# Traffic Safety Facts

# **Overview**

"In 2007, there were an estimated 6,024,000 police-reported traffic crashes, in which 41,059 people were killed and 2,491,000 people were injured; 4,275,000 crashes involved property damage only."

# Introduction

Motor vehicle travel is the primary means of transportation in the United States, providing an unprecedented degree of mobility. Yet for all its advantages, deaths and injuries resulting from motor vehicle crashes are the leading cause of death for people of every age from 3 through 6 and 8 through 34 (based on 2005 data). Traffic fatalities accounted for more than 90 percent of transportation-related fatalities. The mission of the National Highway Traffic Safety Administration is to reduce deaths, injuries, and economic losses from motor vehicle crashes.

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Fortunately, much progress has been made in reducing the number of deaths and serious injuries on our Nation's highways. In 2007, the fatality rate per 100 million vehicle miles of travel (VMT) fell to a historic low of 1.37. The 1997 rate was 1.64 per 100 million VMT. The National Occupant Protection Use Survey (NOPUS) reported a 82-percent seat belt use rate nationwide for 2008. Data has also shown an increase in the number of fatalities in alcohol-impaired-driving crashes — from 12,757 in 1997 to 12,998 in 2007. However, much remains to be done. The economic cost alone of motor vehicle crashes in 2000 was \$230.6 billion.

In 2007, 41,059 people were killed in the estimated 6,024,000 police-reported motor vehicle traffic crashes, 2,491,000 people were injured, and 4,275,000 crashes involved property damage only.

This overview fact sheet contains statistics on motor vehicle fatalities based on data from the Fatality Analysis Reporting System (FARS). FARS is a census of fatal crashes within the 50 States, the District of Columbia, and Puerto Rico (although Puerto Rico is not included in U.S. totals). Crash and injury statistics are based on data from the General Estimates System (GES). GES is a probability-based sample of police-reported crashes, from 60 locations across the country, from which estimates of national totals for injury and propertydamage-only crashes are derived.

NHTSA has recently redefined their motorcycle terminology. The following terms will be used to define motorcycle occupants: a motorcycle rider is the operator only; a passenger is any person seated on the motorcycle but not in control of the motorcycle; and any combined reference to the "motorcycle rider" (operator) as well as the "passenger" will be referred to as motorcyclists. Prior NHTSA publications may not reflect this terminology.

"An average of 112 people died each day in motor vehicle crashes in 2007 — one every 13 minutes."

### Summary

In 2007, 41,059 people lost their lives in motor vehicle crashes — a decrease of 4 percent from 2006 (42,078).

The fatality rate per 100 million VMT in 2007 was 1.37. The injury rate per 100 million VMT in 2007 was 83. The fatality rate per 100,000 population was 13.61 in 2007, a decrease of 5 percent from the 2006 rate of 14.30.

An average of 112 people died each day in motor vehicle crashes in 2007 — one every 13 minutes.

In 2005, motor vehicle crashes were the leading cause of death for every age from 3 through 6 and 8 through 34.

