Speed

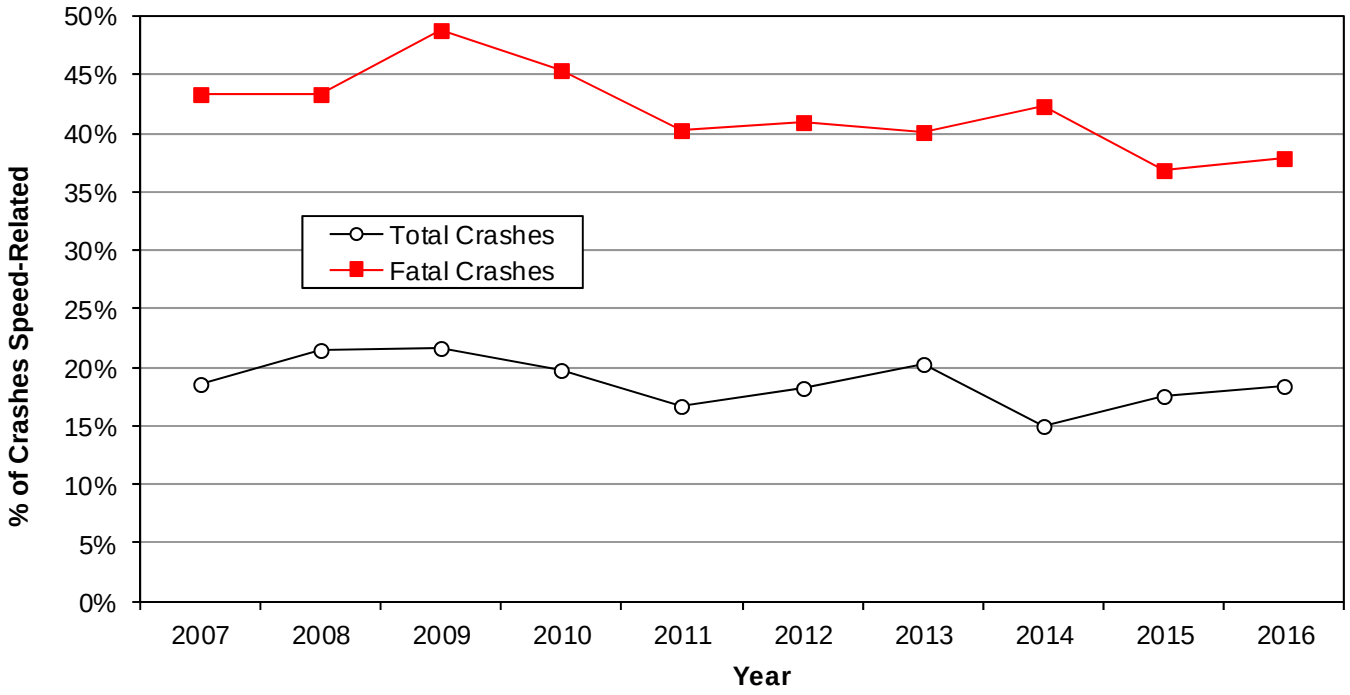
2016

Section 3: Speed

Trends

Speed-Related Crashes (Utah 2007-2016)

Speed-Related Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Speed		All	Speed		All	Speed		All	Speed	
Year	#	#	%	#	#	%	#	#	%	#	#	%
2007	42,368	7,612	18.0%	18,619	3,687	19.8%	258	112	43.4%	**61,245**	**11,411**	**18.6%**
2008	38,997	8,311	21.3%	17,125	3,622	21.2%	245	106	43.3%	**56,367**	**12,039**	**21.4%**
2009	35,398	7,607	21.5%	15,752	3,379	21.5%	217	106	48.8%	**51,367**	**11,092**	**21.6%**
2010	34,155	6,591	19.3%	14,995	3,026	20.2%	218	99	45.4%	**49,368**	**9,716**	**19.7%**
2011	36,418	5,724	15.7%	15,645	2,885	18.4%	224	90	40.2%	**52,287**	**8,699**	**16.6%**
2012	34,635	6,135	17.7%	15,765	2,970	18.8%	200	83	41.5%	**50,600**	**9,188**	**18.2%**
2013	39,301	7,925	20.2%	16,134	3,225	20.0%	202	81	40.1%	**55,637**	**11,231**	**20.2%**
2014	37,388	5,302	14.2%	16,426	2,631	16.0%	222	94	42.3%	**54,036**	**8,027**	**14.9%**
2015	42,089	7,050	16.8%	17,665	3,362	19.0%	258	95	36.8%	**60,012**	**10,507**	**17.5%**
2016	43,465	7,714	17.7%	18,747	3,696	19.7%	259	98	37.8%	**62,471**	**11,508**	**18.4%**
Total	**384,214**	**69,971**	**18.2%**	**166,873**	**32,483**	**19.5%**	**2,303**	**964**	**41.9%**	**553,390**	**103,418**	**18.7%**



