5	2.2	2	1.5	145	4.6	3	2.0	0	0.0	0	0.0	204	3.9
Indiana	45	3.0	6	2.7	2	1.5	133	4.2	7	4.6	2	5.6	0	0.0	195	3.7
Iowa	14	0.9	2	0.9	2	1.5	76	2.4	3	2.0	0	0.0	5	10.0	102	1.9
Kansas	21	1.4	0	0.0	1	0.8	57	1.8	0	0.0	1	2.8	0	0.0	80	1.5
Kentucky	42	2.8	3	1.3	2	1.5	55	1.7	1	0.7	0	0.0	1	2.0	104	2.0
Louisiana	31	2.1	6	2.7	3	2.3	81	2.6	1	0.7	2	5.6	0	0.0	124	2.4
Maine	11	0.7	0	0.0	0	0.0	15	0.5	0	0.0	1	2.8	0	0.0	27	0.5
Maryland	30	2.0	4	1.8	2	1.5	26	0.8	1	0.7	2	5.6	0	0.0	65	1.2
Massachusetts	14	0.9	1	0.4	0	0.0	21	0.7	1	0.7	0	0.0	0	0.0	37	0.7
Michigan	48	3.2	7	3.1	5	3.8	67	2.1	15	9.9	0	0.0	2	4.0	144	2.8
Minnesota	23	1.6	3	1.3	0	0.0	63	2.0	1	0.7	0	0.0	0	0.0	90	1.7
Mississippi **	9	0.6	2	0.9	2	1.5	67	2.1	2	1.3	1	2.8	35	70.0	118	2.3
Missouri	49	3.3	8	3.6	3	2.3	99	3.1	9	6.0	1	2.8	0	0.0	169	3.2
Montana	4	0.3	1	0.4	0	0.0	7	0.2	2	1.3	1	2.8	0	0.0	15	0.3
Nebraska	12	0.8	3	1.3	0	0.0	45	1.4	1	0.7	1	2.8	0	0.0	62	1.2
Nevada	10	0.7	1	0.4	1	0.8	27	0.9	5	3.3	0	0.0	0	0.0	44	0.8
New Hampshire	4	0.3	1	0.4	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	11	0.2
New Jersey	23	1.6	1	0.4	3	2.3	33	1.0	0	0.0	1	2.8	0	0.0	61	1.2
New Mexico	6	0.4	3	1.3	0	0.0	42	1.3	1	0.7	0	0.0	0	0.0	52	1.0
New York	70	4.7	6	2.7	1	0.8	78	2.5	0	0.0	1	2.8	0	0.0	156	3.0
North Carolina	67	4.5	10	4.5	7	5.4	115	3.6	4	2.6	1	2.8	0	0.0	204	3.9
North Dakota	3	0.2	2	0.9	0	0.0	15	0.5	0	0.0	0	0.0	0	0.0	20	0.4
Ohio	69	4.7	7	3.1	1	0.8	133	4.2	4	2.6	0	0.0	0	0.0	214	4.1
Oklahoma	20	1.3	10	4.5	3	2.3	64	2.0	0	0.0	0	0.0	0	0.0	97	1.9
Oregon	3	0.2	4	1.8	2	1.5	34	1.1	7	4.6	0	0.0	0	0.0	50	1.0
Pennsylvania	76	5.1	4	1.8	5	3.8	127	4.0	3	2.0	1	2.8	1	2.0	217	4.1
Rhode Island	8	0.5	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	9	0.2
South Carolina	25	1.7	5	2.2	1	0.8	106	3.4	5	3.3	0	0.0	2	4.0	144	2.8
South Dakota	11	0.7	0	0.0	0	0.0	7	0.2	1	0.7	0	0.0	0	0.0	19	0.4
Tennessee	43	2.9	7	3.1	3	2.3	114	3.6	4	2.6	2	5.6	0	0.0	173	3.3
Texas	141	9.5	30	13.4	8	6.2	251	7.9	1	0.7	3	8.3	0	0.0	434	8.3
Utah	8	0.5	0	0.0	1	0.8	26	0.8	3	2.0	1	2.8	0	0.0	39	0.7
Vermont	5	0.3	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	8	0.2
Virginia	24	1.6	4	1.8	4	3.1	73	2.3	2	1.3	1	2.8	0	0.0	108	2.1
Washington	22	1.5	5	2.2	7	5.4	20	0.6	6	4.0	0	0.0	0	0.0	60	1.1
West Virginia	17	1.1	5	2.2	0	0.0	28	0.9	1	0.7	0	0.0	0	0.0	51	1.0
Wisconsin	29	2.0	3	1.3	0	0.0	44	1.4	1	0.7	0	0.0	0	0.0	77	1.5
Wyoming	1	0.1	2	0.9	0	0.0	23	0.7	1	0.7	0	0.0	0	0.0	27	0.5
Total	1483	100.0	224	100.0	130	100.0	3159	100.0	151	100.0	36	100.0	50	100.0	5233	100.0

\* "Other combinations" includes one triple-trailer involvement in Kansas and one in Utah.

\*\* Mississippi does not provide police reports, so most truck data are unknown.

## Temporal distributions

**Table 2-2**  
**Fatal Truck Involvements by Month and Truck Configuration**  
**TIFA 1999**

Month of accident	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
January	84	5.7	15	6.7	7	5.4	218	6.9	12	7.9	2	5.6	2	4.0	340	6.5
February	97	6.5	8	3.6	10	7.7	218	6.9	8	5.3	4	11.1	3	6.0	348	6.7
March	101	6.8	13	5.8	8	6.2	239	7.6	10	6.6	1	2.8	2	4.0	374	7.1
April	103	6.9	18	8.0	7	5.4	249	7.9	11	7.3	4	11.1	3	6.0	395	7.5
May	116	7.8	26	11.6	11	8.5	272	8.6	9	6.0	3	8.3	4	8.0	441	8.4
June	118	8.0	16	7.1	12	9.2	276	8.7	17	11.3	8	22.2	4	8.0	451	8.6
July	171	11.5	19	8.5	10	7.7	271	8.6	10	6.6	5	13.9	5	10.0	491	9.4
August	155	10.5	31	13.8	8	6.2	299	9.5	21	13.9	1	2.8	4	8.0	519	9.9
September	155	10.5	19	8.5	11	8.5	261	8.3	16	10.6	2	5.6	4	8.0	468	8.9
October	140	9.4	21	9.4	10	7.7	301	9.5	13	8.6	1	2.8	3	6.0	489	9.3
November	127	8.6	21	9.4	24	18.5	278	8.8	11	7.3	2	5.6	7	14.0	470	9.0
December	116	7.8	17	7.6	12	9.2	277	8.8	13	8.6	3	8.3	9	18.0	447	8.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-3**  
**Fatal Truck Involvements by Day of Week and Truck Configuration**  
**TIFA 1999**

Day of week	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Sunday	54	3.6	17	7.6	10	7.7	247	7.8	7	4.6	2	5.6	3	6.0	340	6.5
Monday	269	18.1	34	15.2	17	13.1	541	17.1	24	15.9	5	13.9	10	20.0	900	17.2
Tuesday	264	17.8	29	12.9	28	21.5	545	17.3	22	14.6	8	22.2	5	10.0	901	17.2
Wednesday	253	17.1	34	15.2	16	12.3	506	16.0	25	16.6	5	13.9	8	16.0	847	16.2
Thursday	259	17.5	46	20.5	19	14.6	513	16.2	34	22.5	0	0.0	6	12.0	877	16.8
Friday	251	16.9	40	17.9	22	16.9	508	16.1	21	13.9	11	30.6	12	24.0	865	16.5
Saturday	133	9.0	24	10.7	18	13.8	299	9.5	18	11.9	5	13.9	6	12.0	503	9.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-4**  
**Fatal Truck Involvements by Day Type and Truck Configuration**  
**TIFA 1999**

Day type	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Work week	1296	87.4	183	81.7	102	78.5	2613	82.7	126	83.4	29	80.6	41	82.0	4390	83.9
Weekend	187	12.6	41	18.3	28	21.5	546	17.3	25	16.6	7	19.4	9	18.0	843	16.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

Note: Work week is defined as Monday through Friday, and weekend as Saturday and Sunday.

**Table 2-5  
Fatal Truck Involvements by Time of Accident and Truck Configuration  
TIFA 1999**

Time of accident	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Midnight	13	0.9	2	0.9	2	1.5	103	3.3	11	7.3	2	5.6	2	4.0	135	2.6
1:00 AM	15	1.0	4	1.8	1	0.8	91	2.9	3	2.0	0	0.0	2	4.0	116	2.2
2:00 AM	25	1.7	1	0.4	2	1.5	108	3.4	7	4.6	0	0.0	2	4.0	145	2.8
3:00 AM	15	1.0	4	1.8	6	4.6	85	2.7	7	4.6	0	0.0	2	4.0	119	2.3
4:00 AM	24	1.6	2	0.9	1	0.8	90	2.8	14	9.3	1	2.8	0	0.0	132	2.5
5:00 AM	48	3.2	6	2.7	4	3.1	130	4.1	20	13.2	2	5.6	2	4.0	212	4.1
6:00 AM	62	4.2	8	3.6	4	3.1	154	4.9	5	3.3	1	2.8	3	6.0	237	4.5
7:00 AM	81	5.5	9	4.0	5	3.8	152	4.8	2	1.3	0	0.0	3	6.0	252	4.8
8:00 AM	103	6.9	17	7.6	5	3.8	143	4.5	6	4.0	6	16.7	0	0.0	280	5.4
9:00 AM	109	7.3	12	5.4	7	5.4	130	4.1	3	2.0	3	8.3	0	0.0	264	5.0
10:00 AM	112	7.6	13	5.8	7	5.4	165	5.2	7	4.6	3	8.3	3	6.0	310	5.9
11:00 AM	104	7.0	13	5.8	5	3.8	171	5.4	5	3.3	2	5.6	4	8.0	304	5.8
Noon	98	6.6	15	6.7	7	5.4	177	5.6	13	8.6	0	0.0	4	8.0	314	6.0
1:00 PM	123	8.3	16	7.1	9	6.9	177	5.6	7	4.6	3	8.3	1	2.0	336	6.4
2:00 PM	107	7.2	14	6.3	9	6.9	212	6.7	4	2.6	2	5.6	3	6.0	351	6.7
3:00 PM	127	8.6	23	10.3	7	5.4	183	5.8	7	4.6	3	8.3	10	20.0	360	6.9
4:00 PM	85	5.7	16	7.1	12	9.2	165	5.2	0	0.0	1	2.8	1	2.0	280	5.4
5:00 PM	81	5.5	13	5.8	4	3.1	127	4.0	3	2.0	2	5.6	2	4.0	232	4.4
6:00 PM	44	3.0	8	3.6	10	7.7	103	3.3	6	4.0	1	2.8	1	2.0	173	3.3
7:00 PM	34	2.3	9	4.0	5	3.8	110	3.5	3	2.0	0	0.0	1	2.0	162	3.1
8:00 PM	25	1.7	7	3.1	8	6.2	113	3.6	2	1.3	1	2.8	2	4.0	158	3.0
9:00 PM	15	1.0	2	0.9	3	2.3	95	3.0	4	2.6	1	2.8	1	2.0	121	2.3
10:00 PM	16	1.1	5	2.2	6	4.6	95	3.0	5	3.3	1	2.8	0	0.0	128	2.4
11:00 PM	16	1.1	5	2.2	1	0.8	78	2.5	7	4.6	1	2.8	1	2.0	109	2.1
Unknown	1	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-6**  
**Fatal Truck Involvements by Time of Accident and Day Type**  
**TIFA 1999**

Time of accident	Work week		Weekend		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Midnight	90	2.1	45	5.3	135	2.6
1:00 AM	78	1.8	38	4.5	116	2.2
2:00 AM	98	2.2	47	5.6	145	2.8
3:00 AM	71	1.6	48	5.7	119	2.3
4:00 AM	103	2.3	29	3.4	132	2.5
5:00 AM	176	4.0	36	4.3	212	4.1
6:00 AM	203	4.6	34	4.0	237	4.5
7:00 AM	225	5.1	27	3.2	252	4.8
8:00 AM	248	5.6	32	3.8	280	5.4
9:00 AM	234	5.3	30	3.6	264	5.0
10:00 AM	269	6.1	41	4.9	310	5.9
11:00 AM	269	6.1	35	4.2	304	5.8
Noon	276	6.3	38	4.5	314	6.0
1:00 PM	294	6.7	42	5.0	336	6.4
2:00 PM	316	7.2	35	4.2	351	6.7
3:00 PM	318	7.2	42	5.0	360	6.9
4:00 PM	240	5.5	40	4.7	280	5.4
5:00 PM	204	4.6	28	3.3	232	4.4
6:00 PM	150	3.4	23	2.7	173	3.3
7:00 PM	123	2.8	39	4.6	162	3.1
8:00 PM	130	3.0	28	3.3	158	3.0
9:00 PM	97	2.2	24	2.8	121	2.3
10:00 PM	89	2.0	39	4.6	128	2.4
11:00 PM	87	2.0	22	2.6	109	2.1
Unknown	2	0.0	1	0.1	3	0.1
Total	4390	100.0	843	100.0	5233	100.0

Note: Work week is defined as Monday through Friday, and weekend as Saturday and Sunday.

## ***Environmental distributions***

**Table 2-7**  
**Fatal Truck Involvements by Land Use and Truck Configuration**  
**TIFA 1999**

Land use	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Urban	552	37.2	74	33.0	59	45.4	895	28.3	51	33.8	9	25.0	5	10.0	1645	31.4
Rural	918	61.9	149	66.5	71	54.6	2252	71.3	100	66.2	27	75.0	45	90.0	3562	68.1
Unknown	13	0.9	1	0.4	0	0.0	12	0.4	0	0.0	0	0.0	0	0.0	26	0.5
Total	1483	100.0	224	100.0	130	100.0	3159	100.0	151	100.0	36	100.0	50	100.0	5233	100.0

**Table 2-8**  
**Fatal Truck Involvements by Light Condition and Truck Configuration**  
**TIFA 1999**

Light condition	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Daylight	1165	78.6	168	75.0	80	61.5	1874	59.3	65	43.0	26	72.2	33	66.0	3411	65.2
Dark	170	11.5	42	18.8	25	19.2	862	27.3	62	41.1	6	16.7	12	24.0	1179	22.5
Dark but lighted	94	6.3	10	4.5	19	14.6	279	8.8	17	11.3	1	2.8	4	8.0	424	8.1
Dawn	37	2.5	3	1.3	1	0.8	98	3.1	7	4.6	2	5.6	1	2.0	149	2.8
Dusk	16	1.1	1	0.4	5	3.8	45	1.4	0	0.0	1	2.8	0	0.0	68	1.3
Unknown	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-9**  
**Fatal Truck Involvements by Roadway Surface Condition and Truck Configuration**  
**TIFA 1999**

Roadway surface condition	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Dry	1273	85.8	192	85.7	106	81.5	2608	82.6	123	81.5	33	91.7	42	84.0	4377	83.6
Wet	171	11.5	26	11.6	20	15.4	414	13.1	24	15.9	3	8.3	5	10.0	663	12.7
Snow or slush	19	1.3	3	1.3	1	0.8	66	2.1	1	0.7	0	0.0	0	0.0	90	1.7
Ice	16	1.1	3	1.3	3	2.3	62	2.0	3	2.0	0	0.0	2	4.0	89	1.7
Sand, dirt, oil	1	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Other	1	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	4	0.1
Unknown	2	0.1	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	1	2.0	7	0.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-10**  
**Fatal Truck Involvements by Weather Condition and Truck Configuration**  
**TIFA 1999**

Weather condition	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Normal	1337	90.2	199	88.8	113	86.9	2688	85.1	129	85.4	34	94.4	43	86.0	4543	86.8
Rain	94	6.3	17	7.6	11	8.5	283	9.0	8	5.3	0	0.0	4	8.0	417	8.0
Sleet	3	0.2	2	0.9	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	14	0.3
Snow	19	1.3	2	0.9	3	2.3	73	2.3	5	3.3	1	2.8	2	4.0	105	2.0
Fog	22	1.5	4	1.8	2	1.5	71	2.2	5	3.3	0	0.0	0	0.0	104	2.0
Rain & fog	4	0.3	0	0.0	1	0.8	4	0.1	2	1.3	0	0.0	0	0.0	11	0.2
Sleet & fog	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Other	2	0.1	0	0.0	0	0.0	28	0.9	2	1.3	1	2.8	0	0.0	33	0.6
Unknown	2	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	1	2.0	5	0.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

## Roadway distributions

**Table 2-11**  
**Fatal Truck Involvements by Roadway Function Class and Truck Configuration**  
**TIFA 1999**

Road function class	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Urban</i>																
Interstate	85	15.4	18	24.3	14	23.7	343	38.3	22	43.1	1	11.1	2	40.0	485	29.5
Freeway/expressway	51	9.2	8	10.8	10	16.9	82	9.2	8	15.7	1	11.1	1	20.0	161	9.8
Other principal artery	179	32.4	18	24.3	18	30.5	284	31.7	13	25.5	4	44.4	1	20.0	517	31.4
Minor artery	122	22.1	18	24.3	7	11.9	110	12.3	4	7.8	0	0.0	0	0.0	261	15.9
Collector	33	6.0	3	4.1	1	1.7	20	2.2	1	2.0	0	0.0	0	0.0	58	3.5
Local street	80	14.5	9	12.2	8	13.6	55	6.1	3	5.9	3	33.3	1	20.0	159	9.7
Unknown urban	2	0.4	0	0.0	1	1.7	1	0.1	0	0.0	0	0.0	0	0.0	4	0.2
<b>Total</b>	<b>552</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>	<b>59</b>	<b>100.0</b>	<b>895</b>	<b>100.0</b>	<b>51</b>	<b>100.0</b>	<b>9</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>1645</b>	<b>100.0</b>
<i>Rural</i>																
Interstate	85	9.3	29	19.5	3	4.2	712	31.6	37	37.0	9	33.3	7	15.6	882	24.8
Other principal artery	245	26.7	50	33.6	21	29.6	798	35.4	22	22.0	9	33.3	11	24.4	1156	32.5
Minor artery	199	21.7	19	12.8	16	22.5	371	16.5	17	17.0	3	11.1	3	6.7	628	17.6
Major collector	219	23.9	36	24.2	16	22.5	230	10.2	15	15.0	4	14.8	5	11.1	525	14.7
Minor collector	45	4.9	7	4.7	5	7.0	52	2.3	1	1.0	1	3.7	12	26.7	123	3.5
Local road	118	12.9	7	4.7	7	9.9	73	3.2	8	8.0	1	3.7	7	15.6	221	6.2
Unknown rural	7	0.8	1	0.7	3	4.2	16	0.7	0	0.0	0	0.0	0	0.0	27	0.8
<b>Total</b>	<b>918</b>	<b>100.0</b>	<b>149</b>	<b>100.0</b>	<b>71</b>	<b>100.0</b>	<b>2252</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>	<b>27</b>	<b>100.0</b>	<b>45</b>	<b>100.0</b>	<b>3562</b>	<b>100.0</b>

**Table 2-12**  
**Fatal Truck Involvements by Route Signing and Truck Configuration**  
**TIFA 1999**

Route signing	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate	167	11.3	46	20.5	19	14.6	1056	33.4	58	38.4	10	27.8	9	18.0	1365	26.1
US highway	315	21.2	59	26.3	28	21.5	910	28.8	27	17.9	8	22.2	17	34.0	1364	26.1
State highway	499	33.6	64	28.6	41	31.5	801	25.4	32	21.2	10	27.8	12	24.0	1459	27.9
County road	222	15.0	28	12.5	18	13.8	160	5.1	21	13.9	2	5.6	9	18.0	460	8.8
Township	42	2.8	5	2.2	1	0.8	17	0.5	2	1.3	0	0.0	0	0.0	67	1.3
Municipality	166	11.2	9	4.0	16	12.3	132	4.2	10	6.6	4	11.1	2	4.0	339	6.5
Frontage road	5	0.3	1	0.4	0	0.0	17	0.5	0	0.0	0	0.0	0	0.0	23	0.4
Other	61	4.1	11	4.9	5	3.8	59	1.9	1	0.7	2	5.6	1	2.0	140	2.7
Unknown	6	0.4	1	0.4	2	1.5	7	0.2	0	0.0	0	0.0	0	0.0	16	0.3
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>



**Table 2-13**  
**Fatal Truck Involvements by Relation to Junction and Truck Configuration**  
**TIFA 1999**

Relation to junction	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Noninterchange</i>																
Nonjunction	856	57.7	145	64.7	84	64.6	2074	65.7	108	71.5	25	69.4	32	64.0	3324	63.5
Intersection	452	30.5	56	25.0	26	20.0	645	20.4	27	17.9	6	16.7	3	6.0	1215	23.2
Intersection related	60	4.0	8	3.6	10	7.7	92	2.9	3	2.0	2	5.6	0	0.0	175	3.3
Driveway, alley, etc	38	2.6	3	1.3	1	0.8	76	2.4	4	2.6	0	0.0	1	2.0	123	2.4
Entrance/exit ramp	9	0.6	2	0.9	1	0.8	33	1.0	2	1.3	0	0.0	0	0.0	47	0.9
Rail grade crossing	8	0.5	1	0.4	1	0.8	9	0.3	0	0.0	0	0.0	1	2.0	20	0.4
In crossover	9	0.6	0	0.0	0	0.0	22	0.7	0	0.0	1	2.8	0	0.0	32	0.6
Unknown	0	0.0	0	0.0	1	0.8	3	0.1	0	0.0	0	0.0	0	0.0	4	0.1
<i>Interchange area</i>																
Intersection	23	1.6	1	0.4	3	2.3	53	1.7	0	0.0	0	0.0	12	24.0	92	1.8
Intersection related	2	0.1	0	0.0	1	0.8	4	0.1	3	2.0	0	0.0	0	0.0	10	0.2
Entrance/exit ramp	8	0.5	2	0.9	1	0.8	39	1.2	2	1.3	0	0.0	0	0.0	52	1.0
In crossover	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Other location	14	0.9	6	2.7	1	0.8	85	2.7	2	1.3	2	5.6	1	2.0	111	2.1
Unknown	4	0.3	0	0.0	0	0.0	21	0.7	0	0.0	0	0.0	0	0.0	25	0.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-14**  
**Fatal Truck Involvements by Number of Travel Lanes and Truck Configuration**  
**TIFA 1999**