	Occupants by Vehicle Type						·-	Nonmotorists				
Year	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Un- known	Total	Motor- cyclist	Pedes- trian	Pedal- cyclist	Other/ Unknown	Total	Total
	Killed											
1997	22,199	10,249	723	18	420	33,609	2,116	5,321	814	153	6,288	42,013
1998	21,194	10,705	742	38	409	33,088	2,294	5,228	760	131	6,119	41,501
1999	20,862	11,265	759	59	447	33,392	2,483	4,939	754	149	5,842	41,717
2000	20,699	11,526	754	22	450	33,451	2,897	4,763	693	141	5,597	41,945
2001	20,320	11,723	708	34	458	33,243	3,197	4,901	732	123	5,756	42,196
2002	20,569	12,274	689	45	528	34,105	3,270	4,851	665	114	5,630	43,005
2003	19,725	12,546	726	41	589	33,627	3,714	4,774	629	140	5,543	42,884
2004	19,192	12,674	766	42	602	33,276	4,028	4,675	727	130	5,532	42,836
2005	18,512	13,037	804	58	659	33,070	4,576	4,892	786	186	5,864	43,510
2006	17,925	12,761	805	27	601	32,119	4,837	4,795	772	185	5,752	42,708
2007	16,520	12,413	802	37	629	30,401	5,154	4,654	698	152	5,504	41,059
						Injured						
1997	2,341,000	755,000	31,000	17,000	6,000	3,149,000	53,000	77,000	58,000	11,000	146,000	3,348,000
1998	2,201,000	763,000	29,000	16,000	4,000	3,012,000	49,000	69,000	53,000	8,000	131,000	3,192,000
1999	2,138,000	847,000	33,000	22,000	7,000	3,047,000	50,000	85,000	51,000	3,000	140,000	3,236,000
2000	2,052,000	887,000	31,000	18,000	10,000	2,997,000	58,000	78,000	51,000	5,000	134,000	3,189,000
2001	1,927,000	861,000	29,000	15,000	9,000	2,841,000	60,000	78,000	45,000	8,000	131,000	3,033,000
2002	1,805,000	879,000	26,000	19,000	6,000	2,735,000	65,000	71,000	48,000	7,000	126,000	2,926,000
2003	1,756,000	889,000	27,000	18,000	7,000	2,697,000	67,000	70,000	46,000	8,000	124,000	2,889,000
2004	1,643,000	900,000	27,000	16,000	7,000	2,594,000	76,000	68,000	41,000	9,000	118,000	2,788,000
2005	1,573,000	872,000	27,000	11,000	10,000	2,494,000	87,000	64,000	45,000	8,000	118,000	2,699,000
2006	1,475,000	857,000	23,000	10,000	11,000	2,375,000	88,000	61,000	44,000	7,000	112,000	2,575,000
2007	1,379,000	841,000	23,000	12,000	8,000	2,264,000	103,000	70,000	43,000	10,000	124,000	2,491,000

Motor Vehicle Occupants and Nonoccupants Killed and Injured,	1997-2007
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Table 1

### People Killed and Injured and Fatality and Injury Rates, 1997-2007

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Year	Killed	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million VMT
Killed									
1997	42,013	267,784	15.69	182,709	22.99	203,568	20.64	2,562	1.64
1998	41,501	270,248	15.36	184,861	22.45	208,076	19.95	2,632	1.58
1999	41,717	272,691	15.30	187,170	22.29	212,685	19.61	2,691	1.55
2000	41,945	282,194	14.86	190,625	22.00	217,028	19.33	2,747	1.53
2001	42,196	285,112	14.80	191,276	22.06	221,230	19.07	2,797	1.51
2002	43,005	287,888	14.94	194,602	22.10	225,685	19.06	2,856	1.51
2003	42,884	290,448	14.76	196,166	21.86	230,633	18.59	2,890	1.48
2004	42,836	293,192	14.61	198,889	21.54	237,949	18.00	2,965	1.44
2005	43,510	295,896	14.70	200,549	21.70	245,628	17.71	2,989	1.46
2006	42,708	298,755	14.30	202,810	21.06	251,423	16.99	3,014	1.42
2007	41,059	301,621	13.61	-	-	257,708	15.93	2,996	1.37
Year	Injured	Resident Popualtion (Thousands)	Injury Rate per 100,000 population	Licensed Drivers (Thousands)	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Injury Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Injury Rate per 100 Million VMT
	Injured								
1997	3,348,000	267,784	1,250	182,709	1,832	203,568	1,644	2,562	131
1998	3,192,000	270,248	1,181	184,861	1,727	208,076	1,534	2,632	121
1999	3,236,000	272,691	1,187	187,170	1,729	212,685	1,522	2,691	120
2000	3,189,000	282,194	1,130	190,625	1,673	217,028	1,469	2,747	116
2001	3,033,000	285,112	1,064	191,276	1,585	221,230	1,371	2,797	108
2002	2,926,000	287,888	1,016	194,602	1,503	225,685	1,296	2,856	102
2003	2,889,000	290,448	995	196,166	1,473	230,633	1,252	2,890	100
2004	2,788,000	293,192	951	198,889	1,402	237,949	1,172	2,965	94
2005	2,699,000	295,896	912	200,549	1,346	245,628	1,099	2,989	90
2006	2,575,000	298,755	862	202,810	1,269	251,423	1,024	3,014	85
2007	2,491,000	301,621	826	-	-	257,708	966	2,996	83

