

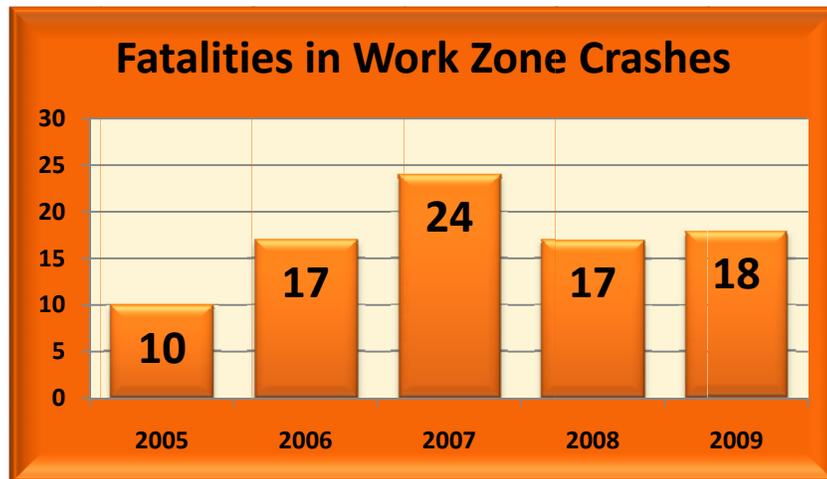


Work Zone Crashes in 2009

Oklahoma Department of Public Safety | Highway Safety Office | 3223 N. Lincoln Blvd | Oklahoma City, OK 73105
www.ohso.ok.gov | Phone: 405/523-1570 | Fax: 405/523-1586

Oklahoma Highway Safety

Work Zone Fatal Crashes & Fatalities Five Year Trend					
	2005	2006	2007	2008	2009
Work Zone Fatal Crashes	9	11	19	17	16
Total Fatal Crashes	708	668	653	673	646
Work Zone Fatal Crashes as Percentage of Total Fatal Crashes	1.3%	1.6%	2.9%	2.5%	2.5%
Fatalities Occurring in Work Zone Crashes	10	17	24	17	18
Total Fatalities	800	765	770	751	737
Work Zone Fatalities as Percentage of Total Fatalities	1.3%	2.2%	3.1%	2.3%	2.4%



Crashes, Fatalities & Injuries

In 2009 there were 1,653 crashes in Work Zones on Oklahoma's roads. This represents 2.3% of the total 71,218 crashes in 2009. Sixteen crashes involved at least one fatality and 596 involved at least one person injured. Work Zone crashes in 2009 resulted in 18 fatalities and 962 persons injured.

Fatalities

Of the 18 fatalities in 2009 Work Zone crashes, 13 were drivers, four were passengers and one was a pedestrian. The table below shows vehicle types with occupants.

Fatalities in 2009 Work Zone Crashes (2009) Vehicle Type & Person Type			
Vehicle Type	Person Type		Total
	Driver	Passenger	
Passenger Vehicle	9	2	11
Pickup Truck	1		1
Single Unit Truck		1	1
Truck-tractor/Trailer(s)	1		1
Motorcycle	2	1	3
Total	13	4	17

Excludes one pedestrian fatality.

Restraint Use Among Fatalities

Some 58.3% (7 of 12) of the persons killed in passenger vehicles/pickup trucks in 2009 Work Zone crashes were not using restraints.

Fatalities in Work Zone Crashes (2009) in Passenger Vehicles/Pickup Trucks Restraint Use & Person Type			
Restraint Use	Person Type		Total
	Driver	Passenger	
Unknown			
Not in Use	5	2	7
In Use	5		5
Total	10	2	12

Driver Age & Sex

Of the 3,183 drivers involved in Work Zone crashes in 2009, 25.5% were age 16-25, 19.7% were age 26-35 and 16.6% were age 36-45. Some 58.0% of the drivers were male.