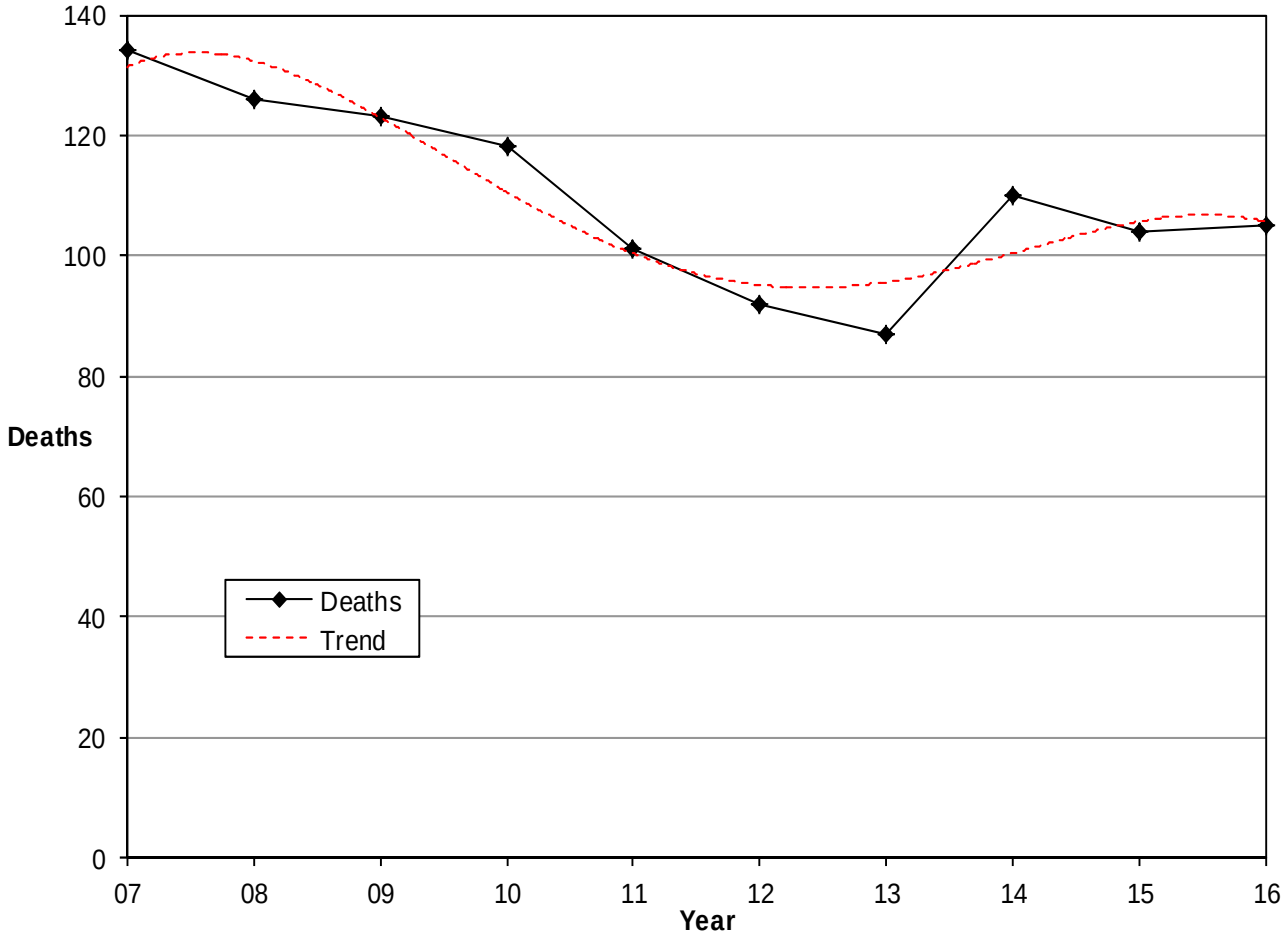
- Speed-related crashes are a concern because of the increased potential for severe injury and death.
- The 10-year trend shows that 19% of total crashes and 42% of fatal crashes in Utah are speed-related.
- 2008 had the highest number of crashes that were speed-related while 2009 had the highest percent.
- 2007 had the highest number of fatal crashes that were speed-related while 2009 had the highest percent.
- Over the last 10 years, speed-related crashes were 3.1 times more likely to be fatal than other crashes.

Note: A crash is considered speed-related when a driver exceeded posted speed limits or was driving too fast for conditions. “Driving too fast for conditions” is more likely to result in less severe crashes. “Exceeding posted speed limits” is more likely to result in more severe crashes as the higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury and death.

Trends

Speed-Related Deaths (Utah 2007-2016)

Speed Crashes						
	Deaths			Fatal Crashes		
	All	Speed		All	Speed	
Year	#	#	%	#	#	%
2007	299	134	44.8%	260	112	43.1%
2008	276	126	45.7%	244	106	43.4%
2009	244	123	50.4%	217	106	48.8%
2010	253	118	46.6%	218	99	45.4%
2011	243	101	41.6%	224	90	40.2%
2012	217	92	42.4%	200	83	41.5%
2013	220	87	39.5%	202	81	40.1%
2014	256	110	43.0%	222	94	42.3%
2015	278	104	37.4%	258	95	36.8%
2016	281	105	37.4%	259	98	37.8%
Total	**2,567**	**1,100**	**42.9%**	**2,304**	**964**	**41.8%**