No. of travel lanes	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	8	0.5	1	0.4	1	0.8	12	0.4	3	2.0	1	2.8	0	0.0	26	0.5
2	1173	79.1	177	79.0	92	70.8	2398	75.9	111	73.5	31	86.1	38	76.0	4020	76.8
3	97	6.5	10	4.5	11	8.5	231	7.3	16	10.6	1	2.8	2	4.0	368	7.0
4	143	9.6	21	9.4	19	14.6	391	12.4	16	10.6	3	8.3	10	20.0	603	11.5
5	12	0.8	3	1.3	4	3.1	27	0.9	2	1.3	0	0.0	0	0.0	48	0.9
6	14	0.9	4	1.8	2	1.5	41	1.3	3	2.0	0	0.0	0	0.0	64	1.2
7	3	0.2	3	1.3	0	0.0	11	0.3	0	0.0	0	0.0	0	0.0	17	0.3
9	33	2.2	5	2.2	1	0.8	48	1.5	0	0.0	0	0.0	0	0.0	87	1.7
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-15**  
**Fatal Truck Involvements by Trafficway Flow and Truck Configuration**  
**TIFA 1999**

Trafficway flow	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not divided	996	67.2	129	57.6	80	61.5	1555	49.2	68	45.0	17	47.2	26	52.0	2871	54.9
Median-no barrier	351	23.7	73	32.6	33	25.4	1167	36.9	59	39.1	12	33.3	20	40.0	1715	32.8
Median w/barrier	104	7.0	20	8.9	15	11.5	393	12.4	23	15.2	7	19.4	4	8.0	566	10.8
One way traffic	18	1.2	1	0.4	1	0.8	21	0.7	0	0.0	0	0.0	0	0.0	41	0.8
Unknown	14	0.9	1	0.4	1	0.8	23	0.7	1	0.7	0	0.0	0	0.0	40	0.8
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-16**  
**Fatal Truck Involvements by Speed Limit and Truck Configuration**  
**TIFA 1999**

Speed limit	Strt truck		Strt/1 trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	6	0.4	0	0.0	0	0.0	9	0.3	1	0.7	0	0.0	1	2.0	17	0.3
10	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
15	3	0.2	0	0.0	1	0.8	1	0.0	0	0.0	0	0.0	0	0.0	5	0.1
20	2	0.1	0	0.0	1	0.8	1	0.0	0	0.0	0	0.0	0	0.0	4	0.1
25	52	3.5	4	1.8	5	3.8	43	1.4	3	2.0	1	2.8	0	0.0	108	2.1
30	68	4.6	5	2.2	5	3.8	43	1.4	1	0.7	1	2.8	0	0.0	123	2.4
35	106	7.1	11	4.9	6	4.6	130	4.1	2	1.3	2	5.6	3	6.0	260	5.0
40	88	5.9	9	4.0	6	4.6	90	2.8	8	5.3	1	2.8	0	0.0	202	3.9
45	203	13.7	25	11.2	21	16.2	265	8.4	9	6.0	2	5.6	7	14.0	532	10.2
50	94	6.3	11	4.9	4	3.1	133	4.2	4	2.6	0	0.0	4	8.0	250	4.8
55	562	37.9	79	35.3	49	37.7	1192	37.7	56	37.1	14	38.9	22	44.0	1974	37.7
60	54	3.6	12	5.4	8	6.2	148	4.7	7	4.6	2	5.6	1	2.0	232	4.4
65	140	9.4	34	15.2	18	13.8	594	18.8	30	19.9	5	13.9	6	12.0	827	15.8
70	68	4.6	29	12.9	5	3.8	386	12.2	23	15.2	5	13.9	5	10.0	521	10.0
75	5	0.3	2	0.9	0	0.0	94	3.0	6	4.0	2	5.6	0	0.0	109	2.1
Unknown	31	2.1	3	1.3	1	0.8	29	0.9	1	0.7	1	2.8	1	2.0	67	1.3
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

## Accident description

**Table 2-17**  
**Fatal Truck Involvements by Accident Type and Truck Configuration**  
**TIFA 1999**

Accident type	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Single vehicle</i>																
Ran off road	124	8.4	14	6.3	18	13.8	273	8.6	12	7.9	6	16.7	0	0.0	447	8.5
Hit object in road	152	10.2	22	9.8	14	10.8	199	6.3	17	11.3	1	2.8	1	2.0	406	7.8
<i>Same direction, same trafficway</i>																
Rearend, truck striking	56	3.8	11	4.9	5	3.8	208	6.6	13	8.6	0	0.0	0	0.0	293	5.6
Rearend, truck struck	134	9.0	11	4.9	8	6.2	273	8.6	9	6.0	2	5.6	4	8.0	441	8.4
Sideswipe, in other's lane	8	0.5	2	0.9	3	2.3	32	1.0	2	1.3	0	0.0	0	0.0	47	0.9
Sideswipe, in truck's lane	18	1.2	4	1.8	0	0.0	70	2.2	4	2.6	1	2.8	0	0.0	97	1.9
<i>Opposite direction, same trafficway</i>																
Head-on, in other's lane	54	3.6	7	3.1	6	4.6	42	1.3	3	2.0	0	0.0	0	0.0	112	2.1
Head-on, in truck's lane	186	12.5	26	11.6	17	13.1	330	10.4	19	12.6	2	5.6	0	0.0	580	11.1
Sideswipe, in other's lane	18	1.2	3	1.3	6	4.6	20	0.6	4	2.6	0	0.0	0	0.0	51	1.0
Sideswipe, in truck's lane	87	5.9	18	8.0	6	4.6	216	6.8	6	4.0	7	19.4	0	0.0	340	6.5
<i>Change trafficway, one vehicle turning</i>																
Truck turn across path	57	3.8	12	5.4	3	2.3	116	3.7	11	7.3	2	5.6	0	0.0	201	3.8
Other turn across path	124	8.4	15	6.7	10	7.7	177	5.6	5	3.3	2	5.6	0	0.0	333	6.4
<i>Intersecting paths, both going straight</i>																
Truck into side of other	204	13.8	20	8.9	16	12.3	294	9.3	8	5.3	1	2.8	0	0.0	543	10.4
Other into side of truck	53	3.6	9	4.0	1	0.8	136	4.3	8	5.3	1	2.8	0	0.0	208	4.0
<i>Other accident types</i>																
Truck backed into other	5	0.3	1	0.4	0	0.0	25	0.8	0	0.0	0	0.0	0	0.0	31	0.6
Other backed into truck	1	0.1	0	0.0	0	0.0	2	0.1	1	0.7	0	0.0	0	0.0	4	0.1
Untripped roll	17	1.1	2	0.9	0	0.0	52	1.6	0	0.0	1	2.8	0	0.0	72	1.4
Other	158	10.7	43	19.2	15	11.5	597	18.9	24	15.9	10	27.8	1	2.0	848	16.2
Unknown	27	1.8	4	1.8	2	1.5	97	3.1	5	3.3	0	0.0	44	88.0	179	3.4
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-18**  
**Fatal Truck Involvements by First Harmful Event and Truck Configuration**  
**TIFA 1999**

First harmful event	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Noncollision event</i>																
Overtum	56	3.8	9	4.0	2	1.5	145	4.6	1	0.7	3	8.3	0	0.0	216	4.1
Fire/explosion	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Fell from vehicle	6	0.4	3	1.3	2	1.5	6	0.2	0	0.0	0	0.0	0	0.0	17	0.3
Other noncollision	1	0.1	1	0.4	0	0.0	11	0.3	1	0.7	0	0.0	0	0.0	14	0.3
Thrown or falling object	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Occ. struck/run over by own veh.	2	0.1	0	0.0	1	0.8	1	0.0	0	0.0	0	0.0	0	0.0	4	0.1
<i>Collision with object not fixed</i>																
Pedestrian	118	8.0	16	7.1	10	7.7	153	4.8	12	7.9	1	2.8	1	2.0	311	5.9
Pedalcycle	31	2.1	5	2.2	2	1.5	30	0.9	2	1.3	1	2.8	0	0.0	71	1.4
Railway train	6	0.4	1	0.4	1	0.8	8	0.3	0	0.0	0	0.0	1	2.0	17	0.3
Animal	0	0.0	1	0.4	1	0.8	5	0.2	1	0.7	0	0.0	0	0.0	8	0.2
Motor vehicle in transport	1122	75.7	168	75.0	89	68.5	2358	74.6	112	74.2	25	69.4	46	92.0	3920	74.9
Veh. in transport - other roadway	20	1.3	9	4.0	5	3.8	164	5.2	6	4.0	1	2.8	0	0.0	205	3.9
Parked motor vehicle	10	0.7	2	0.9	4	3.1	23	0.7	2	1.3	0	0.0	0	0.0	41	0.8
Other type nonmotorist	3	0.2	0	0.0	0	0.0	1	0.0	1	0.7	0	0.0	0	0.0	5	0.1
Other object - not fixed	2	0.1	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	8	0.2
Transport device used as equip	1	0.1	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	1	2.0	6	0.1
Ridden animal/conveyance	2	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
<i>Collision with fixed object</i>																
Boulder	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Building	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Impact attenuator	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.0
Bridge pier or abutment	0	0.0	0	0.0	0	0.0	8	0.3	0	0.0	1	2.8	0	0.0	9	0.2
Bridge parapet end	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3	1	2.8	0	0.0	3	0.1
Bridge rail	4	0.3	1	0.4	0	0.0	8	0.3	1	0.7	0	0.0	0	0.0	14	0.3
Guardrail	21	1.4	2	0.9	3	2.3	82	2.6	6	4.0	2	5.6	0	0.0	116	2.2
Concrete traffic barrier	4	0.3	0	0.0	0	0.0	23	0.7	0	0.0	0	0.0	0	0.0	27	0.5
Other longitudinal barrier type	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Highway/traffic sign post	3	0.2	1	0.4	2	1.5	10	0.3	0	0.0	0	0.0	0	0.0	16	0.3
Luminaire/light support	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Utility pole	5	0.3	0	0.0	1	0.8	7	0.2	0	0.0	0	0.0	0	0.0	13	0.2
Other post, pole or supports	3	0.2	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	7	0.1
Culvert	4	0.3	0	0.0	0	0.0	8	0.3	0	0.0	0	0.0	0	0.0	12	0.2
Curb	5	0.3	0	0.0	1	0.8	5	0.2	0	0.0	0	0.0	0	0.0	11	0.2
Ditch	9	0.6	1	0.4	1	0.8	3	0.1	0	0.0	0	0.0	0	0.0	14	0.3
Embankment - earth	4	0.3	1	0.4	1	0.8	11	0.3	0	0.0	0	0.0	0	0.0	17	0.3
Embankment - rock,stone,etc	4	0.3	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	8	0.2
Embankment - type unknown	5	0.3	0	0.0	2	1.5	10	0.3	0	0.0	1	2.8	0	0.0	18	0.3
Fence	1	0.1	0	0.0	0	0.0	7	0.2	1	0.7	0	0.0	0	0.0	9	0.2
Wall	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Fire hydrant	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Shrubbery	0	0.0	0	0.0	1	0.8	1	0.0	2	1.3	0	0.0	0	0.0	4	0.1
Tree	22	1.5	1	0.4	1	0.8	31	1.0	1	0.7	0	0.0	0	0.0	56	1.1
Other fixed object	4	0.3	1	0.4	0	0.0	11	0.3	0	0.0	0	0.0	1	2.0	17	0.3
Unknown	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.0
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-19**  
**Fatal Truck Involvements by Vehicle Role in Accident and Truck Configuration**  
**TIFA 1999**

Vehicle role	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Non-collision	40	2.7	9	4.0	3	2.3	88	2.8	1	0.7	3	8.3	0	0.0	144	2.8
Striking	1071	72.2	148	66.1	102	78.5	2062	65.3	103	68.2	22	61.1	25	50.0	3533	67.5
Struck	340	22.9	61	27.2	22	16.9	916	29.0	43	28.5	10	27.8	24	48.0	1416	27.1
Both	31	2.1	6	2.7	3	2.3	91	2.9	4	2.6	1	2.8	1	2.0	137	2.6
Unknown	1	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-20**  
**Fatal Truck Involvements by Manner of Collision and Truck Configuration**  
**TIFA 1999**

Manner of collision	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not applicable	341	23.0	47	21.0	36	27.7	636	20.1	33	21.9	10	27.8	4	8.0	1107	21.2
Rear-end	226	15.2	35	15.6	16	12.3	616	19.5	31	20.5	2	5.6	14	28.0	940	18.0
Head-on	348	23.5	50	22.3	35	26.9	718	22.7	37	24.5	9	25.0	13	26.0	1210	23.1
Angle	516	34.8	81	36.2	37	28.5	998	31.6	43	28.5	9	25.0	17	34.0	1701	32.5
Sideswipe: same direction	23	1.6	3	1.3	5	3.8	85	2.7	2	1.3	2	5.6	0	0.0	120	2.3
Sideswipe: opp direction	25	1.7	8	3.6	1	0.8	88	2.8	3	2.0	4	11.1	0	0.0	129	2.5
Unknown	4	0.3	0	0.0	0	0.0	18	0.6	2	1.3	0	0.0	2	4.0	26	0.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-21**  
**Fatal Truck Involvements by Rollover Status and Truck Configuration**  
**TIFA 1999**

Truck rollover status	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No rollover	1266	85.4	200	89.3	113	86.9	2757	87.3	132	87.4	28	77.8	45	90.0	4541	86.8
First event	52	3.5	9	4.0	2	1.5	132	4.2	2	1.3	3	8.3	2	4.0	202	3.9
Subsequent event	165	11.1	15	6.7	15	11.5	270	8.5	17	11.3	5	13.9	3	6.0	490	9.4
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-22**  
**Fatal Truck Involvements by Jackknife Status and Truck Configuration**  
**TIFA 1999**

Truck jackknife status	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	1483	100.0	219	97.8	130	100.0	2907	92.0	133	88.1	32	88.9	50	100.0	4954	94.6
First event	0	0.0	4	1.8	0	0.0	63	2.0	2	1.3	2	5.6	0	0.0	71	1.4
Subsequent event	0	0.0	1	0.4	0	0.0	189	6.0	16	10.6	2	5.6	0	0.0	208	4.0
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-23**  
**Fatal Truck Involvements by Fire Occurrence and Truck Configuration**  
**TIFA 1999**

Truck fire occurrence	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No fire	1444	97.4	218	97.3	126	96.9	2944	93.2	144	95.4	34	94.4	47	94.0	4957	94.7
Fire in vehicle	39	2.6	6	2.7	4	3.1	215	6.8	7	4.6	2	5.6	3	6.0	276	5.3
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 2-24**  
**Fatal Truck Involvements by Cargo Spillage and Truck Configuration**  
**TIFA 1999**

Truck cargo spillage	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	1211	81.7	174	77.7	18	13.8	2599	82.3	123	81.5	28	77.8	5	10.0	4158	79.5
Nonhazardous	221	14.9	45	20.1	2	1.5	430	13.6	19	12.6	6	16.7	0	0.0	723	13.8
Hazardous	16	1.1	3	1.3	0	0.0	39	1.2	2	1.3	0	0.0	0	0.0	60	1.1
Unknown	35	2.4	2	0.9	110	84.6	91	2.9	7	4.6	2	5.6	45	90.0	292	5.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

# Vehicle

This section provides statistics that describe the physical configuration of trucks involved in a fatal accident in 1999. The tables cover truck configuration, cargo body and cargo type, cab style, truck model year, overall weight and length of the trucks, and the type of carrier that operated the truck. Of the 5,233 trucks involved in a fatal accident in 1999, there were 3,159 tractor-semitrailers, 1,483 straight trucks with no trailer, 224 straight trucks pulling a trailer, 130 bobtail tractors, and 151 tractors pulling two trailers.

- Straight trucks with no trailer represented 28.3% of all trucks involved in a fatal accident.
- Tractor-semitrailers accounted for 60.4% of the trucks.
- Over half of the tractor-semitrailers pulled a van trailer, either a dry box van or a refrigerated van.
- 25.0% of the straight trucks had dump bodies. The next most common straight truck cargo body was a van body, with 22.5%.
- 31.8% of the trucks were empty, 20.9% were carrying general freight, and 12.4% were carrying solids in bulk (gravel, soil, etc.) at the time of the accident.
- 14 trucks were longer than 100 feet; 45 weighed more than 100,000 pounds.
- 75.3% of the trucks involved in a fatal accident were Class 8, the heaviest Gross Vehicle Weight Rating (GVWR) class.
- 49.3% of the trucks were operated by interstate for-hire carriers, 18.6% by interstate private carriers, and 16.4% by intrastate private carriers.
- 37.1% of the trucks were on local trips (within 50 miles of base) when involved in the fatal accident.

The following abbreviations are used in this chapter:

<b>Abbreviation</b>	<b>Definition</b>
Strt	Straight truck
Trac	Tractor
Trlrs	Trailers
Oth combs	Other combinations
Semi	Semitrailer
Dist	Distance
Equip	Equipment
Piggybk	Piggyback





**Table 3-1  
Fatal Truck Involvements by Truck Configuration  
TIFA 1999**

Configuration	No.	Pct.
<i>Straight trucks</i>		
Straight truck only	1483	28.3
<i>Straight truck, 1 trailer</i>		
Straight + full trailer	54	1.0
Straight + other	126	2.4
Straight + other, gooseneck hitch	44	0.8
<i>Subtotal</i>	224	4.3
<i>Other straight combinations</i>		
Wrecker + tow	10	0.2
Wrecker towing straight + full trailer	1	0.0
Straight truck, two saddlemount straights	1	0.0
<i>Subtotal</i>	12	0.2
<i>Total straight trucks</i>	1719	32.8
<i>Tractor combinations</i>		
<i>Tractor, no trailers</i>		
Bobtail tractor	110	2.1
Tractor carrying cargo	20	0.4
<i>Subtotal</i>	130	2.5
<i>Tractor, 1 trailer</i>		
Tractor and semitrailer	3159	60.4
Tractor + other	18	0.3
Tractor + full trailer	1	0.0
<i>Subtotal</i>	3178	60.7
<i>Tractor, 2 trailers</i>		
Double with A dolly	87	1.7
Double, B train	1	0.0
Tractor + semitrailer + full trailer	62	1.2
Tractor + semitrailer + other trailer	1	0.0
<i>Subtotal</i>	151	2.9
<i>Tractor, 3 trailers</i>		
Triple with A dollies	2	0.0
<i>Subtotal</i>	2	0.0
<i>Other tractor combinations</i>		
Tractor + semitrailer + jeep	1	0.0
Tractor + jeep + full trailer + jeep	1	0.0
Tractor + 3 saddlemount tractors	1	0.0
<i>Subtotal</i>	3	0.1
<i>Total tractors</i>	3464	66.2
<i>Unknown</i>	50	1.0
<b>Grand total</b>	<b>5233</b>	<b>100.0</b>

**Table 3-2**  
**Fatal Truck Involvements by Cargo Body Style and Truck Configuration**  
**TIFA 1999**

Cargo body style	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Tractor/no trailer	0	0.0	0	0.0	130	100.0	0	0.0	0	0.0	1	2.8	0	0.0	131	2.5
Van	334	22.5	21	9.4	0	0.0	1234	39.1	74	49.0	2	5.6	0	0.0	1665	31.8
Open top van	3	0.2	0	0.0	0	0.0	45	1.4	1	0.7	0	0.0	0	0.0	49	0.9
Refrigerated van	59	4.0	0	0.0	0	0.0	433	13.7	2	1.3	0	0.0	0	0.0	494	9.4
Livestock carrier	3	0.2	1	0.4	0	0.0	43	1.4	0	0.0	0	0.0	0	0.0	47	0.9
Flatbed	98	6.6	33	14.7	0	0.0	450	14.2	21	13.9	2	5.6	0	0.0	604	11.5
Lowboy	1	0.1	0	0.0	0	0.0	53	1.7	2	1.3	0	0.0	0	0.0	56	1.1
Flatbed with equip.	26	1.8	5	2.2	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	38	0.7
Flatbed with sides	65	4.4	9	4.0	0	0.0	35	1.1	3	2.0	0	0.0	0	0.0	112	2.1
Pole/logging	9	0.6	6	2.7	0	0.0	121	3.8	2	1.3	0	0.0	0	0.0	138	2.6
Tank:liquid/gaseous	54	3.6	6	2.7	0	0.0	274	8.7	4	2.6	0	0.0	0	0.0	338	6.5
Tank:dry bulk	4	0.3	1	0.4	0	0.0	63	2.0	4	2.6	0	0.0	0	0.0	72	1.4
Auto carrier	1	0.1	22	9.8	0	0.0	10	0.3	0	0.0	0	0.0	0	0.0	33	0.6
Dump	371	25.0	52	23.2	0	0.0	235	7.4	16	10.6	0	0.0	0	0.0	674	12.9
Hopper bottom	1	0.1	0	0.0	0	0.0	98	3.1	17	11.3	0	0.0	0	0.0	116	2.2
Refuse	128	8.6	2	0.9	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	135	2.6
Other	322	21.7	66	29.5	0	0.0	31	1.0	5	3.3	31	86.1	0	0.0	455	8.7
Unknown	4	0.3	0	0.0	0	0.0	22	0.7	0	0.0	0	0.0	50	100.0	76	1.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-3**  
**Fatal Truck Involvements by Type of Cargo and Truck Configuration**  
**TIFA 1999**

