

# Appendix

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## Appendix

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## Population, Vehicle Miles Traveled, Injuries, Deaths, and Crashes (Utah 1947-2013)

<b>Historical Information</b>														
Year	Population	Vehicle Miles Traveled (VMT)	Injured Persons		Deaths		Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
			#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
1947	636,000	2,132,000,000	3,747	175.8	186	8.72	6,123	287.2	2,603	122.1	159	7.46	8,885	416.7
1948	653,000	2,351,000,000	3,982	169.4	220	9.36	7,117	302.7	2,675	113.8	169	7.19	9,961	423.7
1949	670,800	2,475,000,000	3,808	153.9	174	7.03	8,327	336.4	2,614	105.6	151	6.10	11,092	448.2
1950	695,900	2,839,000,000	4,459	157.1	188	6.62	9,532	335.8	3,004	105.8	169	5.95	12,705	447.5
1951	706,100	3,015,000,000	5,132	170.2	207	6.87	12,806	424.7	3,495	115.9	174	5.77	16,475	546.4
1952	724,000	3,050,000,000	5,140	168.5	246	8.07	14,052	460.7	3,474	113.9	184	6.03	17,710	580.7
1953	739,100	3,232,000,000	4,945	153.0	209	6.47	12,883	398.6	3,305	102.3	185	5.72	16,373	506.6
1954	750,500	3,336,000,000	4,495	134.7	209	6.26	11,911	357.0	3,016	90.4	176	5.28	15,103	452.7
1955	782,800	3,075,000,000	5,036	163.8	203	6.60	14,504	471.7	3,390	110.2	166	5.40	18,060	587.3
1956	808,800	3,310,000,000	4,812	145.4	215	6.50	14,045	424.3	3,310	100.0	176	5.32	17,531	529.6
1957	826,300	3,366,000,000	5,022	149.2	222	6.60	15,476	459.8	3,397	100.9	181	5.38	19,054	566.1
1958	845,200	3,531,000,000	5,658	160.2	193	5.47	18,287	517.9	3,762	106.5	171	4.84	22,220	629.3
1959	869,900	3,784,000,000	5,992	158.4	205	5.42	19,389	512.4	3,946	104.3	171	4.52	23,506	621.2
1960	900,000	3,852,000,000	9,128	237.0	256	6.65	20,702	537.4	5,576	144.8	200	5.19	26,478	687.4
1961	936,000	3,997,000,000	10,412	260.5	236	5.90	19,278	482.3	6,257	156.5	197	4.93	25,732	643.8
1962	958,000	4,240,000,000	11,133	262.6	233	5.50	19,459	458.9	6,968	164.3	186	4.39	26,613	627.7
1963	974,000	4,549,000,000	12,603	277.0	263	5.78	19,344	425.2	7,798	171.4	198	4.35	27,340	601.0
1964	978,000	4,790,000,000	14,096	294.3	295	6.16	20,570	429.4	8,636	180.3	246	5.14	29,452	614.9
1965	991,000	4,997,000,000	14,361	287.4	281	5.62	20,427	408.8	8,856	177.2	242	4.84	29,525	590.9
1966	1,009,000	5,079,000,000	14,994	295.2	331	6.52	20,616	405.9	9,076	178.7	265	5.22	29,957	589.8
1967	1,019,000	5,257,000,000	14,401	273.9	275	5.23	21,873	416.1	8,888	169.1	231	4.39	30,992	589.5