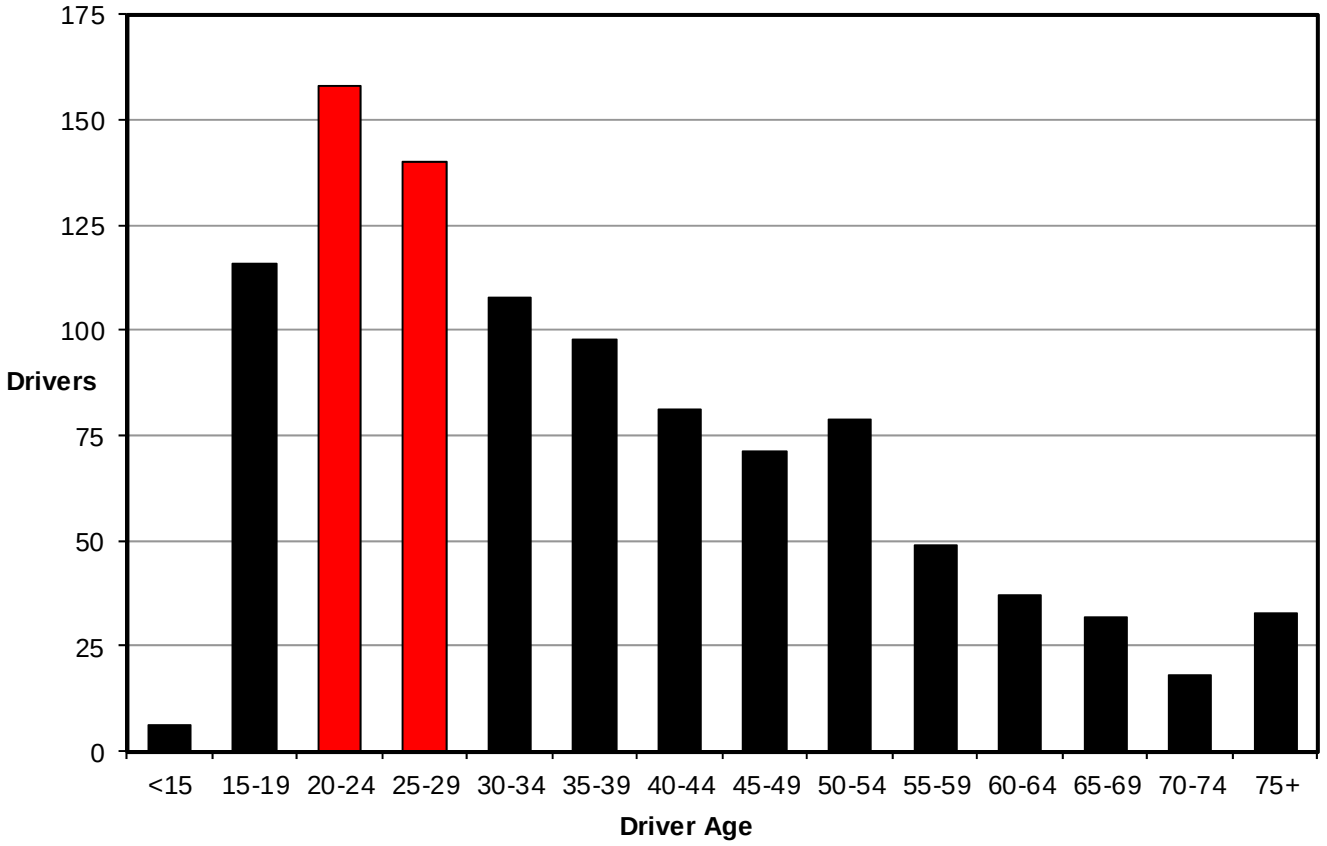


- Over the past 10 years, the percentage of deaths and fatal crashes that were speed-related has fluctuated around 43% of all deaths and 42% of fatal crashes.
- On average, 110 people die a year in Utah from speed-related crashes.

Trends

Speed-Related Drivers in Fatal Crashes (Utah 2007-2016)

Speed-Related Drivers in Fatal Crashes												
	Year										Total	
Age	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%
<15	0	1	1	0	0	1	0	0	2	1	**6**	**0.6%**
15-19	22	14	12	12	11	9	8	10	6	12	**116**	**11.3%**
20-24	23	20	20	14	11	11	9	13	23	14	**158**	**15.4%**
25-29	14	19	12	17	15	10	13	12	13	15	**140**	**13.6%**
30-34	11	14	9	14	13	10	10	5	12	10	**108**	**10.5%**
35-39	8	11	11	12	9	7	7	16	5	12	**98**	**9.6%**
40-44	11	6	16	5	7	8	8	7	4	9	**81**	**7.9%**
45-49	11	4	13	7	6	5	5	8	6	6	**71**	**6.9%**
50-54	6	9	7	8	5	6	6	15	13	4	**79**	**7.7%**
55-59	3	6	9	6	4	3	6	4	7	1	**49**	**4.8%**
60-64	4	1	3	0	6	6	0	6	5	6	**37**	**3.6%**
65-69	2	1	5	3	4	2	3	2	4	6	**32**	**3.1%**
70-74	1	1	1	2	0	3	4	1	3	2	**18**	**1.8%**
75+	2	2	4	5	2	2	6	1	5	4	**33**	**3.2%**
Total	**118**	**109**	**123**	**105**	**93**	**83**	**85**	**100**	**108**	**102**	**1,026**	**100.0%**



- Over the past 10 years, over one-fourth (29%) of the speed-related drivers in fatal crashes were aged 20-29 years.
- Drivers over age 60 years had the lowest number of speed-related drivers in fatal crashes.

Crash Conditions

Speed-Related Crashes by County (Utah 2016)

Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
County	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Wasatch	145	36.1	66	16.4	2	0.50	**213**	**53.0**
Salt Lake	3,394	34.5	1,567	15.9	17	0.17	**4,978**	**50.6**
Morgan	52	34.9	16	10.7	1	0.67	**69**	**46.3**
Box Elder	302	29.9	135	13.4	5	0.50	**442**	**43.8**
Rich	13	23.7	9	16.4	0	0.00	**22**	**40.0**
Utah	1,156	24.5	621	13.2	9	0.19	**1,786**	**37.8**
Cache	273	27.4	91	9.1	6	0.60	**370**	**37.1**
Beaver	76	25.2	30	9.9	0	0.00	**106**	**35.1**
Garfield	21	16.1	21	16.1	3	2.31	**45**	**34.6**
Summit	190	22.2	89	10.4	3	0.35	**282**	**32.9**
Weber	386	21.5	186	10.4	7	0.39	**579**	**32.2**
Davis	622	21.0	299	10.1	8	0.27	**929**	**31.4**
Millard	112	19.8	53	9.4	2	0.35	**167**	**29.6**
Iron	153	18.3	76	9.1	2	0.24	**231**	**27.7**
Wayne	6	11.0	9	16.5	0	0.00	**15**	**27.4**
Juab	87	19.4	31	6.9	3	0.67	**121**	**26.9**
Sanpete	43	17.3	18	7.3	3	1.21	**64**	**25.8**
Sevier	62	16.9	31	8.5	1	0.27	**94**	**25.7**
Tooele	139	15.4	82	9.1	7	0.78	**228**	**25.3**
Duchesne	43	13.1	29	8.9	1	0.31	**73**	**22.3**
Carbon	52	14.8	24	6.8	2	0.57	**78**	**22.3**
Piute	4	12.3	3	9.2	0	0.00	**7**	**21.5**
Washington	210	12.6	122	7.3	7	0.42	**339**	**20.4**
Emery	48	12.3	28	7.2	3	0.77	**79**	**20.3**
Uintah	59	13.5	25	5.7	1	0.23	**85**	**19.4**
Daggett	4	11.5	0	0.0	1	2.88	**5**	**14.4**
San Juan	29	8.7	8	2.4	1	0.30	**38**	**11.5**
Kane	8	4.8	11	6.6	0	0.00	**19**	**11.4**
Grand	25	6.2	16	3.9	3	0.74	**44**	**10.8**
Statewide	**7,714**	**25.1**	**3,696**	**12.0**	**98**	**0.32**	**11,508**	**37.4**

- Wasatch (53.0), Salt Lake (50.6), Morgan (46.3), and Box Elder (43.8) counties had the highest rates of speed-related total crashes per 100 million vehicle miles traveled.
- Daggett (2.88), Garfield (2.31), and Sanpete (1.21) counties had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Grand (10.8), Kane (11.4), and San Juan (11.5) counties had the lowest rates of speed -related total crashes per 100 million vehicle miles traveled.