Drivers in Work Zone Crashes (2009) Driver Age & Driver Sex								
Driver Age	Unknown		Female		Male		Total	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Unknown	107	99.1%	8	.7%	22	1.2%	137	4.3%
Under 16					3	.2%	3	.1%
16 - 25	1	.9%	384	31.3%	428	23.2%	813	25.5%
26 - 35			252	20.5%	376	20.4%	628	19.7%
36 - 45			207	16.9%	320	17.3%	527	16.6%
46 - 55			176	14.3%	300	16.2%	476	15.0%
56 - 65			110	9.0%	211	11.4%	321	10.1%
66 - 75			63	5.1%	116	6.3%	179	5.6%
76+			28	2.3%	71	3.8%	99	3.1%
Total	108	100.0%	1228	100.0%	1847	100.0%	3183	100.0%

Alcohol-Related Driver Condition

Some 5.3% of the drivers in Work Zone crashes had an alcohol-related driver condition. Of the 163 drivers with an alcohol-related driver condition, 27.0% were age 16-25, 23.3% were age 26-35 and 22.1% were age 46-55. Some 75.5% of the drivers were male.

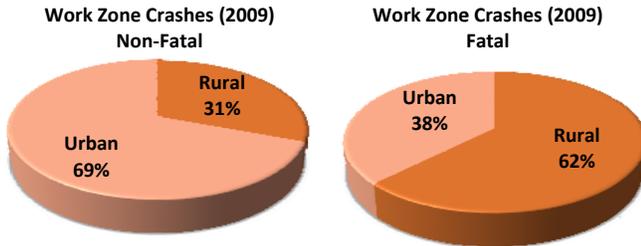
Drivers in Work Zone Crashes (2009) Alcohol-Related Driver Condition Driver Age & Driver Sex						
Driver Age	Female		Male		Total	
	Number	% of Total	Number	% of Total	Number	% of Total
Not Stated						
Under 16						
16 - 25	15	37.5%	29	23.6%	44	27.0%
26 - 35	7	17.5%	31	25.2%	38	23.3%
36 - 45	6	15.0%	22	17.9%	28	17.2%
46 - 55	10	25.0%	26	21.1%	36	22.1%
56 - 65	1	2.5%	11	8.9%	12	7.4%
66 - 75	1	2.5%	3	2.4%	4	2.5%
76+			1	.8%	1	.6%
Total	40	100.0%	123	100.0%	163	100.0%

Driver Contributing Factors

Some 10.8% of the drivers in Work Zone crashes were following too closely, 9.5% were driving at an unsafe speed and 8.6% were inattentive. A closer look at the primary contributing factor of following too closely shows that 53.1% were following too closely for traffic conditions, 39.9% were following too closely (human element) and 7.0% were following too closely for weather conditions.

Rural vs. Urban

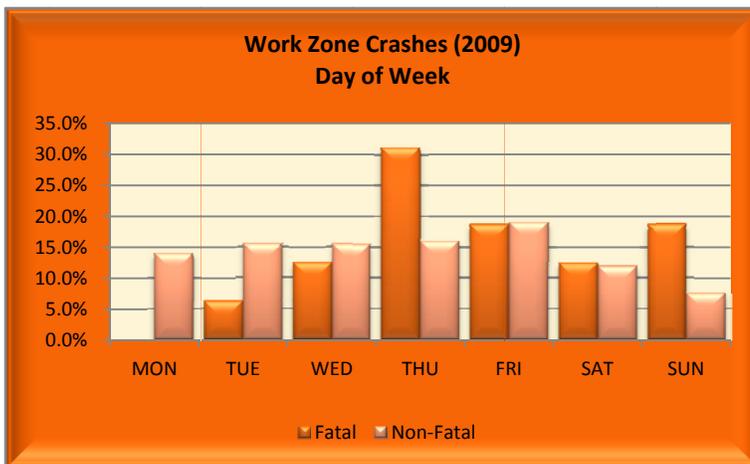
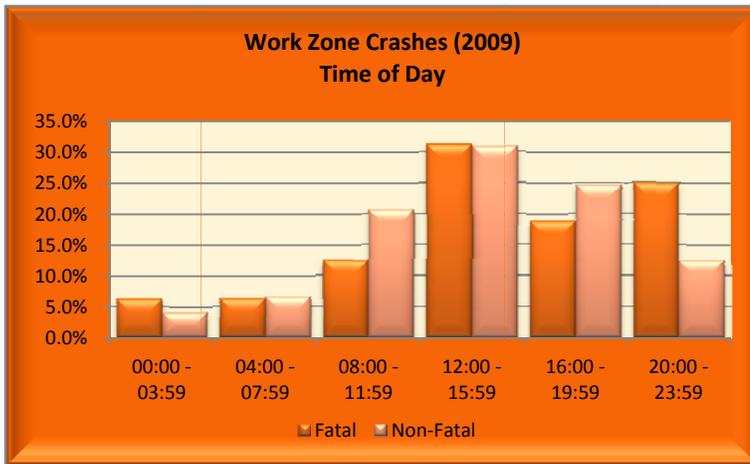
Statewide in 2009, there were twice as many non-fatal Work Zone crashes in urban areas as in rural areas. However, fatal Work Zone crashes occurred twice as often in rural areas.



