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Utah in the Fast Lane

An Analysis of Driving and Traffic Safety



Bryson Garbett, Chairman
Brent Jensen, Vice Chairman
Douglas Matsumori, Treasurer
Stephen J. Hershey Kroes, President
Shawn Teigen, Research Director

10 West Broadway, Suite 307, Salt Lake City, UT 84101
801.355.1400 • utahfoundation.org

The mission of Utah Foundation is to promote a thriving economy, a well-prepared workforce, and a high quality of life for Utahns by performing thorough, well-supported research that helps policymakers, business and community leaders, and citizens better understand complex issues and providing practical, well-reasoned recommendations for policy change.

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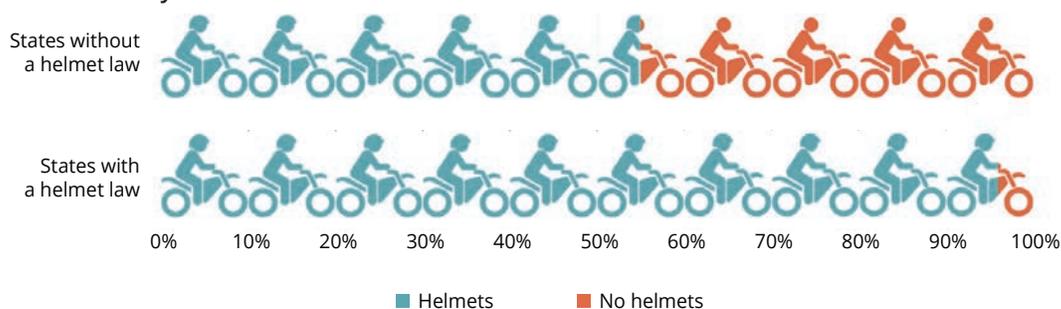
Are Utahns good drivers? That question is much debated. Many people think that they themselves are good drivers, but that other drivers are terrible.

This report gestures towards the range of subjective assessments, but then turns to a more serious examination of Utah traffic laws that involve restraints and restrictions affecting safety on the roads. Specifically, the report discusses laws regarding seatbelts, booster seats, motorcycle helmets, teen driving, impaired driving, and distracted driving. Within the category of distracted driving, talking on a cellphone receives special emphasis. This focus reflects extensive scientific research showing the limitations of attention, and the way that increased cognitive workload, as required by cellphone conversations, impairs driving performance.

KEY FINDINGS

- The Utah Legislature made the state's seatbelt law enforceable as a primary offense; the law will take effect in May 2015. (See page 3)
- Modifying Utah's current helmet law to cover all riders would likely reduce fatalities. (See page 6)
- Utah's current restrictions on teen driving do not include the following standards as recommended by national safety experts:
 - Nighttime driving restriction from as early as 9pm and ending at 5am;
 - Passenger limitation for one year;
 - Minimum 16 years of age for learners' permits;
 - Restricted licenses until 18. (See page 7)
- Utah's drunk driving rates continue to decrease; this may be credited to Utah's strict laws and policies. (See page 9)
- Studies show that hands-free calls while driving cause an impairment equivalent to hand-held calls. (See page 12)
- Research shows that driving while talking on a cellphone is as hazardous as driving with a blood alcohol level of 0.08%, the legal threshold for drunk driving. (See page 12)

Percent of Motorcyclists Who Wear Helmets



See Figure 3 for source.

This research report was written by Utah Foundation Research Analyst Melissa Proctor. Assistance was provided by Research Director Shawn Teigen. Research support was provided by Intern Marin Christensen. Ms. Proctor can be reached for comment at (801) 355-1400, or by email at melissa@utahfoundation.org

INTRODUCTION

Anecdotal evidence is often presented as proof that Utah drivers are either the worst or the best. But what is the truth, and how is it determined? In July 2014, an Insure.com survey of 2,000 drivers nationwide ranked Utah drivers the tenth rudest in the country. Respondents were licensed drivers—half women and half men. The driving behaviors that made people most angry in general were talking on cellphones while driving, tailgating, not signaling turns, weaving in and out of lanes, and driving too fast. According to one survey respondent, Utah drivers in particular “tend not to signal,” “pretend not to see that car trying to squeeze in next,” and “blow through yield signs as if they don’t exist.”¹

For most states, it was the neighboring states’ drivers who called foul, but California drivers were the most critical overall. According to Insure.com, drivers from the Golden State dislike drivers from Arizona, Arkansas, Colorado, Nevada, New York, Oregon, Texas, Utah, and even Vermont. The survey is silent about the criteria California drivers used to form their opinions, but if personal evaluations factor in, it means Californians have taken a lot of angry, long-distance road trips. Other states with reportedly rude drivers include New Jersey, New York, Massachusetts, Vermont, and the District of Columbia. But the rudest drivers in the country, according to the poll, are Idaho drivers. Their problem? Driving too slowly. While these critiques may be interesting, polls measuring subjective assessments of rudeness might not be the most accurate source for determining driving performance.

Utah Drivers: Good, Bad or Middle of the Road?