Speed-Related Crashes by Urban/Rural Location (Utah 2016)

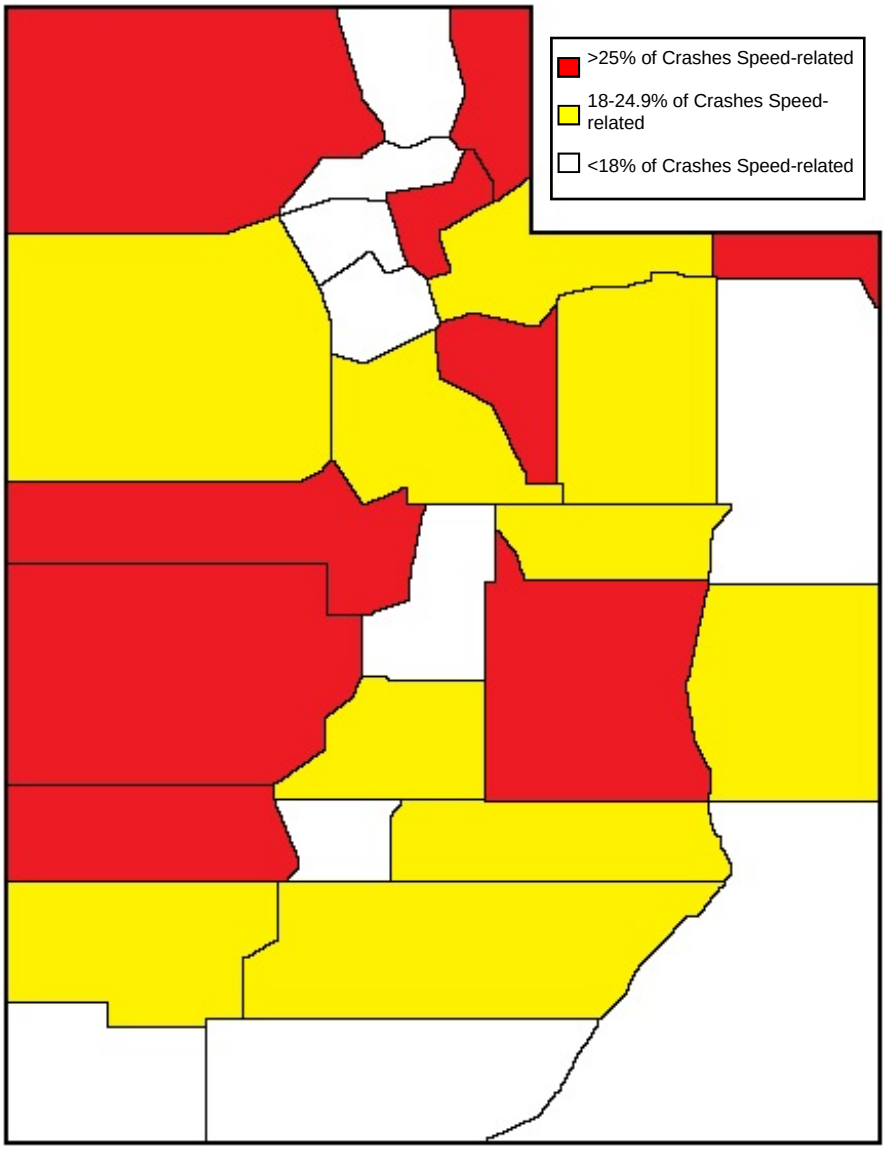
- Urban areas had a higher rate of total speed-related crashes per VMT while Rural areas had a higher rate for fatal speed crashes.
- Speed-related crashes occurring in rural areas were 2.9 times more likely to result in a death than speed-related crashes in urban areas.

Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Location	#	Rate per 100 Million	#	Rate per 100 Million	#	Rate per 100 Million	#	Rate per 100 Million
Urban	6,041	27.5	2,886	13.1	54	0.25	**8,981**	**40.9**
Rural	1,673	19.0	810	9.2	44	0.50	**2,527**	**28.7**
Total	**7,714**	**25.1**	**3,696**	**12.0**	**98**	**0.32**	**11,508**	**37.4**

Crash Conditions

Percent of Crashes Speed-Related by County (Utah 2016)

Speed-Related Crashes			
		Total	
	Total Crashes	Speed	
County	#	#	%
Beaver	251	106	42.2%
Morgan	166	69	41.6%
Millard	434	167	38.5%
Daggett	14	5	35.7%
Juab	353	121	34.3%
Box Elder	1,359	442	32.5%
Emery	256	79	30.9%
Wasatch	726	213	29.3%
Rich	81	22	27.2%
Iron	951	231	24.3%
Duchesne	302	73	24.2%
Sevier	390	94	24.1%
Summit	1,193	282	23.6%
Wayne	64	15	23.4%
Tooele	1,107	228	20.6%
Carbon	385	78	20.3%
Grand	222	44	19.8%
Garfield	230	45	19.6%
Utah	9,365	1,786	19.1%
Piute	39	7	17.9%
Cache	2,064	370	17.9%
Salt Lake	28,287	4,978	17.6%
Sanpete	364	64	17.6%
Uintah	499	85	17.0%
Davis	5,776	929	16.1%
San Juan	266	38	14.3%
Weber	4,413	579	13.1%
Washington	2,706	339	12.5%
Kane	208	19	9.1%
Statewide	**62,471**	**11,508**	**18.4%**