Type of cargo	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty/bobtail	568	38.3	120	53.6	110	84.6	826	26.1	40	26.5	1	2.8	0	0.0	1665	31.8
General freight	199	13.4	2	0.9	0	0.0	834	26.4	59	39.1	2	5.6	0	0.0	1096	20.9
Household goods	31	2.1	13	5.8	0	0.0	16	0.5	0	0.0	0	0.0	0	0.0	60	1.1
Building materials	15	1.0	4	1.8	0	0.0	51	1.6	2	1.3	1	2.8	0	0.0	73	1.4
Metal (coils, sheets)	13	0.9	0	0.0	0	0.0	117	3.7	3	2.0	0	0.0	0	0.0	133	2.5
Heavy machinery	8	0.5	0	0.0	0	0.0	45	1.4	0	0.0	0	0.0	0	0.0	53	1.0
Large objects	18	1.2	6	2.7	0	0.0	65	2.1	5	3.3	2	5.6	0	0.0	96	1.8
Motor vehicles	8	0.5	11	4.9	0	0.0	17	0.5	0	0.0	1	2.8	0	0.0	37	0.7
Piggybk/towaway	0	0.0	0	0.0	20	15.4	0	0.0	0	0.0	11	30.6	0	0.0	31	0.6
Gases in bulk	9	0.6	0	0.0	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	18	0.3
Solids in bulk	294	19.8	19	8.5	0	0.0	315	10.0	19	12.6	0	0.0	0	0.0	647	12.4
Liquids in bulk	38	2.6	2	0.9	0	0.0	182	5.8	4	2.6	0	0.0	0	0.0	226	4.3
Explosives	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Logs/poles/lumber	28	1.9	7	3.1	0	0.0	156	4.9	4	2.6	0	0.0	0	0.0	195	3.7
Refrigerated foods	42	2.8	0	0.0	0	0.0	293	9.3	1	0.7	0	0.0	0	0.0	336	6.4
Mobile home	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	41.7	0	0.0	15	0.3
Farm products	32	2.2	3	1.3	0	0.0	76	2.4	9	6.0	0	0.0	0	0.0	120	2.3
Live animals	3	0.2	1	0.4	0	0.0	34	1.1	0	0.0	0	0.0	0	0.0	38	0.7
Other	150	10.1	34	15.2	0	0.0	8	0.3	0	0.0	1	2.8	0	0.0	193	3.7
Cargo, unk. type	1	0.1	0	0.0	0	0.0	19	0.6	1	0.7	0	0.0	0	0.0	21	0.4
Saddlemount tractor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.0
Unknown	25	1.7	2	0.9	0	0.0	95	3.0	4	2.6	1	2.8	50	100.0	177	3.4
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-4  
Fatal Truck Involvements by Cab Style and Truck Configuration  
TIFA 1999**

Cab style	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Conventional	1248	84.2	211	94.2	106	81.5	2861	90.6	125	82.8	27	75.0	2	4.0	4580	87.5
Cabover or cab-forward	231	15.6	13	5.8	23	17.7	284	9.0	26	17.2	9	25.0	0	0.0	586	11.2
Unknown	4	0.3	0	0.0	1	0.8	14	0.4	0	0.0	0	0.0	48	96.0	67	1.3
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-5  
Fatal Truck Involvements by Cab Style and Power Unit Model Year  
TIFA 1999**

Power unit model year	Conventional		Cabover		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1959	0	0.0	1	0.2	0	0.0	1	0.0
1962	1	0.0	0	0.0	0	0.0	1	0.0
1964	1	0.0	0	0.0	0	0.0	1	0.0
1966	6	0.1	0	0.0	0	0.0	6	0.1
1967	4	0.1	0	0.0	0	0.0	4	0.1
1968	2	0.0	1	0.2	0	0.0	3	0.1
1969	5	0.1	0	0.0	0	0.0	5	0.1
1970	6	0.1	1	0.2	0	0.0	7	0.1
1971	5	0.1	0	0.0	0	0.0	5	0.1
1972	7	0.2	3	0.5	0	0.0	10	0.2
1973	15	0.3	2	0.3	1	1.5	18	0.3
1974	17	0.4	1	0.2	0	0.0	18	0.3
1975	19	0.4	3	0.5	0	0.0	22	0.4
1976	17	0.4	4	0.7	0	0.0	21	0.4
1977	19	0.4	4	0.7	0	0.0	23	0.4
1978	26	0.6	4	0.7	0	0.0	30	0.6
1979	44	1.0	8	1.4	0	0.0	52	1.0
1980	25	0.5	10	1.7	0	0.0	35	0.7
1981	25	0.5	12	2.0	0	0.0	37	0.7
1982	30	0.7	6	1.0	0	0.0	36	0.7
1983	29	0.6	15	2.6	0	0.0	44	0.8
1984	78	1.7	26	4.4	0	0.0	104	2.0
1985	108	2.4	33	5.6	0	0.0	141	2.7
1986	99	2.2	20	3.4	0	0.0	119	2.3
1987	102	2.2	28	4.8	0	0.0	130	2.5
1988	158	3.4	28	4.8	0	0.0	186	3.6
1989	142	3.1	35	6.0	0	0.0	177	3.4
1990	162	3.5	23	3.9	2	3.0	187	3.6
1991	141	3.1	32	5.5	0	0.0	173	3.3
1992	161	3.5	34	5.8	0	0.0	195	3.7
1993	279	6.1	42	7.2	0	0.0	321	6.1
1994	359	7.8	44	7.5	0	0.0	403	7.7
1995	474	10.3	44	7.5	1	1.5	519	9.9
1996	394	8.6	25	4.3	0	0.0	419	8.0
1997	413	9.0	33	5.6	2	3.0	448	8.6
1998	509	11.1	37	6.3	0	0.0	546	10.4
1999	586	12.8	21	3.6	0	0.0	607	11.6
2000	107	2.3	6	1.0	0	0.0	113	2.2
Unknown	5	0.1	0	0.0	61	91.0	66	1.3
<b>Total</b>	<b>4580</b>	<b>100.0</b>	<b>586</b>	<b>100.0</b>	<b>67</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-6**  
**Fatal Truck Involvements by Power Unit Model Year and Truck Configuration**  
**TIFA 1999**

Power unit model year	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1959	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
1962	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
1964	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
1966	4	0.3	1	0.4	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	6	0.1
1967	4	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
1968	2	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
1969	2	0.1	0	0.0	0	0.0	2	0.1	0	0.0	1	2.8	0	0.0	5	0.1
1970	4	0.3	0	0.0	0	0.0	2	0.1	0	0.0	1	2.8	0	0.0	7	0.1
1971	2	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	5	0.1
1972	5	0.3	0	0.0	0	0.0	3	0.1	2	1.3	0	0.0	0	0.0	10	0.2
1973	16	1.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	18	0.3
1974	11	0.7	1	0.4	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	18	0.3
1975	10	0.7	1	0.4	1	0.8	6	0.2	4	2.6	0	0.0	0	0.0	22	0.4
1976	14	0.9	1	0.4	2	1.5	4	0.1	0	0.0	0	0.0	0	0.0	21	0.4
1977	13	0.9	4	1.8	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	23	0.4
1978	14	0.9	0	0.0	0	0.0	14	0.4	2	1.3	0	0.0	0	0.0	30	0.6
1979	29	2.0	10	4.5	2	1.5	11	0.3	0	0.0	0	0.0	0	0.0	52	1.0
1980	18	1.2	2	0.9	1	0.8	14	0.4	0	0.0	0	0.0	0	0.0	35	0.7
1981	12	0.8	2	0.9	2	1.5	17	0.5	4	2.6	0	0.0	0	0.0	37	0.7
1982	17	1.1	4	1.8	3	2.3	11	0.3	1	0.7	0	0.0	0	0.0	36	0.7
1983	14	0.9	2	0.9	3	2.3	25	0.8	0	0.0	0	0.0	0	0.0	44	0.8
1984	27	1.8	4	1.8	6	4.6	64	2.0	1	0.7	2	5.6	0	0.0	104	2.0
1985	63	4.2	4	1.8	2	1.5	63	2.0	6	4.0	3	8.3	0	0.0	141	2.7
1986	53	3.6	5	2.2	3	2.3	55	1.7	3	2.0	0	0.0	0	0.0	119	2.3
1987	46	3.1	6	2.7	6	4.6	70	2.2	1	0.7	1	2.8	0	0.0	130	2.5
1988	67	4.5	10	4.5	11	8.5	95	3.0	3	2.0	0	0.0	0	0.0	186	3.6
1989	42	2.8	10	4.5	8	6.2	109	3.5	5	3.3	3	8.3	0	0.0	177	3.4
1990	67	4.5	7	3.1	2	1.5	101	3.2	9	6.0	1	2.8	0	0.0	187	3.6
1991	54	3.6	3	1.3	8	6.2	99	3.1	7	4.6	2	5.6	0	0.0	173	3.3
1992	50	3.4	6	2.7	3	2.3	125	4.0	6	4.0	4	11.1	1	2.0	195	3.7
1993	67	4.5	12	5.4	7	5.4	225	7.1	6	4.0	4	11.1	0	0.0	321	6.1
1994	96	6.5	14	6.3	4	3.1	273	8.6	13	8.6	3	8.3	0	0.0	403	7.7
1995	139	9.4	17	7.6	16	12.3	330	10.4	16	10.6	1	2.8	0	0.0	519	9.9
1996	97	6.5	16	7.1	10	7.7	280	8.9	13	8.6	2	5.6	1	2.0	419	8.0
1997	117	7.9	29	12.9	9	6.9	281	8.9	12	7.9	0	0.0	0	0.0	448	8.6
1998	141	9.5	22	9.8	8	6.2	356	11.3	14	9.3	5	13.9	0	0.0	546	10.4
1999	147	9.9	27	12.1	8	6.2	404	12.8	20	13.2	1	2.8	0	0.0	607	11.6
2000	15	1.0	2	0.9	4	3.1	87	2.8	3	2.0	2	5.6	0	0.0	113	2.2
Unknown	3	0.2	0	0.0	1	0.8	14	0.4	0	0.0	0	0.0	48	96.0	66	1.3
Total	1483	100.0	224	100.0	130	100.0	3159	100.0	151	100.0	36	100.0	50	100.0	5233	100.0

**Table 3-7  
Fatal Truck Involvements by Truck Length and Truck Configuration  
TIFA 1999**

Truck length (feet)	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<16	1	0.1	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
16-20	262	17.7	0	0.0	21	16.2	0	0.0	0	0.0	0	0.0	0	0.0	283	5.4
21-25	476	32.1	1	0.4	69	53.1	1	0.0	0	0.0	1	2.8	0	0.0	548	10.5
26-30	406	27.4	4	1.8	33	25.4	1	0.0	0	0.0	1	2.8	0	0.0	445	8.5
31-35	233	15.7	14	6.3	4	3.1	8	0.3	0	0.0	0	0.0	0	0.0	259	4.9
36-40	56	3.8	26	11.6	0	0.0	32	1.0	0	0.0	4	11.1	0	0.0	118	2.3
41-45	3	0.2	43	19.2	0	0.0	63	2.0	0	0.0	1	2.8	0	0.0	110	2.1
46-50	1	0.1	27	12.1	0	0.0	71	2.2	0	0.0	1	2.8	0	0.0	100	1.9
51-55	1	0.1	27	12.1	0	0.0	214	6.8	0	0.0	0	0.0	0	0.0	242	4.6
56-60	0	0.0	16	7.1	0	0.0	534	16.9	3	2.0	0	0.0	0	0.0	553	10.6
61-65	0	0.0	20	8.9	0	0.0	987	31.2	17	11.3	1	2.8	0	0.0	1025	19.6
66-70	0	0.0	9	4.0	0	0.0	796	25.2	18	11.9	3	8.3	0	0.0	826	15.8
71-75	0	0.0	13	5.8	0	0.0	293	9.3	65	43.0	0	0.0	0	0.0	371	7.1
76-80	0	0.0	5	2.2	0	0.0	18	0.6	22	14.6	2	5.6	0	0.0	47	0.9
81-85	0	0.0	2	0.9	0	0.0	1	0.0	8	5.3	3	8.3	0	0.0	14	0.3
86-90	0	0.0	1	0.4	0	0.0	0	0.0	4	2.6	1	2.8	0	0.0	6	0.1
91-95	0	0.0	0	0.0	0	0.0	1	0.0	4	2.6	1	2.8	0	0.0	6	0.1
96-100	0	0.0	0	0.0	0	0.0	1	0.0	3	2.0	2	5.6	0	0.0	6	0.1
101 +	0	0.0	0	0.0	0	0.0	3	0.1	3	2.0	8	22.2	0	0.0	14	0.3
Unknown	44	3.0	16	7.1	2	1.5	135	4.3	4	2.6	7	19.4	50	100.0	258	4.9
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-8**  
**Fatal Truck Involvements by Gross Combination Weight and Truck Configuration**  
**TIFA 1999**

Gross combination weight (lbs)	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<= 5,000	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
5,001-10,000	290	19.6	11	4.9	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	302	5.8
10,001-15,000	266	17.9	31	13.8	22	16.9	0	0.0	0	0.0	4	11.1	0	0.0	323	6.2
15,001-20,000	110	7.4	21	9.4	86	66.2	7	0.2	0	0.0	4	11.1	0	0.0	228	4.4
20,001-25,000	148	10.0	16	7.1	10	7.7	56	1.8	1	0.7	2	5.6	0	0.0	233	4.5
25,001-30,000	143	9.6	14	6.3	8	6.2	412	13.0	16	10.6	2	5.6	0	0.0	595	11.4
30,001-35,000	51	3.4	12	5.4	1	0.8	401	12.7	11	7.3	1	2.8	0	0.0	477	9.1
35,001-40,000	22	1.5	15	6.7	0	0.0	130	4.1	6	4.0	1	2.8	0	0.0	174	3.3
40,001-45,000	28	1.9	6	2.7	0	0.0	90	2.8	9	6.0	4	11.1	0	0.0	137	2.6
45,001-50,000	26	1.8	0	0.0	0	0.0	88	2.8	5	3.3	2	5.6	0	0.0	121	2.3
50,001-55,000	37	2.5	5	2.2	0	0.0	90	2.8	10	6.6	1	2.8	0	0.0	143	2.7
55,001-60,000	27	1.8	5	2.2	0	0.0	98	3.1	9	6.0	1	2.8	0	0.0	140	2.7
60,001-65,000	17	1.1	2	0.9	0	0.0	101	3.2	7	4.6	1	2.8	0	0.0	128	2.4
65,001-70,000	30	2.0	2	0.9	0	0.0	225	7.1	6	4.0	1	2.8	0	0.0	264	5.0
70,001-75,000	15	1.0	4	1.8	0	0.0	372	11.8	5	3.3	0	0.0	0	0.0	396	7.6
75,001-80,000	4	0.3	10	4.5	0	0.0	564	17.9	14	9.3	0	0.0	0	0.0	592	11.3
80,001-85,000	1	0.1	0	0.0	0	0.0	50	1.6	2	1.3	0	0.0	0	0.0	53	1.0
85,001-90,000	0	0.0	0	0.0	0	0.0	27	0.9	1	0.7	0	0.0	0	0.0	28	0.5
90,001-95,000	0	0.0	3	1.3	0	0.0	9	0.3	2	1.3	0	0.0	0	0.0	14	0.3
95,001-100,000	0	0.0	1	0.4	0	0.0	4	0.1	1	0.7	0	0.0	0	0.0	6	0.1
100,001-110,000	1	0.1	2	0.9	0	0.0	5	0.2	6	4.0	1	2.8	0	0.0	15	0.3
110,001-120,000	0	0.0	0	0.0	0	0.0	6	0.2	2	1.3	1	2.8	0	0.0	9	0.2
120,001-130,000	0	0.0	0	0.0	0	0.0	3	0.1	4	2.6	0	0.0	0	0.0	7	0.1
130,001-140,000	0	0.0	0	0.0	0	0.0	2	0.1	3	2.0	0	0.0	0	0.0	5	0.1
140,001-150,000	0	0.0	1	0.4	0	0.0	0	0.0	3	2.0	0	0.0	0	0.0	4	0.1
150,001-160,000	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
160,001-170,000	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0	1	0.0
170,001 and over	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	2	5.6	0	0.0	3	0.1
Unknown	265	17.9	62	27.7	2	1.5	418	13.2	27	17.9	8	22.2	50	100.0	832	15.9
Total	1483	100.0	224	100.0	130	100.0	3159	100.0	151	100.0	36	100.0	50	100.0	5233	100.0

**Table 3-9**  
**Fatal Truck Involvements by Gross Vehicle Weight Rating and Truck Configuration**  
**TIFA 1999**

Gross vehicle weight rating	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Class 3: 10,001-14,000	271	18.3	76	33.9	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	349	6.7
Class 4: 14,001-16,000	109	7.3	17	7.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	126	2.4
Class 5: 16,001-19,500	29	2.0	2	0.9	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	33	0.6
Class 6: 19,501-26,000	181	12.2	17	7.6	0	0.0	2	0.1	0	0.0	3	8.3	0	0.0	203	3.9
Class 7: 26,001-33,000	222	15.0	18	8.0	10	7.7	80	2.5	37	24.5	7	19.4	0	0.0	374	7.1
Class 8: 33,001 or more	570	38.4	85	37.9	117	90.0	3047	96.5	99	65.6	18	50.0	2	4.0	3938	75.3
Unknown	101	6.8	9	4.0	3	2.3	30	0.9	15	9.9	4	11.1	48	96.0	210	4.0
Total	1483	100.0	224	100.0	130	100.0	3159	100.0	151	100.0	36	100.0	50	100.0	5233	100.0

Note: Gross Vehicle Weight Rating (GVWR) pertains to the power unit.

**Table 3-10**  
**Fatal Truck Involvements by Carrier Type and Truck Configuration**  
**TIFA 1999**

Carrier type	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate private	390	26.3	55	24.6	17	13.1	499	15.8	9	6.0	4	11.1	1	2.0	975	18.6
Interstate for-hire	140	9.4	38	17.0	74	56.9	2200	69.6	108	71.5	19	52.8	1	2.0	2580	49.3
Intrastate private	565	38.1	82	36.6	11	8.5	183	5.8	13	8.6	3	8.3	0	0.0	857	16.4
Intrastate for-hire	165	11.1	12	5.4	15	11.5	165	5.2	17	11.3	5	13.9	0	0.0	379	7.2
Government owned	74	5.0	3	1.3	0	0.0	14	0.4	1	0.7	0	0.0	0	0.0	92	1.8
Daily rental	43	2.9	14	6.3	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	59	1.1
Unknown	106	7.1	20	8.9	13	10.0	96	3.0	3	2.0	5	13.9	48	96.0	291	5.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 3-11**  
**Fatal Truck Involvements by Trip Type and Truck Configuration**  
**TIFA 1999**

Trip type	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Local	1068	72.0	114	50.9	62	47.7	654	20.7	32	21.2	12	33.3	0	0.0	1942	37.1
51-100 miles	146	9.8	22	9.8	20	15.4	387	12.3	20	13.2	8	22.2	0	0.0	603	11.5
101-200	58	3.9	25	11.2	6	4.6	366	11.6	27	17.9	2	5.6	0	0.0	484	9.2
201-500	41	2.8	14	6.3	4	3.1	519	16.4	37	24.5	7	19.4	0	0.0	622	11.9
Over 500	16	1.1	22	9.8	8	6.2	680	21.5	9	6.0	4	11.1	0	0.0	739	14.1
Unk over-the-road dist.	13	0.9	3	1.3	4	3.1	130	4.1	3	2.0	2	5.6	0	0.0	155	3.0
Unknown	141	9.5	24	10.7	26	20.0	423	13.4	23	15.2	1	2.8	50	100.0	688	13.1
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>





## Driver

This section provides statistics on the drivers of trucks involved in fatal traffic accidents. Tables cover driver age, sex, alcohol or drug use, safety belt use, driver injury, licensing, previous driving record, and driver factors related to the accident.

- 2.2% of truck drivers involved in a fatal traffic accident had been drinking.
- Drug use was reported for 0.5% of truck drivers in a fatal crash.
- 96.1% of truck drivers involved in a fatal accident were male.
- 698 truck drivers were fatally injured in a traffic accident.
- 2.1% of truck drivers involved in a fatal accident were recorded as drowsy or asleep.
- Ran-off-road was the most common driver factor recorded (12.3%), followed by driving too fast (7.5%) and inattentive (5.2%).
- 61.1% of truck drivers had no driver factors recorded.