Time & Day

Work Zone crashes in 2009, whether fatal or non-fatal, occurred more often between 12:00 Noon (12:00) and 3:39 p.m. (15:59).

Fatal Work Zone crashes occurred more often on Thursday than any other day of the week. Non-fatal Work Zone crashes occurred more often on Friday than any other day of the week.



Work Zone Crashes (2009)		
Person Injury Severity & Person Type		
	Count	% of Total
Fatalities		
Occupant of Passenger Vehicle	11	61.1%
Occupant of Pickup Truck	1	5.6%
Occupant of Large Truck	2	11.1%
Motorcyclist	3	16.7%
Motor Scooter/Moped		
Occupant of Other Type Vehicle		
Non-motorist	1	5.6%
Total	18	100.0%
Incapacitating Injuries		
Occupant of Passenger Vehicle	71	62.3%
Occupant of Pickup Truck	21	18.4%
Occupant of Large Truck	2	1.8%
Motorcyclist	14	12.3%
Motor Scooter/Moped		
Occupant of Other Type Vehicle		
Non-motorist	6	5.3%
Total	113	100.0%
Non-incapacitating Injuries		
Occupant of Passenger Vehicle	229	65.2%
Occupant of Pickup Truck	64	18.2%
Occupant of Large Truck	24	6.8%
Motorcyclist	20	5.7%
Motor Scooter/Moped	1	0.3%
Occupant of Other Type Vehicle	6	1.7%
Non-motorist	4	1.1%
Total	348	100.0%
Possible Injuries		
Occupant of Passenger Vehicle	337	67.1%
Occupant of Pickup Truck	123	24.5%
Occupant of Large Truck	20	4.0%
Motorcyclist	4	0.8%
Motor Scooter/Moped		
Occupant of Other Type Vehicle	14	2.8%
Non-motorist	3	0.6%
Total	501	100.0%

Work Zone-Related Fatalities & Injuries by County (2009) Rates by Population & Vehicle Miles Traveled (VMT)								
County	Estimated Population	Vehicles Miles Traveled	Fatalities	Rate Per 5,000 Population	Rate per 100 Million VMT	Injuries	Rate Per 5,000 Population	Rate per 100 Million VMT
Adair	21,857	151,358,200	1	0.23	0.66	6	1.37	3.96
Alfalfa	5,481	63,254,500						
Atoka	14,498	348,837,800				2	0.69	0.57
Beaver	5,270	153,978,900						
Beckham	21,116	393,754,700				18	4.26	4.57
Blaine	12,609	124,450,400				1	0.40	0.80
Bryan	40,783	550,803,250	1	0.12	0.18	27	3.31	4.90
Caddo	30,393	418,096,550				7	1.15	1.67
Canadian	109,668	1,484,079,050	2	0.09	0.13	18	0.82	1.21
Carter	48,326	671,191,200				13	1.35	1.94
Cherokee	46,029	384,268,350				5	0.54	1.30
Choctaw	14,872	205,688,450				3	1.01	1.46
Cimarron	2,630	75,733,850				1	1.90	1.32
Cleveland	244,589	2,333,010,650	2	0.04	0.09	104	2.13	4.46
Coal	5,856	94,648,150						
Comanche	113,228	1,073,286,150				7	0.31	0.65
Cotton	6,281	129,677,200				1	0.80	0.77
Craig	15,158	320,597,750				1	0.33	0.31
Creek	70,244	962,968,550				8	0.57	0.83
Custer	26,717	419,085,700				7	1.31	1.67
Delaware	40,555	389,444,050				14	1.73	3.59
Dewey	4,404	103,276,750						
Ellis	3,925	90,928,800						
Garfield	58,928	552,084,400				2	0.17	0.36
Garvin	27,113	537,988,100				20	3.69	3.72
Grady	51,649	632,749,400				12	1.16	1.90
Grant	4,317	81,964,400						
Greer	5,830	53,454,250						
Harmon	2,843	26,721,650						
Harper	3,377	78,642,900						
Haskell	12,393	128,458,100						
Hughes	13,819	159,307,900						
Jackson	25,369	250,218,450						
Jefferson	6,319	76,022,200				1	0.79	1.32
Johnston	10,468	118,325,700				4	1.91	3.38
Kay	46,110	565,819,350	1	0.11	0.18	5	0.54	0.88
Kingfisher	14,384	176,681,900				5	1.74	2.83
Kiowa	9,101	127,760,950				1	0.55	0.78
Latimer	10,621	133,203,100						
LeFlore	49,915	568,852,500				12	1.20	2.11
Lincoln	32,199	537,495,350	1	0.16	0.19	11	1.71	2.05
Logan	39,301	440,795,900				6	0.76	1.36
Love	9,124	315,411,100						
McClain	33,168	722,696,350				10	1.51	1.38

