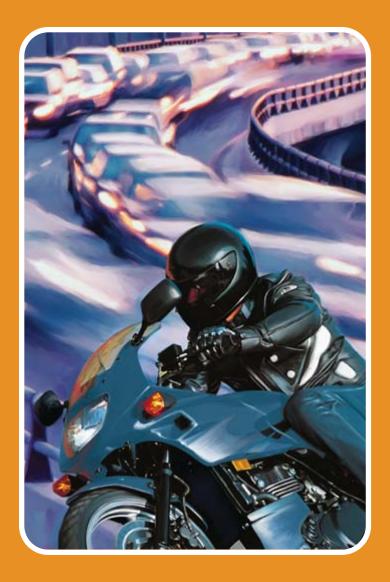
the Roadway Motorists & Motorcyclists in Traffic







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SHARING THE ROADWAY: Motorists & Motorcyclists in Traffic

Introduction

Changing lifestyles in the United States can be seen in the changing population on our highways. Although the automobile remains the king of the American road, many other highway vehicles are taking their place in traffic.

The growing use of different modes of transportation for commuting, business and recreation has led to a complex traffic mix on the nation's streets and highways. Private motor vehicles have been joined by more commercial vehicles, buses, bicycles, mopeds, scooters and motorcycles.

In 1995 the number of motorcycles registered for street use was 3.9 million. In 2002, this yearly number increased to 5 million.

On today's highway we can find large numbers of new motorcycle riders and even more automobile drivers who do not understand how to mix in traffic. The general lack of knowledge on how to share the roadway was pointed out in a University of Southern California (USC) in-depth research study of 900 motorcycle crashes, with analysis of an additional 3,600 crashes.

Approximately three-quarters of the crashes studied involved a motorcycle colliding with another vehicle. In two-thirds of these crashes, the other vehicle violated the motorcyclist's right-of-way.

Considering the crash statistics and the increasing number of motorcyclists, the key to a safe traffic mix is understanding and learning to share the roadway.

Since 1973, the Motorcycle Safety Foundation (MSF) has been working to improve cooperation between motorists and motorcyclists.

This booklet is another component of the MSF Rider Education and Training System to improve cooperation between motorists and motorcyclists.

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DRIVING AND RIDING

As vehicle patterns change, motorists are learning that other vehicles on the roadway are not operated in the same manner as an automobile. The motorcycle is obviously different from a car in size and handling.

THE MOTORCYCLIST, for instance, uses his/her hands to operate throttle, clutch, front brake, as well as turn signals, light switches and horn. In addition, the motorcyclist maintains steering control with his/her hands.

THE MOTORIST, by comparison, uses his/her hands only to operate turn signals, light switches, horn and steering wheel – and steering is frequently power assisted.

THE MOTORCYCLIST is exposed to all the elements. The motorcyclist relies on all his/her senses, including touch, in operating the motorcycle. Clothing is dictated by this exposure: motorcycle helmet manufactured to meet Department of Transportation (DOT) standards, eye protection, over-the-ankle boots, full-fingered gloves, long-sleeved jacket and long pants all protect the rider.

THE MOTORIST, by contrast, is protected by lots of steel in an enclosed compartment. Operation is within the vehicle, and insulated from traffic noises and weather. Four wheels and heavy weight offer stability.

THE MOTORCYCLIST must add the skills of balance and heightened awareness to the other skills necessary for safe vehicle operation. The motorcyclist must be more alert than the motorist because he/she is relatively inconspicuous in traffic. He/she must ride assuming that motorists who don't see him/her in traffic will constantly violate his/her right-of-way.

It is vital for motorists to condition themselves to look for motorcycles in traffic. The appearance of a motorcycle in a traffic situation when the motorist is not prepared can lead to a hazardous situation. The USC study showed that motorists' failure to detect and recognize motorcycles in traffic is the predominant cause of motorcycle crashes. The driver of the vehicle did not see the motorcycle before the collision, or did not see it until it was too late to avoid the crash. Motorcyclists are not difficult to see if the motorist expects to see them. "I didn't see him," usually results from not looking for a motorcyclist.