Insure.com ranks Utah drivers as tenth rudest in the nation

CarInsuranceComparison.com ranks Utah drivers second best

Allstate ranks drivers in Salt Lake City sixty-seventh best and drivers in West Valley eightieth out of 200 cities

In fact, other polls rank Utah quite differently. According to a survey published by CarInsuranceComparison.com, Utah has the second best drivers in the country, with Vermont beating Utah for the top spot. Using data from the National Highway Traffic Safety Administration (NHTSA), CarInsuranceComparison.com used the following five criteria to determine Utah’s ranking: 1) drunk driving, 2) failure to obey traffic signals, 3) fatality rate, 4) tickets issued, and 5) careless driving. Utah has the lowest percentage of alcohol-related vehicle fatalities at 16%, and is one of the states with the fewest accidents caused by violations such as running lights, running stop signs, and not wearing seat belts. Utah’s worst ranking was in the category of careless driving as measured by pedestrians and bicyclists killed by motor vehicles.² In 2014, there were 39 pedestrian and 9 bicyclist fatalities in Utah, putting the state’s ranking at twenty-third in this category.³ Vermont, by contrast, was ranked first for pedestrian safety. Sober driving in Utah did not compensate sufficiently for high pedestrian fatalities, and bumped the state down to number two.

A third source suggests that Utah drivers are neither the worst nor the best, but middle of the road. Allstate’s 2014 America’s Best Drivers Report says that Salt Lake City drivers average one accident every 9.7 years. Years between accidents is Allstate’s criterion for good driving. On this measure, Salt Lake City ranks 67th safest among 200 of America’s largest cities for car-collision frequency. West Valley City comes in at 80th. According to the report, Fort Collins, Colorado ranks as the safest driving city with drivers averaging an accident every 14.2 years. The nation’s worst drivers were in Worcester, Massachusetts, followed closely by Boston, Massachusetts and Washington, D.C.⁴

While each of these sources offers a small glimpse of Utah drivers, this research report expands the view by exploring specific state practices that affect drivers, passengers, and traffic safety in Utah.

SEAT BELTS SAVE LIVES

Utah law requires the use of seat belts for all occupants in motor vehicles. Until the 2015 legislative session, the seatbelt law was only subject to secondary enforcement, though there were previous legislative efforts by Representative Lee Perry and Senator Luz Escamilla to make the failure to buckle up a primary offense. Primary enforcement of seat belt laws allows law enforcement officers to stop and ticket a driver simply for failing to use a seat belt. No other violation need occur first to take action. Secondary enforcement allows an officer to issue a ticket for not wearing a seatbelt only if the officer has reason to pull a driver over for some other violation (unless the driver is 19 years old or younger). Representative Perry's bill, H.B. 79, making failure to wear a seatbelt a primary offense for all drivers was finally passed into law this year. When it takes effect in May, Utah will join the thirty-three other states and the District of Columbia that have primary enforcement of their front seat belt laws. For an initial period, officers will only issue warnings for first time offenders.

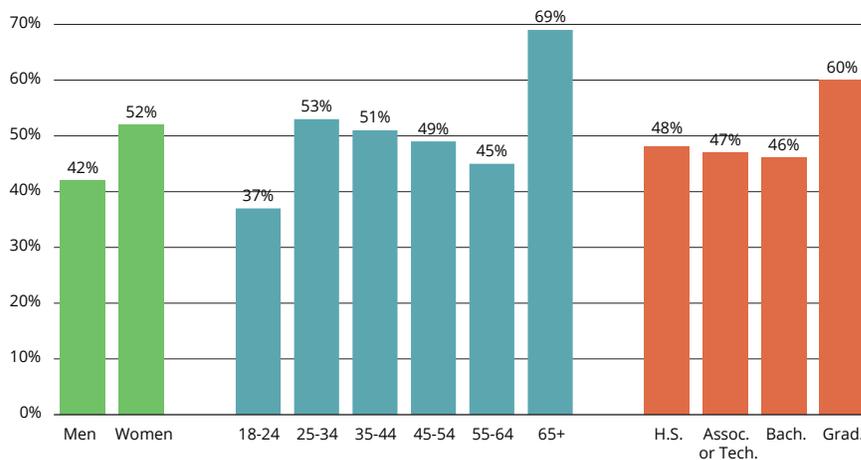
"I don't believe in secondary laws. If we are going to have a law, it either needs to be a law or not be a law."

—Utah Representative Paul Ray⁵

More people die from failure to use seat belts than from any other contributing factor during accidents.⁶ Data show that primary enforcement laws result in higher seat belt use rates. According to NHTSA, states with primary enforcement seat belt laws for front seat passengers had a 91% belt use rate, while states with secondary laws were only at 80% in 2013.⁷ That national rate corresponds closely to Utah, which has an 83% buckle up rate.

Higher seat belt use correlates with fewer injuries and fatalities. When states strengthen their laws from secondary to primary enforcement, seatbelt use rates improve from 10 to 15 points and fatalities decline an estimated 7%.⁸ It is likely that Utah will see similar results when the new law takes effect making the failure to wear a seatbelt a primary offense. NHTSA estimates that with 100% seat belt use, the lives of 27 Utahns could have been saved in 2013. Of the 256 people killed in Utah in traffic crashes in 2014, 72 drivers and passengers were not restrained.⁹

Figure 1: Support in Utah for Primary Enforcement of Seat Belt Laws



Note: Do you support or oppose changing the seat belt law so law enforcement can pull someone over for not wearing a seatbelt without requiring a separate violation?
Source: UtahPolicy.com survey, February 2-9, 2015.