1968	1,029,000	5,539,000,000	15,539	280.5	289	5.22	24,724	446.4	9,550	172.4	258	4.66	34,532	623.4
1969	1,047,000	5,802,000,000	15,977	275.4	308	5.31	24,665	425.1	9,850	169.8	251	4.33	34,766	599.2
1970	1,066,000	6,108,000,000	17,076	279.6	335	5.48	24,168	395.7	10,722	175.5	276	4.52	35,166	575.7
1971	1,101,150	6,544,000,000	18,073	276.2	337	5.15	27,429	419.1	11,399	174.2	280	4.28	39,108	597.6
1972	1,135,100	6,969,000,000	18,261	262.0	382	5.48	27,914	400.5	11,630	166.9	312	4.48	39,856	571.9
1973	1,168,950	7,274,000,000	18,415	253.2	361	4.96	26,220	360.5	11,710	161.0	304	4.18	38,234	525.6
1974	1,196,950	7,457,000,000	16,268	218.2	228	3.06	20,637	276.7	10,560	141.6	204	2.74	31,401	421.1
1975	1,233,900	7,942,000,000	17,762	223.6	274	3.45	24,740	311.5	11,441	144.1	245	3.08	36,426	458.7
1976	1,272,050	8,420,000,000	18,315	217.5	254	3.02	22,435	266.4	11,685	138.8	225	2.67	34,345	407.9
1977	1,315,950	9,054,000,000	19,728	217.9	360	3.98	25,562	282.3	12,652	139.7	310	3.42	38,524	425.5
1978	1,363,750	9,826,000,000	21,029	214.0	376	3.83	28,946	294.6	13,423	136.6	315	3.21	42,684	434.4
1979	1,415,950	9,811,000,000	20,798	212.0	328	3.34	26,732	272.5	13,449	137.1	287	2.93	40,468	412.5
1980	1,474,000	10,645,000,000	17,828	167.5	335	3.15	21,589	202.8	11,701	109.9	292	2.74	33,582	315.5
1981	1,515,000	10,733,000,000	18,090	168.5	364	3.39	23,844	222.2	11,824	110.2	321	2.99	35,989	335.3
1982	1,558,000	10,947,000,000	17,538	160.2	296	2.70	26,425	241.4	11,504	105.1	263	2.40	38,192	348.9
1983	1,595,000	11,228,000,000	18,910	168.4	283	2.52	28,419	253.1	12,317	109.7	253	2.25	40,989	365.1
1984	1,622,000	11,642,000,000	20,487	176.0	315	2.71	33,738	289.8	13,477	115.8	274	2.35	47,489	407.9
1985	1,643,000	12,035,000,000	21,346	177.4	303	2.52	33,684	279.9	13,917	115.6	270	2.24	47,871	397.8
1986	1,663,000	12,253,000,000	21,350	174.2	312	2.55	32,426	264.6	13,988	114.2	276	2.25	46,690	381.0
1987	1,678,000	12,679,000,000	19,237	151.7	297	2.34	33,386	263.3	13,599	107.3	271	2.14	47,256	372.7
1988	1,690,000	13,229,853,875	19,066	144.1	297	2.24	35,614	269.2	13,377	101.1	258	1.95	49,249	372.3
1989	1,706,000	13,933,977,565	19,843	142.4	303	2.17	37,110	266.3	13,941	100.1	269	1.93	51,320	368.3
1990	1,729,227	14,649,064,030	20,608	140.7	272	1.86	37,823	258.2	14,632	99.9	236	1.61	52,691	359.7
1991	1,780,870	15,390,400,930	19,540	127.0	271	1.76	33,443	217.3	13,763	89.4	229	1.49	47,435	308.2
1992	1,838,149	16,263,289,670	22,490	138.3	269	1.65	34,760	213.7	15,665	96.3	235	1.44	50,660	311.5

