

Roadway conditions are going to affect your vehicle speed, handling, control, and the driver's ability to notice things and react in time to safely deal with them. Not only do we have to notice what the roadway surface is like, but also the shape, size, and shoulder area of each roadway we travel on.

## Roadway Shape

The shape of the roadway is going to affect your sight distance, vehicle handling, vehicle speed and control. As you drive you need to be assessing the shape of the roadway. Does it have hills or curves? How well can I see around or over them? Is there anything on the other side?



**HILLS** - Slow down as you approach the crest of the hill. You cannot see what is on the other side. There may be people, animals, debris, or even another vehicle in your driving path. Don't speed up to try to jump the hill or get that rollercoaster affect. You could lose control of the vehicle and crash.

As you crest the hill, if you notice a problem on the other side of the hill, turn on your hazards lights or flash your brake lights several times to alert those behind you that there is a problem ahead. If you notice the vehicles ahead of you on the hill slowing down or flashing their brake or hazard lights, be prepared to slow down yourself. Just because you have traveled this roadway many times without problems, doesn't mean there won't be any this time.



**CURVES** – Like hills, curves limit your view of what is around them. Adjust your speed to how well you can see around or through the curve. The sharper the curve, the slower you need to approach and take the curve. Some curves will be what are called banked. This is when they make the outside of the curve higher than the inside to allow vehicles to take them at higher speeds.

Curve warning signs will be placed several hundred feet before the curve to indicate if it is a gradual or sharp curve. The sharper the curve, the slower you need to go. These signs will also let you know if there is a single curve or multiple curves. Some may have a number on that indicates what speed you should take the curve at during ideal conditions.



## Roadway Size

The size of the roadway is going to affect your vehicle speed and spacing. Is the roadway narrow or wide? What is the width of your vehicle? Is there room for all vehicles?



The approach to older bridges will normally narrow down. As you approach, check the width. Is there room for more than one vehicle in each direction? If not, the vehicle that arrives first is permitted to cross the bridge first.

Parked vehicles or equipment on the side of narrow roadways will decrease the driving area. The vehicle with the limited space is required to yield and wait for any oncoming traffic before proceeding around the parked or stopped vehicle or equipment on the side of the roadway.



Narrow roadways have limited driving space so you need to use extra caution when approaching other vehicles and users like bikes and pedestrians. Trees and other objects may be close to the roadway limiting the shoulder area.

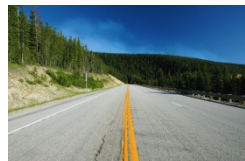


Drivers tend to go faster and in some cases exceed the posted speed limit on wider roadways. The wider the roadway, the safer drivers feel when there is little or no other traffic. The wider the roadway, the longer it is going to take pedestrians and other traffic to cross. Slow down for crossing traffic and pedestrians.



The more lanes a roadway have the more traffic that is going to be using it. The more traffic, the slower traffic goes. At times it gets to be too much traffic and a traffic jam is created. The more traffic the greater the chances of a crash. If you can, plan your trip so that you do not have to travel on large multiple roadways during busy times. These multiple lane roadways are normally found in large city areas like Chicago, New York, or California.

## Roadway Surface



The roadway surface is going to affect vehicle handling, control, and stopping distance. The roadway surface can change quickly from road to road or even on the same roadway. You need to determine a safe driving speed by taking into consideration the roadway surface. Going too fast when surfaces change could result in losing control of your vehicle.

The type of surface is going to affect handling and control of the vehicle. Most new drivers gain their vehicle handling experience on smooth dry roads. They get use to stopping and turning on the smooth, dry road and then have problems controlling the vehicle when stopping on loose, wet, or icy roads.

When driving on dirt or gravel roadways, keep in mind that your vehicle tires are going to slip and slide much sooner than on hard surface roads.

Icy roadways create a whole different problem for stopping. If going to fast on icy roads, you basically lose control of your vehicle and go where the vehicle wants to go.

The biggest and most important factor that surface plays with the operation of the vehicle is stopping distance. The faster you go the longer it will take to stop your vehicle. You must remember that the stopping distance of your vehicle is not the same for different roadway surfaces.

Surface Type:	Distance it will take to stop your vehicle at:				
	20 mph	30 mph	40 mph	50 mph	60 mph
Dry Asphalt	20 feet	43 feet	76 feet	120 feet	172 feet
Wet Asphalt or Concrete	24 feet	55 feet	97 feet	152 feet	219 feet
Dry Concrete	17 feet	38 feet	67 feet	104 feet	150 feet
Snow	45 feet	100 feet	178 feet	279 feet	401 feet
Ice	89 feet	201 feet	357 feet	558 feet	803 feet

The results in the chart are a rough approximation for your information. Road conditions depend on a number of factors such as slope, wear rate and depth of snow or ice on the roadway. Also, these results do not take into account any speed loss due to collision forces, or the time required to perceive and then respond to a given situation.