Injuries are classified according to severity under the following levels:

Severity category	Definition
K	Fatal injury
A	Incapacitating injury
B	Evident but not incapacitating
C	Complaint of pain
O	No injury

The following abbreviations are used in this chapter:

Abbreviation	Definition
Strt	Straight truck
Trac	Tractor
Trlrs	Trailers
Oth combs	Other combinations
Semi	Semitrailer
Convs	Convictions
CDL	Commercial driver's license



**Table 4-1  
Fatal Truck Involvements by Driver Drinking Status and Truck Configuration  
TIFA 1999**

Truck driver drinking	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No drinking	1428	96.3	220	98.2	126	96.9	3111	98.5	149	98.7	35	97.2	49	98.0	5118	97.8
Drinking	55	3.7	4	1.8	4	3.1	48	1.5	2	1.3	1	2.8	1	2.0	115	2.2
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-2  
Fatal Truck Involvements by Driver Drug Use and Truck Configuration  
TIFA 1999**

Truck driver drug use	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No drugs	447	30.1	52	23.2	30	23.1	949	30.0	35	23.2	14	38.9	3	6.0	1530	29.2
Drugs involved	8	0.5	2	0.9	1	0.8	15	0.5	0	0.0	1	2.8	0	0.0	27	0.5
Not reported	922	62.2	157	70.1	89	68.5	1992	63.1	110	72.8	19	52.8	46	92.0	3335	63.7
Reported unk.	106	7.1	13	5.8	10	7.7	203	6.4	6	4.0	2	5.6	1	2.0	341	6.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-3  
Fatal Truck Involvements by Driver Age and Truck Configuration  
TIFA 1999**

Age (years)	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
12-20	48	3.2	6	2.7	1	0.8	9	0.3	2	1.3	0	0.0	3	6.0	69	1.3
21-25	144	9.7	16	7.1	4	3.1	169	5.3	8	5.3	1	2.8	4	8.0	346	6.6
26-30	195	13.1	26	11.6	13	10.0	329	10.4	14	9.3	5	13.9	3	6.0	585	11.2
31-35	243	16.4	29	12.9	18	13.8	372	11.8	22	14.6	9	25.0	5	10.0	698	13.3
36-40	221	14.9	38	17.0	19	14.6	539	17.1	21	13.9	8	22.2	6	12.0	852	16.3
41-45	176	11.9	32	14.3	25	19.2	507	16.0	21	13.9	3	8.3	3	6.0	767	14.7
46-50	138	9.3	17	7.6	15	11.5	423	13.4	24	15.9	4	11.1	7	14.0	628	12.0
51-55	124	8.4	17	7.6	16	12.3	339	10.7	15	9.9	1	2.8	5	10.0	517	9.9
56-60	83	5.6	25	11.2	7	5.4	244	7.7	14	9.3	2	5.6	3	6.0	378	7.2
61-65	43	2.9	9	4.0	5	3.8	130	4.1	7	4.6	2	5.6	2	4.0	198	3.8
66-70	28	1.9	4	1.8	3	2.3	39	1.2	1	0.7	1	2.8	1	2.0	77	1.5
71-75	7	0.5	3	1.3	1	0.8	14	0.4	0	0.0	0	0.0	2	4.0	27	0.5
> 75	8	0.5	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	10	0.2
Unknown	25	1.7	2	0.9	3	2.3	43	1.4	2	1.3	0	0.0	6	12.0	81	1.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-4**  
**Fatal Truck Involvements by Driver Sex and Truck Configuration**  
**TIFA 1999**

Driver sex	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Male	1409	95.0	217	96.9	126	96.9	3050	96.5	147	97.4	36	100.0	43	86.0	5028	96.1
Female	52	3.5	5	2.2	2	1.5	68	2.2	2	1.3	0	0.0	1	2.0	130	2.5
Unknown	22	1.5	2	0.9	2	1.5	41	1.3	2	1.3	0	0.0	6	12.0	75	1.4
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-5**  
**Fatal Truck Involvements by Driver Restraint Use and Truck Configuration**  
**TIFA 1999**

Restraint use	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None used or N/A	428	28.9	61	27.2	34	26.2	463	14.7	21	13.9	7	19.4	10	20.0	1024	19.6
Shoulder belt	7	0.5	1	0.4	0	0.0	4	0.1	0	0.0	1	2.8	0	0.0	13	0.2
Lap belt	147	9.9	29	12.9	17	13.1	243	7.7	15	9.9	5	13.9	8	16.0	464	8.9
Lap and shoulder	673	45.4	106	47.3	60	46.2	1864	59.0	80	53.0	18	50.0	21	42.0	2822	53.9
Used, type unk	65	4.4	8	3.6	2	1.5	210	6.6	11	7.3	1	2.8	1	2.0	298	5.7
Belt use improper	1	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	4	0.1
Unknown	162	10.9	19	8.5	17	13.1	372	11.8	24	15.9	4	11.1	10	20.0	608	11.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-6**  
**Fatal Truck Involvements by Driver Injury Severity and Truck Configuration**  
**TIFA 1999**

Driver injury severity	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Fatal injury (K)	192	12.9	28	12.5	15	11.5	425	13.5	23	15.2	7	19.4	8	16.0	698	13.3
Incapacitating (A)	108	7.3	10	4.5	10	7.7	153	4.8	4	2.6	0	0.0	2	4.0	287	5.5
Non-incapacitating (B)	200	13.5	24	10.7	21	16.2	277	8.8	9	6.0	3	8.3	3	6.0	537	10.3
Complaint of pain (C)	215	14.5	33	14.7	20	15.4	317	10.0	21	13.9	4	11.1	7	14.0	617	11.8
No injury (O)	736	49.6	127	56.7	61	46.9	1948	61.7	92	60.9	22	61.1	28	56.0	3014	57.6
Died prior to accident	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Unknown	32	2.2	2	0.9	3	2.3	38	1.2	2	1.3	0	0.0	2	4.0	79	1.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-7**  
**Fatal Truck Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status**  
**TIFA 1999**

Rollover, fire ejection	Fatal injury (K)		Incapaci- tating (A)		Non-incapa- citating (B)		Complaint of pain (C)		No injury (O)		Died prior to accident		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Rollover only	181	25.9	56	19.5	90	16.8	63	10.2	69	2.3	0	0.0	1	1.3	460	8.8
Fire only	47	6.7	18	6.3	39	7.3	21	3.4	55	1.8	0	0.0	0	0.0	180	3.4
Ejection only	53	7.6	10	3.5	5	0.9	3	0.5	1	0.0	1	100.0	0	0.0	73	1.4
Rollover and fire	43	6.2	8	2.8	6	1.1	1	0.2	3	0.1	0	0.0	0	0.0	61	1.2
Rollover & ejection	139	19.9	6	2.1	3	0.6	0	0.0	0	0.0	0	0.0	0	0.0	148	2.8
Fire and ejection	10	1.4	2	0.7	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	13	0.2
Rollover, fire,&eject	15	2.1	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.3
None	203	29.1	185	64.5	394	73.4	527	85.4	2884	95.7	0	0.0	25	31.6	4218	80.6
Unknown	7	1.0	1	0.3	0	0.0	1	0.2	2	0.1	0	0.0	53	67.1	64	1.2
<b>Total</b>	<b>698</b>	<b>100.0</b>	<b>287</b>	<b>100.0</b>	<b>537</b>	<b>100.0</b>	<b>617</b>	<b>100.0</b>	<b>3014</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>79</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-8**  
**Fatal Truck Involvements by Driver Extrication and Truck Configuration**  
**TIFA 1999**

Driver extrication	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not extricated	1389	93.7	211	94.2	122	93.8	2965	93.9	139	92.1	34	94.4	50	100.0	4910	93.8
Extricated	64	4.3	9	4.0	6	4.6	151	4.8	9	6.0	2	5.6	0	0.0	241	4.6
Unknown	30	2.0	4	1.8	2	1.5	43	1.4	3	2.0	0	0.0	0	0.0	82	1.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-9**  
**Fatal Truck Involvements by Reported Hours Driven and Truck Configuration**  
**TIFA 1999**

Hours driven	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1 hr	430	29.0	67	29.9	34	26.2	489	15.5	16	10.6	8	22.2	0	0.0	1044	20.0
2 hrs	130	8.8	18	8.0	10	7.7	361	11.4	19	12.6	5	13.9	0	0.0	543	10.4
3 hrs	93	6.3	14	6.3	5	3.8	225	7.1	7	4.6	2	5.6	0	0.0	346	6.6
4-5 hrs	160	10.8	27	12.1	7	5.4	434	13.7	33	21.9	2	5.6	0	0.0	663	12.7
6-8 hrs	137	9.2	17	7.6	15	11.5	331	10.5	24	15.9	2	5.6	0	0.0	526	10.1
9-12 hrs	17	1.1	1	0.4	3	2.3	88	2.8	5	3.3	0	0.0	0	0.0	114	2.2
13-18 hrs	1	0.1	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	7	0.1
> 18 hrs	0	0.0	1	0.4	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Unknown, legal	48	3.2	6	2.7	5	3.8	161	5.1	7	4.6	1	2.8	0	0.0	228	4.4
Unk, not legal	0	0.0	0	0.0	1	0.8	5	0.2	0	0.0	0	0.0	0	0.0	6	0.1
Unknown/NA	467	31.5	73	32.6	50	38.5	1057	33.5	40	26.5	16	44.4	50	100.0	1753	33.5
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-10**  
**Fatal Truck Involvements by Number of Previous Accidents and Truck Configuration**  
**TIFA 1999**

No. of previous accidents	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	1093	73.7	179	79.9	96	73.8	2320	73.4	113	74.8	26	72.2	37	74.0	3864	73.8
1	222	15.0	25	11.2	21	16.2	429	13.6	26	17.2	5	13.9	2	4.0	730	13.9
2	32	2.2	1	0.4	1	0.8	88	2.8	4	2.6	2	5.6	5	10.0	133	2.5
3	8	0.5	2	0.9	0	0.0	18	0.6	2	1.3	0	0.0	0	0.0	30	0.6
4	1	0.1	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	6	0.1
5	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
8	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Not reported	85	5.7	14	6.3	6	4.6	156	4.9	2	1.3	2	5.6	0	0.0	265	5.1
Unknown	40	2.7	3	1.3	6	4.6	143	4.5	4	2.6	1	2.8	6	12.0	203	3.9
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-11**  
**Fatal Truck Involvements by Number of Previous Suspensions and Truck Configuration**  
**TIFA 1999**

No. of previous suspensions	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	1302	87.8	205	91.5	104	80.0	2770	87.7	138	91.4	33	91.7	40	80.0	4592	87.8
1	84	5.7	4	1.8	9	6.9	146	4.6	8	5.3	1	2.8	2	4.0	254	4.9
2	31	2.1	6	2.7	5	3.8	55	1.7	1	0.7	0	0.0	2	4.0	100	1.9
3	14	0.9	4	1.8	4	3.1	22	0.7	0	0.0	1	2.8	0	0.0	45	0.9
4	2	0.1	1	0.4	0	0.0	8	0.3	0	0.0	0	0.0	0	0.0	11	0.2
5	3	0.2	1	0.4	1	0.8	8	0.3	0	0.0	0	0.0	0	0.0	13	0.2
6	2	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	5	0.1
7	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
8	1	0.1	0	0.0	1	0.8	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
9	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
10	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
13	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
15	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Unknown	40	2.7	3	1.3	6	4.6	143	4.5	4	2.6	1	2.8	6	12.0	203	3.9
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-12**  
**Fatal Truck Involvements by Number of Previous Speeding Convictions and Truck Configuration**  
**TIFA 1999**

No. of previous speeding convs.	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	1133	76.4	170	75.9	77	59.2	2024	64.1	112	74.2	24	66.7	33	66.0	3573	68.3
1	234	15.8	35	15.6	30	23.1	638	20.2	20	13.2	8	22.2	8	16.0	973	18.6
2	50	3.4	13	5.8	10	7.7	225	7.1	7	4.6	3	8.3	1	2.0	309	5.9
3	18	1.2	3	1.3	3	2.3	85	2.7	4	2.6	0	0.0	2	4.0	115	2.2
4	5	0.3	0	0.0	2	1.5	27	0.9	3	2.0	0	0.0	0	0.0	37	0.7
5	3	0.2	0	0.0	0	0.0	14	0.4	1	0.7	0	0.0	0	0.0	18	0.3
6	0	0.0	0	0.0	2	1.5	2	0.1	0	0.0	0	0.0	0	0.0	4	0.1
7	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.0
Unknown	40	2.7	3	1.3	6	4.6	142	4.5	4	2.6	1	2.8	6	12.0	202	3.9
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-13**  
**Fatal Truck Involvements by Previous Other Moving Convictions and Truck Configuration**  
**TIFA 1999**

No. prev. other moving convs.	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	1154	77.8	172	76.8	78	60.0	2146	67.9	104	68.9	25	69.4	39	78.0	3718	71.0
1	206	13.9	33	14.7	25	19.2	581	18.4	29	19.2	7	19.4	5	10.0	886	16.9
2	56	3.8	10	4.5	10	7.7	190	6.0	11	7.3	1	2.8	0	0.0	278	5.3
3	15	1.0	4	1.8	8	6.2	55	1.7	2	1.3	1	2.8	0	0.0	85	1.6
4	7	0.5	1	0.4	2	1.5	30	0.9	0	0.0	0	0.0	0	0.0	40	0.8
5	4	0.3	0	0.0	1	0.8	6	0.2	0	0.0	0	0.0	0	0.0	11	0.2
6	1	0.1	1	0.4	0	0.0	5	0.2	1	0.7	1	2.8	0	0.0	9	0.2
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.0
>8	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Unknown	40	2.7	3	1.3	6	4.6	143	4.5	4	2.6	1	2.8	6	12.0	203	3.9
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-14**  
**Fatal Truck Involvements by License Class Compliance and Truck Configuration**  
**TIFA 1999**

License class compliance	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not licensed	11	0.7	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	13	0.2
Not required	1	0.1	0	0.0	1	0.8	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
Not valid	87	5.9	14	6.3	6	4.6	69	2.2	2	1.3	0	0.0	1	2.0	179	3.4
Valid	1338	90.2	208	92.9	117	90.0	2953	93.5	145	96.0	35	97.2	43	86.0	4839	92.5
Unk if CDL req.	8	0.5	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	12	0.2
Unknown	38	2.6	2	0.9	6	4.6	130	4.1	4	2.6	1	2.8	6	12.0	187	3.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-15**  
**Fatal Truck Involvements by CDL License Status and Truck Configuration**  
**TIFA 1999**

CDL license status	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No CDL	505	34.1	80	35.7	3	2.3	22	0.7	0	0.0	5	13.9	4	8.0	619	11.8
Suspended	8	0.5	3	1.3	2	1.5	23	0.7	0	0.0	0	0.0	0	0.0	36	0.7
Revoked	1	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Expired	7	0.5	0	0.0	0	0.0	8	0.3	0	0.0	0	0.0	0	0.0	15	0.3
Cancelled/denied	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Disqualified	0	0.0	0	0.0	0	0.0	3	0.1	1	0.7	0	0.0	0	0.0	4	0.1
Valid	917	61.8	139	62.1	118	90.8	2957	93.6	145	96.0	29	80.6	40	80.0	4345	83.0
Learner's permit	1	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	4	0.1
Other-not valid	2	0.1	0	0.0	0	0.0	13	0.4	1	0.7	0	0.0	0	0.0	16	0.3
Unknown	42	2.8	2	0.9	7	5.4	127	4.0	4	2.6	2	5.6	6	12.0	190	3.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

**Table 4-16**  
**Fatal Truck Involvements by License Endorsements and Truck Configuration**  
**TIFA 1999**

License endorsements	Strt truck		Strt/1trailer		Bobtail		Trac/1 semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No endorsements	1161	78.3	179	79.9	80	61.5	1735	54.9	27	17.9	25	69.4	40	80.0	3247	62.0
Complied	118	8.0	19	8.5	11	8.5	547	17.3	86	57.0	4	11.1	1	2.0	786	15.0
Not complied	6	0.4	0	0.0	1	0.8	10	0.3	2	1.3	0	0.0	0	0.0	19	0.4
Compliance unk.	100	6.7	13	5.8	23	17.7	559	17.7	27	17.9	5	13.9	3	6.0	730	13.9
Unknown	98	6.6	13	5.8	15	11.5	308	9.7	9	6.0	2	5.6	6	12.0	451	8.6
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>



**Table 4-17**  
**Fatal Truck Involvements by Driver-related Factors and Truck Configuration**  
**TIFA 1999**

Driver-related factors	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	868	58.5	136	60.7	70	53.8	1984	62.8	97	64.2	18	50.0	26	52.0	3199	61.1
<i>Physical/mental cond.</i>																
Drowsy, asleep	24	1.6	1	0.4	2	1.5	75	2.4	5	3.3	3	8.3	1	2.0	111	2.1
Ill, passed out, blackout	3	0.2	0	0.0	1	0.8	8	0.3	0	0.0	1	2.8	0	0.0	13	0.2
Depressed, angry	4	0.3	0	0.0	1	0.8	3	0.1	0	0.0	0	0.0	0	0.0	8	0.2
Reaction to drugs	0	0.0	0	0.0	0	0.0	3	0.1	1	0.7	1	2.8	0	0.0	5	0.1
Inattentive	79	5.3	16	7.1	6	4.6	153	4.8	11	7.3	2	5.6	4	8.0	271	5.2
Restricted to wheelchair	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Previous injury	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Other impairment	2	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	4	0.1
<i>Miscellaneous causes</i>																
On prohib. trafficway	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Vehicle unattended	14	0.9	1	0.4	2	1.5	16	0.5	2	1.3	0	0.0	0	0.0	35	0.7
Improper loading	4	0.3	4	1.8	1	0.8	25	0.8	1	0.7	2	5.6	0	0.0	37	0.7
Improper towing	2	0.1	2	0.9	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	5	0.1
Improper lights	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
W/O req equipment	15	1.0	8	3.6	1	0.8	21	0.7	6	4.0	0	0.0	1	2.0	52	1.0
Creating unlawful noise	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Improper tailing	22	1.5	2	0.9	2	1.5	84	2.7	3	2.0	0	0.0	0	0.0	113	2.2
Improper lane change	4	0.3	1	0.4	1	0.8	29	0.9	0	0.0	1	2.8	0	0.0	36	0.7
Ran off road/lane	210	14.2	23	10.3	20	15.4	366	11.6	18	11.9	5	13.9	4	8.0	646	12.3
Driving on shoulder	2	0.1	0	0.0	1	0.8	4	0.1	0	0.0	0	0.0	0	0.0	7	0.1
Improper entry/exit	3	0.2	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	9	0.2
Improper start/back	12	0.8	1	0.4	1	0.8	15	0.5	0	0.0	0	0.0	1	2.0	30	0.6
Prohibited passing	3	0.2	1	0.4	0	0.0	10	0.3	0	0.0	0	0.0	0	0.0	14	0.3
Passing-wrong side	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	1	2.8	0	0.0	4	0.1
Passing-insufficient dist	7	0.5	0	0.0	1	0.8	11	0.3	0	0.0	1	2.8	0	0.0	20	0.4
Erratic/reckless	46	3.1	6	2.7	4	3.1	79	2.5	4	2.6	0	0.0	0	0.0	139	2.7
Failure to yield	91	6.1	11	4.9	7	5.4	136	4.3	3	2.0	1	2.8	6	12.0	255	4.9
Failure to obey signs	67	4.5	9	4.0	4	3.1	81	2.6	3	2.0	1	2.8	5	10.0	170	3.2
Passing around barrier	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0	1	0.0
Fail to observe warning	3	0.2	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	7	0.1
Driving too fast	96	6.5	15	6.7	14	10.8	249	7.9	14	9.3	4	11.1	3	6.0	395	7.5
Under minimum speed	4	0.3	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	9	0.2
Turning from wrong lane	2	0.1	0	0.0	0	0.0	4	0.1	0	0.0	1	2.8	0	0.0	7	0.1
Other improper turn	20	1.3	2	0.9	3	2.3	35	1.1	7	4.6	1	2.8	0	0.0	68	1.3
Driving wrong way	0	0.0	1	0.4	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
Wrong side of road	14	0.9	4	1.8	2	1.5	26	0.8	1	0.7	2	5.6	0	0.0	49	0.9
Operator inexperience	1	0.1	0	0.0	1	0.8	7	0.2	1	0.7	1	2.8	0	0.0	11	0.2
Unfamiliar w/roadway	0	0.0	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	6	0.1
Stopping in roadway	19	1.3	3	1.3	1	0.8	21	0.7	1	0.7	0	0.0	0	0.0	45	0.9
Locked wheel	9	0.6	1	0.4	2	1.5	6	0.2	2	1.3	1	2.8	0	0.0	21	0.4
Over correcting	27	1.8	1	0.4	2	1.5	13	0.4	1	0.7	0	0.0	0	0.0	44	0.8
On/Off moving vehicle	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0

(continued on next page)

Table 4-17 (continued)

Driver-related factors	Strt truck		Strt/1trailer		Bobtail		Trac/1semi		Trac/2 trlrs		Oth combs		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Vision obscured by</i>																
Incllement weather	10	0.7	1	0.4	2	1.5	69	2.2	3	2.0	0	0.0	0	0.0	85	1.6
Glare	4	0.3	0	0.0	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	13	0.2
Curve, hill, etc	5	0.3	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	10	0.2
Building, billboard	2	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	5	0.1
Trees, crops, vegetation	3	0.2	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	4	0.1
Motor vehicle	0	0.0	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	6	0.1
Parked vehicle	1	0.1	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	3	0.1
Inadequate lighting system	2	0.1	0	0.0	1	0.8	1	0.0	1	0.7	0	0.0	0	0.0	5	0.1
Obstructing angles	5	0.3	0	0.0	1	0.8	5	0.2	0	0.0	0	0.0	0	0.0	11	0.2
Other obstruction	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
<i>Avoiding, swerving due to</i>																
Severe crosswind	2	0.1	1	0.4	0	0.0	1	0.0	0	0.0	1	2.8	0	0.0	5	0.1
Slippery surface	1	0.1	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	6	0.1
Tire blowout or flat	6	0.4	0	0.0	0	0.0	6	0.2	1	0.7	0	0.0	0	0.0	13	0.2
Debris in road	2	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	5	0.1
Live animal in road	0	0.0	2	0.9	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
Vehicle in road	17	1.1	3	1.3	5	3.8	28	0.9	0	0.0	0	0.0	0	0.0	53	1.0
Phantom vehicle	3	0.2	0	0.0	3	2.3	4	0.1	0	0.0	0	0.0	0	0.0	10	0.2
Pedestrian in road	1	0.1	0	0.0	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	10	0.2
Ice,water,snow on road	6	0.4	1	0.4	0	0.0	35	1.1	0	0.0	0	0.0	0	0.0	42	0.8
<i>Other misc. factors</i>																
Hauling haz. mat. improp.	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Hit and run driver	15	1.0	1	0.4	3	2.3	22	0.7	1	0.7	0	0.0	6	12.0	48	0.9
Homocide	37	2.5	10	4.5	6	4.6	60	1.9	6	4.0	1	2.8	0	0.0	120	2.3
Other nonmoving viol.	47	3.2	9	4.0	5	3.8	79	2.5	2	1.3	1	2.8	0	0.0	143	2.7
<i>Possible distractions</i>																
Cellular phone	2	0.1	1	0.4	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	10	0.2
Computer	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Unknown	72	4.9	4	1.8	4	3.1	84	2.7	4	2.6	0	0.0	0	0.0	168	3.2
<b>Total</b>	<b>1483</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>5233</b>	<b>100.0</b>

Note: Since Driver-related Factors is a multiple-response variable, more than one driver factor can be coded per driver. Percents are calculated based on total drivers, not total factors.