## Population, Vehicle Miles Traveled, Injuries, Deaths, and Crashes (Utah 1947-2013)

<b>Historical Information (Continued)</b>														
Year	Population	Vehicle Miles Traveled (VMT)	Injured Persons		Deaths		Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
			#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
1993	1,889,393	17,055,044,750	25,763	151.1	303	1.78	38,357	224.9	17,088	100.2	259	1.52	55,704	326.6
1994	1,946,721	18,091,944,321	28,436	157.2	343	1.90	40,243	222.4	18,726	103.5	303	1.67	59,272	327.6
1995	1,995,228	18,798,488,669	28,343	150.8	325	1.73	37,532	199.7	19,828	105.5	284	1.51	57,644	306.6
1996	2,042,893	19,433,341,748	30,711	158.0	321	1.65	40,225	207.0	20,988	108.0	292	1.50	61,505	316.5
1997	2,099,409	20,407,590,239	31,238	153.1	366	1.79	33,512	164.2	21,131	103.5	309	1.51	54,952	269.3
1998	2,141,632	21,236,980,216	30,232	142.4	350	1.65	34,337	161.7	19,427	91.5	308	1.45	54,072	254.6
1999	2,193,014	21,867,355,694	29,959	137.0	360	1.65	32,971	150.8	19,513	89.2	318	1.45	52,802	241.5
2000	2,246,467	22,517,131,427	30,086	133.6	373	1.66	33,269	147.7	19,564	86.9	318	1.41	53,151	236.0
2001	2,290,632	23,398,734,621	29,375	125.5	291	1.24	33,113	141.5	19,332	82.6	258	1.10	52,703	225.2
2002	2,331,826	24,438,992,554	30,433	124.5	328	1.34	33,542	137.2	19,552	80.0	274	1.12	53,368	218.4
2003	2,372,457	23,963,242,376	28,352	118.3	309	1.29	31,842	132.9	18,285	76.3	262	1.09	50,389	210.3
2004	2,430,224	24,641,658,091	29,638	120.3	296	1.20	34,222	138.9	19,423	78.8	260	1.06	53,905	218.8
2005	2,505,844	25,129,538,952	29,221	116.3	282	1.12	35,158	139.9	19,545	77.8	235	0.94	54,938	218.6
2006	2,576,228	26,166,885,473	27,433	104.8	287	1.10	37,674	144.0	18,264	69.8	249	0.95	56,187	214.7
2007	2,636,077	26,824,244,333	27,420	102.2	299	1.11	42,368	157.9	18,619	69.4	258	0.96	61,245	228.3
2008	2,691,122	25,883,467,343	24,672	95.3	276	1.07	38,997	150.7	17,125	66.2	245	0.95	56,367	217.8
2009	2,731,558	26,217,108,843	22,847	87.1	244	0.93	35,398	135.0	15,752	60.1	217	0.83	51,367	195.9
2010	2,774,424	26,617,169,711	21,675	81.4	253	0.95	34,155	128.3	14,995	56.3	218	0.82	49,368	185.5
2011	2,814,784	26,379,900,505	22,325	84.6	243	0.92	36,418	138.1	15,645	59.3	224	0.85	52,287	198.2
2012	2,854,871	26,637,413,207	22,336	83.9	217	0.81	34,635	130.0	15,765	59.2	200	0.75	50,600	190.0
2013	2,900,872	27,014,745,900	22,740	84.2	220	0.81	39,301	145.5	16,134	59.7	202	0.75	55,637	206.0
<b>Total</b>	<b>103,777,072</b>	<b>825,352,565,043</b>	<b>1,210,165</b>	<b>146.6</b>	<b>18,882</b>	<b>2.29</b>	<b>1,800,423</b>	<b>218.1</b>	<b>800,523</b>	<b>97.0</b>	<b>16,204</b>	<b>1.96</b>	<b>2,617,150</b>	<b>317.1</b>

POPULATION SOURCE: State of Utah Population Estimates, Demographic and Economic Analysis, [www.governor.utah.gov/dea](http://www.governor.utah.gov/dea)

VEHICLE MILES TRAVELED SOURCE: Utah Department of Transportation, Utah Highway Performance Monitoring System, [www.udot.utah.gov](http://www.udot.utah.gov)

## County Population and Vehicle Miles Traveled (Utah 2013)

<b>County</b>		
<b>County</b>	<b>Vehicle Miles Traveled</b>	<b>Population</b>
Beaver	264,273,530	6,459
Box Elder	895,366,745	50,794
Cache	880,249,558	116,909
Carbon	310,210,602	20,988
Daggett	30,980,594	1,127
Davis	2,538,778,040	322,094
Duchesne	278,837,297	20,308
Emery	351,741,796	10,749
Garfield	108,004,544	5,083
Grand	334,853,328	9,360
Iron	721,883,152	46,780
Juab	391,200,663	10,348
Kane	161,183,477	7,260
Millard	490,465,889	12,662
Morgan	131,337,257	10,173
Piute	28,071,707	1,510
Rich	49,105,907	2,288
Salt Lake	8,881,223,683	1,079,721
San Juan	312,364,995	14,973
Sanpete	210,754,236	28,237
Sevier	311,210,506	20,852
Summit	745,619,650	38,486
Tooele	818,748,872	60,762
Uintah	419,416,805	35,555
Utah	3,956,113,485	551,891
Wasatch	333,402,298	26,437
Washington	1,405,655,035	147,800
Wayne	47,544,289	2,747
Weber	1,606,147,960	238,519
<b>Statewide</b>	<b>27,014,745,900</b>	<b>2,900,872</b>