Sources: Vehicle Miles of Travel and Licensed Drivers — Federal Highway Administration; Registered Vehicles — R.L. Polk & Co. and Federal Highway Administration; Population — U.S. Bureau of the Census. 2007 Licensed Driver data not available.

Vehicle occupants accounted for 74 percent and motorcycle riders accounted for 13 percent of traffic fatalities in 2007. The remaining 13 percent were pedestrians, pedalcyclists, and other nonoccupants.

### **Occupant Protection**

In 2007, 49 States and the District of Columbia had seat belt use laws in effect. Use rates vary widely from State to State, reflecting factors such as differences in public attitudes, enforcement practices, legal provisions, and public information and education programs.

From 1975 through 2007, NHTSA estimates that seat belts saved 241,789 passenger vehicle occupants age 5 and older, including 15,147 lives saved in

"NHTSA estimates that 15,147 lives were saved in 2007 by the use of seat belts." "Alcohol-impaireddriving fatalities fell to 12,998 in 2007 — 32 percent of all traffic fatalities for the year." 2007. If all passenger vehicle occupants over age 4 wore seat belts, 20,171 lives (that is, an additional 5,024) could have been saved in 2007.

In 2007, it is estimated that 382 children under age 5 were saved as a result of child restraint use. An estimated 8,709 lives were saved by child restraints from 1975 through 2007.

Children in rear-facing child safety seats should not be placed in the front seat of cars equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child safety seat could result in injury to the child. NHTSA also recommends that children age 12 and under sit in the rear seat away from the force of a deploying air bag.

In 2007, 33 percent of passenger car occupants and 37 percent of light-truck occupants involved in fatal crashes were unrestrained.

In fatal crashes, 76 percent of passenger vehicle occupants who were totally ejected from vehicles were killed. Seat belts are effective in preventing total ejections: only 1 percent of the occupants reported to have been using restraints were totally ejected, compared with 31 percent of the unrestrained occupants.

1997 dilu 2007						
	Restraint Use Rate (Percent)					
Type of Occupant	1997	2007				
Drivers	58	68				
Passengers - Front Seat	56	68				
- Rear Seat	43	59				
- 5 Years Old and Older	47	60				
- 4 Years Old and Younger	69	84				
- All Passengers	48	62				
All Occupants	54	65				

#### Table 3 Restraint Use Rates for Passenger Vehicle Occupants in Fatal Crashes, 1997 and 2007

### Alcohol

In 2007, there were 12,998 alcohol-impaired-driving fatalities. This is a decrease of 4 percent compared to 2006 (13,491 fatalities), and it represents an average of one alcohol-related fatality every 40 minutes.

The 12,998 alcohol-impaired-driving fatalities in 2007 (32% of total traffic fatalities for the year) represent a 2-percent increase from the 12,757 alcohol-impaired-driving fatalities reported in 1997 (30% of the total)

Over 1.46 million drivers were arrested in 2006 for driving under the influence of alcohol or narcotics. This is an arrest rate of 1 for every 139 licensed drivers in the United States.

In fatal crashes in 2007, 27 percent of motorcycle riders had BAC levels of .08 g/dL or higher, as compared with 23 percent for drivers of light trucks, 23 percent for passenger car drivers, and 1 percent for drivers of large trucks.

In fatal crashes in 2007, the highest percentages of drivers with BAC levels of .08 g/dL or higher were recorded for drivers 21 to 24 years old (35%), followed by ages 25 to 34 (29%) and 35 to 44 (25%).