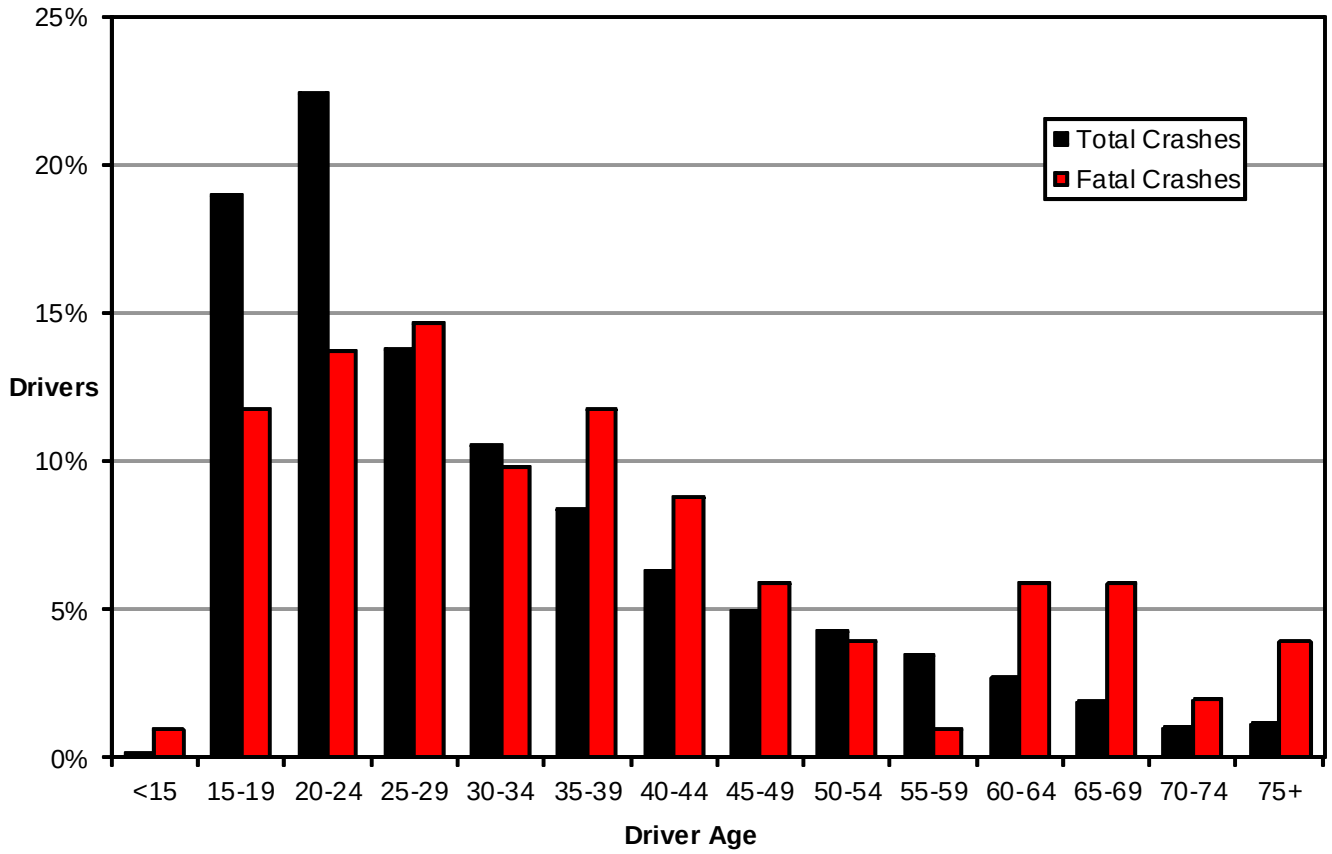


- Beaver (42%), Morgan (42%), and Millard (39%) counties had the highest percent of crashes that were speed-related.
- Kane (9%), Washington (13%), and Weber (13%) counties had the lowest percent of crashes that were speed-related.

Crash Conditions

Age of Drivers in Speed-Related Crashes (Utah 2016)

Speed-Related Drivers								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Age	#	%	#	%	#	%	#	%
<15	4	0.0%	13	0.3%	1	1.0%	**18**	**0.1%**
15-19	1,539	19.1%	682	17.4%	12	11.7%	**2,233**	**18.5%**
20-24	1,791	22.2%	832	21.2%	14	13.6%	**2,637**	**21.8%**
25-29	1,061	13.2%	546	13.9%	15	14.6%	**1,622**	**13.4%**
30-34	832	10.3%	399	10.2%	10	9.7%	**1,241**	**10.3%**
35-39	633	7.9%	339	8.7%	12	11.7%	**984**	**8.1%**
40-44	497	6.2%	231	5.9%	9	8.7%	**737**	**6.1%**
45-49	374	4.6%	205	5.2%	6	5.8%	**585**	**4.8%**
50-54	327	4.1%	167	4.3%	4	3.9%	**498**	**4.1%**
55-59	252	3.1%	150	3.8%	1	1.0%	**403**	**3.3%**
60-64	198	2.5%	112	2.9%	6	5.8%	**316**	**2.6%**
65-69	134	1.7%	82	2.1%	6	5.8%	**222**	**1.8%**
70-74	81	1.0%	38	1.0%	2	1.9%	**121**	**1.0%**
75+	76	0.9%	56	1.4%	4	3.9%	**136**	**1.1%**
Unknown	258	3.2%	66	1.7%	1	1.0%	**325**	**2.7%**
Total	**8,057**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,078**	**100.0%**



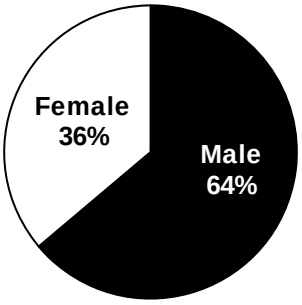
- Younger drivers (15-24 years) had the highest percentage of total speed-related crashes.
- Drivers aged 15-39 years had the highest percentage of fatal speed-related crashes.

Crash Conditions

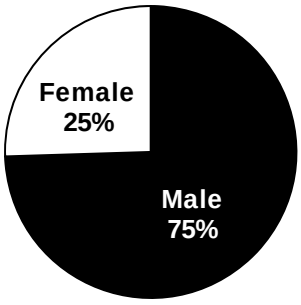
Gender of Drivers in Speed-Related Crashes (Utah 2016)

Speed-Related Drivers								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Gender	#	%	#	%	#	%	#	%
Male	5,073	63.0%	2,384	60.8%	76	73.8%	**7,533**	**62.4%**
Female	2,756	34.2%	1,481	37.8%	26	25.2%	**4,263**	**35.3%**
Unknown	228	2.8%	53	1.4%	1	1.0%	**282**	**2.3%**
Total	**8,057**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,078**	**100.0%**

Total Speed-Related Crashes



Fatal Speed-Related Crashes



- Male drivers represented 64% (of known) of the drivers in speed-related total crashes and 75% of the drivers in speed-related fatal crashes.