VEHICLE MILES TRAVELED SOURCE: Utah Department of Transportation, Utah Highway Performance Monitoring System, [www.udot.utah.gov](http://www.udot.utah.gov)

POPULATION SOURCE: State of Utah Population Estimates, Demographic and Economic Analysis, [www.governor.utah.gov/dea](http://www.governor.utah.gov/dea)

## Number of Licensed Drivers by Age (Utah 2013)

Licensed Drivers		
Age	#	%
15-19	156,822	8.3%
20-24	198,238	10.4%
25-29	200,937	10.6%
30-34	207,415	10.9%
35-39	189,387	10.0%
40-44	158,792	8.4%
45-49	137,357	7.2%
50-54	144,279	7.6%
55-59	136,965	7.2%
60-64	115,900	6.1%
65-69	90,147	4.7%
70-74	65,207	3.4%
75-79	45,398	2.4%
80-84	30,258	1.6%
85+	22,237	1.2%
<b>Total</b>	<b>1,899,339</b>	<b>100.0%</b>

## Number of Licensed Drivers by Gender (Utah 2013)

Licensed Drivers		
Gender	#	%
Female	940,572	49.5%
Male	958,767	50.5%
<b>Total</b>	<b>1,899,339</b>	<b>100.0%</b>

SOURCE: Utah Department of Public Safety, Driver License Division

## Number of Registered Vehicles by Vehicle Type (Utah 2005-2013)

Vehicles					
Year	Heavy Truck	Light Truck	Motorcycle	Passenger Car	Total
2005	58,645	552,931	43,271	1,205,430	<b>1,860,277</b>
2006	60,765	564,280	48,949	1,243,041	<b>1,917,035</b>
2007	62,860	585,413	56,146	1,297,242	<b>2,001,661</b>
2008	66,578	601,655	64,376	1,334,906	<b>2,067,515</b>
2009	67,124	598,513	78,302	1,349,596	<b>2,093,535</b>
2010	63,927	588,733	71,957	1,340,300	<b>2,064,917</b>
2011	64,288	585,689	69,774	1,346,803	<b>2,066,554</b>
2012	73,047	642,921	90,095	1,466,245	<b>2,272,308</b>
2013	68,188	593,301	74,324	1,405,155	<b>2,140,968</b>
<b>Total</b>	<b>585,422</b>	<b>5,313,436</b>	<b>597,194</b>	<b>11,988,718</b>	<b>18,484,770</b>

SOURCE: Utah State Tax Commission, Economic and Statistical Unit

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## Notable Dates in Utah Highway Safety History

- 1906** First motor vehicle traffic crash death in Utah.
- 1912** First electric traffic signal installed in Salt Lake City.
- 1915** Driving age established at 16 years and older.
- 1926** Stop sign law implemented.
- 1935** Alcohol drinking age set at 21 years and older.
- 1935** Utah Highway Patrol granted statewide police authority.
- 1960** First sections of interstate opened in Utah.
- 1967** Illegal to operate a motor vehicle at or above .08 BAC.
- 1969** Motorcycle helmet required for all ages on roads with speed limits 35 mph or higher.
- 1972** Highest number of deaths recorded in one year in Utah (382).
- 1973** Maximum speed limit lowered to 55 mph.
- 1977** Motorcycle helmet law changed, helmets required only for riders under 18 years on all roads.
- 1985** First child restraint law.
- 1986** First seat belt law.
- 1987** Maximum speed limit raised to 65 mph.
- 1991** Amount of property damage required for reportable crashes increased from \$400 to \$750.
- 1992** Illegal for drivers under age 21 years to drive with any detectable amount of alcohol.
- 1996** Amount of property damage required for reportable crashes increased to \$1,000.
- 1996** Maximum speed limit raised to 75 mph.
- 1997** Increased age that children need to be restrained from up to eight years to up to ten years.
- 1997** Non-traffic crashes excluded. Non-traffic crashes accounted for approximately 10% of crashes in previous years.
- 1999** First Graduated Driver License law implemented.
- 2000** Secondary seat belt law for drivers and all passengers of motor vehicles.
- 2000** Increased age for use of child restraints up to age five years.
- 2006** State of Utah Investigating Officer's Report of Traffic Crash DI-9 Form updated.
- 2007** Hand-held telephone use prohibited, enforced if a moving traffic violation is committed.
- 2008** Increased age for use of child restraints up to age eight years.
- 2008** Maximum speed limit raised to 80 mph on selected parts of rural I-15.
- 2009** Amount of property damage required for reportable crashes increased to \$1,500.
- 2009** All drivers convicted of DUI required to use ignition interlock system.
- 2009** Text messaging prohibited while operating a moving motor vehicle.