Motorists in rural areas of Utah use seat belts less often (74%) than motorists in urban areas (86%), and men (78%) use seat belts less often than women (86%).¹⁰ A poll commissioned by UtahPolicy.com in February – before the Utah Legislature voted to allow primary enforcement – found that fewer men support a primary seatbelt law than women, but that 50% of Utahns overall support making seatbelt usage subject to primary enforcement for all

drivers. The biggest difference in support for a primary seatbelt law was between 18 to 24 year-old drivers who support such a law at only 37% and drivers 65 years and older who support it at 69%. Very few drivers strongly oppose the law, but 6% of southern Utah drivers do. Utah Department of Transportation, the Utah Highway Patrol, the Utah Chamber of Commerce, and the Utah Department of Health support primary enforcement of the seatbelt law.

But 50% of Utahns disapprove of the new primary enforcement law for seatbelts. Some drivers refuse to wear seatbelts because of fears about being trapped inside a sinking or burning car.¹² Others object based on principle, believing that state interference is illegitimate in the case of seatbelts because the only person injured when someone fails to buckle up is the non-user.

The latter argument is based on the misconception that only the non-user can be hurt by the decision not to buckle up. One unbelted occupant can increase the risk of serious injury or death to other belted occupants in the vehicle by 40%.¹³ Minor crashes become serious when an unbuckled driver cannot remain behind the wheel.¹⁴ A driver may lose control by being “thrown from the wheel by a spin, violent evasive action or sudden braking. A similar loss of control may be precipitated by the sliding or unseating of a passenger flung by centrifugal forces against the operator. The innocent motorist deserves protection from the oncoming careening automobile whose driver has been jostled from its controls.”¹⁵ It is the state’s responsibility to ensure the safety of innocent motorists on public roadways.

“An unbuckled person in a car where others are properly restrained becomes a projectile...”

--Carlos Braceras, Executive Director, Utah Department of Transportation.¹¹

In addition to the human costs measured by injuries and death, motor vehicle crashes also result in lost productivity, property damage, medical expenses, emergency services, and other costs. The annual economic costs of motor vehicle crashes to Utah is estimated at \$1.98 billion.¹⁶ The average in-patient costs for crash victims who do not use seat belts are 55% higher than for those who use them because their injuries are more substantial, according to NHTSA.¹⁷ National data show that members of society pay more of the accident costs through higher insurance premiums, taxes, traffic congestion, and the subsequent excess fuel consumption and environmental effects than those who cause the accidents.¹⁸

Buckling up also leads to reduced insurance costs. Data from the Intermountain Injury Control Research Center show that in 2001 inpatient and emergency hospital services for unbelted Utahns cost approximately \$7 million. An estimated 86% of those costs could have been saved had the crash victims been wearing seat belts.¹⁹

BOOSTER SEATS: LAWS BOOST USAGE

Booster seats are used to raise a child up from a vehicle seat in order to improve the fit of an adult seat belt. Expanded child restraint laws covering children through age seven make it three times as likely that children will be in appropriate restraints. According to NHTSA, child safety seats reduce fatal injury by 71% for infants and 54% for toddlers in passenger cars. Using a booster seat with a seat belt instead of a seat belt alone reduces a child’s risk of injury in a crash by 59%.²⁰ Expanded child restraint laws were associated with 5% reduction in the rate of children with any injuries, and 17% reduction in the rate of children with fatal and incapacitating injuries.

When children are properly restrained in child safety seats, booster seats, or safety belts – as appropriate for their age and size – their chance of being killed or seriously injured in a car crash is greatly reduced. Laws enforcing proper restraint of children in motor vehicles increase the likelihood that children will be properly restrained.²¹ Prior to May 2008, there was no law requiring booster seats for children up to the age of eight years old. Carl

Wimmer, a Utah law enforcement officer turned state lawmaker, remembers families and safety advocates attending Law Enforcement and Criminal Justice Committee hearings about booster seats. “They’d line up these kids who would come up and say: Please help save my life.” Wimmer felt so sorry for them he put up \$1000 of his own money at one point to buy booster seats for any family who wanted one, but he “wouldn’t vote for such a law, arguing that it was just another example of the government sticking its nose into people’s business.”²²

Despite these kinds of arguments from some members of the Utah legislature, in May 2008 a new booster seat law went into effect in Utah. According to Advocates for Highway and Auto Safety, Utah now has the optimal booster seat law. It requires that:

The operator of a motor vehicle operated on a highway shall provide for the protection of a person younger than eight years of age by using a child restraint device to restrain each person in the manner prescribed by the manufacturer of the device. Children younger than eight are not required to be in a booster seat if they are at least 57 inches tall.

At that point, they should use the lap and shoulder belt without a booster. The penalty for breaking this law is \$45. Failure to properly secure children is a primary offense, so a driver may be pulled over if anyone in the vehicle under age 19 is not properly restrained. Proper restraint does not mean simply wearing a seat belt. Children ages seven and younger must be restrained in an age-appropriate child safety seat or booster seat.²³

