

Compiled by: A. Mahesh, Chief Traffic Warden.

For "Traffic Rules Classes" by Traffic Wardens program 2011

Traffic Logic

Not just the "What" of road traffic rules, but the "Why" also

Here's a detail which helps you appreciate the logic of traffic rules. Once you know why (your safety, usually), and you know how, you would be able to drive safely, and drive with confidence.

(Rules covered are based on traffic laws in India, but most of the logic is common across the world. Just keep left/right conventions in mind when using these in other countries).

Rule: You must drive on the left of the road. "Keep Left" first started in Rome, but the first law on it was made in 1756 in England. In 75 countries, you have to drive on the left, in 167 countries, on the right.

Traffic Logic: To avoid collisions, people driving in opposite directions should be on opposite sides of the road.

Rule: Pedestrians must walk on the left of the pavement, whether there is only one pavement, or pavement on both sides of the road. If there is no pavement, they must walk on the right side of the road.

Traffic Logic: Pedestrians cannot turn or stop faster than a vehicle. They must walk facing oncoming traffic so that they can see when it is necessary to give way to the vehicle by stepping to the side. If there is only one pavement, pedestrians closer to the road must face the traffic, for the same reason. If there is a pavement on both sides, pedestrians walk in the same direction as traffic.

Rule: Overtake only from the right, unless the vehicle in front has signaled an intention to turn right.

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Traffic Logic: We drive on the left, and the driver sits on the right. Slow traffic is in the left lane and fast traffic in the right lane. To overtake, we have to change lanes. Moving to the right, we can see what is in front by moving a little into the other lane. Moving left, we can only see it when most of the vehicle is in the left lane--CRASH. The obstruction caused to other traffic and chances of collision are much less when moving right. Also, there is less speed difference with the slow vehicles on the left.

Overtaking a vehicle that is turning right, will put the overtaking vehicle in the path of the turning vehicle--CRASH.

Rule: Use the turn indicator to signal when you are leaving the main traffic lane, not when the road changes direction. Turn indicators can be used to tell traffic behind you where to overtake.

Traffic Logic: Use turn indicators to signal your intentions to other road users, especially those behind you. Example: If the main road makes a right turn and there is a small side road continuing straight, you do not need to use the right turn indicator if you are on the main road. However, if you plan to take the small road, going straight, you should give a left turn indication.

On a straight road, the vehicle in front should signal **right** if it wants the following vehicle **not** to overtake (wait for 'side'). To tell the following vehicle to overtake (from the right), it should signal **left**, not right. Truckers often get this wrong.

Roundabouts: In technical terms, a roundabout is a way to convert "cross" traffic into "merge" and "diverge" traffic, which is safer.

Rule: On roundabouts, "give way to traffic on your right".

Traffic Logic: One reason is to avoid "gridlock". Imagine the roundabout to be a road with traffic going round continually. Traffic on the

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right is traffic already in the stream. If this traffic has to give way to traffic that is yet to join, nobody will be able to move. Hence, leaving the stream has priority over joining it. The other reason is that doing it the other way results in unsafe "left side overtaking".

Rule: A red triangle with the point downward means "give way" or "yield". This sign is put up at junctions with main roads, and at roundabouts.

Traffic Logic: "Give way" means slow down and move into the road only if there is a gap in the traffic to which you are giving way. If necessary, stop and wait. Do not bully your way into the traffic.

Rule: When joining or continuing in a roundabout, give a "right" indication. When leaving, give a "left" indication.

Traffic Logic: You are indicating whether you are moving into the stream (right) and out of it (left). Giving a left indication just as you join the roundabout is wrong, unless you are turning left.

Pedestrians crossing the road: Rules for pedestrians to cross the road are meant to protect the lives of pedestrians.

Rule: Cross the road at right angles. Never cross diagonally.

Traffic Logic: As long as you are on the road, you are at risk. Minimise the time and risk by using the shortest distance. Which means, cross at right angles.

Rule: Before crossing, look right, then left, then right again. Cross only if the road is clear.