## ***Straight trucks***

This section provides descriptive statistics on straight trucks involved in a fatal traffic accident in 1999. All truck configurations in which the power unit was a straight truck are included in this section. A straight truck is a truck power unit with a permanently attached cargo body. Straight truck configurations include trucks pulling no trailers, pulling a full or other trailer, as well as wreckers towing cars or other straight trucks.

- Truck configurations with a straight-truck power unit accounted for 32.8% of all trucks involved in a fatal traffic accident in 1999.
- 38.3% of straight trucks were Class 8 (over 33,000 lbs.) Gross Vehicle Weight Rating (GVWR), and 20.3% were Class 3 (10,001-14,000 lbs.).
- The lightest straight trucks involved in a fatal accident in 1999 weighed 5,000 pounds or less; the heaviest straight truck combination weighed over 150,000 pounds.
- 40.0% of straight trucks were empty at the time of the accident; solids in bulk was the most frequent cargo type, accounting for 18.2%.
- 54.6% of straight truck configurations involved in a fatal traffic accident had two axles, 23.3% had three axles (including the trailer), and one straight truck combination had five axles on the power unit and six axles on the trailer.
- 37.7% of straight trucks were operated by a private, intrastate carrier; 26.0% by a private, interstate carrier; and only 10.6% by a for-hire, interstate carrier.
- 69.1% of straight trucks were on a local trip (within 50 miles of base) at the time of the accident.
- 224 straight truck drivers were fatally injured in a traffic accident; 48.2% of the fatalities occurred in ran-off-road crashes.

Note: 400 straight trucks had "other" cargo bodies, bodies that did not fall into any named cargo body type. Most of these were utility bodies or some other working body type such as concrete mixers, cement pumps, or boom trucks.



## Configuration

**Table 5-1**  
**Fatal Truck Involvements by Truck Configuration**  
**TIFA 1999**

Configuration	No.	Pct.
<i>Straight truck only</i>	1483	86.3
<i>Straight truck, 1 trailer</i>		
Straight + full trailer	54	3.1
Straight + other	126	7.3
Straight + other, gooseneck hitch	44	2.6
<i>Subtotal</i>	224	13.0
<i>Other straight combinations</i>		
Wrecker + tow	10	0.6
Wrecker towing straight + full trailer	1	0.1
Straight + 2 saddlemount straights	1	0.1
<i>Subtotal</i>	12	0.7
Total straight trucks	1719	100.0

**Table 5-2**  
**Fatal Truck Involvements by Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Cargo body style	No.	Pct.
Van	355	20.7
Open top van	3	0.2
Refrigerated van	59	3.4
Livestock carrier	4	0.2
Flatbed	131	7.6
Lowboy	1	0.1
Flatbed with equipment	31	1.8
Flatbed with sides	74	4.3
Pole/logging	15	0.9
Tank:liquid/gas	60	3.5
Tank:dry bulk	5	0.3
Auto carrier	23	1.3
Dump	423	24.6
Hopper bottom	1	0.1
Garbage/refuse	130	7.6
Other	400	23.3
Unknown	4	0.2
Total	1719	100.0

**Table 5-3**  
**Fatal Truck Involvements by Gross Vehicle Weight Rating and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Gross vehicle weight rating (lbs)	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Class 3: 10,001-14,000	106	25.4	54	22.8	4	6.2	10	2.4	0	0.0	0	0.0	174	40.7	1	25.0	349	20.3
Class 4: 14,001-16,000	30	7.2	37	15.6	3	4.6	7	1.7	1	0.8	0	0.0	48	11.2	0	0.0	126	7.3
Class 5: 16,001-19,500	17	4.1	4	1.7	0	0.0	1	0.2	1	0.8	0	0.0	10	2.3	0	0.0	33	1.9
Class 6: 19,501-26,000	99	23.7	27	11.4	7	10.8	22	5.2	1	0.8	0	0.0	45	10.5	0	0.0	201	11.7
Class 7: 26,001-33,000	112	26.9	49	20.7	21	32.3	23	5.4	5	3.8	0	0.0	28	6.6	2	50.0	240	14.0
Class 8: 33,001 or more	23	5.5	43	18.1	27	41.5	327	77.1	116	89.2	15	100.0	107	25.1	0	0.0	658	38.3
Unknown	30	7.2	23	9.7	3	4.6	34	8.0	6	4.6	0	0.0	15	3.5	1	25.0	112	6.5
Total	417	100.0	237	100.0	65	100.0	424	100.0	130	100.0	15	100.0	427	100.0	4	100.0	1719	100.0

\* Note: The Other category includes 23 auto carriers and four livestock carriers.  
 Gross Vehicle Weight Rating (GVWR) pertains to the power unit.

**Table 5-4**  
**Fatal Truck Involvements by Gross Combination Weight and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Gross combination weight (lbs)	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<= 5,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0	2	0.1
5,001-10,000	68	16.3	77	32.5	1	1.5	21	5.0	0	0.0	0	0.0	134	31.4	0	0.0	301	17.5
10,001-15,000	139	33.3	45	19.0	6	9.2	35	8.3	1	0.8	0	0.0	74	17.3	1	25.0	301	17.5
15,001-20,000	47	11.3	24	10.1	8	12.3	26	6.1	2	1.5	1	6.7	25	5.9	0	0.0	133	7.7
20,001-25,000	32	7.7	18	7.6	9	13.8	73	17.2	10	7.7	0	0.0	23	5.4	0	0.0	165	9.6
25,001-30,000	16	3.8	9	3.8	9	13.8	72	17.0	30	23.1	1	6.7	21	4.9	0	0.0	158	9.2
30,001-35,000	4	1.0	9	3.8	4	6.2	16	3.8	18	13.8	1	6.7	11	2.6	0	0.0	63	3.7
35,001-40,000	0	0.0	3	1.3	3	4.6	12	2.8	7	5.4	0	0.0	12	2.8	0	0.0	37	2.2
40,001-45,000	3	0.7	5	2.1	2	3.1	12	2.8	5	3.8	1	6.7	6	1.4	0	0.0	34	2.0
45,001-50,000	0	0.0	1	0.4	2	3.1	18	4.2	3	2.3	0	0.0	2	0.5	0	0.0	26	1.5
50,001-55,000	0	0.0	1	0.4	1	1.5	29	6.8	5	3.8	0	0.0	6	1.4	0	0.0	42	2.4
55,001-60,000	0	0.0	2	0.8	0	0.0	14	3.3	5	3.8	1	6.7	10	2.3	0	0.0	32	1.9
60,001-65,000	0	0.0	0	0.0	1	1.5	10	2.4	1	0.8	1	6.7	7	1.6	0	0.0	20	1.2
65,001-70,000	0	0.0	2	0.8	1	1.5	16	3.8	4	3.1	1	6.7	8	1.9	0	0.0	32	1.9
70,001-75,000	0	0.0	0	0.0	1	1.5	9	2.1	0	0.0	4	26.7	5	1.2	0	0.0	19	1.1
75,001-80,000	0	0.0	0	0.0	0	0.0	7	1.7	2	1.5	0	0.0	5	1.2	0	0.0	14	0.8
80,001-85,000	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
85,001-90,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90,001-95,000	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	2	13.3	0	0.0	0	0.0	3	0.2
95,001-100,000	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
100,001-110,000	0	0.0	0	0.0	0	0.0	3	0.7	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
110,001-120,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.1
120,001-130,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
130,001-140,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
140,001-150,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.1
150,001-160,000	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Unknown	108	25.9	41	17.3	17	26.2	47	11.1	37	28.5	2	13.3	74	17.3	3	75.0	329	19.1
Total	417	100.0	237	100.0	65	100.0	424	100.0	130	100.0	15	100.0	427	100.0	4	100.0	1719	100.0

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-5  
Fatal Truck Involvements by Cargo Type and Cargo Body Style – Straight Trucks  
TIFA 1999**

Cargo type	Van		Open top van		Refrigerated van		Livestock carrier		Flatbed		Lowboy		Flatbed with equip.		Flatbed with sides		Pole/logging	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty	87	24.5	2	66.7	15	25.4	1	25.0	68	51.9	1	100.0	12	38.7	22	29.7	4	26.7
General freight	174	49.0	1	33.3	2	3.4	0	0.0	5	3.8	0	0.0	2	6.5	11	14.9	0	0.0
Household goods	41	11.5	0	0.0	0	0.0	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0
Building materials	1	0.3	0	0.0	0	0.0	0	0.0	7	5.3	0	0.0	2	6.5	3	4.1	0	0.0
Metal (coils, sheets)	4	1.1	0	0.0	0	0.0	0	0.0	5	3.8	0	0.0	0	0.0	1	1.4	0	0.0
Heavy machinery	0	0.0	0	0.0	0	0.0	0	0.0	5	3.8	0	0.0	0	0.0	1	1.4	0	0.0
Large objects	3	0.8	0	0.0	0	0.0	0	0.0	11	8.4	0	0.0	3	9.7	3	4.1	0	0.0
Motor vehicles	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0
Piggybk/towaway	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gases in bulk	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0
Solids in bulk	5	1.4	0	0.0	0	0.0	0	0.0	5	3.8	0	0.0	0	0.0	8	10.8	0	0.0
Liquids in bulk	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0
Explosives	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Logs/poles/lumber	2	0.6	0	0.0	0	0.0	0	0.0	9	6.9	0	0.0	2	6.5	4	5.4	11	73.3
Refrigerated foods	0	0.0	0	0.0	41	69.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Farm products	5	1.4	0	0.0	0	0.0	0	0.0	3	2.3	0	0.0	0	0.0	4	5.4	0	0.0
Live animals	0	0.0	0	0.0	0	0.0	3	75.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	23	6.5	0	0.0	0	0.0	0	0.0	11	8.4	0	0.0	9	29.0	16	21.6	0	0.0
Cargo, unk. type	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	9	2.5	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>355</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>59</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>131</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>

**Table 5-5 (continued)**

Cargo Type	Tank liquid/gas		Tank dry bulk		Auto carrier		Dump		Hopper bottom		Refuse		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty	12	20.0	1	20.0	12	52.2	217	51.3	1	100.0	44	33.8	189	47.3	0	0.0	688	40.0
General freight	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	4	1.0	1	25.0	201	11.7
Household goods	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0	44	2.6
Building materials	0	0.0	0	0.0	0	0.0	4	0.9	0	0.0	0	0.0	2	0.5	0	0.0	19	1.1
Metal (coils, sheets)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8	0	0.0	13	0.8
Heavy machinery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0	8	0.5
Large objects	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.0	0	0.0	24	1.4
Motor vehicles	0	0.0	0	0.0	10	43.5	0	0.0	0	0.0	0	0.0	9	2.3	0	0.0	20	1.2
Piggybk/towaway	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	2.8	0	0.0	11	0.6
Gases in bulk	8	13.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	0.5
Solids in bulk	1	1.7	4	80.0	0	0.0	166	39.2	0	0.0	82	63.1	42	10.5	0	0.0	313	18.2
Liquids in bulk	38	63.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	40	2.3
Explosives	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Logs/poles/lumber	0	0.0	0	0.0	0	0.0	6	1.4	0	0.0	0	0.0	1	0.3	0	0.0	35	2.0
Refrigerated foods	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	42	2.4
Farm products	0	0.0	0	0.0	0	0.0	20	4.7	0	0.0	0	0.0	3	0.8	0	0.0	35	2.0
Live animals	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	4	0.2
Other	0	0.0	0	0.0	1	4.3	4	0.9	0	0.0	0	0.0	120	30.0	0	0.0	184	10.7
Cargo, unk. type	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Unknown	1	1.7	0	0.0	0	0.0	3	0.7	0	0.0	4	3.1	6	1.5	3	75.0	27	1.6
<b>Total</b>	<b>60</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>23</b>	<b>100.0</b>	<b>423</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>400</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

**Table 5-6**  
**Fatal Truck Involvements by Axle Combinations – Straight Truck Configurations**  
**TIFA 1999**

Straight only Power unit axles*	Str/ 1 trlr Trailer axles*	Total	
		No.	Pct.
2		932	54.6
3		372	21.8
4		141	8.3
5		26	1.5
6		5	0.3
7		2	0.1
2	1	26	1.5
2	2	106	6.2
2	3	10	0.6
3	2	62	3.6
3	3	5	0.3
3	4	1	0.1
4	2	5	0.3
4	3	4	0.2
4	7	1	0.1
5	3	1	0.1
5	6	1	0.1
Unknown		7	0.4
<b>Total</b>		<b>1707</b>	<b>100.0</b>

\* Note: Axle counts include power unit axles plus lift axles not in use. Cases with unknown lift axles were counted as having 0 lift axles. The 12 other straight truck combinations were not included in this table.

## Vehicle use

**Table 5-7**  
**Fatal Truck Involvements by Carrier Type and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Carrier type	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate private	122	29.3	86	36.3	23	35.4	72	17.0	50	38.5	2	13.3	91	21.3	1	25.0	447	26.0
Interstate for-hire	83	19.9	4	1.7	4	6.2	38	9.0	1	0.8	3	20.0	48	11.2	1	25.0	182	10.6
Intrastate private	113	27.1	115	48.5	31	47.7	131	30.9	58	44.6	9	60.0	191	44.7	0	0.0	648	37.7
Intrastate for-hire	21	5.0	8	3.4	3	4.6	119	28.1	1	0.8	1	6.7	26	6.1	0	0.0	179	10.4
Government owned	3	0.7	4	1.7	2	3.1	39	9.2	15	11.5	0	0.0	14	3.3	0	0.0	77	4.5
Daily rental	55	13.2	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	57	3.3
Unknown	20	4.8	19	8.0	2	3.1	25	5.9	5	3.8	0	0.0	56	13.1	2	50.0	129	7.5
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.



**Table 5-8**  
**Fatal Truck Involvements by Trip Type and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Trip type	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Local	198	47.5	163	68.8	50	76.9	353	83.3	109	83.8	11	73.3	303	71.0	0	0.0	1187	69.1
51-100 miles	72	17.3	25	10.5	8	12.3	27	6.4	8	6.2	1	6.7	31	7.3	0	0.0	172	10.0
101-200	37	8.9	21	8.9	2	3.1	3	0.7	2	1.5	0	0.0	18	4.2	0	0.0	83	4.8
201-500	27	6.5	5	2.1	0	0.0	6	1.4	0	0.0	1	6.7	16	3.7	1	25.0	56	3.3
Over 500	21	5.0	2	0.8	1	1.5	2	0.5	0	0.0	0	0.0	14	3.3	0	0.0	40	2.3
Unk over-the-road dist	8	1.9	2	0.8	0	0.0	3	0.7	0	0.0	0	0.0	3	0.7	0	0.0	16	0.9
Unknown	54	12.9	19	8.0	4	6.2	30	7.1	11	8.5	2	13.3	42	9.8	3	75.0	165	9.6
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-9**  
**Fatal Truck Involvements by Route Signing and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Route signing	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate	84	20.1	29	12.2	3	4.6	30	7.1	7	5.4	0	0.0	65	15.2	0	0.0	218	12.7
US highway	89	21.3	50	21.1	11	16.9	108	25.5	21	16.2	4	26.7	92	21.5	1	25.0	376	21.9
State highway	123	29.5	77	32.5	20	30.8	148	34.9	44	33.8	8	53.3	142	33.3	1	25.0	563	32.8
County road	48	11.5	36	15.2	17	26.2	74	17.5	20	15.4	1	6.7	54	12.6	1	25.0	251	14.6
Township	10	2.4	6	2.5	4	6.2	9	2.1	6	4.6	0	0.0	12	2.8	0	0.0	47	2.7
Municipality	49	11.8	24	10.1	6	9.2	33	7.8	23	17.7	0	0.0	42	9.8	1	25.0	178	10.4
Frontage road	2	0.5	0	0.0	0	0.0	1	0.2	1	0.8	1	6.7	1	0.2	0	0.0	6	0.3
Other	9	2.2	14	5.9	4	6.2	19	4.5	7	5.4	1	6.7	19	4.4	0	0.0	73	4.2
Unknown	3	0.7	1	0.4	0	0.0	2	0.5	1	0.8	0	0.0	0	0.0	0	0.0	7	0.4
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-10**  
**Fatal Truck Involvements by Land Use and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Land use	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Urban	179	42.9	87	36.7	15	23.1	116	27.4	68	52.3	0	0.0	165	38.6	2	50.0	632	36.8
Rural	234	56.1	148	62.4	49	75.4	305	71.9	59	45.4	15	100.0	261	61.1	2	50.0	1073	62.4
Unknown	4	1.0	2	0.8	1	1.5	3	0.7	3	2.3	0	0.0	1	0.2	0	0.0	14	0.8
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-11**  
**Fatal Truck Involvements by Light Condition and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Light condition	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Daylight	310	74.3	199	84.0	55	84.6	354	83.5	102	78.5	10	66.7	308	72.1	3	75.0	1341	78.0
Dark	60	14.4	27	11.4	5	7.7	40	9.4	10	7.7	3	20.0	70	16.4	0	0.0	215	12.5
Dark but lighted	31	7.4	9	3.8	3	4.6	17	4.0	10	7.7	0	0.0	34	8.0	0	0.0	104	6.1
Dawn	11	2.6	1	0.4	1	1.5	9	2.1	7	5.4	1	6.7	10	2.3	1	25.0	41	2.4
Dusk	5	1.2	1	0.4	1	1.5	3	0.7	1	0.8	1	6.7	5	1.2	0	0.0	17	1.0
Unknown	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

## Accident description

**Table 5-12**  
**Fatal Truck Involvements by Accident Type and Driver Injury Severity – Straight Trucks**  
**TIFA 1999**

Accident type	Fatal injury (K)		Incapacitating (A)		Non-incapacitating (B)		Complaint of pain (C)		No injury (O)		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Single vehicle</i>														
Ran off road	108	48.2	16	13.6	7	3.1	3	1.2	7	0.8	1	2.9	142	8.3
Hit object in road	8	3.6	1	0.8	2	0.9	7	2.8	150	17.3	7	20.6	175	10.2
<i>Same direction, same trafficway</i>														
Rearend, truck striking	18	8.0	4	3.4	4	1.8	9	3.6	31	3.6	1	2.9	67	3.9
Rearend, truck struck	7	3.1	6	5.1	13	5.8	22	8.8	85	9.8	12	35.3	145	8.4
Sideswipe, in other's lane	2	0.9	1	0.8	1	0.4	1	0.4	5	0.6	0	0.0	10	0.6
Sideswipe, in truck's lane	1	0.4	0	0.0	3	1.3	2	0.8	16	1.8	1	2.9	23	1.3
<i>Opposite direction, same trafficway</i>														
Head-on, in other's lane	8	3.6	8	6.8	16	7.1	15	6.0	14	1.6	0	0.0	61	3.5
Head-on, in truck's lane	6	2.7	30	25.4	53	23.6	50	20.1	73	8.4	0	0.0	212	12.3
Sideswipe, in other's lane	4	1.8	4	3.4	7	3.1	2	0.8	4	0.5	0	0.0	21	1.2
Sideswipe, in truck's lane	5	2.2	4	3.4	23	10.2	14	5.6	59	6.8	1	2.9	106	6.2
<i>Change trafficway, one vehicle turning</i>														
Truck turn across path	3	1.3	4	3.4	3	1.3	11	4.4	48	5.5	0	0.0	69	4.0
Other turn across path	4	1.8	8	6.8	15	6.7	23	9.2	88	10.1	1	2.9	139	8.1
<i>Intersecting paths, both going straight</i>														
Truck into side of other	10	4.5	14	11.9	37	16.4	42	16.9	120	13.8	1	2.9	224	13.0
Other into side of truck	11	4.9	2	1.7	8	3.6	12	4.8	28	3.2	2	5.9	63	3.7
<i>Other accident types</i>														
Truck backed into other	0	0.0	0	0.0	0	0.0	0	0.0	6	0.7	0	0.0	6	0.3
Other backed into truck	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0	1	0.1
Untripped roll	13	5.8	0	0.0	2	0.9	1	0.4	3	0.3	0	0.0	19	1.1
Other	12	5.4	13	11.0	26	11.6	32	12.9	115	13.2	7	20.6	205	11.9
Unknown	4	1.8	3	2.5	5	2.2	2	0.8	17	2.0	0	0.0	31	1.8
<b>Total</b>	<b>224</b>	<b>100.0</b>	<b>118</b>	<b>100.0</b>	<b>225</b>	<b>100.0</b>	<b>249</b>	<b>100.0</b>	<b>869</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

**Table 5-13**  
**Fatal Truck Involvements by Manner of Collision and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Manner of collision	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not applicable	103	24.7	50	21.1	26	40.0	64	15.1	47	36.2	3	20.0	101	23.7	0	0.0	394	22.9
Rear-end	50	12.0	50	21.1	5	7.7	66	15.6	26	20.0	1	6.7	62	14.5	1	25.0	261	15.2
Head-on	116	27.8	49	20.7	13	20.0	95	22.4	15	11.5	6	40.0	105	24.6	0	0.0	399	23.2
Angle	126	30.2	77	32.5	20	30.8	190	44.8	38	29.2	5	33.3	141	33.0	2	50.0	599	34.8
Sideswipe:same direction	13	3.1	2	0.8	1	1.5	2	0.5	2	1.5	0	0.0	7	1.6	1	25.0	28	1.6
Sideswipe:opp. direction	8	1.9	8	3.4	0	0.0	7	1.7	1	0.8	0	0.0	10	2.3	0	0.0	34	2.0
Unknown	1	0.2	1	0.4	0	0.0	0	0.0	1	0.8	0	0.0	1	0.2	0	0.0	4	0.2
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-14**  
**Fatal Truck Involvements by Driver Injury Severity and Cargo Body Style – Straight Trucks**  
**TIFA 1999**

Driver injury severity	Van		Flatbed		Tank		Dump		Refuse		Pole/logging		Other*		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Fatal injury (K)	50	12.0	28	11.8	19	29.2	49	11.6	12	9.2	2	13.3	64	15.0	0	0.0	224	13.0
Incapacitating (A)	37	8.9	20	8.4	3	4.6	18	4.2	4	3.1	0	0.0	36	8.4	0	0.0	118	6.9
Non-incapacitating (B)	64	15.3	25	10.5	7	10.8	59	13.9	12	9.2	4	26.7	54	12.6	0	0.0	225	13.1
Complaint of pain (C)	59	14.1	42	17.7	8	12.3	63	14.9	15	11.5	3	20.0	58	13.6	1	25.0	249	14.5
No injury (O)	200	48.0	115	48.5	28	43.1	231	54.5	80	61.5	6	40.0	206	48.2	3	75.0	869	50.6
Unknown	7	1.7	7	3.0	0	0.0	4	0.9	7	5.4	0	0.0	9	2.1	0	0.0	34	2.0
<b>Total</b>	<b>417</b>	<b>100.0</b>	<b>237</b>	<b>100.0</b>	<b>65</b>	<b>100.0</b>	<b>424</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>

\* Note: The Other category includes 23 auto carriers and four livestock carriers.