Speed-Related Crashes by Vehicle Type (Utah 2016)

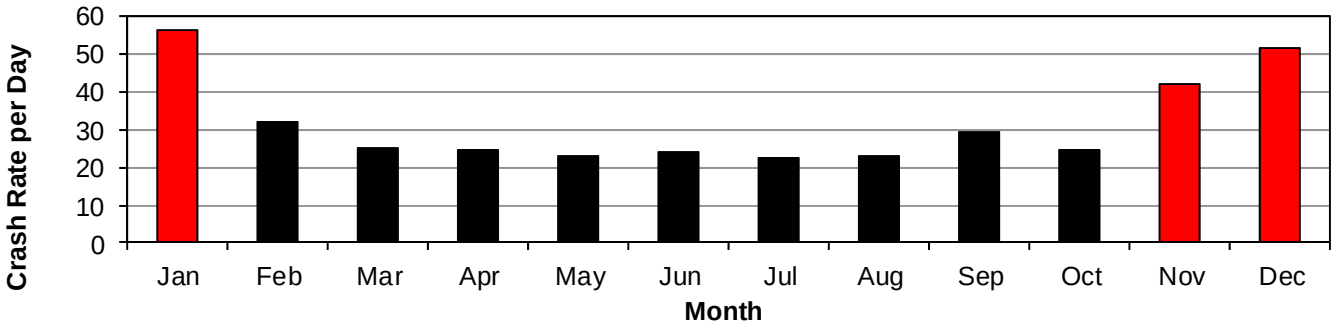
Speed-Related Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Vehicle Type	#	%	#	%	#	%	#	%
Passenger Car	4,733	58.6%	2,072	52.9%	43	41.7%	**6,848**	**56.6%**
SUV	1,502	18.6%	786	20.1%	16	15.5%	**2,304**	**19.1%**
Pickup Truck	1,274	15.8%	572	14.6%	15	14.6%	**1,861**	**15.4%**
Van	288	3.6%	157	4.0%	3	2.9%	**448**	**3.7%**
Heavy Truck	186	2.3%	79	2.0%	1	1.0%	**266**	**2.2%**
Motorcycle	13	0.2%	191	4.9%	18	17.5%	**222**	**1.8%**
Off Road Vehicle	6	0.1%	50	1.3%	5	4.9%	**61**	**0.5%**
Bus	6	0.1%	4	0.1%	0	0.0%	**10**	**0.1%**
RV/Motor Home	4	0.0%	1	0.0%	0	0.0%	**5**	**0.0%**
Other	1	0.0%	0	0.0%	1	1.0%	**2**	**0.0%**
Unknown	59	0.7%	6	0.2%	1	1.0%	**66**	**0.5%**
Total	**8,072**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,093**	**100.0%**

- For total speed-related crashes, passenger car and SUV were the leading vehicle types.
- For fatal speed-related crashes, passenger car and motorcycle were the leading vehicle types.
- Motorcycle was overrepresented in fatal speed-related crashes compared to total speed-related crashes (18% to 2%).

Crash Conditions

Speed-Related Crashes by Month (Utah 2016)

Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Month	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	1,307	42.2	428	13.8	3	0.10	**1,738**	**56.1**
February	658	22.7	263	9.1	9	0.31	**930**	**32.1**
March	522	16.8	255	8.2	4	0.13	**781**	**25.2**
April	447	14.9	282	9.4	6	0.20	**735**	**24.5**
May	441	14.2	254	8.2	13	0.42	**708**	**22.8**
June	424	14.1	286	9.5	10	0.33	**720**	**24.0**
July	398	12.8	282	9.1	15	0.48	**695**	**22.4**
August	441	14.2	272	8.8	5	0.16	**718**	**23.2**
September	524	17.5	342	11.4	10	0.33	**876**	**29.2**
October	461	14.9	287	9.3	7	0.23	**755**	**24.4**
November	909	30.3	339	11.3	10	0.33	**1,258**	**41.9**
December	1,182	38.1	406	13.1	6	0.19	**1,594**	**51.4**
Total	**7,714**	**21.1**	**3,696**	**10.1**	**98**	**0.27**	**11,508**	**31.4**



- Overall, January (56.1) and December (51.4) had the highest rates of speed-related crashes per day.
- July (0.48) and May (0.42) had the highest rates per day of fatal speed-related crashes.

Speed-Related Crashes by Day of Week (Utah 2016)

Speed-Related Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	940	12.2%	423	11.4%	19	19.4%	**1,382**	**12.0%**
Monday	1,305	16.9%	556	15.0%	12	12.2%	**1,873**	**16.3%**
Tuesday	1,002	13.0%	519	14.0%	9	9.2%	**1,530**	**13.3%**
Wednesday	973	12.6%	473	12.8%	11	11.2%	**1,457**	**12.7%**
Thursday	1,204	15.6%	567	15.3%	10	10.2%	**1,781**	**15.5%**
Friday	1,282	16.6%	616	16.7%	15	15.3%	**1,913**	**16.6%**
Saturday	1,008	13.1%	542	14.7%	22	22.4%	**1,572**	**13.7%**
Total	**7,714**	**100.0%**	**3,696**	**100.0%**	**98**	**100.0%**	**11,508**	**100.0%**

- The highest percentage of speed-related total crashes occurred on Friday and Monday while the highest percentage of fatal crashes occurred on Saturday and Sunday.
- Speed-related total crashes were lowest on Sunday and fatal crashes were lowest on Tuesday.

Crash Conditions

Speed-Related Crashes by Hour (Utah 2016)

Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Hour	#	%	#	%	#	%	#	%
Midnight	171	2.2%	78	2.1%	3	3.1%	**252**	**2.2%**
1 a.m.	106	1.4%	90	2.4%	2	2.0%	**198**	**1.7%**
2 a.m.	91	1.2%	50	1.4%	3	3.1%	**144**	**1.3%**
3 a.m.	88	1.1%	52	1.4%	4	4.1%	**144**	**1.3%**
4 a.m.	87	1.1%	47	1.3%	2	2.0%	**136**	**1.2%**
5 a.m.	172	2.2%	59	1.6%	3	3.1%	**234**	**2.0%**
6 a.m.	346	4.5%	97	2.6%	1	1.0%	**444**	**3.9%**
7 a.m.	576	7.5%	183	5.0%	1	1.0%	**760**	**6.6%**
8 a.m.	572	7.4%	226	6.1%	2	2.0%	**800**	**7.0%**
9 a.m.	357	4.6%	137	3.7%	1	1.0%	**495**	**4.3%**
10 a.m.	278	3.6%	135	3.7%	4	4.1%	**417**	**3.6%**
11 a.m.	278	3.6%	159	4.3%	3	3.1%	**440**	**3.8%**
Noon	292	3.8%	145	3.9%	4	4.1%	**441**	**3.8%**
1 p.m.	317	4.1%	168	4.5%	16	16.3%	**501**	**4.4%**
2 p.m.	387	5.0%	220	6.0%	4	4.1%	**611**	**5.3%**
3 p.m.	493	6.4%	276	7.5%	7	7.1%	**776**	**6.7%**
4 p.m.	634	8.2%	325	8.8%	8	8.2%	**967**	**8.4%**
5 p.m.	747	9.7%	374	10.1%	6	6.1%	**1,127**	**9.8%**
6 p.m.	506	6.6%	258	7.0%	5	5.1%	**769**	**6.7%**
7 p.m.	300	3.9%	156	4.2%	6	6.1%	**462**	**4.0%**
8 p.m.	245	3.2%	116	3.1%	4	4.1%	**365**	**3.2%**
9 p.m.	254	3.3%	143	3.9%	3	3.1%	**400**	**3.5%**
10 p.m.	237	3.1%	109	2.9%	2	2.0%	**348**	**3.0%**
11 p.m.	180	2.3%	93	2.5%	4	4.1%	**277**	**2.4%**
Total	**7,714**	**100.0%**	**3,696**	**100.0%**	**98**	**100.0%**	**11,508**	**100.0%**