Traffic Logic: Traffic on the road drives on the left. When you cross at right angles to the road, you will first cross traffic coming up from your right. After crossing half the road, traffic will now come from the left. So, first see

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if the first half of the road (right side) is clear. Don't cross immediately! Check if the rest of the road (left side) is also clear. Don't cross yet! Check the right again to be sure that the road is *still* clear (vehicles may have turned on to the road). If there is a divider, many people cross half the road and wait there. This is not safe. In fast traffic, the suction from a big vehicle can pull you onto the road.

Zebra crossings: These are special points for pedestrians to cross busy roads. They are marked with white stripes parallel to the road.

Rule: Pedestrians get priority over traffic on zebra (pedestrian) crossings without traffic lights, where drivers have to check the crossing before proceeding.

Traffic Logic: Pedestrians give way to traffic as any collision will injure them more. However, to help pedestrians cross busy roads, safe points are marked with zebra crossings. On these, vehicles must give way to pedestrians. The driver is responsible for checking if any pedestrian wants to cross, and must stop if so. You should stop even if the pedestrians have reached the crossing, but are not yet on it.

Rule: Pedestrians may cross a zebra crossing at a traffic signal only when the signal is green for pedestrians (red for the vehicles).

Traffic Logic: If traffic on very busy roads stops for pedestrians at zebra crossings when the light is green for vehicles, it would cause a traffic jam. However, when it turns green, drivers must still wait for pedestrians already on the crossing to clear it, before moving.

The STOP line: Do you inch across the STOP line, or creep slowly into main road traffic with your blinker on, in the hope of moving faster? Don't. Apart from greater chances of a crash, you are actually slowing yourself down.

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Traffic Logic: If the vehicle pokes out into the road, the space available for cross traffic to move past is reduced. Vehicles in cross traffic have to move closer to each other. To do this safely, they have to slow down. They will take longer to go past your vehicle than if you waited a little further back, and you will have to wait longer.

Rule: Vehicles are not permitted to cross the STOP line at traffic signals.

Traffic Logic: The STOP line is marked before you reach the zebra crossing. If vehicles cross this, they poke into the space for pedestrians to cross. Pedestrians will have to slow down to go between vehicles. They may not finish crossing the road before the light changes. Vehicles have to wait for them, which can cause traffic jams.

Priorities: Who should give way to who is set by road rules? This applies to all vehicles, irrespective of size. I.e., the bigger vehicle does not always have priority!

Rule: On straight roads or unregulated crossings, give way to traffic on your right.

Traffic Logic:

(a) Faster traffic moves on the right of the road (furthest from pedestrians). It is easier for slower vehicles to stop than faster vehicles.

(b) Driving, we sit on the right side. Thus, it is easier to see vehicles on the right than the left. So, if you are to the left, you give way. If you are to the right, you have right of way. E.g. if you are on the left and want to turn right, and a car is coming up behind you on the right, slow and wait for it to pass before turning. If you can't "see" him on your right, he surely can't "see" you on his left!

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Use of Horns and Silence Zones

Rule: A driver of a vehicle shall not

- (a) sound the horn needlessly or continuously or more than necessary to ensure safety;
- (b) sound the horn in silence zones;
- (c) make-use of a cut-out by which gases are released other than through the silencer;
- (d) fit or use any multi-toned horn giving a harsh, shrill, loud or alarming noise;
- (e) drive a vehicle creating undue noise when in motion;
- (f) drive a vehicle with a muffler causing alarming sound.

Traffic Logic:

- a) Use of horns in silence zones, like hospitals, disturbs patients, some of whom maybe in a critical state
- b) Excessive and shrill horns startles pedestrians and other drivers on the roads. They may lose control and this may cause accidents
- c) Too much sound from the horns also contributes to noise pollution

Driving at Intersections: Straight traffic gets priority over turning traffic.

Traffic Logic: You have to slow down for a turn anyway. It is easier to stop when slower. This is true for both straight roads and crossings.

Rule: Main road traffic has priority over side road traffic <

Traffic Logic: Main road traffic is faster than side road traffic. Main roads are also more crowded. If main road traffic stops for side road traffic, there will be a jam. Side roads rarely have enough traffic to cause a jam.