Both the motorist and the motorcyclist can benefit from using a simple system to heighten awareness of potential problems while on the roadway. It's known as the **SEE** process and consists of the following steps:

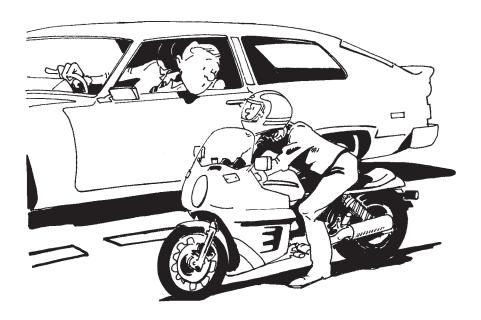
- S Search for factors in the area.
- E Evaluate the potential risks and options.
- **E** Execute with control and precision.

This process causes drivers to scan ahead for potential trouble spots. You learn not to fix your gaze on any one object for more than a moment. How and where to look for hazards will become automatic. Safer highway sharing will be the result.

Attitude plays an important part in creating a safe highway environment. Sharing the roadway is a good indication that motorists and motorcyclists both recognize the importance of cooperation. By curbing aggressive behavior and operating the vehicles in accordance with common sense, courtesy and the law, motorists and motorcyclists can ride together on the road.

Driving and Riding

Today's motorcycle riders are friends, relatives and neighbors. The motorcyclist has the same rights and responsibilities on the roadway as drivers of other vehicles. Motorists should recognize this and not attempt to crowd motorcycles or take the right-of-way from motorcyclists. Motorcyclists, on the other hand, must operate as responsible road users and not take unsafe advantage of the motorcycle's narrow silhouette and maneuverability.



Lights and Signals

Communication with other roadway users is an important part of vehicle operation. This is true for both motorists and motorcyclists.

Hand signals are a fast-disappearing technique for communicating. Motorists should pay attention to the electric turn signals on motorcycles, and riders should heed the turn signals of the vehicle ahead.



THE MOTORIST must be careful not to misinterpret a rider's intentions. You must remember that most motorcycle turn signals are not self-canceling like those of an automobile. The turn signals could be inadvertently left on even after a turn is completed. Be aware that a motorcyclist riding with his/her turn signal on is not always going to turn.



THE MOTORCYCLIST must use signals and lane position to communicate with other roadway users. Remember to cancel your signal after a turn so you do not confuse other drivers. You can use hand signals to augment the electric turn signal, especially if you are unsure others see the original signal.

One means of making the motorcycle more visible in traffic is to use headlights during the daytime. Some states require headlight use at all times by law. Most motorcycle headlights come on automatically when the engine is started.

Following Distance

Being able to judge distances accurately is one of the most important abilities any motorist or motorcyclist can have.

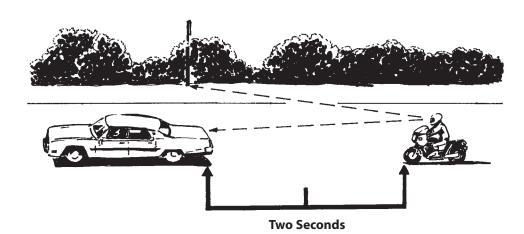
Tailgating – of autos by motorcyclists, or motorcyclists by autos – is a hazardous, unwise practice. Insufficient stopping room and reduced ability to see conditions ahead may cause both riders and drivers to make incorrect decisions. This leads to crashes.

THE MOTORIST can handle a tailgater in several ways. Flash the brake lights or pull off the road when conditions permit. Increasing your following distance from the vehicle in front of you will give you more time to react so you will not be forced to brake suddenly, nor cause the tailgater to do so as well.

THE MOTORCYCLIST can choose any of these methods, but must also be conscious of riding in a position to discourage lane sharing.

BOTH RIDER AND DRIVER should know what a safe following distance is, and how to maintain it under various traffic conditions.

Two-Second Following Distance

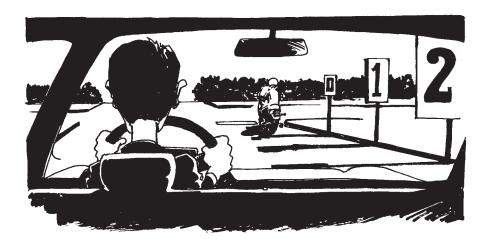


Using the two-second count is a simple way to establish a safe following distance on a clear, sunny day. The rider or driver should pick a fixed point (shadow, pavement marker, pole) ahead of the lead vehicle. Once the lead vehicle has passed the point, the motorist or motorcyclist should be able to count off two seconds (one-thousand one, one-thousand two) before passing the reference point.