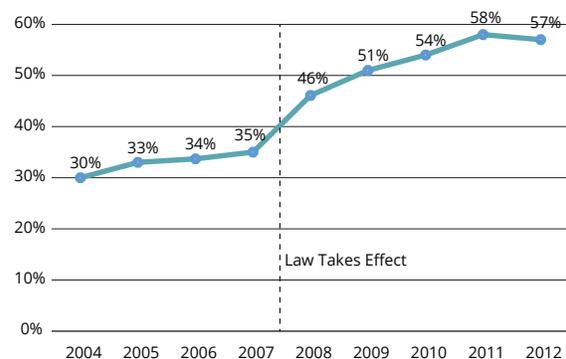
Over the years, numerous campaigns have educated the public about booster seat use. Before passage of the booster seat law, these campaigns may have been responsible for slight increases in booster seat use among children aged four to seven in crashes (from 30% in 2004 to 35% in 2007). Booster seat use increased significantly to 46% with the passage of the booster seat legislation in 2008. Booster seat use continued to increase in the following years with a high of 58% booster seat use in crashes during 2011 (see Figure 2). The year 2012 saw the first drop in booster seat usage rates since legislation passed where use was 57% in crashes. Even with the drop in 2012, booster seat use has increased by nearly two-thirds in traffic crashes among children aged four to seven since the 2008 booster seat legislation.²⁴

With higher use of booster seats there are fewer child occupants injured in traffic accidents. In 2007, there were 524 child occupants injured in Utah accidents. After passage of the booster seat law in 2008, the number decreased to 430. By 2012, the number of child injuries in traffic accidents had decreased to 393.²⁵ Based on these numbers, the Utah Department of Public Safety concluded that legislation can have an immediate impact on traffic safety. Indeed, booster seat legislation corresponded with a dramatic increase of booster seat use and a decrease in injuries in crashes. Legislation could similarly impact helmet usage.

HELMETS DECREASE DEATHS

Forty years ago federal highway funding was tied to helmet laws. As a result, 47 states and Washington, D.C. had mandatory helmet laws for all riders.

Figure 2: Legislation Affects Outcomes: Booster Seat Use in Vehicle Crashes



Source: Utah Department of Public Safety.

Congress removed that requirement in 1976 and repealed financial incentives in the early 1990s. Now only 19 states and Washington, D.C. require all riders to wear helmets.²⁶ Utah repealed its universal helmet law in 1977. Utah currently has only a partial helmet law, requiring riders younger than 18 to wear protective head-gear. A CDC study shows that partial helmet laws actually *decrease* helmet use even among young riders who are required to wear them.²⁷ Partial laws complicate enforcement since officers find it difficult to determine the age of the potential violator.

All-rider helmet laws increase motorcycle helmet use, decrease deaths and injuries, and save taxpayer dollars. According to the U.S. Government Accountability Office, “laws requiring all motorcyclists to wear helmets are the only strategy proven to be effective in reducing motorcyclist fatalities.”²⁸

NHTSA reports that states with all-rider helmet laws had 96% observed use of motorcycle helmets, while states without all-rider laws had a use rate of only 55% (see Figure 3). All-rider helmet laws effectively promote increased helmet usage, and helmets effectively protect riders. Motorcycle helmets are 69% effective in preventing brain injuries from crashes.²⁹

Opponents of primary safety laws for things like motorcycle helmets often assert that highway safety laws are paternalistic and violate personal freedom. This argument is not necessarily trivial. Some motorcyclists may experience the wearing of a helmet not as a minor inconvenience as non-riders might, but rather as a significant impediment to some of the highly valued ends of riding a motorcycle in the first place, such as feeling the wind in their hair. Motorcycle riders also often argue that any risks inherent to riding without a helmet are purely self-regarding risks, and as such do not justify legal interference.

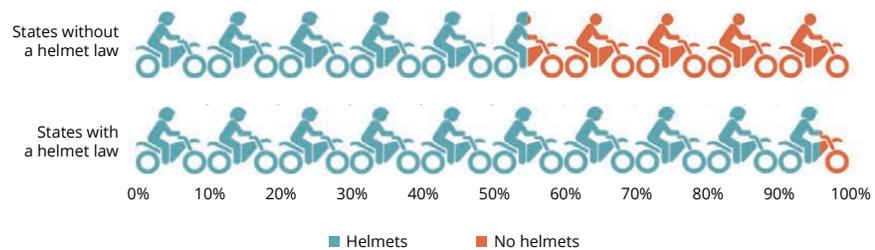
In response to these kinds of arguments, the U.S. Supreme Court affirmed the U.S. District Court of Massachusetts’ decision regarding belt and helmet legislation. “From the moment of injury society picks the person up off the highway; delivers him to a municipal hospital and municipal doctors; provides him with unemployment compensation if, after recovery, he cannot replace his lost job; and, if the injury causes disability, may assume the responsibility for his and his family’s continued subsistence.”³⁰ Since society bears the costs of accidents on public roads, many states use their authority to require helmet use as a reasonable standard for highway use.

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According to the Centers for Disease Control and Prevention (CDC), the economic benefits of motorcycle helmet use laws are significant. In states that have an all-rider helmet use law, savings to society from accidents avoided including injury-related costs and productivity losses were \$725 per registered motorcycle, compared to savings of just \$198 per registered motorcycle in states without a mandatory helmet use law.³¹

Legislation mandating helmet use protects casual riders who do not have personal objections to helmets, but who may fail to wear them out of habit or insufficient awareness of the risks.³² Other riders offer principled arguments that wearing a helmet fundamentally changes the experience of riding a motorcycle by reducing the goods integral to the experience. While this position is understandable, the public safety

Figure 3: Percent of Motorcyclists Who Wear Helmets



Source: NHTSA

arguments in favor of legislation are not unsubstantial. Those, like the Sikhs, for whom wearing a helmet would represent a violation of religious faith, could easily be exempted from all-ride helmet law as turbans are easily observable by law enforcement officials.