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Rule: If the driver is to leave the roundabout less than halfway around it, the driver must enter the roundabout from the left marked lane or left line of traffic.

Traffic Logic: This rule applies to drivers who will leave the roundabout at the first exit after entering the roundabout, or when the exit is less than halfway around the roundabout.

By keeping to the left lane and keeping the left turn indicator on during this time, the driver is saved the trouble of first switching to the right lane and then working his/her way back to the left.

Rule: If the driver is to leave the roundabout more than halfway around it, the driver must enter the roundabout from the right marked lane or right line of traffic.

Traffic Logic: By switching to the right lane immediately after entering the roundabout, a driver who has to travel at least halfway around it is saved the trouble of negotiating around other drivers who are exiting the roundabout, and those who are entering the roundabout from other intersection points.

Rule: On T junctions, traffic going straight gets priority.

Rule: Certain roads have marked speed limits. You are not permitted to exceed this speed.

Traffic Logic: Speed limits are set based on traffic conditions on that road, to ensure road safety. E.g., highway speed limits are quite high, while in school areas they are low. In India, the design speed of highways is 60 kph. It is not advisable to exceed this speed on turns. Speed limits on divided urban roads are usually 50 kph for cars. On undivided roads, this may be 30. Residential areas are 25 kph unless there is a sign stating otherwise. Exceeding the speed limit endangers pedestrians and other road users, as well as the

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Rules of the road regulations with simple logics



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speeder. The faster the car, the more the chances of a crash, and the more severe the injuries and property damage. Some weak bridges also have low speed limits, as a faster vehicle puts more load on the structure. If visibility is low, e.g. at night or in rain/fog, it is advisable to stay 10 kph below the daytime limit.

Rule: The speed limit for residential areas, near schools, hospitals etc. is 25 kph, even if not marked.

Traffic Logic: Such areas have many pedestrians, especially small children who do not know the dangers of the road. Children do not notice vehicles while playing. They are 2–3 times slower than adults to react to a horn, and may run the wrong way. There are also pets in residential areas, which can jump in the path of a car. Near hospitals, there may be invalids who cannot move fast. A vehicle should be able to stop instantly in these cases. With maximum braking, your car can stop within 4 meters from 25 kph. To stop within 1 m, stay below 13 kph. To ensure you stay below the legal 25 kph, stay in 3rd gear or, better, in 2nd gear.

Rule: The headlight should be on low beam if there is on-coming traffic.

Traffic Logic: Headlights on high beam blind drivers in on-coming traffic (towards you). They would not be able to see pedestrians or obstructions on the road in the glare. This is a safety hazard. Put the beam on low, at least until the other vehicles are completely past. Avoid using high beam except on highways without streetlights. Traffic police shall challan drivers using high beam within city limits.

Courtesy: Clicking the headlight off and on is a request to the on-coming driver to put the headlight on low beam. Lower the beam if requested like this.

Rule: You are not allowed to use a cell phone ("mobile") while driving.

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Traffic logic: Both your hands and your attention are distracted when you are using a cell phone. You cannot pay sufficient attention to the traffic, and may cause a crash. You are therefore liable to be challenged for this.

Hands-free: These sets are more critical as that your attention is still distracted, much more than talking to others in the car. Some researches rate it as at par or more dangerous than drunk driving.

It is best to switch the phone to voicemail or off while driving. If not, get a passenger to take your call, or disconnect, find a safe place to stop (off the road or on the side if permitted), and return the call.

Courtesy: While calling up someone on the mobile, always ask first: "Are you driving?" (Even before "Are you busy?") If the answer is yes, disconnect and call back later.

Traffic lights: red and green

Rule: At regulated crossings, stop at a red light, go on a green light.

Traffic logic: Heavy traffic crossings need regulation, as the rule for unregulated crossings is not sufficient to ensure safe and smooth flow. As you know, a green light indicates go, red means stop. Never cross the stop line if the light is red, as you may cause a crash.

If there is a single light, it is possible for opposing traffic to be "go" at the same time. Traffic turning right should wait for straight traffic from the opposite side to clear the crossing first. Usually, there are separate lights for straight and right.