Following distance establishes time and space in which to maneuver or respond. It is not enough space to stop. Therefore, following distance should be adjusted depending upon roadway conditions.

Advantages of a safe following distance are:

- Ability to be seen
- Ability to see around and over other vehicles
- Time and space to react to road-surface changes covered by preceding vehicles
- Time and space to react to vehicles ahead



Lane Position

Because of a motorcycle's size, its position within a lane of traffic will change as traffic conditions change.

THE MOTORCYCLIST should choose a position in the lane to be seen. This often means you will ride in the left portion of a traffic lane. This position gives him/her a better view of traffic and the road ahead, as well as making the motorcycle more visible to other traffic in most situations.

As a motorcyclist, you should change position within your lane as needed to maximize distance from potential hazards. Lateral movements within a lane may be necessary at times to increase your chance of being seen. Avoid riding for any length of time in a driver's blind spot. Experienced riders realize that the best position within a lane of traffic is dictated by the situation.

THE MOTORIST should respect the vehicle space of a motorcycle and its position in traffic. Although there is often enough room, refrain from sharing a lane with a motorcyclist. The rider needs that space to maneuver for safety reasons.

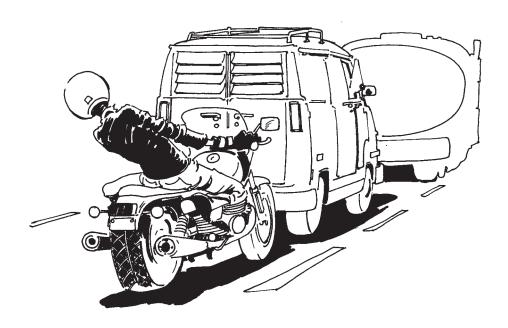
Blind Spots

The motorcycle, due to its relatively small size, is sometimes difficult to see. Coupled with the fact that all automobiles have blind spots to the left and right rear, problems can occur. This is especially true when motorists do not expect motorcycles to appear in the traffic stream.

THE MOTORIST, in developing proper search patterns in traffic, should always be on the lookout for the unexpected. Expect to see motorcycles in traffic at any time.

THE MOTORCYCLIST can minimize the problem of blind spots by spending as little time as possible in the blind spot of an automobile. Take a position that offers maximum visibility of your motorcycle to other traffic. You should avoid riding too closely behind large trucks or vans.

Like other motor vehicles, the motorcycle also has blinds spots to the left and right. A mirror and head check is required for motorcyclists making lane changes or turning.



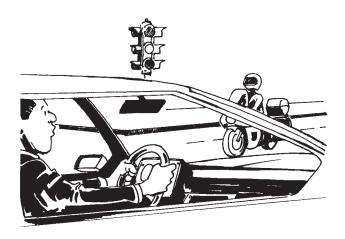
Intersections

According to the USC study, intersections are the most likely place for motorcycle crashes to occur. For crashes involving a motorcycle and another vehicle, the other vehicle violates the motorcyclist's right-ofway two-thirds of the time.

THE MOTORIST should be prepared to yield the right-of-way to oncoming vehicles, including motorcycles. A motorcycle's small size (which makes it difficult to spot in traffic) requires you, as a driver, to aggressively and consciously look for motorcycles in changing traffic situations. Determining the speed of an oncoming motorcycle is not easy. Whether it is day or night, when you spot a motorcycle, make sure you have accurately judged its speed and distance. The small silhouette and lack of accurate reference scale can lead to misjudging the actual distance between the car and the motorcycle. Give the scene a second look – and your decision a second thought.

THE MOTORCYCLIST should approach intersections with caution. Never assume the other vehicle drivers see you and will yield. Before riding through an intersection, check traffic from the right, left, rear, and front. Especially check oncoming traffic for vehicles that may be turning left. The USC study found that about 25 percent of all motorcycle crashes studied were the result of the other vehicle turning left across a motorcyclist's path.