Work Zone-Related Fatalities & Injuries by County (2009) Rates by Population & Vehicle Miles Traveled (VMT)								
County	Estimated Population	Vehicles Miles Traveled	Fatalities	Rate Per 5,000 Population	Rate per 100 Million VMT	Injuries	Rate Per 5,000 Population	Rate per 100 Million VMT
McCurtain	33,370	423,889,100				22	3.30	5.19
McIntosh	19,801	436,105,650				2	0.51	0.46
Major	7,189	149,945,650						
Marshall	15,014	153,862,100				9	3.00	5.85
Mayer	40,065	629,526,450				7	0.87	1.11
Murray	12,960	237,027,350				11	4.24	4.64
Muskogee	71,412	888,285,900	1	0.07	0.11	26	1.82	2.93
Noble	10,950	364,985,400	4	1.83	1.10	18	8.22	4.93
Nowata	10,528	120,161,650						
Okfuskee	10,924	201,399,700				9	4.12	4.47
Oklahoma	716,704	9,787,190,300	1	0.01	0.01	184	1.28	1.88
Okmulgee	39,292	486,847,950				14	1.78	2.88
Osage	45,051	359,014,000				8	0.89	2.23
Ottawa	31,629	556,781,950				6	0.95	1.08
Pawnee	16,419	238,177,100				6	1.83	2.52
Payne	79,727	703,895,200				5	0.31	0.71
Pittsburg	45,211	682,524,450				13	1.44	1.90
Pontotoc	37,422	406,971,350						
Pottawatomie	70,274	779,494,000				19	1.35	2.44
Pushmataha	11,812	161,282,550				3	1.27	1.86
Roger Mills	3,407	72,671,500						
Rogers	85,654	1,065,175,850				15	0.88	1.41
Seminole	24,296	380,972,400				7	1.44	1.84
Sequoyah	41,433	573,495,300				7	0.84	1.22
Stephens	43,487	407,329,050						
Texas	21,135	300,730,800	2	0.47	0.67	19	4.49	6.32
Tillman	7,796	83,614,200						
Tulsa	601,961	7,376,431,000	2	0.02	0.03	204	1.69	2.77
Wagoner	70,394	722,656,200				3	0.21	0.42
Washington	50,706	435,948,700				9	0.89	2.06
Washita	11,813	217,138,500				1	0.42	0.46
Woods	8,418	94,228,400				3	1.78	3.18
Woodward	19,959	272,158,600						
Statewide	3,687,050	46,996,991,200	18	0.02	0.04	962	1.30	2.05

Injuries include incapacitating, non-incapacitating and possible.