TEEN DRIVING

Automobile accidents are the number one killer of American teenagers.³³ Because teen drivers lack driving experience and engage in riskier behavior than adults while driving, they are much more likely to be involved in fatal crashes.³⁴ NHTSA reports that 4,640 people were killed in crashes involving young drivers in 2012 nationwide. Of that number, 1,875 were young drivers and 1,052 were passengers of young drivers. Other victims

Figure 4: Facts You Can Use; Motor Vehicle Fines in Utah

Description of Violation	Fine
Driving without registration	\$50
Using plates registered to another vehicle	110
Abuse of disabilities parking privileges	110
Boarding vehicle with intent to commit criminal mischief	340
No working odometer	50
New residents: failure to register in 60 days	1,010
No adequate brakes	50
Driving on railroad tracks	120
Failure to observe flashing red lights on school bus	150
Parking vehicle on sidewalk	40
Parking within 15 ft of fire hydrant	40
Tail light violation	50
Unlawful use of horn	50
Inadequate or missing vehicle mirrors	50
No installed seatbelt	50
Window tint violation	60
Careless driving	100
Using handheld device while operating vehicle	100
Causing injury to another using handheld device while operating vehicle	680
Failure to wear seatbelt	45
Failure to wear seatbelt or use child restraint device	60
Failure to obey officer, firefighter, flagger, or crossing guard	90
Speeding in construction/maintenance zone	170
Fail to obey traffic control devices	120
Failure to remain at scene of accident	500
Driving under the influence of drugs/alcohol, or impaired driving	1,420
Open alcohol container in vehicle	110
Reckless driving	680
Speeding in school zone	140
Minimum speed regulations violation	120
Speed contest/exhibition on highway	500
Improper usage of lanes	120
Following too close	120
Improper left/right turn, or U-turn	120
Failure to signal for 2 seconds	120
Failure to yield right of way	120
Driver's license not obtained	200
Expired license, or no license in possession	50
Driving on suspension	310

Note: Items in bold are discussed in this report.
Source: Utah State Code.

include pedestrians, cyclists, and occupants of other vehicles. The annual estimated economic cost of crashes caused by teen drivers is \$40.8 billion.³⁵ Between 2006 and 2012, there were 338 fatalities caused by crashes involving drivers aged 15 to 20 in Utah.

Graduated Driver Licensing (GDL) programs have been effective at decreasing the number of fatalities involving teen drivers by granting driving privileges incrementally, and in more controlled settings. Studies show that in states that have adopted GDL programs, crashes caused by teen drivers decrease 10 to 30%.³⁶ For 16 year-olds, accidents are reduced as much as 40%.³⁷

Advocates for Highway and Auto Safety, a coalition of insurance companies, consumer, health and safety groups, recommends the following seven GDL provisions:

- Minimum age of 16 for a learner's permit
- Six-month holding period
- 30-50 hours of supervised driving
- Nighttime restriction
- Passenger restriction
- Cell phone restriction
- Age 18 unrestricted license

Utah has enacted only three of the seven recommended laws for teen drivers:

- Six-month holding period
- 30-50 hours of supervised driving
- Cell phone restriction

Utah fails to meet four of the optimal recommendations for teen drivers made by the Advocates for Highway and Auto Safety. First, Utah grants 15 year olds learners' permits instead of

waiting until teens are 16 years old. A NHTSA study of fatal crashes for drivers aged 15 to 17 in states with different minimum learner's permit ages found that as the age of obtaining a learner's permit decreases, fatal crash rates increase.³⁸ Eight states grant learners' permits to 14 year olds, and nine states wait until drivers are 16 years old to issue them.

Second, Utah only restricts passengers during the first six months of driving. Fatal crash rates are 21% lower for 15 to 17 year-old drivers when they are prohibited from having any teenage passengers in their vehicles, compared to when two or more passengers are allowed.³⁹

Third, Utah has a nighttime driving restriction for teenagers, but only from midnight to 5 a.m. According to the Insurance Institute for Highway Safety, the optimal nighttime driving restriction begins at 9 p.m. because the majority of teenage motor vehicle crash deaths occur from 9 p.m. to midnight. States with optimal nighttime driving restrictions reduce crashes by up to 60% during restricted hours.⁴⁰

Finally, Utah grants full driving privileges and unrestricted licenses to drivers who are 17 years old. According to Bruce Simons-Morton, a behavioral scientist with the National Institutes of Health, "good driving ability and safety judgment develops over a very long period of time." He explains the high accident rate among teenage drivers. "It takes thousands of hours of practice to get good at driving."⁴¹

A 2010 nationwide survey showed that parents of 15 to 18 year olds favor GDL laws that are as strict as or even stricter than current laws. More than half want the minimum licensing age to be 17 or older.⁴² Perhaps surprisingly, according to a survey by the Allstate Foundation, 74% of teens also support a single comprehensive law that incorporates the key elements of GDL.⁴³

IMPAIRED DRIVING

Impaired driving laws refer to a range of behaviors involved with motor vehicle operation on public roads.⁴⁴ Alcohol consumption is commonly pointed to as the biggest offender. Since the 1980s there has been a downward trend in alcohol-related deaths nationwide due to strong drunk driving laws and public education campaigns by groups like Mothers against Drunk Driving, which have encouraged a cultural shift in attitudes towards drunk driving. Federal laws with strong sanctions have encouraged all 50 states

Historical Highlight

During the 1950's there was a vigorous national conversation about the need to improve training for young drivers because of their high accident rate. In 1955 the Utah Foundation issued a Traffic Safety report noting that less than 10% of the eligible high school students in the state completed a driving education course which met standards at the time. Studies in other states revealed that people who had taken driver education courses had fewer than 50% as many accidents as untrained drivers. As part of that report, Utah Foundation recommended that more Utah schools offer driving education courses. A bill adopted during the 1955 legislative session encouraged the development of driver training courses in Utah and provided for the establishment of standards by the State School Board of Education.