#### Figure 1

# Drivers With BAC Levels of .08 or Higher Involved in Fatal Crashes by Age Group, 2007



### For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at www.nhtsa. gov/portal/site/nhtsa/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are Alcohol, African American, Bicyclists and Other Cyclists (formerly titled Pedalcyclists), Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers. Detailed data on motor vehicle traffic crashes are published annually in Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. The fact sheets and annual Traffic Safety Facts report can be accessed online at ww.nrd.nhtsa.dot.gov/cats.

"The highest percentage of drivers in fatal crashes who had BAC levels of .08 g/dL or higher was for drivers 21 to 24 years old."

#### Figure 2

### Previous Driving Records of Drivers Involved in Traffic Crashes by Blood Alcohol Concentration, 2007

"The economic cost of speeding-related crashes is estimated to be \$40.4 billion each year."



### Speeding

NHTSA considers a crash to be speeding-related if the driver was charged with a speeding-related offense or if an officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash.







Speeding is one of the most prevalent factors contributing to traffic crashes. The economic cost to society of speeding-related crashes is estimated by NHTSA to be \$40.4 billion per year. In 2007, speeding was a contributing factor in 31 percent of all fatal crashes, and 13,040 lives were lost in speeding-related crashes.

For drivers involved in fatal crashes, young males are the most likely to be speeding. With the increase in driver age, the proportion of all crashes that are speeding-related have decreased. In 2007, 39 percent of the 15- to 20-year-old male drivers who were involved in fatal crashes were speeding at the time of the crash.

In 2007, 88 percent of speeding-related fatalities occurred on roads that were not Interstate highways.

Alcohol and speeding are clearly a deadly combination. Speeding involvement is prevalent for drivers involved in alcohol-related crashes. In 2007, 40 percent of the drivers with BAC levels of .08 g/dL or higher who were involved in fatal crashes were speeding, compared with only 15 percent of the drivers with BAC levels of .00 (i.e., no alcohol) involved in fatal crashes.

# Figure 4 Speeding Drivers in Fatal Crashes by Age and Sex, 2007

"In 2007, 39 percent of 15- to 20-year-old male drivers involved in fatal crashes were speeding."

"Per vehicle mile, motorcyclists were 35 times more likely than passenger car occupants to die in a traffic crash."

### Motorcycles

The 5,154 motorcyclist fatalities in 2007 accounted for 13 percent of all traffic fatalities for the year. An additional 103,000 motorcyclist were injured.

Per vehicle mile traveled in 2006, motorcyclists were 35 times more likely than passenger car occupants to die in a motor vehicle traffic crash and 8 times more likely to be injured (motorcycle VMT data is not available for 2007).



#### Figure 5

Speeding, Alcohol Involvement, and Failure to Use Restraints Among Drivers Involved in Fatal Crashes by Vehicle Type, 2007



"In fatal crashes, 36 percent of motorcycle riders were speeding."

In 2007, 36 percent of all motorcycle riders involved in fatal crashes were speeding, as compared to 24 percent for passenger car drivers, 19 percent for light-truck drivers, and 8 percent for large-truck drivers.

#### Figure 6





In 2007, 41 percent of fatally injured motorcycle riders and 53 percent of fatally injured passengers were not wearing helmets at the time of the crash.

Over one-fourth of motorcycle riders (26%) involved in fatal crashes in 2007 were driving the vehicles with invalid licenses at the time of the collision.

The percentage of motorcycle riders involved in fatal crashes in 2007 who had BAC levels of .08 g/dL or higher — 27 percent — was higher than for any other type of motor vehicle driver.

NHTSA estimates that helmets saved the lives of 1,784 motorcyclists in 2007. If all motorcyclists had worn helmets, an additional 800 lives could have been saved.

### **Large Trucks**

In 2007, 12 percent (4,808) of all the motor vehicle traffic fatalities reported involved large trucks (gross vehicle weight rating greater than 10,000 pounds).