**Table 5-15**  
**Fatal Truck Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status – Straight Trucks**  
**TIFA 1999**

Fire, rollover, and ejection	Fatal injury (K)		Incapacitating (A)		Non-incapacitating (B)		Complaint of pain (C)		No. injury (O)		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Rollover only	39	17.4	19	16.1	40	17.8	23	9.2	26	3.0	0	0.0	147	8.6
Fire only	8	3.6	4	3.4	4	1.8	6	2.4	6	0.7	0	0.0	28	1.6
Ejection only	18	8.0	8	6.8	2	0.9	2	0.8	0	0.0	0	0.0	30	1.7
Rollover and fire	5	2.2	2	1.7	1	0.4	0	0.0	0	0.0	0	0.0	8	0.5
Rollover & ejection	75	33.5	5	4.2	2	0.9	0	0.0	0	0.0	0	0.0	82	4.8
Fire and ejection	2	0.9	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0	3	0.2
Rollover, fire&eject	4	1.8	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	5	0.3
None	72	32.1	79	66.9	176	78.2	217	87.1	836	96.2	12	35.3	1392	81.0
Unknown	1	0.4	0	0.0	0	0.0	0	0.0	1	0.1	22	64.7	24	1.4
<b>Total</b>	<b>224</b>	<b>100.0</b>	<b>118</b>	<b>100.0</b>	<b>225</b>	<b>100.0</b>	<b>249</b>	<b>100.0</b>	<b>869</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>	<b>1719</b>	<b>100.0</b>



# ***Tractors***

This section provides descriptive statistics on tractor combinations involved in a fatal traffic accident in 1999. All truck configurations in which the power unit is a truck-tractor are included in this section. A tractor is a truck power unit with a fifth-wheel designed to pull semitrailers. Tractor configurations include tractors pulling no trailers (bobtail), pulling one or more semitrailers, as well as other configurations with supplementary units such as jeeeps that permit hauling very heavy loads or configurations in which the tractor towed other tractors by means of saddlemounts. Most tables cover all tractor combinations, but some are limited to tractor-semitrailers and some are limited to tractors with two trailers (doubles).

- Truck configurations in which the power unit was a tractor accounted for 3,464 of the 5,233 trucks (66.2%) involved in a fatal accident in 1999.
- 94.6% of the power units in tractor combinations were Class 8 (over 33,000 lbs.) Gross Vehicle Weight Rating (GVWR).
- The lightest tractor configuration weighed 10,000 pounds or less, and was a bobtail tractor; the two heaviest tractor configurations each had a loaded weight over 240,000 pounds.
- 77.7% of tractor combinations weighed between 25,001 and 80,000 pounds.
- 28.2% of tractor combinations were empty at the time of the accident; the most common cargo was general freight with 25.8% of tractor involvements.
- 88.7% of tractor-semitrailer configurations consisted of a three-axle tractor pulling a two-axle trailer. 57.0% of doubles (two trailers) consisted of a two-axle tractor with a one-axle first trailer and a two-axle second trailer.
- 69.2% of tractor combinations were operated by for-hire, interstate carriers; 15.2% of tractors were operated by private, interstate carriers.
- 21.8% of tractor combinations were on a local trip (within 50 miles of base) at the time of the accident; 20.2% were on a trip over 500 miles.
- 466 tractor drivers were fatally injured in a traffic accident; 53.4% of the fatalities occurred in ran-off-road crashes.



## Configuration

**Table 6-1**  
**Fatal Truck Involvements by Tractor Configuration**  
**TIFA 1999**

Configuration	No.	Pct.
<i>Tractor, no trailers</i>		
Bobtail tractor	110	3.2
Tractor carrying cargo	20	0.6
<i>Subtotal</i>	130	3.8
<i>Tractor, 1 trailer</i>		
Tractor and semitrailer	3159	91.2
Tractor + other	18	0.5
Tractor + full trailer	1	0.0
<i>Subtotal</i>	3178	91.7
<i>Tractor, 2 trailers</i>		
Double with A dolly	87	2.5
Double, B train	1	0.0
Tractor + semitrailer + full trailer	62	1.8
Tractor + semitrailer + other trailer	1	0.0
<i>Subtotal</i>	151	4.4
<i>Tractor, 3 trailers</i>		
Triple with A dollies	2	0.1
<i>Subtotal</i>	2	0.1
<i>Other tractor combinations</i>		
Tractor + semitrailer + jeep	1	0.0
Tractor + jeep + full trailer + jeep	1	0.0
Tractor + 3 saddlemount tractors	1	0.0
<i>Subtotal</i>	3	0.1
<b>Total tractors</b>	<b>3464</b>	<b>100.0</b>

**Table 6-2**  
**Fatal Truck Involvements by Cargo Body Style and Truck Configuration – Tractor Combinations**  
**TIFA 1999**

Cargo body style	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combinations		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Tractor/no trailers	130	100.0	0	0.0	0	0.0	0	0.0	1	33.3	131	3.8
Van	0	0.0	1234	38.8	74	49.0	2	100.0	0	0.0	1310	37.8
Open top van	0	0.0	45	1.4	1	0.7	0	0.0	0	0.0	46	1.3
Refrigerated van	0	0.0	433	13.6	2	1.3	0	0.0	0	0.0	435	12.6
Livestock carrier	0	0.0	43	1.4	0	0.0	0	0.0	0	0.0	43	1.2
Flatbed	0	0.0	451	14.2	21	13.9	0	0.0	1	33.3	473	13.7
Lowboy	0	0.0	53	1.7	2	1.3	0	0.0	0	0.0	55	1.6
Flatbed with equip.	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	7	0.2
Flatbed with sides	0	0.0	35	1.1	3	2.0	0	0.0	0	0.0	38	1.1
Pole/logging	0	0.0	121	3.8	2	1.3	0	0.0	0	0.0	123	3.6
Tank:liquid/gaseous	0	0.0	274	8.6	4	2.6	0	0.0	0	0.0	278	8.0
Tank:dry bulk	0	0.0	63	2.0	4	2.6	0	0.0	0	0.0	67	1.9
Auto carrier	0	0.0	10	0.3	0	0.0	0	0.0	0	0.0	10	0.3
Dump	0	0.0	235	7.4	16	10.6	0	0.0	0	0.0	251	7.2
Hopper bottom	0	0.0	98	3.1	17	11.3	0	0.0	0	0.0	115	3.3
Refuse	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	5	0.1
Other	0	0.0	49	1.5	5	3.3	0	0.0	1	33.3	55	1.6
Unknown	0	0.0	22	0.7	0	0.0	0	0.0	0	0.0	22	0.6
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>



**Table 6-3**  
**Fatal Truck Involvements by Cargo Type and Truck Configuration – Tractor Combinations**  
**TIFA 1999**

Cargo type	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combinations		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty/bobtail	110	84.6	827	26.0	40	26.5	0	0.0	0	0.0	977	28.2
General freight	0	0.0	834	26.2	59	39.1	2	100.0	0	0.0	895	25.8
Household goods	0	0.0	16	0.5	0	0.0	0	0.0	0	0.0	16	0.5
Building materials	0	0.0	52	1.6	2	1.3	0	0.0	0	0.0	54	1.6
Metal (coils, sheets)	0	0.0	117	3.7	3	2.0	0	0.0	0	0.0	120	3.5
Heavy machinery	0	0.0	45	1.4	0	0.0	0	0.0	0	0.0	45	1.3
Large objects	0	0.0	65	2.0	5	3.3	0	0.0	2	66.7	72	2.1
Motor vehicles	0	0.0	17	0.5	0	0.0	0	0.0	0	0.0	17	0.5
Piggyback/towaway	20	15.4	0	0.0	0	0.0	0	0.0	0	0.0	20	0.6
Gases in bulk	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	9	0.3
Solids in bulk	0	0.0	315	9.9	19	12.6	0	0.0	0	0.0	334	9.6
Liquids in bulk	0	0.0	182	5.7	4	2.6	0	0.0	0	0.0	186	5.4
Explosives	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Logs/poles/lumber	0	0.0	156	4.9	4	2.6	0	0.0	0	0.0	160	4.6
Refrigerated foods	0	0.0	293	9.2	1	0.7	0	0.0	0	0.0	294	8.5
Mobile home	0	0.0	15	0.5	0	0.0	0	0.0	0	0.0	15	0.4
Farm products	0	0.0	76	2.4	9	6.0	0	0.0	0	0.0	85	2.5
Live animals	0	0.0	34	1.1	0	0.0	0	0.0	0	0.0	34	1.0
Other	0	0.0	9	0.3	0	0.0	0	0.0	0	0.0	9	0.3
Cargo, unk. type	0	0.0	19	0.6	1	0.7	0	0.0	0	0.0	20	0.6
Saddlemount tractor	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3	1	0.0
Unknown	0	0.0	96	3.0	4	2.6	0	0.0	0	0.0	100	2.9
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-4**  
**Fatal Truck Involvements by Cargo Type and Cargo Body Style – Tractor Combinations**  
**TIFA 1999**

Cargo type	Tractor/ no trailers		Van		Open top van		Refrigerated van		Livestock carrier		Flatbed		Lowboy		Flatbed with equipment		Flatbed with sides		Pole/logging	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty/bobtail	110	84.0	288	22.0	11	23.9	74	17.0	15	34.9	129	27.3	27	49.1	0	0.0	7	18.4	38	30.9
General freight	0	0.0	808	61.7	2	4.3	53	12.2	0	0.0	21	4.4	1	1.8	1	14.3	5	13.2	0	0.0
Household goods	0	0.0	15	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Building materials	0	0.0	5	0.4	0	0.0	1	0.2	0	0.0	46	9.7	0	0.0	2	28.6	0	0.0	0	0.0
Metal (coils, sheets)	0	0.0	6	0.5	0	0.0	2	0.5	0	0.0	93	19.7	1	1.8	1	14.3	15	39.5	0	0.0
Heavy machinery	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	25	5.3	16	29.1	0	0.0	2	5.3	0	0.0
Large objects	0	0.0	14	1.1	0	0.0	0	0.0	0	0.0	45	9.5	1	1.8	2	28.6	3	7.9	1	0.8
Motor vehicles	0	0.0	5	0.4	0	0.0	0	0.0	0	0.0	4	0.8	3	5.5	0	0.0	0	0.0	0	0.0
Piggyback/towaway	20	15.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gases in bulk	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Solids in bulk	0	0.0	58	4.4	28	60.9	9	2.1	0	0.0	21	4.4	0	0.0	1	14.3	2	5.3	0	0.0
Liquids in bulk	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Explosives	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Logs/poles/lumber	0	0.0	12	0.9	0	0.0	0	0.0	0	0.0	63	13.3	1	1.8	0	0.0	0	0.0	84	68.3
Refrigerated foods	0	0.0	3	0.2	1	2.2	288	66.2	1	2.3	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0
Mobile home	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Farm products	0	0.0	12	0.9	4	8.7	5	1.1	0	0.0	12	2.5	1	1.8	0	0.0	1	2.6	0	0.0
Live animals	0	0.0	0	0.0	0	0.0	0	0.0	27	62.8	6	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	4	0.8	2	3.6	0	0.0	0	0.0	0	0.0
Cargo, unk. type	0	0.0	16	1.2	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0
Saddlemount tractor	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	64	4.9	0	0.0	2	0.5	0	0.0	4	0.8	1	1.8	0	0.0	2	5.3	0	0.0
<b>Total</b>	<b>131</b>	<b>100.0</b>	<b>1310</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>	<b>435</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>473</b>	<b>100.0</b>	<b>55</b>	<b>100.0</b>	<b>7</b>	<b>100.0</b>	<b>38</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>

**Table 6-4 (continued)**

Cargo type	Tank liquid/gas		Tank dry bulk		Auto carrier		Dump		Hopper bottom		Refuse		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty/bobtail	81	29.1	20	29.9	3	30.0	108	43.0	43	37.4	4	80.0	19	34.5	0	0.0	977	28.2
General freight	0	0.0	1	1.5	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	2	9.1	895	25.8
Household goods	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.5
Building materials	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	54	1.6
Metal (coils, sheets)	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0	1	1.8	0	0.0	120	3.5
Heavy machinery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	45	1.3
Large objects	0	0.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	5	9.1	0	0.0	72	2.1
Motor vehicles	0	0.0	0	0.0	5	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	17	0.5
Piggyback/towaway	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	0.6
Gases in bulk	9	3.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	0.3
Solids in bulk	1	0.4	45	67.2	0	0.0	118	47.0	46	40.0	1	20.0	4	7.3	0	0.0	334	9.6
Liquids in bulk	183	65.8	1	1.5	0	0.0	1	0.4	0	0.0	0	0.0	1	1.8	0	0.0	186	5.4
Explosives	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Logs/poles/lumber	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	160	4.6
Refrigerated foods	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	294	8.5
Mobile home	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	27.3	0	0.0	15	0.4
Farm products	0	0.0	0	0.0	0	0.0	19	7.6	24	20.9	0	0.0	7	12.7	0	0.0	85	2.5
Live animals	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	34	1.0
Other	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	9	0.3
Cargo, unk. type	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	9.1	20	0.6
Saddlemount tractor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Unknown	2	0.7	0	0.0	1	10.0	3	1.2	2	1.7	0	0.0	1	1.8	18	81.8	100	2.9
<b>Total</b>	<b>278</b>	<b>100.0</b>	<b>67</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>251</b>	<b>100.0</b>	<b>115</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>55</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-5**  
**Fatal Truck Involvements by Cargo Type and Cargo Body Style Groups – Tractor Combinations**  
**TIFA 1999**

Cargo type	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty/bobtail	373	20.8	163	28.4	101	29.3	151	41.3	15	34.9	38	30.9	26	37.1	110	71.9	977	28.2
General freight	863	48.2	28	4.9	1	0.3	1	0.3	0	0.0	0	0.0	0	0.0	2	1.3	895	25.8
Household goods	15	0.8	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.5
Building materials	6	0.3	48	8.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	54	1.6
Metal (coils, sheets)	8	0.4	110	19.2	0	0.0	1	0.3	0	0.0	0	0.0	1	1.4	0	0.0	120	3.5
Heavy machinery	2	0.1	43	7.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	45	1.3
Large objects	14	0.8	51	8.9	0	0.0	0	0.0	0	0.0	1	0.8	6	8.6	0	0.0	72	2.1
Motor vehicles	5	0.3	7	1.2	0	0.0	0	0.0	0	0.0	0	0.0	5	7.1	0	0.0	17	0.5
Piggyback/towaway	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	13.1	20	0.6
Gases in bulk	0	0.0	0	0.0	9	2.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	0.3
Solids in bulk	95	5.3	24	4.2	46	13.3	164	44.8	0	0.0	0	0.0	5	7.1	0	0.0	334	9.6
Liquids in bulk	0	0.0	0	0.0	184	53.3	1	0.3	0	0.0	0	0.0	1	1.4	0	0.0	186	5.4
Explosives	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Logs/poles/lumber	12	0.7	64	11.2	0	0.0	0	0.0	0	0.0	84	68.3	0	0.0	0	0.0	160	4.6
Refrigerated foods	292	16.3	1	0.2	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	294	8.5
Mobile home	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	21.4	0	0.0	15	0.4
Farm products	21	1.2	14	2.4	0	0.0	43	11.7	0	0.0	0	0.0	7	10.0	0	0.0	85	2.5
Live animals	0	0.0	6	1.0	0	0.0	0	0.0	27	62.8	0	0.0	1	1.4	0	0.0	34	1.0
Other	1	0.1	6	1.0	1	0.3	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0	9	0.3
Cargo, unk. type	17	0.9	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3	20	0.6
Saddlemount tractor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	1	0.0
Unknown	66	3.7	7	1.2	2	0.6	5	1.4	0	0.0	0	0.0	2	2.9	18	11.8	100	2.9
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-6**  
**Fatal Truck Involvements by Gross Vehicle Weight Rating and Truck Configuration – Tractor Combinations**  
**TIFA 1999**

Gross vehicle weight rating (lbs)	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combs		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Class 6: 19,501-26,000	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
Class 7: 26,001-33,000	10	7.7	85	2.7	37	24.5	2	100.0	0	0.0	134	3.9
Class 8: 33,001+	117	90.0	3059	96.3	99	65.6	0	0.0	3	100.0	3278	94.6
Unknown	3	2.3	32	1.0	15	9.9	0	0.0	0	0.0	50	1.4
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

Note: Gross Vehicle Weight Rating (GVWR) pertains to the power unit.

**Table 6-7**  
**Fatal Truck Involvements by Gross Vehicle Weight Rating and Cargo Body Style – Tractor Combinations**  
**TIFA 1999**

Gross vehicle weight rating (lbs)	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Class 6: 19,501-26,000	1	0.1	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	2	0.1
Class 7: 26,001-33,000	90	5.0	11	1.9	2	0.6	9	2.5	0	0.0	0	0.0	12	17.1	10	6.5	134	3.9
Class 8: 33,001+	1680	93.8	553	96.5	341	98.8	353	96.4	42	97.7	123	100.0	54	77.1	132	86.3	3278	94.6
Unknown	20	1.1	9	1.6	2	0.6	4	1.1	0	0.0	0	0.0	4	5.7	11	7.2	50	1.4
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks. Gross Vehicle Weight Rating (GVWR) pertains to the power unit.

**Table 6-8**  
**Fatal Truck Involvements by Gross Combination Weight and Truck Configuration – Tractor Combinations**  
**TIFA 1999**

Gross combination weight (lbs)	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combs		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
5,001-10,000	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
10,001-15,000	22	16.9	0	0.0	0	0.0	0	0.0	0	0.0	22	0.6
15,001-20,000	86	66.2	9	0.3	0	0.0	0	0.0	0	0.0	95	2.7
20,001-25,000	10	7.7	57	1.8	1	0.7	0	0.0	0	0.0	68	2.0
25,001-30,000	8	6.2	413	13.0	16	10.6	0	0.0	0	0.0	437	12.6
30,001-35,000	1	0.8	402	12.6	11	7.3	0	0.0	0	0.0	414	12.0
35,001-40,000	0	0.0	131	4.1	6	4.0	0	0.0	0	0.0	137	4.0
40,001-45,000	0	0.0	94	3.0	9	6.0	0	0.0	0	0.0	103	3.0
45,001-50,000	0	0.0	90	2.8	5	3.3	0	0.0	0	0.0	95	2.7
50,001-55,000	0	0.0	91	2.9	10	6.6	0	0.0	0	0.0	101	2.9
55,001-60,000	0	0.0	98	3.1	9	6.0	0	0.0	1	33.3	108	3.1
60,001-65,000	0	0.0	101	3.2	7	4.6	0	0.0	0	0.0	108	3.1
65,001-70,000	0	0.0	225	7.1	6	4.0	1	50.0	0	0.0	232	6.7
70,001-75,000	0	0.0	372	11.7	5	3.3	0	0.0	0	0.0	377	10.9
75,001-80,000	0	0.0	564	17.7	14	9.3	0	0.0	0	0.0	578	16.7
80,001-85,000	0	0.0	50	1.6	2	1.3	0	0.0	0	0.0	52	1.5
85,001-90,000	0	0.0	27	0.8	1	0.7	0	0.0	0	0.0	28	0.8
90,001-95,000	0	0.0	9	0.3	2	1.3	0	0.0	0	0.0	11	0.3
95,001-100,000	0	0.0	4	0.1	1	0.7	0	0.0	0	0.0	5	0.1
100,001-110,000	0	0.0	5	0.2	6	4.0	1	50.0	0	0.0	12	0.3
110,001-120,000	0	0.0	6	0.2	2	1.3	0	0.0	0	0.0	8	0.2
120,001-130,000	0	0.0	3	0.1	4	2.6	0	0.0	0	0.0	7	0.2
130,001-140,000	0	0.0	2	0.1	3	2.0	0	0.0	0	0.0	5	0.1
140,001-150,000	0	0.0	0	0.0	3	2.0	0	0.0	0	0.0	3	0.1
150,001-160,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
160,001-170,000	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0	1	0.0
170,001 and over *	0	0.0	1	0.0	0	0.0	0	0.0	2	66.7	3	0.1
Unknown	2	1.5	424	13.3	27	17.9	0	0.0	0	0.0	453	13.1
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* This category includes two "Other tractor combinations," each weighing over 240,000 lbs.