Almost thirty years later in 1983, the Utah Foundation issued a report noting that Utah had been quite successful imparting basic driving skills to young drivers through its high school driver training program.



and Washington D.C. to adopt 0.08% blood alcohol content (BAC) laws, a national minimum drinking age of 21, and zero tolerance BAC laws for youth.⁴⁵ Nevertheless, drunk driving continues to pose a threat on the roads nationally, and in 2012 still accounted for nearly one third of all traffic deaths. An average of one alcohol-impaired driving fatality occurred every 52 minutes in 2013; every day in the United States, 28 people are killed in drunk-driving crashes.

Historical Highlight

In 1983 the Utah Foundation issued a Traffic Safety report noting an increasing concern about the “drinking driver.” In the preceding year, 8,921 drivers had been arrested in Utah for driving under the influence of alcohol or drugs, and drinking was a contributing factor in 29% of the fatal accidents. The report points out the improvement among young drivers due to the “extensive driver education program in the public schools,” and suggests “a need to re-educate some of the adult drivers.” Utah’s blood alcohol content limit was lowered for drivers to 0.08% in 1983.⁴⁶

In Utah there has been a significant decrease in alcohol-related deaths over time. Of the 154 drivers in fatal crashes tested for alcohol and/or drugs in 2013, less than 10% were positive for alcohol. From calendar year 2011 to 2012 the percentage of total crash fatalities that were alcohol-related decreased from 16% to 9%.

In 2013 law enforcement officers made 12,227 arrests for Driving under the Influence (DUI). This was 804 fewer than in 2012, representing a decrease of over 6% in one year, and a decrease of over 11% since 2011. These arrests were made as a result of specialized DUI overtime enforcement events such as enforcement blitzes, saturation patrols, and DUI checkpoints.

During 2013 more than one hundred law enforcement agencies throughout the state participated in these events including local police agencies, sheriff offices, the Utah Highway Patrol, Motor Vehicle Enforcement, Utah Parks and Recreation, Utah Wildlife Resources, and three university police departments.⁴⁷

Utah consistently ranks as the state with the fewest drunk drivers.⁴⁸ The standard explanation for low drunk driving rates in Utah is that because the LDS Church prohibits drinking alcoholic beverages, there are fewer drinkers in the state of Utah, and therefore fewer drunk drivers on the road. But Utah also supports strong impaired driving laws.⁴⁹ Utah has codified all three impaired driving laws recommended by the Advocates for Highway and Auto Safety: Ignition Interlock Device (IID) Laws, Child Endangerment Laws, and Open Container Laws. NHTSA argues that the best “countermeasures against drunk driving [are] a combination of laws, public education, and enforcement.”⁵⁰

An IID is a mechanism that works like a breathalyzer. An IID is connected to a vehicle’s ignition system. On entering the car, the driver must breathe into the device. If the sample is not provided or the result is over the legal BAC limit, the vehicle will not start. In order to avoid cheating, at random times after the engine has been started the IID requires additional breath samples. If the sample exceeds the preset BAC, the device sets off an alarm until the ignition is turned off. The CDC has found that when IIDs are installed, they are associated with a reduction in arrest rates for impaired driving of approximately 70%.⁵¹ In Utah, IIDs are mandatory for all offenders, including first time offenders.

Child endangerment laws either create a separate violation or exacerbate an existing DUI penalty for people who drive under the influence of alcohol with a minor child in the vehicle. Child endangerment laws function to remind people to think about the effects for children before they drive under the influence with minor child. Utah has strong child endangerment laws.⁵²

In 1988, Congress passed a law that created a program meant to encourage states to adopt laws that ban open containers of an alcoholic beverage in the entire passenger section of a motor vehicle. The federal law requires the following six provisions for a state to be in compliance. An open container law must:

- Prohibit both possession of any open alcoholic beverage container and consumption of any alcoholic beverage in a motor vehicle
- Cover the entire passenger area of any motor vehicle, including unlocked glove compartments and accessible storage areas
- Apply to all alcoholic beverages including beer, wine, and spirits
- Apply to all vehicle occupants except for passengers of buses, taxi cabs, limousines or persons in the living quarters of motor homes
- Apply to vehicles on the shoulder of public highways
- Require primary enforcement of the law

Utah is in compliance with the Open Container law as recommended by Congress. In addition to having all three optimal impaired driving laws, the decrease in drunk driving in Utah corresponds closely to the Utah Safety Office's recent coordinated campaign to educate the public about the dangers of drinking and driving, which has included statewide media, high-visibility enforcement, and extensive community outreach.⁵³