- Total speed-related crashes peaked in the morning (7:00 a.m. to 8:59 a.m.), with another peak in the late afternoon/evening (3:00 p.m. to 6:59 p.m.).
- Fatal speed-related crashes were highest during the 1:00 p.m., 4:00 p.m., and 5:00 p.m. hours.

Speed-Related Crashes by Speed Limit (Utah 2016)

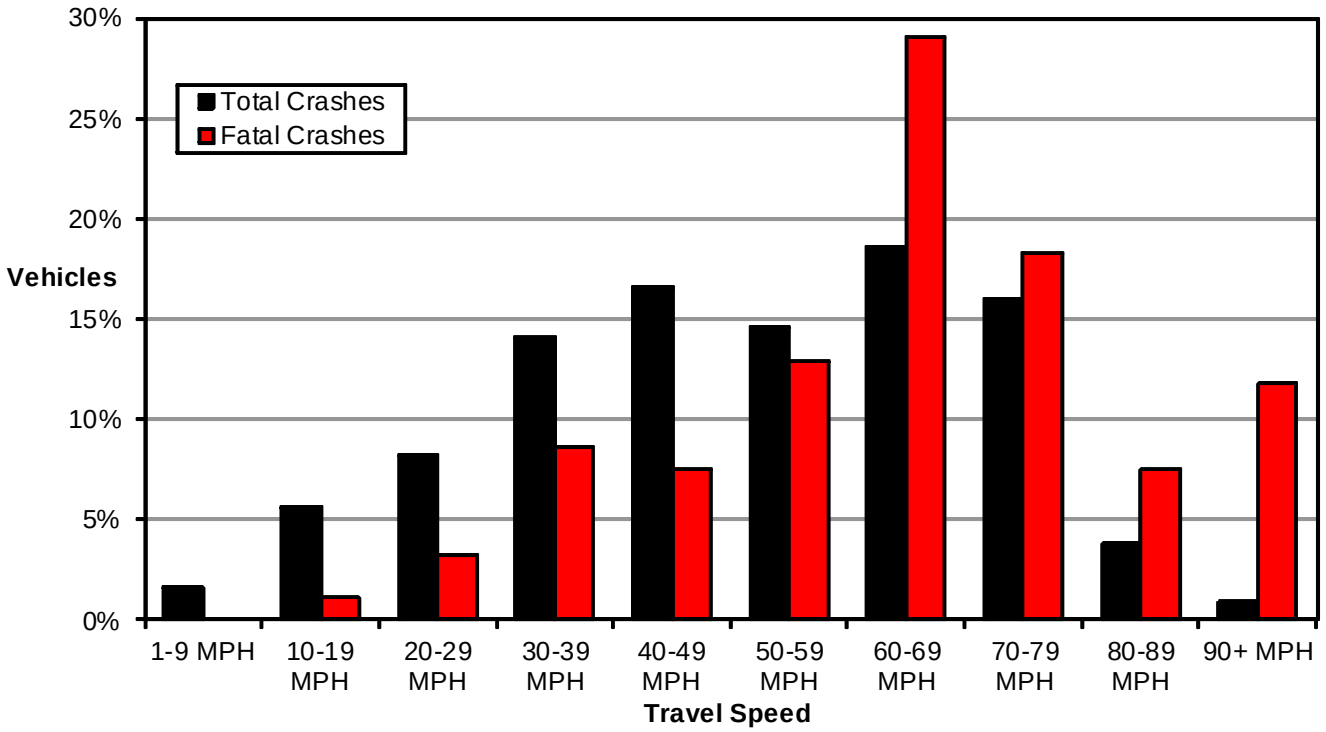
Speed-Related Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	137	1.7%	48	1.2%	2	1.9%	**187**	**1.5%**
20-25 MPH	770	9.5%	409	10.4%	5	4.9%	**1,184**	**9.8%**
30-35 MPH	754	9.3%	505	12.9%	12	11.7%	**1,271**	**10.5%**
40-45 MPH	823	10.2%	472	12.0%	17	16.5%	**1,312**	**10.8%**
50-55 MPH	796	9.9%	458	11.7%	20	19.4%	**1,274**	**10.5%**
60-65 MPH	1,070	13.3%	472	12.0%	17	16.5%	**1,559**	**12.9%**
70-75 MPH	2,826	35.0%	1,169	29.8%	10	9.7%	**4,005**	**33.1%**
80 MPH	456	5.6%	177	4.5%	8	7.8%	**641**	**5.3%**
Unknown	440	5.5%	208	5.3%	12	11.7%	**660**	**5.5%**
Total	**8,072**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,093**	**100.0%**

- When compared to all crashes, speed-related crashes were more likely to occur on roads with higher speed limits.
- 41% (of known) of total speed-related crashes occurred where the speed limit was 70 MPH or higher.