## Glossary

**Alcohol-Impaired Driver Crash:** A crash in which the driver was cited for driving under the influence, the alcohol test was positive, or if the investigating officer suspected alcohol use.

**Alcohol-Impaired Driver Fatal Crash:** A crash resulting in one or more deaths involving at least one driver with a blood alcohol concentration of .08 grams per deciliter or above.

**Contributing Factor:** The circumstances reported by the investigating officer surrounding a crash that contributed to the crash or the crash severity.

**Crash Rate:** Crashes per 100 million vehicle miles traveled unless otherwise specified.

**Death Rate:** Traffic deaths per 100 million vehicle miles traveled unless otherwise specified.

**Fatal Crash:** A crash involving a motor vehicle traveling on a trafficway resulting in the death of at least one person within 30 days of the crash.

**Fatality Analysis Reporting System (FARS):** National data system containing data on all fatal traffic crashes in the U.S.

**Holiday Crash:** The following criteria was used to determine the number of days in the holiday period: 1) If a holiday occurred on Sunday, Tuesday, Wednesday, or Saturday, then it was considered a three day holiday (the day prior to the holiday, the holiday, and the day after the holiday); 2) If a holiday occurred on Monday, then it was considered a four day holiday (Friday through Monday); 3) If a holiday occurred on Friday, then it was considered a four day holiday (Thursday through Sunday); 4) If a holiday occurred on Thursday, then it was considered a five day holiday (Wednesday through Sunday).

**Incapacitating Injury:** Any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred. Often defined as needing help from the scene.

**Injury Crash:** A crash in which one or more persons sustained a possible injury, non-incapacitating injury, or an incapacitating injury.

**Miles per Hour (MPH):** A unit of speed expressing the distance traveled (in miles) to the time spent traveling (in hours).

**Motorcycle Crash:** A crash involving a motorcycle or moped.

**Non-Incapacitating Injury:** Any injury, other than a fatal injury or an incapacitating injury, which is evident to observers at the scene of the crash in which the injury occurred. Examples: bruise, cut, bloody nose.

**Out-of-State Driver:** A driver licensed from a state/country other than Utah who is in a crash. Some of these drivers may reside in Utah and have not yet applied for a Utah driver license.

**Possible Injury:** Complaint of pain without visible injury.

**Property Damage Only (PDO) Crash:** A crash which results in damage to the motor vehicle or other property but without injury or death to any person.

**Restraint Use:** Restraint use is reported for occupants in a passenger car, light truck, van, SUV, or large truck. Occupants are coded as restrained if they reported using a shoulder/lap belt, lap belt, or a child safety seat at the scene of the crash. Occupants using only a shoulder strap were reported as being unrestrained. In the majority of cases, restraint use is self-reported by the crash occupant. In the case of fatal or severe injury crashes, the officer determines restraint use.

**Rural:** Counties with population less than 100,000 people. Rural counties in Utah are Beaver, Box Elder, Carbon, Daggett, Duchesne, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Morgan, Piute, Rich, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Wasatch, and Wayne.

**Speed Crash:** A crash where a driver exceeded posted speed limits or was driving too fast for conditions.

**Teenage Driver Crash:** A crash involving a driver aged 15 to 19 years.

**Urban:** Counties with population 100,000 people and above. Urban counties in Utah are Cache, Davis, Salt Lake, Utah, Washington, and Weber.

**Vehicle Miles Traveled (VMT):** The number of miles traveled in a year for a given area calculated by the Utah Department of Transportation.

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