Of the fatalities that resulted from crashes involving large trucks, 75 percent were occupants of other vehicles, 8 percent were nonoccupants, and 17 percent were occupants of large trucks.

Table 4Persons Killed or Injured in Crashes Involving Large Trucks, 2007

		Number	Percentage of Total
Killed	Occupants of Large Trucks	802	17
	Single-Vehicle Crashes	502	10
	Multiple-Vehicle Crashes	300	6
	Occupants of Other Vehicles in Crashes Involving Large Trucks	3,601	75
	Nonoccupants (Pedestrians, Pedalcyclists, etc.)	405	8
	Total	4,808	100
Injured	Occupants of Large Trucks	23,000	23
	Single-Vehicle Crashes	10,000	10
	Multiple-Vehicle Crashes	13,000	13
	Occupants of Other Vehicles in Crashes Involving Large Trucks	75,000	75
	Nonoccupants (Pedestrians, Pedalcyclists, etc.)	2,000	2
	Total	101,000	100

Large trucks accounted for 8 percent of all vehicles involved in fatal crashes and 4 percent of all vehicles involved in injury and property-damage-only crashes in 2007.

Three-quarters (75%) of the large trucks involved in fatal crashes in 2007 collided with other motor vehicles in transport.

"One out of nine traffic fatalities in 2007 resulted from collisions involving a large truck." "Ejection from the vehicle accounted for 28 percent of all passenger vehicle occupant fatalities." Only 1 percent of the drivers of large trucks involved in fatal crashes in 2007 had BAC levels of .08 g/dL or higher, compared with 23 percent for passenger cars, 23 percent for light trucks, and 27 percent for motorcycles.

### Cars, Light Trucks, and Vans

In 2007, 28,933 occupants of passenger vehicles were killed in traffic crashes and an additional 2,221,000 were injured, accounting for 81 percent of all occupant fatalities (passenger cars 46%, light trucks and vans 35%) and 94 percent of all occupants injured (passenger cars 58%, light trucks and vans 36%).

Occupant fatalities in single-vehicle crashes accounted for 45 percent of all motor vehicle fatalities in 2007. Occupant fatalities in multiple-vehicle crashes accounted for 42 percent of all fatalities, and the remaining 13 percent were nonoccupant fatalities (pedestrians, pedalcyclists, etc.).

# Figure 7 Fatalities in Traffic Crashes, 1997 and 2007

"More than half of the passenger vehicle occupants killed in traffic crashes in 2007 were unrestrained."



In 2007, 54 percent of passenger vehicle occupant fatalities occurred in vehicles that sustained frontal damage.

Ejection from the vehicle accounted for 28 percent of all passenger vehicle occupant fatalities. The ejection rate for occupants of light trucks in fatal crashes was 38 percent.

More than half (54%) of the passenger vehicle occupants killed in traffic crashes in 2007 were unrestrained.

SUVs had the highest rollover involvement rate of any vehicle type in fatal crashes — 34 percent, as compared with 28 percent for pickups, 17 percent for vans, and 17 percent for passenger cars.

SUVs also had the highest rollover rate for passenger vehicles in injury crashes — 10 percent, compared with 9 percent for pickups, 4 percent for vans, and 4 percent for passenger cars.

### **Driver Age**

In 2007, 13 percent of the total U.S. resident population (more than 37 million) were people age 65 years and older.

In 2007, 196,000 older individuals were injured in traffic crashes, accounting for 8 percent of all the people injured in traffic crashes during the year. These older individuals made up 14 percent of all traffic fatalities, 14 percent of all vehicle occupant fatalities, and 19 percent of all pedestrian fatalities.

The percentage of older drivers involved in fatal crashes in 2007 who had BAC levels of .08 g/dL or higher (6%) was lower than for any other group of adult drivers.

In two-vehicle fatal crashes involving an older driver and a younger driver, the vehicle driven by the older person was nearly twice as likely to be the one that was struck (59% and 33%, respectively). In 46 percent of these crashes, both vehicles were proceeding straight at the time of the collision. In 25 percent, the older drivers were turning left — 5 times more often than the younger drivers.