**Table 6-9**  
**Fatal Truck Involvements by Gross Combination Weight and Cargo Body Style – TRACTOR-SEMITRAILERS**  
**TIFA 1999**

Gross combination weight (lbs)	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
15,001-20,000	5	0.3	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	1	2.2	0	0.0	7	0.2
20,001-25,000	28	1.6	4	0.7	6	1.8	9	2.7	0	0.0	6	5.0	3	6.5	0	0.0	56	1.8
25,001-30,000	173	10.1	86	15.8	53	15.7	59	17.7	9	20.9	25	20.7	7	15.2	0	0.0	412	13.0
30,001-35,000	223	13.0	72	13.2	34	10.1	55	16.5	8	18.6	5	4.1	4	8.7	0	0.0	401	12.7
35,001-40,000	79	4.6	27	5.0	6	1.8	11	3.3	0	0.0	2	1.7	5	10.9	0	0.0	130	4.1
40,001-45,000	68	4.0	18	3.3	2	0.6	0	0.0	0	0.0	0	0.0	2	4.3	0	0.0	90	2.8
45,001-50,000	67	3.9	13	2.4	2	0.6	3	0.9	0	0.0	1	0.8	2	4.3	0	0.0	88	2.8
50,001-55,000	70	4.1	13	2.4	3	0.9	1	0.3	0	0.0	1	0.8	2	4.3	0	0.0	90	2.8
55,001-60,000	67	3.9	19	3.5	7	2.1	4	1.2	0	0.0	0	0.0	1	2.2	0	0.0	98	3.1
60,001-65,000	71	4.1	15	2.8	3	0.9	8	2.4	0	0.0	3	2.5	1	2.2	0	0.0	101	3.2
65,001-70,000	145	8.5	43	7.9	20	5.9	11	3.3	1	2.3	4	3.3	1	2.2	0	0.0	225	7.1
70,001-75,000	219	12.8	59	10.8	41	12.2	29	8.7	7	16.3	14	11.6	3	6.5	0	0.0	372	11.8
75,001-80,000	220	12.9	105	19.3	110	32.6	82	24.6	11	25.6	32	26.4	3	6.5	1	4.5	564	17.9
80,001-85,000	5	0.3	6	1.1	12	3.6	17	5.1	2	4.7	8	6.6	0	0.0	0	0.0	50	1.6
85,001-90,000	5	0.3	8	1.5	4	1.2	4	1.2	2	4.7	4	3.3	0	0.0	0	0.0	27	0.9
90,001-95,000	0	0.0	3	0.6	3	0.9	2	0.6	0	0.0	0	0.0	1	2.2	0	0.0	9	0.3
95,001-100,000	1	0.1	1	0.2	1	0.3	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
100,001-110,000	2	0.1	0	0.0	0	0.0	2	0.6	0	0.0	0	0.0	1	2.2	0	0.0	5	0.2
110,001-120,000	0	0.0	2	0.4	0	0.0	3	0.9	0	0.0	0	0.0	1	2.2	0	0.0	6	0.2
120,001-130,000	0	0.0	1	0.2	0	0.0	1	0.3	0	0.0	1	0.8	0	0.0	0	0.0	3	0.1
130,001-140,000	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	2	0.1
140,001 and over	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	1	0.0
Unknown	264	15.4	49	9.0	30	8.9	31	9.3	2	4.7	15	12.4	6	13.0	21	95.5	418	13.2
<b>Total</b>	<b>1712</b>	<b>100.0</b>	<b>545</b>	<b>100.0</b>	<b>337</b>	<b>100.0</b>	<b>333</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>121</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>

**Table 6-10**  
**Fatal Truck Involvements by Gross Combination Weight and Cargo Body Style – DOUBLES**  
**TIFA 1999**

Gross combination weight (lbs)	Van		Flatbed		Tank		Dump		Pole/logging		Other		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
20,001-25,000	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	1	0.7
25,001-30,000	7	9.1	4	15.4	0	0.0	4	12.1	0	0.0	1	20.0	16	10.6
30,001-35,000	3	3.9	6	23.1	0	0.0	2	6.1	0	0.0	0	0.0	11	7.3
35,001-40,000	4	5.2	1	3.8	0	0.0	0	0.0	0	0.0	1	20.0	6	4.0
40,001-45,000	3	3.9	1	3.8	0	0.0	5	15.2	0	0.0	0	0.0	9	6.0
45,001-50,000	3	3.9	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0	5	3.3
50,001-55,000	6	7.8	1	3.8	0	0.0	3	9.1	0	0.0	0	0.0	10	6.6
55,001-60,000	9	11.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	6.0
60,001-65,000	7	9.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	4.6
65,001-70,000	3	3.9	2	7.7	0	0.0	1	3.0	0	0.0	0	0.0	6	4.0
70,001-75,000	4	5.2	1	3.8	0	0.0	0	0.0	0	0.0	0	0.0	5	3.3
75,001-80,000	4	5.2	3	11.5	2	25.0	3	9.1	0	0.0	2	40.0	14	9.3
80,001-85,000	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0	2	1.3
85,001-90,000	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7
90,001-95,000	0	0.0	2	7.7	0	0.0	0	0.0	0	0.0	0	0.0	2	1.3
95,001-100,000	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0	1	0.7
100,001-110,000	0	0.0	0	0.0	3	37.5	2	6.1	1	50.0	0	0.0	6	4.0
110,001-120,000	0	0.0	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0	2	1.3
120,001-130,000	0	0.0	1	3.8	1	12.5	2	6.1	0	0.0	0	0.0	4	2.6
130,001-140,000	0	0.0	2	7.7	0	0.0	1	3.0	0	0.0	0	0.0	3	2.0
140,001-150,000	0	0.0	1	3.8	0	0.0	2	6.1	0	0.0	0	0.0	3	2.0
150,001-160,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
160,001-170,000	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0	1	0.7
Unknown	22	28.6	1	3.8	1	12.5	2	6.1	1	50.0	0	0.0	27	17.9
<b>Total</b>	<b>77</b>	<b>100.0</b>	<b>26</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>33</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>

**Table 6-11  
Fatal Truck Involvements by Empty Combination Weight and Truck Configuration – Tractor Combinations  
TIFA 1999**

Empty combination wt. (lbs)	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combs		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
5,000 or less	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
5,001-10,000	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
10,001-15,000	22	16.9	9	0.3	0	0.0	0	0.0	0	0.0	31	0.9
15,001-20,000	102	78.5	29	0.9	0	0.0	0	0.0	1	33.3	132	3.8
20,001-25,000	3	2.3	167	5.3	4	2.6	0	0.0	0	0.0	174	5.0
25,001-30,000	0	0.0	1321	41.6	64	42.4	0	0.0	0	0.0	1385	40.0
30,001-35,000	0	0.0	1319	41.5	44	29.1	1	50.0	0	0.0	1364	39.4
35,001-40,000	0	0.0	172	5.4	10	6.6	1	50.0	0	0.0	183	5.3
40,001-45,000	0	0.0	17	0.5	10	6.6	0	0.0	0	0.0	27	0.8
45,001-50,000	0	0.0	2	0.1	7	4.6	0	0.0	0	0.0	9	0.3
50,001-55,000	0	0.0	1	0.0	6	4.0	0	0.0	0	0.0	7	0.2
55,001-60,000	0	0.0	0	0.0	1	0.7	0	0.0	0	0.0	1	0.0
60,001-65,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
65,001-70,000	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
70,001-75,000	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
75,001-80,000	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
80,001 and over	0	0.0	2	0.1	0	0.0	0	0.0	1	33.3	3	0.1
Unknown	2	1.5	133	4.2	5	3.3	0	0.0	1	33.3	141	4.1
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-12  
Fatal Truck Involvements by Empty Combination Weight and Cargo Body Style – TRACTOR-SEMITRAILERS  
TIFA 1999**

Empty combination wt. (lbs)	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
15,000 or less	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
15,001-20,000	19	1.1	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	1	2.2	0	0.0	21	0.7
20,001-25,000	76	4.4	21	3.9	23	6.8	18	5.4	1	2.3	23	19.0	5	10.9	0	0.0	167	5.3
25,001-30,000	565	33.0	313	57.4	187	55.5	155	46.5	18	41.9	70	57.9	10	21.7	2	9.1	1320	41.8
30,001-35,000	887	51.8	166	30.5	88	26.1	125	37.5	20	46.5	18	14.9	15	32.6	0	0.0	1319	41.8
35,001-40,000	99	5.8	24	4.4	17	5.0	22	6.6	3	7.0	3	2.5	4	8.7	0	0.0	172	5.4
40,001-45,000	8	0.5	5	0.9	2	0.6	1	0.3	0	0.0	0	0.0	1	2.2	0	0.0	17	0.5
45,001-50,000	1	0.1	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
50,001-55,000	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
55,001-60,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
60,001-65,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
65,001-70,000	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
70,001-75,000	0	0.0	0	0.0	2	0.6	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	3	0.1
75,000-80,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	1	0.0
80,001 and over	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.3	0	0.0	2	0.1
Unknown	56	3.3	14	2.6	17	5.0	12	3.6	0	0.0	7	5.8	6	13.0	20	90.9	132	4.2
<b>Total</b>	<b>1712</b>	<b>100.0</b>	<b>545</b>	<b>100.0</b>	<b>337</b>	<b>100.0</b>	<b>333</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>121</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>3159</b>	<b>100.0</b>

**Table 6-13**  
**Fatal Truck Involvements by Empty Combination Weight and Cargo Body Style – DOUBLES**  
**TIFA 1999**

Empty combination wt. (lbs)	Van		Flatbed		Tank		Dump		Pole/logging		Other		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
20,001-25,000	1	1.3	0	0.0	2	25.0	0	0.0	0	0.0	1	20.0	4	2.6
25,001-30,000	39	50.6	11	42.3	1	12.5	11	33.3	0	0.0	2	40.0	64	42.4
30,001-35,000	27	35.1	9	34.6	3	37.5	3	9.1	1	50.0	1	20.0	44	29.1
35,001-40,000	5	6.5	2	7.7	1	12.5	1	3.0	0	0.0	1	20.0	10	6.6
40,001-45,000	1	1.3	2	7.7	1	12.5	6	18.2	0	0.0	0	0.0	10	6.6
45,001-50,000	0	0.0	1	3.8	0	0.0	6	18.2	0	0.0	0	0.0	7	4.6
50,001-55,000	0	0.0	1	3.8	0	0.0	5	15.2	0	0.0	0	0.0	6	4.0
55,001-60,000	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	0	0.0	1	0.7
Unknown	4	5.2	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	5	3.3
<b>Total</b>	<b>77</b>	<b>100.0</b>	<b>26</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>33</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>

**Table 6-14A**  
**Fatal Truck Involvements by Axle Combinations – Tractors, No Trailers**  
**TIFA 1999**

Power unit axles	No.	Pct.
2	16	12.3
3	112	86.2
4	1	0.8
Unknown	1	0.8
<b>Total</b>	<b>130</b>	<b>100.0</b>

Note: Axle counts include power unit axles plus lift axles not in use. Cases with unknown lift axles were counted as having 0 lift axles.



**Table 6-14B**  
**Fatal Truck Involvements by Axle Combinations – TRACTOR-SEMITRAILERS, TIFA 1999**

Power unit axles	1st trailer axles	No.	Pct.
2	1	42	1.3
2	2	135	4.3
2	3	1	0.0
3	1	9	0.3
3	2	2801	88.7
3	3	93	2.9
3	4	17	0.5
3	5	5	0.2
3	6	2	0.1
3	8	2	0.1
4	2	5	0.2
4	3	9	0.3
4	4	4	0.1
5	2	1	0.0
5	5	1	0.0
Unknown		32	1.0
Total		3159	100.0

Note: Axle counts include power unit axles plus lift axles not in use. Cases with unknown lift axles were counted as having 0 lift axles.

**Table 6-14C**  
**Fatal Truck Involvements by Axle Combinations – DOUBLES, TIFA 1999**

Power unit axles	1st trailer axles	2nd trailer axles	No.	Pct.
2	1	1	2	1.3
2	1	2	86	57.0
2	2	2	1	0.7
3	1	2	20	13.2
3	2	2	10	6.6
3	2	3	7	4.6
3	2	4	2	1.3
3	3	3	2	1.3
3	3	4	1	0.7
3	3	5	8	5.3
3	4	2	1	0.7
3	4	3	1	0.7
3	4	4	1	0.7
3	5	3	2	1.3
3	5	4	1	0.7
4	2	2	3	2.0
4	3	1	1	0.7
4	3	2	1	0.7
Unknown			1	0.7
Total			151	100.0

Note: Axle counts include power unit axles plus lift axles not in use. Cases with unknown lift axles were counted as having 0 lift axles.

## Vehicle use

**Table 6-15**  
**Fatal Truck Involvements by Carrier Type and Truck Configuration – Tractor Combinations**  
**TIFA 1999**

Carrier type	Tractor, no trailers		Tractor, 1 trailer		Tractor, 2 trailers		Tractor, 3 trailers		Other tractor combs		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate private	17	13.1	501	15.8	9	6.0	0	0.0	0	0.0	527	15.2
Interstate for-hire	74	56.9	2210	69.5	108	71.5	2	100.0	3	100.0	2397	69.2
Intrastate private	11	8.5	185	5.8	13	8.6	0	0.0	0	0.0	209	6.0
Intrastate for-hire	15	11.5	168	5.3	17	11.3	0	0.0	0	0.0	200	5.8
Government owned	0	0.0	14	0.4	1	0.7	0	0.0	0	0.0	15	0.4
Daily rental	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
Unknown	13	10.0	98	3.1	3	2.0	0	0.0	0	0.0	114	3.3
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>3178</b>	<b>100.0</b>	<b>151</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-16**  
**Fatal Truck Involvements by Carrier Type and Cargo Body Style – Tractor Combinations**  
**TIFA 1999**

Carrier type	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate private	223	12.5	105	18.3	84	24.3	49	13.4	4	9.3	28	22.8	15	21.4	19	12.4	527	15.2
Interstate for-hire	1441	80.5	367	64.0	220	63.8	180	49.2	35	81.4	39	31.7	33	47.1	82	53.6	2397	69.2
Intrastate private	50	2.8	51	8.9	16	4.6	55	15.0	2	4.7	14	11.4	10	14.3	11	7.2	209	6.0
Intrastate for-hire	35	2.0	26	4.5	19	5.5	61	16.7	2	4.7	34	27.6	8	11.4	15	9.8	200	5.8
Government owned	7	0.4	2	0.3	0	0.0	5	1.4	0	0.0	0	0.0	1	1.4	0	0.0	15	0.4
Daily rental	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Unknown	33	1.8	22	3.8	6	1.7	16	4.4	0	0.0	8	6.5	3	4.3	26	17.0	114	3.3
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-17**  
**Fatal Truck Involvements by Trip Type and Cargo Body Style – Tractor Combinations**  
**TIFA 1999**

Trip type	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Local	218	12.2	114	19.9	92	26.7	180	49.2	9	20.9	54	43.9	25	35.7	63	41.2	755	21.8
51-100 miles	158	8.8	63	11.0	69	20.0	66	18.0	7	16.3	35	28.5	13	18.6	20	13.1	431	12.4
101-200	199	11.1	71	12.4	57	16.5	41	11.2	7	16.3	9	7.3	11	15.7	6	3.9	401	11.6
201-500	347	19.4	109	19.0	55	15.9	26	7.1	14	32.6	4	3.3	6	8.6	5	3.3	566	16.3
Over 500	536	29.9	105	18.3	27	7.8	14	3.8	3	7.0	2	1.6	4	5.7	8	5.2	699	20.2
Unk over-the-road dist	89	5.0	26	4.5	10	2.9	2	0.5	1	2.3	3	2.4	4	5.7	4	2.6	139	4.0
Unknown	244	13.6	85	14.8	35	10.1	37	10.1	2	4.7	16	13.0	7	10.0	47	30.7	473	13.7
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-18  
Fatal Truck Involvements by Route Signing and Cargo Body Style – Tractor Combinations  
TIFA 1999**

Route signing	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate	802	44.8	155	27.1	90	26.1	42	11.5	2	4.7	1	0.8	14	20.0	32	20.9	1138	32.9
US highway	468	26.1	165	28.8	98	28.4	117	32.0	20	46.5	54	43.9	17	24.3	32	20.9	971	28.0
State highway	365	20.4	148	25.8	108	31.3	131	35.8	15	34.9	52	42.3	24	34.3	41	26.8	884	25.5
County road	34	1.9	51	8.9	25	7.2	43	11.7	5	11.6	11	8.9	10	14.3	21	13.7	200	5.8
Township	8	0.4	3	0.5	1	0.3	4	1.1	1	2.3	1	0.8	0	0.0	2	1.3	20	0.6
Municipality	78	4.4	31	5.4	12	3.5	16	4.4	0	0.0	0	0.0	4	5.7	18	11.8	159	4.6
Frontage road	7	0.4	6	1.0	2	0.6	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	17	0.5
Other	25	1.4	12	2.1	9	2.6	10	2.7	0	0.0	4	3.3	1	1.4	5	3.3	66	1.9
Unknown	4	0.2	2	0.3	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	2	1.3	9	0.3
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-19  
Fatal Truck Involvements by Land Use and Cargo Body Style – Tractor Combinations  
TIFA 1999**

Land use	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Urban	574	32.0	148	25.8	86	24.9	97	26.5	5	11.6	12	9.8	18	25.7	68	44.4	1008	29.1
Rural	1209	67.5	424	74.0	258	74.8	267	73.0	38	88.4	111	90.2	52	74.3	85	55.6	2444	70.6
Unknown	8	0.4	1	0.2	1	0.3	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-20  
Fatal Truck Involvements by Light Condition and Cargo Body Style – Tractor Combinations  
TIFA 1999**

Light condition	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Daylight	928	51.8	373	65.1	198	57.4	275	75.1	28	65.1	100	81.3	41	58.6	94	61.4	2037	58.8
Dark	582	32.5	145	25.3	94	27.2	62	16.9	13	30.2	10	8.1	15	21.4	31	20.3	952	27.5
Dark but lighted	195	10.9	35	6.1	35	10.1	17	4.6	1	2.3	5	4.1	6	8.6	22	14.4	316	9.1
Dawn	59	3.3	15	2.6	11	3.2	11	3.0	0	0.0	6	4.9	4	5.7	1	0.7	107	3.1
Dusk	26	1.5	5	0.9	7	2.0	1	0.3	1	2.3	2	1.6	4	5.7	5	3.3	51	1.5
Unknown	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

## Accident description

**Table 6-21**  
**Fatal Truck Involvements by Manner of Collision and Cargo Body Style – Tractor Combinations**  
**TIFA 1999**

Manner of collision	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not applicable	371	20.7	108	18.8	97	28.1	49	13.4	5	11.6	24	19.5	14	20.0	41	26.8	709	20.5
Rear-end	393	21.9	118	20.6	54	15.7	51	13.9	4	9.3	12	9.8	11	15.7	22	14.4	665	19.2
Head-on	417	23.3	125	21.8	69	20.0	84	23.0	20	46.5	27	22.0	17	24.3	39	25.5	798	23.0
Angle	494	27.6	188	32.8	107	31.0	162	44.3	14	32.6	55	44.7	23	32.9	42	27.5	1085	31.3
Sideswipe:same dir	55	3.1	14	2.4	9	2.6	7	1.9	0	0.0	0	0.0	1	1.4	6	3.9	92	2.7
Sideswipe:opp dir	49	2.7	16	2.8	6	1.7	13	3.6	0	0.0	5	4.1	4	5.7	2	1.3	95	2.7
Unknown	12	0.7	4	0.7	3	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.7	20	0.6
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-22**  
**Fatal Truck Involvements by Accident Type and Driver Injury Severity – Tractor Combinations**  
**TIFA 1999**

Accident type	Fatal injury (K)		Incapacitating (A)		Non-incapacitating (B)		Complaint of pain (C)		No injury (O)		Died prior to accident		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<b>Single vehicle</b>																
Ran off road	249	53.4	19	11.4	14	4.5	7	1.9	15	0.7	0	0.0	1	25.0	305	8.8
Hit object in road	15	3.2	5	3.0	3	1.0	1	0.3	197	9.3	0	0.0	9	225.0	230	6.6
<b>Same direction, same trafficway</b>																
Rearend, truck striking	47	10.1	10	6.0	26	8.4	19	5.3	124	5.9	0	0.0	0	0.0	226	6.5
Rearend, truck struck	0	0.0	1	0.6	15	4.9	31	8.6	231	10.9	0	0.0	14	350.0	292	8.4
Sideswipe, in other's lane	6	1.3	2	1.2	2	0.6	2	0.6	23	1.1	0	0.0	2	50.0	37	1.1
Sideswipe, in truck's lane	6	1.3	0	0.0	7	2.3	3	0.8	58	2.7	0	0.0	0	0.0	74	2.1
<b>Opposite direction, same trafficway</b>																
Head-on, in other's lane	10	2.1	8	4.8	7	2.3	9	2.5	16	0.8	1	100.0	0	0.0	51	1.5
Head-on, in truck's lane	18	3.9	24	14.4	67	21.7	77	21.3	182	8.6	0	0.0	0	0.0	368	10.6
Sideswipe, in other's lane	6	1.3	1	0.6	1	0.3	4	1.1	18	0.9	0	0.0	0	0.0	30	0.9
Sideswipe, in truck's lane	6	1.3	6	3.6	23	7.4	30	8.3	166	7.8	0	0.0	3	75.0	234	6.8
<b>Change trafficway, one vehicle turning</b>																
Truck turn across path	0	0.0	0	0.0	6	1.9	7	1.9	119	5.6	0	0.0	0	0.0	132	3.8
Other turn across path	6	1.3	13	7.8	16	5.2	26	7.2	133	6.3	0	0.0	0	0.0	194	5.6
<b>Intersecting paths, both going straight</b>																
Truck into side of other	6	1.3	15	9.0	41	13.3	53	14.7	204	9.6	0	0.0	0	0.0	319	9.2
Other into side of truck	2	0.4	5	3.0	12	3.9	12	3.3	113	5.3	0	0.0	1	25.0	145	4.2
<b>Other accident types</b>																
Truck backed into other	0	0.0	0	0.0	0	0.0	1	0.3	24	1.1	0	0.0	0	0.0	25	0.7
Other backed into truck	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	3	0.1
Untripped roll	36	7.7	5	3.0	5	1.6	1	0.3	6	0.3	0	0.0	0	0.0	53	1.5
Other	38	8.2	49	29.3	56	18.1	68	18.8	419	19.8	0	0.0	1	25.0	642	18.5
Unknown	15	3.2	4	2.4	8	2.6	10	2.8	66	3.1	0	0.0	0	0.0	104	3.0
<b>Total</b>	<b>466</b>	<b>100.0</b>	<b>167</b>	<b>100.0</b>	<b>309</b>	<b>100.0</b>	<b>361</b>	<b>100.0</b>	<b>2117</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-23  
Fatal Truck Involvements by Driver Injury Severity and Cargo Body Style – Tractor Combinations  
TIFA 1999**

Driver injury severity	Van		Flatbed		Tank		Dump		Livestock		Pole/logging		Other*		None/unk		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Fatal injury (K)	212	11.8	80	14.0	86	24.9	35	9.6	2	4.7	23	18.7	9	12.9	19	12.4	466	13.5
Incapacitating (A)	80	4.5	32	5.6	15	4.3	15	4.1	1	2.3	12	9.8	1	1.4	11	7.2	167	4.8
Non-incapacitating (B)	165	9.2	46	8.0	18	5.2	34	9.3	6	14.0	10	8.1	9	12.9	21	13.7	309	8.9
Complaint of pain (C)	185	10.3	56	9.8	24	7.0	46	12.6	5	11.6	15	12.2	8	11.4	22	14.4	361	10.4
No injury (O)	1129	63.0	348	60.7	201	58.3	231	63.1	29	67.4	61	49.6	42	60.0	76	49.7	2117	61.1
Died prior to accident	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
Unknown	20	1.1	10	1.7	1	0.3	5	1.4	0	0.0	2	1.6	1	1.4	4	2.6	43	1.2
<b>Total</b>	<b>1791</b>	<b>100.0</b>	<b>573</b>	<b>100.0</b>	<b>345</b>	<b>100.0</b>	<b>366</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>123</b>	<b>100.0</b>	<b>70</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

\* Note: The Other category includes ten auto carriers and five refuse trucks.