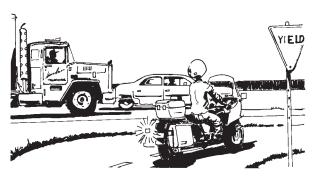


At intersections where vision is limited by buildings, parked vehicles and shrubbery, traffic hazards may be obscured. **THE MOTORIST AND MOTORCYCLIST** should slow down, check traffic and adjust position.

Special problems arise at signal-controlled intersections. Drivers and riders should be aware that cross traffic may be going through the intersection on a yellow light. Also, oncoming motorists may try to make a quick left turn in front of other traffic.

MOTORCYCLISTS should be aware that home driveways present special hazards. Since automobiles are often backed out of driveways, the driver may have difficulty seeing an oncoming motorcycle. Make sure the driver sees you before you reach the driveway entrance. Also, slow down and be prepared to stop.

Remember that alleys, parking lot corners, traffic circles, and highway entrance and exit ramps are also intersections. These require motorcyclists to exercise the same care used when approaching the more typical street intersections.



Passing and Being Passed

The rules for passing other vehicles are similar for motorcycles. The most important considerations: Do the other vehicle operators see me? Do I have time and space to complete the maneuver safely?

THE MOTORIST being overtaken by a motorcycle should maintain lane position and speed, allowing the motorcyclist to complete the pass and assume proper lane position as quickly and safely as possible.

When passing a motorcycle, allow a full lane to the motorcycle – never crowding the motorcycle in the same lane. Avoid returning to the original lane too early. You may cause the motorcyclist to swerve into traffic to avoid you, or you might force him/her off the road. Either way, it could cause a crash or injuries.



THE MOTORCYCLIST should pass only when it is safe. Before passing, you should make sure your motorcycle is in the left portion of the lane at a safe following distance. Avoid crowding the automobile when passing.

BOTH MOTORIST AND MOTORCYCLIST should avoid accelerating when being passed – this action is discourteous, improper and hazardous. Both rider and driver should use mirrors and head checks of traffic to ensure that the passing maneuver can be accomplished safely.



Road Hazards

Most drivers take for granted the ability of their automobile to handle minor road hazards such as potholes or railroad tracks. What are minor problems for the four-wheeled vehicle can be major problems for two-wheeled motorcycles.

For motorcyclists, potholes, railroad tracks, oil slicks, puddles, road debris, ruts and other hazards may require sudden changes of lane position and direction.

THE MOTORIST needs to be alert to how the motorcyclist "sets up" when encountering such hazards. You should expect the motorcyclist to make sudden changes in position and direction. Drive accordingly.

THE MOTORCYCLIST can watch the movements of vehicles ahead for clues to road hazards. Keep an appropriate following distance so you have time to react. If possible, you should try to go around an obstacle rather than over it, and reduce speed as needed before reaching it.



While the road surface is important to safe vehicle operation for drivers, it is *critical* to motorcyclists. Sand, mud and water will make starting and stopping difficult. Loose gravel, sand, and mud force the motorcyclist to ride with extreme caution to avoid skidding or sliding. Even wet paint stripes can increase the likelihood of a skid

FOR THE MOTORCYCLIST, it is imperative to be aware of road conditions and give yourself plenty of time and space to react.

FOR THE MOTORIST, it is imperative to be aware of how road conditions can affect motorcycle operation so you are not surprised by the rider's actions.

Sharing the Road

Sharing the road means "getting along" not "getting ahead."

This driving attitude by both motorcyclists and other highway users will make our roadways a safe place for all.

Making this a reality requires **MOTORISTS** actively looking for and granting motorcyclists their space on the roadway coupled with **MOTORCYCLISTS** operating within the rules of the road.

About the Motorcycle Safety Foundation

The Motorcycle Safety FoundationSM (MSF) is a national, not-for-profit organization promoting the safety of motorcyclists with programs in rider training, operator licensing and public information. The MSF is sponsored by the U.S. manufacturers and distributors of BMW, Ducati, Harley-Davidson, Honda, Kawasaki, KTM, Piaggio/Vespa, Suzuki, Victory and Yamaha motorcycles.

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