## Roadway Shoulder Area

Even though we may not drive on the shoulder area of the roadway that much, we still need to take notice of what type of shoulder area there is and if there is a shoulder area to pull on to if we need. Not all roads have shoulder areas. Most city streets will not.



When driving on roadways with no shoulder area, be alert for people walking on or near the roadway.



Watch for objects that may be next to the roadway.



Some roadways may have a partial shoulder area. There is not enough room to stop safely only on the paved shoulder. You will have to pull part way onto the grass shoulder area. Pull off so that you are to the right of the white line.



Most major roadway systems will be designed with wide paved shoulder areas on the right to pull onto in case of vehicle problems. Pull as far onto the right shoulder area as you safely can. Only pull on the left side shoulder in extreme emergencies. The left shoulder is usually narrower than the right shoulder.

If your vehicle does go off the roadway and onto the shoulder area, slow down, and ease the vehicle back onto the roadway without pressing the gas pedal.

## Road Construction & Maintenance



Road construction and maintenance is never ending in Wisconsin and most other states. It may be annoying but necessary to allow us to get to where we are going safer. Well maintained roads are safer and cost drivers less to drive on.



Weather is hard on the roads. Temperatures in WI go from 90 degrees in the summer to -20 degrees in winter. The temperature swing causes the roadway to crack which allows water and dirt in. The water and dirt then causes the roadway to come apart creating potholes.

A work zone is an area of the roadway where highway construction, maintenance, or utility-work activities are occurring. A work zone is generally marked by signs, channelizing devices, barriers, pavement markings, and construction/maintenance work vehicles. It extends from the first warning sign or flashing lights on a vehicle to the end of roadwork sign or the last traffic control device. A work zone may be for short or long durations and may include stationary or moving activities.

The work zone activities can be categorized into the following:

- **Mobile highway maintenance activities:** It consists of highway repair work such as crack sealing and pothole repair etc. Operations like litter cleanup, pothole patching, or utility operations, involves frequent stops and is similar to stationary operations.
- **Continuous Moving Mobile Operations:** These operations include work activities in which workers and equipment move along the road without stopping (mowing, pavement striping, street weeping, or herbicide spraying), usually at slow speeds.
- **Short-term stationary activities:** It consists of utility work such as repairing of electric, gas, or water lines on the highway.
- **Long-term stationary activities:** It consists of highway construction such as building a new bridge, adding travel lanes to the roadway and extending an existing roadway.



## REMEMBER THAT TRAFFIC FINES DOUBLE IN WORK ZONES



There are many things you need to be alert for when approaching and driving through work zones. Do not expect every work zone to be the same. Even the same work zone can change by the hour.

Whenever you see orange signs and cones/barrels or flashing amber/yellow lights, slow down and watch for workers, vehicles, and equipment that may be on or near the roadway. Remember that your main attention should be to your driving path. Don't stare at the workers or work being done. Also watch for roadway surface changes. You may go from a paved surface to an unpaved surface and then back to the paved surface.

Your driving lane may also be narrower than normal in work zones. Be alert for how much space you have on each side of your vehicle so that you don't hit something on the side with your mirror.

**Work Zone Signs, Barricades, and Cones** – are there for you and the workers protection. Obey the signs. Don't move signs, barricades or cones to get around them. Leave them where they were placed by the workers. If you see barricades, signs, or cones out of place, notify your local city street or police department.



Barricades may be placed in the roadway to keep traffic from entering areas of the work zone.



Cones may be placed on the roadway to indicate where a temporary work zone is or where the workers are.



Barrels will outline the work zone area. Do not drive around the barrels. Watch for barrels that may have been knocked down.



Small barricades will be placed by hazards in the roadway. The down slant of the lines on the barricade tell you which side of the barricade to drive on.



If the work zone sign tells you that the road is closed, DO NOT drive on that road passed the work zone sign. Doing so could result in a traffic ticket.



Flagger Ahead signs let you know that there will be a worker directing traffic through the work zone. You must obey their directions.



The Detour Ahead sign indicates that the roadway is closed ahead and you will follow an alternative route around the work zone.



Indicates that there is work alongside or above the roadway. Work is being done on electrical, phone, cable, or gas lines in the area.



Flaggers will be using portable stop and slow signs to direct traffic.



The End Road Work sign will let you know when you are out of that work zone.

**Eating, drinking, talking on the phone or with passengers, reading a map, changing the music, putting on makeup, or day dreaming should not be done while driving in work zones. You could kill someone.**