**Table 6-24  
Fatal Truck Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status – Tractor Combinations  
TIFA 1999**

Rollover, fire, and ejection	Fatal injury (K)		Incapacitating (A)		Non-incapacitating (B)		Complaint of pain (C)		No injury (O)		Died prior to accident		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Rollover only	142	30.5	36	21.6	49	15.9	40	11.1	42	2.0	0	0.0	1	2.3	310	8.9
Fire only	38	8.2	14	8.4	35	11.3	14	3.9	49	2.3	0	0.0	0	0.0	150	4.3
Ejection only	34	7.3	2	1.2	3	1.0	1	0.3	1	0.0	1	100.0	0	0.0	42	1.2
Rollover and fire	37	7.9	6	3.6	5	1.6	1	0.3	3	0.1	0	0.0	0	0.0	52	1.5
Rollover and ejection	63	13.5	1	0.6	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	65	1.9
Fire and ejection	8	1.7	2	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.3
Rollover, fire & eject	11	2.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	0.3
None	127	27.3	105	62.9	216	69.9	304	84.2	2021	95.5	0	0.0	11	25.6	2784	80.4
Unknown	6	1.3	1	0.6	0	0.0	1	0.3	1	0.0	0	0.0	31	72.1	40	1.2
<b>Total</b>	<b>466</b>	<b>100.0</b>	<b>167</b>	<b>100.0</b>	<b>309</b>	<b>100.0</b>	<b>361</b>	<b>100.0</b>	<b>2117</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>3464</b>	<b>100.0</b>

**Table 6-25**  
**Fatal Truck Involvements by Rollover Status and Gross Combination Weight – TRACTOR-SEMITRAILERS**  
**TIFA 1999**

Gross combination wt. (lbs)	No rollover		First event		Subsequent event		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
15,001-20,000	5	0.2	0	0.0	2	0.7	7	0.2
20,001-25,000	54	2.0	0	0.0	2	0.7	56	1.8
25,001-30,000	398	14.4	2	1.5	12	4.4	412	13.0
30,001-35,000	387	14.0	4	3.0	10	3.7	401	12.7
35,001-40,000	126	4.6	3	2.3	1	0.4	130	4.1
40,001-45,000	82	3.0	2	1.5	6	2.2	90	2.8
45,001-50,000	76	2.8	3	2.3	9	3.3	88	2.8
50,001-55,000	81	2.9	1	0.8	8	3.0	90	2.8
55,001-60,000	80	2.9	7	5.3	11	4.1	98	3.1
60,001-65,000	82	3.0	5	3.8	14	5.2	101	3.2
65,001-70,000	192	7.0	13	9.8	20	7.4	225	7.1
70,001-75,000	303	11.0	19	14.4	50	18.5	372	11.8
75,001-80,000	447	16.2	37	28.0	80	29.6	564	17.9
80,001-85,000	39	1.4	5	3.8	6	2.2	50	1.6
85,001-90,000	23	0.8	1	0.8	3	1.1	27	0.9
90,001-95,000	2	0.1	3	2.3	4	1.5	9	0.3
95,001-100,000	3	0.1	1	0.8	0	0.0	4	0.1
100,001-110,000	4	0.1	0	0.0	1	0.4	5	0.2
110,001-120,000	6	0.2	0	0.0	0	0.0	6	0.2
120,001-130,000	2	0.1	1	0.8	0	0.0	3	0.1
130,001-140,000	2	0.1	0	0.0	0	0.0	2	0.1
140,001 and over	0	0.0	1	0.8	0	0.0	1	0.0
Unknown	363	13.2	24	18.2	31	11.5	418	13.2
Total	2757	100.0	132	100.0	270	100.0	3159	100.0

**Table 6-26**  
**Fatal Truck Involvements by Jackknife Status and Gross Combination Weight – TRACTOR-SEMITRAILERS**  
**TIFA 1999**

Gross combination wt. (lbs)	No jackknife		First event		Subsequent event		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
15,001-20,000	5	0.2	0	0.0	2	1.1	7	0.2
20,001-25,000	46	1.6	0	0.0	10	5.3	56	1.8
25,001-30,000	363	12.5	20	31.7	29	15.3	412	13.0
30,001-35,000	358	12.3	9	14.3	34	18.0	401	12.7
35,001-40,000	119	4.1	2	3.2	9	4.8	130	4.1
40,001-45,000	81	2.8	3	4.8	6	3.2	90	2.8
45,001-50,000	78	2.7	2	3.2	8	4.2	88	2.8
50,001-55,000	81	2.8	1	1.6	8	4.2	90	2.8
55,001-60,000	91	3.1	3	4.8	4	2.1	98	3.1
60,001-65,000	98	3.4	0	0.0	3	1.6	101	3.2
65,001-70,000	213	7.3	1	1.6	11	5.8	225	7.1
70,001-75,000	349	12.0	2	3.2	21	11.1	372	11.8
75,001-80,000	529	18.2	10	15.9	25	13.2	564	17.9
80,001-85,000	48	1.7	1	1.6	1	0.5	50	1.6
85,001-90,000	27	0.9	0	0.0	0	0.0	27	0.9
90,001-95,000	8	0.3	1	1.6	0	0.0	9	0.3
95,001-100,000	4	0.1	0	0.0	0	0.0	4	0.1
100,001-110,000	5	0.2	0	0.0	0	0.0	5	0.2
110,001-120,000	5	0.2	0	0.0	1	0.5	6	0.2
120,001-130,000	3	0.1	0	0.0	0	0.0	3	0.1
130,001-140,000	2	0.1	0	0.0	0	0.0	2	0.1
140,001 and over	1	0.0	0	0.0	0	0.0	1	0.0
Unknown	393	13.5	8	12.7	17	9.0	418	13.2
Total	2907	100.0	63	100.0	189	100.0	3159	100.0





## ***Longer combination vehicles***

This section provides descriptive statistics on longer combination vehicles (LCVs) involved in a fatal traffic accident in 1999. The definition of a LCV is based on the Surface Transportation Assistance Act (STAA) of 1982, which restricted the states' ability to regulate truck weights and lengths within their borders. States were required to permit tractors with two trailers, each up to 28.5 feet long, to operate on Interstate and other designated highways. In addition, states were prohibited from setting weight limits less than 80,000 pounds. For the purposes of this section, an LCV is defined as a combination vehicle with two or more trailers that exceeds the minimum weight and length standards set by the STAA of 1982.

Definition of an LCV:

- a truck-tractor with two trailers capable of carrying cargo;
- and at least one trailer longer than 29 feet.

OR

- a truck-tractor with two trailers capable of carrying cargo;
- and a gross combination weight greater than 80,000 pounds.

OR

- a truck-tractor pulling three trailers capable of carrying cargo.

Tables in this section classify LCVs as overlength, overweight, or both overlength and overweight. **Overlength** LCVs have at least one cargo-carrying trailer longer than 29 feet. **Overweight** LCVs exceed the weight standard but not the trailer length standard. LCVs categorized as **both** exceed both weight and length standards. **Triples** are LCVs with three cargo-carrying trailers. Some tables include, for comparison, a line for doubles that fall within the STAA requirements. These combinations consist of a tractor pulling two trailers, each less than 30 feet long, with a gross combination weight of 80,000 pounds or less. Such two-trailer configurations that fall within the STAA requirement are called **STAA doubles**.



**Table 7-1**  
**Fatal Truck Involvements of LCVs and "STAA Doubles" by Configuration**  
**TIFA 1999**

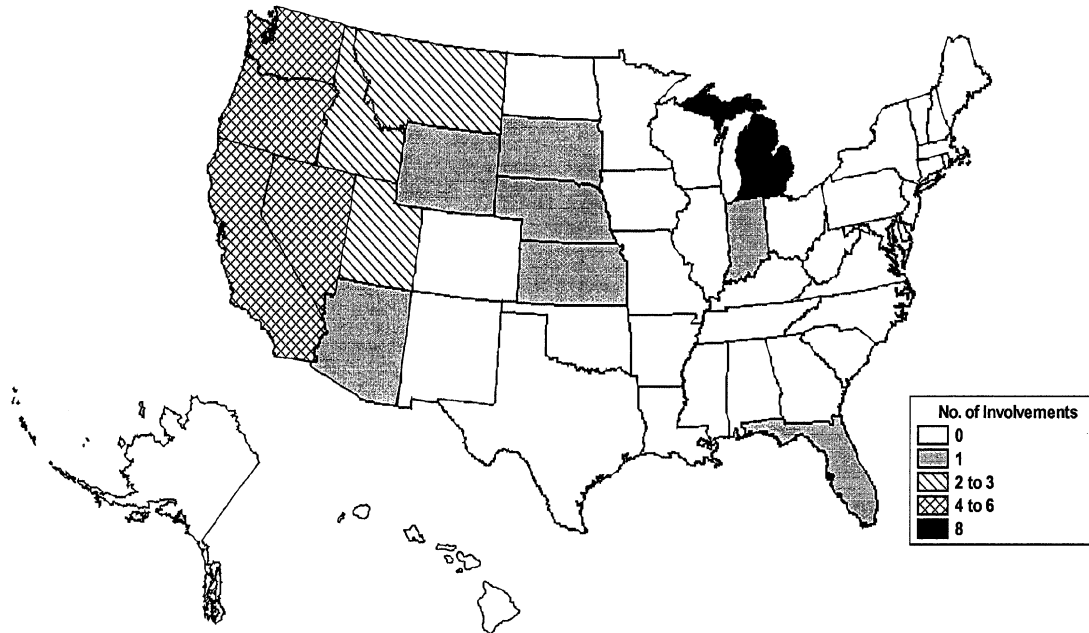
Configuration	No.	Pct.
<i>Longer combination vehicles</i>		
Double with A dolly	14	9.2
Double, B train	1	0.7
Tractor + semi + full	25	16.3
Tractor + semi + other	1	0.7
Triple with A dollies	2	1.3
<i>Subtotal</i>	43	28.1
<i>Non-LCV tractor and two trailers</i>		
<i>STAA double</i>		
Double with A dolly	65	42.5
Tractor + semi + full	33	21.6
<i>Subtotal</i>	98	64.1
<i>Unknown double</i>		
Double with A dolly	8	5.2
Tractor + semi + full	4	2.6
<i>Subtotal</i>	12	7.8
<b>Total</b>	<b>153</b>	<b>100.0</b>

**Table 7-2**  
**Fatal Truck Involvements of LCVs and "STAA Doubles" by Year**  
**TIFA 1995-1999**

Combination type	1995		1996		1997		1998		1999		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Longer combination vehicles</i>												
Overlength	19	10.7	14	7.7	22	10.0	23	13.9	16	10.5	94	10.5
Overweight	10	5.6	9	5.0	15	6.8	4	2.4	14	9.2	52	5.8
Both	20	11.3	5	2.8	14	6.3	18	10.9	11	7.2	68	7.6
Triple	1	0.6	3	1.7	5	2.3	1	0.6	2	1.3	12	1.3
<i>Subtotal</i>	50	28.2	31	17.1	56	25.3	46	27.9	43	28.1	226	25.2
<i>Non-LCV tractor and two trailers</i>												
STAA double	122	68.9	145	80.1	152	68.8	104	63.0	98	64.1	621	69.2
Unknown double	5	2.8	5	2.8	13	5.9	15	9.1	12	7.8	50	5.6
<b>Total</b>	<b>177</b>	<b>100.0</b>	<b>181</b>	<b>100.0</b>	<b>221</b>	<b>100.0</b>	<b>165</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>	<b>897</b>	<b>100.0</b>

**Table 7-3**  
**Fatal Truck Involvements for Common LCV Types**  
**TIFA 1999**

Combination type	No.	Pct.
Rocky Mountain double	10	23.3
Turnpike double	1	2.3
Other LCV	16	37.2
Overweight	14	32.6
Triple	2	4.7
Total	43	100.0



**Figure 7-1: Fatal LCV Involvements by State, TIFA 1999**

**Table 7-4  
Fatal Truck Involvements by State and LCV Type  
TIFA 1999**

State	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Arizona	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
California	2	12.5	3	21.4	0	0.0	0	0.0	5	11.6
Florida	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Idaho	1	6.3	0	0.0	1	9.1	0	0.0	2	4.7
Indiana	0	0.0	0	0.0	1	9.1	0	0.0	1	2.3
Kansas	0	0.0	0	0.0	0	0.0	1	50.0	1	2.3
Michigan	0	0.0	7	50.0	1	9.1	0	0.0	8	18.6
Montana	0	0.0	0	0.0	2	18.2	0	0.0	2	4.7
Nebraska	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
Nevada	3	18.8	0	0.0	1	9.1	0	0.0	4	9.3
Oregon	3	18.8	0	0.0	3	27.3	0	0.0	6	14.0
South Dakota	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Utah	1	6.3	0	0.0	1	9.1	1	50.0	3	7.0
Washington	3	18.8	2	14.3	1	9.1	0	0.0	6	14.0
Wyoming	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Total	16	100.0	14	100.0	11	100.0	2	100.0	43	100.0

**Table 7-5  
Fatal Truck Involvements and Fatalities for Selected Combination Types  
TIFA 1999**

Combination type	Involvements	Total fatalities	Fatalities per involvement
Longer combination vehicles			
Overlength	16	19	1.19
Overweight	14	14	1.00
Both	11	12	1.09
Triple	2	3	1.50
Subtotal	43	48	1.12
Non-LCV tractor and two trailers			
"STAA double"	98	135	1.38
Unknown double	12	13	1.08
Subtotal	110	148	1.35
Other tractor combination			
Tractor-semitrailer	3159	3445	1.09

**Table 7-6**  
**Fatal Truck Involvements by Total Length and LCV Type**  
**TIFA 1999**

Length (in feet)	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
56-60	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
61-65	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
66-70	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
71-75	2	12.5	4	28.6	0	0.0	0	0.0	6	14.0
76-80	4	25.0	6	42.9	1	9.1	0	0.0	11	25.6
81-85	2	12.5	2	14.3	4	36.4	0	0.0	8	18.6
86-90	1	6.3	0	0.0	2	18.2	0	0.0	3	7.0
91-95	2	12.5	0	0.0	2	18.2	0	0.0	4	9.3
96-100	2	12.5	0	0.0	1	9.1	0	0.0	3	7.0
101 +	2	12.5	0	0.0	1	9.1	2	100.0	5	11.6
Unknown	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-7**  
**Fatal Truck Involvements by Gross Combination Weight and LCV Type**  
**TIFA 1999**

Gross combination weight (in lbs)	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
30,001-35,000	4	25.0	0	0.0	0	0.0	0	0.0	4	9.3
35,001-40,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
40,001-45,000	5	31.3	0	0.0	0	0.0	0	0.0	5	11.6
45,001-50,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
50,001-55,000	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
55,001-60,000	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
60,001-65,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
65,001-70,000	0	0.0	0	0.0	0	0.0	1	50.0	1	2.3
70,001-75,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
75,001-80,000	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
80,001-85,000	0	0.0	2	14.3	0	0.0	0	0.0	2	4.7
85,001-90,000	0	0.0	0	0.0	1	9.1	0	0.0	1	2.3
90,001-95,000	0	0.0	0	0.0	2	18.2	0	0.0	2	4.7
95,001-100,000	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
100,001-110,000	0	0.0	2	14.3	4	36.4	1	50.0	7	16.3
110,001-120,000	0	0.0	1	7.1	1	9.1	0	0.0	2	4.7
120,001-130,000	0	0.0	3	21.4	1	9.1	0	0.0	4	9.3
130,001-140,000	0	0.0	2	14.3	1	9.1	0	0.0	3	7.0
140,001-150,000	0	0.0	2	14.3	1	9.1	0	0.0	3	7.0
150,001-160,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
160,001-170,000	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
Unknown	4	25.0	0	0.0	0	0.0	0	0.0	4	9.3
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-8**  
**Fatal Truck Involvements by Cargo Body Style and LCV Type**  
**TIFA 1999**

Cargo body style	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Van	2	12.5	1	7.1	1	9.1	2	100.0	6	14.0
Refrigerated van	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Flatbed	5	31.3	0	0.0	2	18.2	0	0.0	7	16.3
Lowboy	1	6.3	0	0.0	1	9.1	0	0.0	2	4.7
Flatbed with sides	0	0.0	2	14.3	1	9.1	0	0.0	3	7.0
Pole/logging	1	6.3	1	7.1	0	0.0	0	0.0	2	4.7
Tank:liquid/gas	0	0.0	1	7.1	3	27.3	0	0.0	4	9.3
Dump	3	18.8	5	35.7	1	9.1	0	0.0	9	20.9
Hopper bottom	3	18.8	3	21.4	2	18.2	0	0.0	8	18.6
Other	0	0.0	1	7.1	0	0.0	0	0.0	1	2.3
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-9**  
**Fatal Truck Involvements by Type of Cargo and LCV Type**  
**TIFA 1999**

Cargo type	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Empty	9	56.3	0	0.0	0	0.0	0	0.0	9	20.9
General freight	1	6.3	1	7.1	1	9.1	2	100.0	5	11.6
Metal (coils, sheets)	0	0.0	2	14.3	1	9.1	0	0.0	3	7.0
Large objects	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Solids in bulk	2	12.5	7	50.0	3	27.3	0	0.0	12	27.9
Liquids in bulk	0	0.0	1	7.1	3	27.3	0	0.0	4	9.3
Logs/poles/lumber	1	6.3	1	7.1	2	18.2	0	0.0	4	9.3
Farm products	1	6.3	2	14.3	1	9.1	0	0.0	4	9.3
Unknown	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-10**  
**Fatal Truck Involvements by Road Class and LCV Type**  
**TIFA 1999**

Road class	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate/urban	1	6.3	0	0.0	0	0.0	0	0.0	1	2.3
Interstate/rural	3	18.8	1	7.1	3	27.3	2	100.0	9	20.9
Major arterial/urban	0	0.0	5	35.7	0	0.0	0	0.0	5	11.6
Major arterial/rural	9	56.3	4	28.6	8	72.7	0	0.0	21	48.8
Other/urban	2	12.5	1	7.1	0	0.0	0	0.0	3	7.0
Other/rural	1	6.3	3	21.4	0	0.0	0	0.0	4	9.3
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-11**  
**Fatal Truck Involvements by Carrier Type and LCV Type**  
**TIFA 1999**

Carrier type	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate private	3	18.8	1	7.1	2	18.2	0	0.0	6	14.0
Interstate for-hire	7	43.8	10	71.4	8	72.7	2	100.0	27	62.8
Intrastate private	2	12.5	1	7.1	1	9.1	0	0.0	4	9.3
Intrastate for-hire	2	12.5	2	14.3	0	0.0	0	0.0	4	9.3
Unknown	2	12.5	0	0.0	0	0.0	0	0.0	2	4.7
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

**Table 7-12**  
**Fatal Truck Involvements by First Harmful Event and LCV Type**  
**TIFA 1999**

First harmful event	Overlength		Overweight		Both		Triple		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Collision</i>										
Motor vehicle	12	75.0	11	78.6	10	90.9	1	50.0	34	79.1
Pedestrian/bicyclist	3	18.8	1	7.1	0	0.0	0	0.0	4	9.3
Non-fixed object	0	0.0	0	0.0	1	9.1	0	0.0	1	2.3
Fixed object	1	6.3	1	7.1	0	0.0	0	0.0	2	4.7
<i>Noncollision</i>										
Rollover	0	0.0	1	7.1	0	0.0	1	50.0	2	4.7
<b>Total</b>	<b>16</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>11</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>



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