There is no similarly robust public campaign against driving under the influence of drugs—prescription or illegal. So, while drunk driving is decreasing in Utah, in 2013 out of 154 drivers in fatal crashes who were tested, 27% were positive for drugs of any kind, and 4.5% were positive for drugs and alcohol. Specific laws against driving under the influence of drugs are difficult to enact because “at the current time, specific drug concentration levels cannot be reliably equated with a specific degree of driver impairment.”⁵⁴

DISTRACTED DRIVING

Albert Einstein purportedly said, “Any man who can drive safely while kissing a pretty girl is simply not giving the kiss the attention it deserves.”⁵⁵ The quip concedes the limited capacity of human attention. Driving is a complex task that requires manual, visual, and cognitive attention. It is estimated that distraction is associated with up to 25% of accidents.⁵⁶ Because so many different kinds of behavior can distract a driver from the road, NHTSA defines distracted driving broadly as “any activity that could divert a person’s attention from the primary task of driving.”⁵⁷ Based on this definition, distracted driving can include personal grooming and eating. Distracted driving, however, more commonly involves the use of personal electronic devices.

The Governors Highway Safety Association reports that distraction-related vehicle fatalities increased by 1.9% to 3,331 in 2011, a year when the total number of crash fatalities was at its lowest since 1949. According to its 2012 Traffic Safety Culture Index survey, the AAA Foundation found that 89% of respondents believe that drivers talking on cell phones are a “somewhat” or “very” serious threat to their personal safety. Survey respondents also believe that the situation is getting worse, and that distracted driving is a bigger problem than it was three years before.

Despite this evidence for high social disapproval of talking while driving, almost one third of respondents admitted to regularly talking on their cell phones, and 56% felt the use of hands-free devices while driving was somewhat or completely acceptable.⁵⁸ These kinds of survey results reveal the common assumption that because talking on a hands-free device does not require visual or manual attention, it does not lead to distraction.



A March 2015 UtahPolicy.com survey found that the majority of Utahns support a law against driving while using hand-held cell phones. Current Utah law allows the use of hand-held phones. The survey did not ask whether respondents think that the law should allow hands-free cell phones or whether the use of cell phones should be completely restricted while driving, but it is possible that these survey results reflect the same assumptions made by drivers across the country: that what makes cell phones dangerous for drivers is the visual and manual distraction.

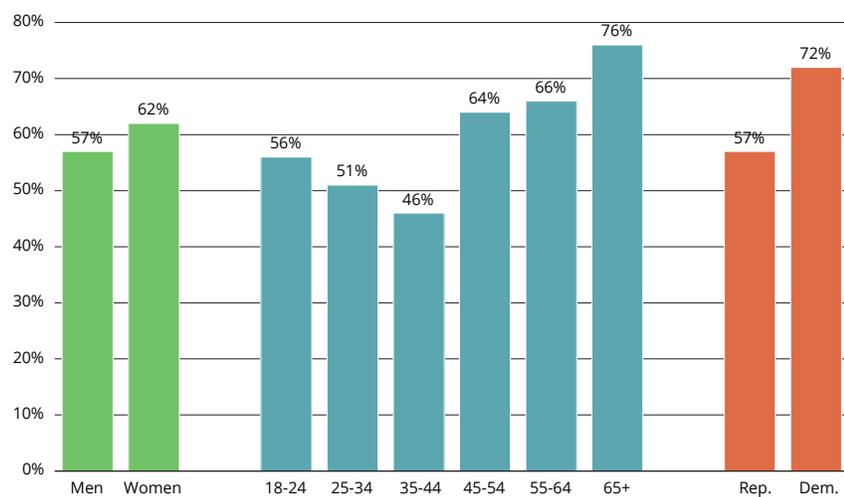
In 2014, the Utah Legislature passed a new law against dialing a cell phone, but which continued to allow drivers to hold their hand-held phones to their ears. When speaking about this law, Senator Stephen Urquhart said “My thought is that talking on a phone is not a big problem because that’s like talking to someone next to you in the vehicle. We typically can talk on the phone and pay attention to what’s going on around us.”⁵⁹

Contrary to most people’s beliefs, experiments show that cellphone conversations are uniquely distracting, and are not comparable to conversations with passengers in the vehicle. A passenger shares the situation with the driver, and can modulate the conversation in real-time

to reflect the variations in driving difficulty. They may also assist the driver with navigation, and point out obstacles or hazards on the road. In experiments, 88% of drivers conversing with a passenger in a driving simulator successfully completed the task of navigating to a rest area, whereas, only 50% of the drivers talking on a cell phone arrived at the destination. Professor David Strayer of the University of Utah, one of the foremost authorities on attention and distracted driving in the country, and his research team concluded that “a conversation on the phone cannot be successfully broken into arbitrary units,” but instead is composed of turns that engage the central-processing area of the brain for prolonged periods of time.⁶⁰ Passengers in a vehicle share situation awareness with the driver, which changes the expectations of conversation. A cellphone interlocutor does not share an awareness of the driving situation and does not adjust the pace or intensity of the conversation in response to road conditions the way a passenger does.

The 2014 law against manipulating a personal electronic device while driving was praiseworthy because it reduced both manual and visual distractions. Manual distractions while driving are dangerous. If a driver is holding a cellphone, then the driver only has one remaining hand to control the steering wheel. Simply holding a cellphone might be comparable to holding an ice cream cone or a hamburger while driving; holding anything with your hands while driving reduces one’s ability to steer the car, and thereby increases the risk of an accident.