### Youth

In 2007, 16- to 24-year-olds represented 24 percent of all traffic fatalities compared with 5 percent for age 15 and under, 46 percent for ages 25 to 54, and 24 percent for age 55 and older.

On a per population basis, drivers under the age of 25 had the highest rate of involvement in fatal crashes of any age group.

In 2007, 18 percent of 16- to 20-year-old drivers involved in fatal crashes had BAC levels of .08 g/dL or higher. The highest percentages were for drivers ages 21 to 24 and 25 to 34 (35% and 29%, respectively).

One-fifth (20%) of all children between the ages of 5 and 9 who were killed in motor vehicle traffic crashes were pedestrians. Children age 15 and under accounted for 18 percent of the pedestrian fatalities in 2007.

Passenger vehicle occupants ages 10 to 24 involved in fatal crashes had the lowest restraint use rate (57%), and those under age 10 had the highest rate (80%).

# Male/Female Fatal Crash Involvement

In 2006, the fatal crash involvement rate per 100,000 population was almost 3 times higher for male drivers than for females.

Males accounted for 71 percent of all traffic fatalities, 70 percent of all pedestrian fatalities, and 88 percent of all pedalcyclist fatalities in 2007.

"In 2007, older people made up 14 percent of all traffic fatalities and 19 percent of all pedestrian fatalities."

"Males accounted for 71 percent of all traffic fatalities, 70 percent of all pedestrian fatalities, and 88 percent of all pedalcyclist fatalities in 2007." Among male drivers involved in fatal crashes in 2007, 25 percent had BAC levels of .08 g/dL or higher, compared with 13 percent of the female drivers involved in fatal crashes.

Among female drivers of passenger vehicles involved in fatal crashes in 2007, 24 percent were unrestrained at the time of the collision, compared with 36 percent of male drivers in fatal crashes.

### Pedestrians

In 2007, 70,000 pedestrians were injured and 4,654 were killed in traffic crashes in the United States, representing 3 percent of all the people injured in traffic crashes and 11 percent of all traffic fatalities.

On average, a pedestrian is killed in a motor vehicle crash every 113 minutes, and one is injured every 8 minutes.

Alcohol involvement — either for the driver or the pedestrian — was reported in 49 percent of the traffic crashes that resulted in pedestrian fatalities. Of the pedestrians involved, 35 percent had BAC levels of .08 g/dL or higher. Of the drivers involved in fatal crashes, only 14 percent had BAC levels of .08 g/dL or higher. In 6 percent of the crashes, both the driver and the pedestrian had BAC levels of .08 g/dL or higher.

# **Pedalcyclists**

In 2007, 698 pedalcyclists were killed and an additional 44,000 were injured in traffic crashes. Pedalcyclists made up 2 percent of all traffic fatalities and 2 percent of all the people injured in traffic crashes during the year.

Most of the pedalcyclists injured or killed in 2007 were males (83% and 88%, respectively), and most were between the ages of 5 and 44 (79% and 55%, respectively).

Over one-seventh (15%) of the pedalcyclists killed in traffic crashes in 2007 were between the ages of 5 and 15.

# Table 5Nonoccupant Traffic Fatalities, 1997-2007

Year	Pedestrian	Pedalcyclist	Other	Total
1997	5,321	814	153	6,288
1998	5,228	760	131	6,119
1999	4,939	754	149	5,842
2000	4,763	693	141	5,597
2001	4,901	732	123	5,756
2002	4,851	665	114	5,630
2003	4,774	629	140	5,543
2004	4,675	727	130	5,532
2005	4,892	786	186	5,864
2006	4,795	772	185	5,752
2007	4,654	698	152	5,504

"Pedestrian fatalities in 2007 were 13-percent lower than in 1997."

"Over one-seventh of the pedalcyclists killed in traffic crashes in 2007 were between 5 and 15 years old."