Crash Conditions

Speed-Related Crashes by Travel Speed (Utah 2016)

Speed-Related Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed	#	%	#	%	#	%	#	%
1-9 MPH	144	1.8%	33	0.8%	0	0.0%	**177**	**1.5%**
10-19 MPH	485	6.0%	137	3.5%	1	1.0%	**623**	**5.2%**
20-29 MPH	677	8.4%	233	5.9%	3	2.9%	**913**	**7.5%**
30-39 MPH	1,056	13.1%	511	13.0%	8	7.8%	**1,575**	**13.0%**
40-49 MPH	1,154	14.3%	693	17.7%	7	6.8%	**1,854**	**15.3%**
50-59 MPH	1,041	12.9%	574	14.7%	12	11.7%	**1,627**	**13.5%**
60-69 MPH	1,397	17.3%	648	16.5%	27	26.2%	**2,072**	**17.1%**
70-79 MPH	1,209	15.0%	560	14.3%	17	16.5%	**1,786**	**14.8%**
80-89 MPH	247	3.1%	174	4.4%	7	6.8%	**428**	**3.5%**
90+ MPH	35	0.4%	59	1.5%	11	10.7%	**105**	**0.9%**
Unknown	627	7.8%	296	7.6%	10	9.7%	**933**	**7.7%**
Total	**8,072**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,093**	**100.0%**

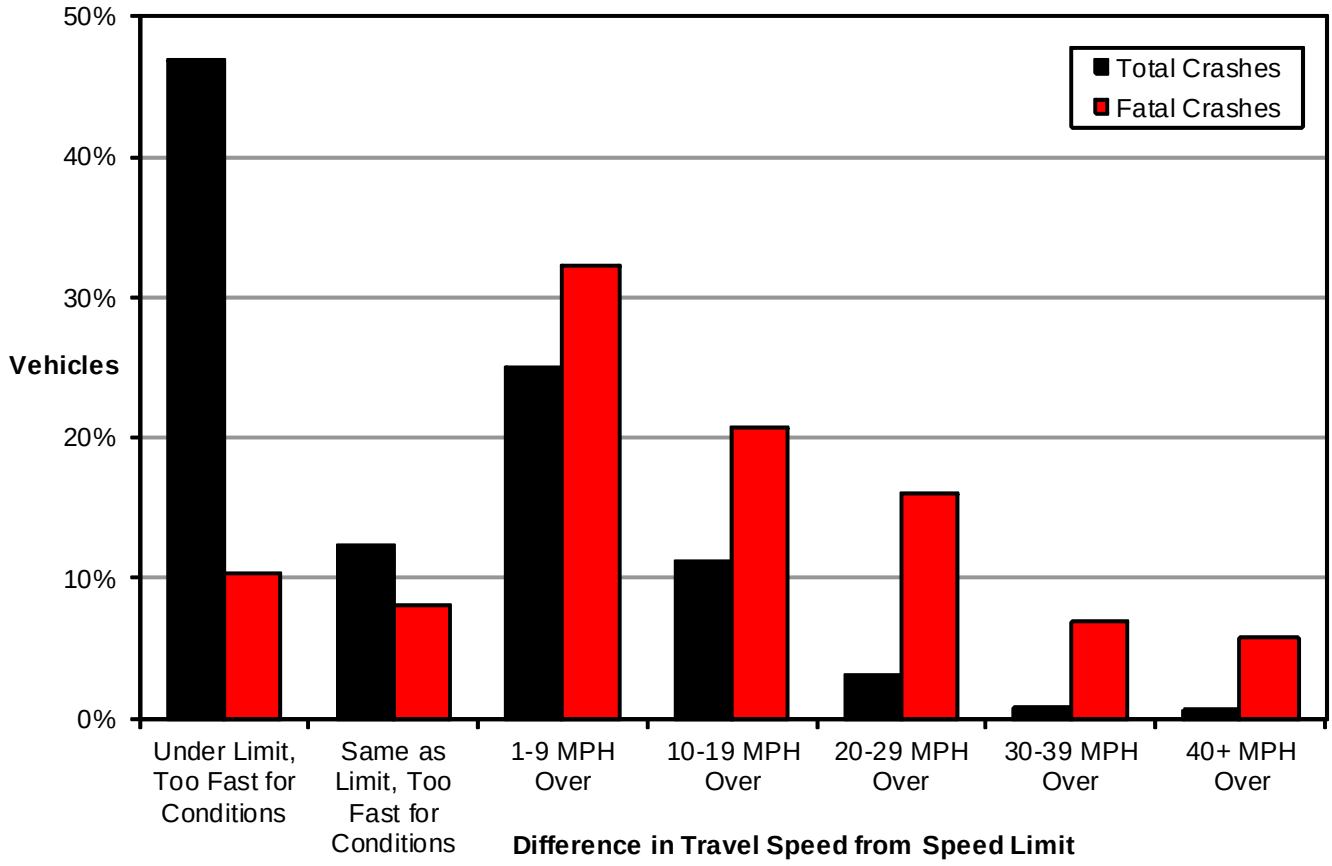


- 60-69 MPH (19% of known) and 40-49 MPH (17% of known) were the leading travel speeds of vehicles in total speed-related crashes.
- Two-thirds (67% of known) of vehicles in fatal speed-related crashes were traveling 60+ MPH.
- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds. Speed-related vehicles in crashes traveling 80+ MPH were 4.9 times more likely to be in a fatal crash.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury and death. The risk of death and severe injury is a direct exponential function of speed. Drivers become increased risks to themselves and other people on the highway due to higher speeds.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

Crash Conditions

Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2016)

Speed-Related Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed vs. Speed Limit	#	%	#	%	#	%	#	%
Under Limit, Too Fast for Conditions	3,768	46.7%	1,378	35.2%	9	8.7%	**5,155**	**42.6%**
Same as Limit, Too Fast for Conditions	944	11.7%	397	10.1%	7	6.8%	**1,348**	**11.1%**
1-9 MPH Over Speed Limit	1,710	21.2%	1,000	25.5%	28	27.2%	**2,738**	**22.6%**
10-19 MPH Over Speed Limit	688	8.5%	529	13.5%	18	17.5%	**1,235**	**10.2%**
20-29 MPH Over Speed Limit	165	2.0%	159	4.1%	14	13.6%	**338**	**2.8%**
30-39 MPH Over Speed Limit	35	0.4%	49	1.3%	6	5.8%	**90**	**0.7%**
40+ MPH Over Speed Limit	24	0.3%	50	1.3%	5	4.9%	**79**	**0.7%**
Unknown	738	9.1%	356	9.1%	16	15.5%	**1,110**	**9.2%**
Total	**8,072**	**100.0%**	**3,918**	**100.0%**	**103**	**100.0%**	**12,093**	**100.0%**



- 4,480 vehicles in crashes were known to be traveling over the posted speed limit.
- Speed-related vehicles in fatal crashes were more likely to be exceeding the posted speed limit by greater amounts.
- Speed-related vehicles in total crashes were more likely to be traveling too fast for conditions.
- Over three-fourths (82% of known) of speed-related vehicles in fatal crashes were traveling over the posted speed limit.
- Speed increases the crash energy by the square of the speeds. When impact speed increases from 40 to 60 MPH (a 50% increase), the energy that needs to be manages increases by 125%.