Figure 5: Support in Utah for a Law Against Using Hand-Held Phones



Note: Do you favor or oppose a new law that would allow a police officer to pull over a driver who is talking on a cell phone unless the call is hands free? Source: UtahPolicy.com survey, February 2-9, 2015.

Source: UtahPolicy.com Poll March 2-5, 2015.

Visual distractions too are incontrovertibly dangerous. Senator Urquhart – like the survey respondents – rightly worries about these kinds of threats to safe driving. He explained, “When we take our eyes off the road and look down at the device, we have issues.”⁶¹ If a driver is looking at a cell phone to read or respond to a text, then the driver is not looking at the road. Studies show that five seconds is the average time a driver’s eyes are off the road while texting; “when traveling at 55 mph, that’s enough time to cover the length of a football field blindfolded.”⁶²

Manual and visual distractions are the only kinds of distraction that create danger for drivers. In fact, cognitive distraction, though harder to observe, can be just as risky on the road.

Dr. Strayer has shown that some secondary tasks can increase the cognitive workload enough that they interfere with the attentional processes required for safe driving, and driving performance degrades as a result.⁶³ Tasks like listening to the radio do not increase the cognitive workload. Because listening to music, a podcast, or a book on tape does not require a response, the driver need only passively attend to these stimuli, and can vary his or her focus depending on traffic flow, weather conditions, and road conditions. Studies show these kinds of tasks are not a significant source of cognitive distraction.⁶⁴ Other secondary tasks, however, demonstrably increase the cognitive workload, and impair safe driving.

Most notably, experiments reveal that the level of impairment when talking on a cell phone while driving is comparable to being intoxicated at a blood alcohol level of 0.08%, the level sufficient for a DUI arrest.⁶⁵ These experiments were conducted with hands-free devices so visual and manual distractions did not factor into the results. In every case, the phone conversation was initiated prior to driving.

Yet, scientists found no reliable safety advantages for individuals who use hands-free cellphones instead of hand-held cellphones. Hands-free and hand-held devices are equivalent in terms of cognitive distraction. The interference associated with cellphone use is due to attentional factors.⁶⁶ It is the conversation itself that strains a driver’s attentional capacity by demanding cognitive resources in order to listen, process and respond.

Using a cellphone is associated with a fourfold increase in the likelihood of being involved in a crash.⁶⁷ The reasons for the increased risk may be somewhat surprising. While visual distractions have been shown to increase the variability of lane position (lane weaving), cognitive distraction, on the other hand, has been shown to decrease the variability of lane position. As a result, drivers who are talking on a cellphone exhibit a form of tunnel vision, failing to scan the environment broadly for potential hazards.

Scientists suggest the cognitive distraction exhibited by drivers on cellphones is a form of “inattention blindness” that leads drivers to miss important information otherwise easily noticeable in the driving scene.⁶⁸ Cognitively distracted drivers look straightforward rather than glancing at their mirrors, and more often fail to notice roadside objects like hidden crosswalks or pedestrians. Cognitively distracted drivers have slower response times than other drivers when unexpected events occur on the road.

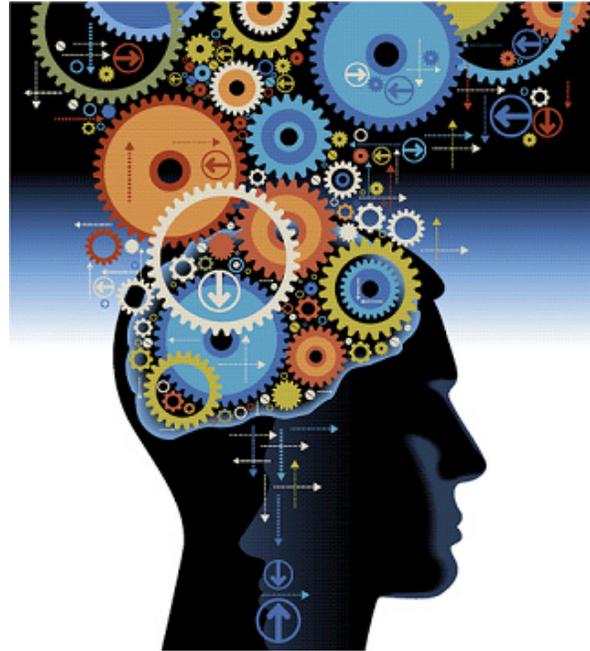
Distracted drivers are also prone to behaviors associated with congested traffic. In addition to anticipatory visual scanning, efficient traffic flow also requires rapid reaction time, consistent speed, and appropriate following distance.⁶⁹ Each of these driving behaviors is reduced when talking on a cellphone. While the



priority is saving lives and preventing the bodily injuries and economic losses of accidents caused by distracted driving, another benefit of prohibiting cellphones on the road might be less traffic congestion on the highway.

CONCLUSION

This report discusses various Utah traffic laws including seatbelts, booster seats, motorcycle helmets, teen driving, impaired driving, and distracted driving. Utah has the optimal laws for booster seats and impaired driving. With the new 2015 law making failure to wear a seatbelt a primary offense, the state meets the recommendations for seatbelts as well. Now that the primary seatbelt law has passed, the most important legislation to improve traffic safety in Utah would be strengthen teen driving laws, require all riders to wear helmets on motorcycles, and to prohibit cellphone use while driving motor vehicles.



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