Most left turns are "free". However, in heavy traffic, wait for straight traffic from your right (if any) to clear the crossing before you turn left "give way" to traffic on your right). Always check for signs that left is not free, especially on unfamiliar turns.

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Traffic lights: amber (yellow)

Rule: At regulated crossings, when the light is amber (yellow), go only if you can cross the complete crossing before the light turns red. Otherwise, stop before the stop line.

Traffic logic: If the lights change straight from green to red, the driver may not be able to clear the crossing before the green-light traffic reaches his car. This may cause crashes. Hence, four seconds before the light turns red, there is an amber indication.

If you cannot clear the crossing before the light turns red (this can get you a challan), stop before the stop line. Within the speed limit, this is always possible. In case of slow and heavy traffic (jam), stop immediately as the light turns yellow.

In many cities, there is a countdown timer for red and green lights (timed for straight traffic). Use this information wisely, and avoid speeding at the crossing.

Traffic lights: amber and red flashing lights

Rule: At crossings, an amber (yellow) flashing light is a "caution". Slow, check if the crossing is safe, and then move. A red flashing light is for "stop, look and go". Come to a complete stop, check if the crossing is safe, and then move.

Traffic logic: These lights are put at unregulated crossings. Usually, main road traffic gets the "caution" and side road traffic gets the "stop" light. At "caution", slow to about 25 kph to be safe. Remember, you need time enough to check all the other roads, especially the one on your right.

The language of the roads.

Rules of the road regulations with simple logics



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Regulated crossings may switch to flashing late at night, when traffic is less. Here, amber is "caution" and red is "stop, look and go". Always check at such crossings, the other driver may not be careful enough, especially at night.

Emergency vehicles

Rule: Emergency vehicles (fire engines, ambulances, and police; with red/blue flashing light and/or siren) get **complete** priority over all other traffic. **Give way, even if the traffic light is against them and in your favour.**

Traffic logic: Obvious! They are rushing to save lives; you are not.

Courtesy: Pull over to the side of the road immediately, and stay there till they have passed. Never attempt to cut traffic lights in their wake. This is illegal, anyway.

Non-emergency vehicles

Rule: It is not permitted to use a siren (or siren-like horn) on a non-emergency vehicle. This is a punishable offence.

Traffic logic: Remember the boy who cried "Wolf!"? If people get fooled by fake sirens, they may not give way when it is really required.

Courtesy: Give way to high officials with red lights on the car (no siren), as soon as convenient. However, this is not obligatory.

One way roads

Rule: Certain roads are one-way only. It is not allowed to go the other way on such roads, **even in reverse gear**. One-way roads are indicated by many signs, besides 'One-way', e.g. 'No entry', 'No right turn' or 'No left turn'. Traffic can only exit at this point, not enter. 'Compulsory right turn' signs mean the same as 'no left turn or straight', etc.

The language of the roads.

Rules of the road regulations with simple logics



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Traffic logic: This is required to prevent collisions. Reversing on such roads is worse than driving in the wrong direction, as you won't even be able to easily see what you are backing into!

Rule: To reach a cut in the road which is to the **right** of the point at which you reach a road with a central divider, turn left, and do a U-turn at the next cut to the **left**. This applies no matter how close the cut to the right is, or how far the cut to the left is.

Traffic logic: Turning right puts you on the wrong side of the road, and increases collision risk, if no cut has been provided. It is because the main road traffic is too heavy to cut across. Turning left allows you to join the traffic easily, and the distance to the cut on the left gives you enough time to find a break and move to the right side, so that you are in place for the U-turn.

Intersection logic

Rule: Turning left, doing a U-turn and turning left again, to avoid a red light, is treated the same as jumping a red light, and gets the same fine.

Traffic Logic: While doing the U-turn, you would be cutting across the same traffic that the red light was stopping you from, with the same risks.

Rule: You are not allowed to do a U-turn at an intersection where opposing traffic is also 'green'. Busy T-intersections either have a U-turn signal on the straight leg, or a 'No U-turn' sign. If so, take the **left** road, do a U-turn at a **cut** or **circle** (not an intersection), and take the right at the signal.

Traffic Logic: Due to the turning radius, you would cut across the entire on-coming traffic, which is not safe.