Work Zone-Related Fatalities & Injuries in Cities of 5,000+ Population (2009) Rates by Population & Vehicles Miles Traveled (VMT)								
City	Estimated Population	Vehicles Miles Traveled	Fatalities	Rate Per 5,000 Population	Rate per 100 Million VMT	Injuries	Rate Per 5,000 Population	Rate per 100 Million VMT
Ada	17,017	125,954,200						
Altus	19,000	114,646,500						
Anadarko	6,380	34,992,550						
Ardmore	24,850	261,891,150				5	1.01	1.91
Bartlesville	36,068	201,527,450				4	0.55	1.98
Bethany	19,767	138,736,500						
Bixby	21,433	114,095,350				1	0.23	0.88
Blackwell	7,203	33,382,900						
Blanchard	6,762	52,585,550						
Broken Arrow	94,996	741,610,650				6	0.32	0.81
Catoosa	7,897	57,553,200				4	2.53	6.95
Chickasha	17,192	126,103,850				2	0.58	1.59
Choctaw	11,587	84,362,450						
Claremore	17,397	121,508,500				2	0.57	1.65
Clinton	8,852	69,510,600				4	2.26	5.75
Collinsville	5,204	16,738,900						
Coweta	8,975	62,517,200						
Cushing	9,596	35,981,700						
Del City	22,297	212,846,100						
Duncan	22,568	168,801,550						
Durant	16,876	148,982,050				11	3.26	7.38
Edmond	81,093	742,289,550				4	0.25	0.54
El Reno	16,999	236,074,700	1	0.29	0.42	9	2.65	3.81
Elk City	11,517	76,737,600						
Enid	47,968	376,880,750				1	0.10	0.27
Glenpool	10,356	89,300,900						
Grove	6,376	43,869,350				13	10.19	29.63
Guthrie	11,502	64,736,400						
Guymon	11,117	47,318,600						
Harrah	5,291	56,531,200				2	1.89	3.54
Henryetta	6,004	34,368,400						
Holdenville	5,588	17,983,550						
Hugo	5,395	26,112,100				1	0.93	3.83
Idabel	6,783	67,999,500						
Jenks	16,143	181,018,100				2	0.62	1.10
Lawton	91,186	680,527,900				7	0.38	1.03
Lone Grove	5,358	44,489,850						
McAlester	18,413	107,061,800						
Miami	12,908	75,726,550						
Midwest City	57,193	401,514,600				1	0.09	0.25
Moore	53,762	443,336,300				16	1.49	3.61
Muskogee	39,991	376,840,600				17	2.13	4.51
Mustang	18,384	102,061,300						

Work Zone-Related Fatalities & Injuries in Cities of 5,000+ Population (2009)
Rates by Population & Vehicles Miles Traveled (VMT)

City	Estimated Population	Vehicles Miles Traveled	Fatalities	Rate Per 5,000 Population	Rate per 100 Million VMT	Injuries	Rate Per 5,000 Population	Rate per 100 Million VMT
Newcastle	7,528	179,072,650				4	2.66	2.23
Noble	5,914	30,225,650						
Norman	109,063	1,064,194,000	1	0.05	0.09	73	3.35	6.86
Oklahoma City	560,332	9,017,923,600	2	0.02	0.02	190	1.70	2.11
Okmulgee	12,557	74,230,050				1	0.40	1.35
Owasso	28,865	134,210,500				2	0.35	1.49
Pauls Valley	6,067	73,131,400				1	0.82	1.37
Piedmont	5,753	22,312,450						
Ponca City	24,780	159,950,300				1	0.20	0.63
Poteau	8,290	91,826,700				5	3.02	5.45
Pryor	9,260	55,377,800						
Purcell	6,224	128,713,600				3	2.41	2.33
Sallisaw	8,812	85,004,850				1	0.57	1.18
Sand Springs	18,868	136,652,350				2	0.53	1.46
Sapulpa	21,228	217,032,650				4	0.94	1.84
Seminole	6,827	68,660,150						
Shawnee	30,533	248,207,300				3	0.49	1.21
Skiatook	6,897	33,240,550						
Stillwater	46,157	268,439,250				5	0.54	1.86
Tahlequah	16,665	126,377,600				3	0.90	2.37
Tecumseh	6,721	53,019,900						
The Village	9,849	59,841,750				1	0.51	1.67
Tulsa	389,625	5,266,574,050	2	0.03	0.04	198	2.54	3.76
Tuttle	6,158	50,450,300						
Vinita	6,056	32,397,400				1	0.83	3.09
Wagoner	8,139	47,026,600						
Warr Acres	9,501	78,945,850						
Watonga	5,630	10,088,600						
Weatherford	10,386	49,859,000						
Woodward	12,347	87,694,900						
Yukon	23,511	150,051,500				1	0.21	0.67
Total	2,369,787	25,317,841,750	6	0.01	0.02	611	1.29	2.41

Injuries include incapacitating, non-incapacitating and possible.