Pedestrians and other road users at Light Rail Vehicle level crossing are bound to wait and not cross it even if the light is flashing as at this particular spot, the Light Rail vehicle has priority over all other road users.

If the tram has already crossed the level crossing, do not take it for granted that the crossing is free and just enter the level crossing as another tram may be coming from the other direction. So be very careful.

The fact that the braking distance and time of a tram are very long compared to any other vehicles due to it’s size and weight and the structure of the rail track, longer time is required to completely stop the tram. Hence other road users should bear this element in mind before using the tram level crossing.

At a railway station, passengers may be running or walking carelessly to catch the tram. So drivers and riders should be alert and drive their vehicles at a reasonable speed to avoid unexpected mishaps.

**TRAM HIGHWAY CODE & RULES**

1. If a road, a lane, or any other route is reserved for trams, you MUST NOT enter it.

2. Use extra caution where trams run alongside the road especially when overtaking it.

3. Avoid driving ‘directly’ on top of the rails as this affects the tyres.

4. Take particular care and do not follow the tram, leaving the main carriageway to enter the reserved route.

5. Tram lanes are marked off by white lines, yellow dots, and a different texture on the road. Thus, the road surface distinguishes the width taken up by trams.

6. Take extra care where the track crosses the road. Use caution where the road narrows and the tracks come close to the kerb.

7. Tram drivers get their instructions from their own appropriate traffic signals. Always give way to trams as they may have permission to move when other road users are not authorised to do so.
8. Never try to race or overtake trams. Do not drive on the whole part of the tram’s rail track and its reserve path.

9. Parking or driving in tram tracks is dangerous. Tram drivers cannot steer around an obstruction. You should not stop on any part of a tramline, except in a designated bay. The location of the bay will be alongside and clear of the track.

10. You MUST NOT park a vehicle on any part of the tram road.

11. You MUST follow the route shown by the road signs and markings where a tram stops at a platform. It will be either in the middle or at the side of the road. Adopt a defensive driving attitude to cope with an unexpected mishap.

12. Drivers should look out for pedestrians, especially children, who may be running to catch a tram as it approaches a stop.

13. Always give priority to trams, especially when they signal to pull away from stops, unless it would be unsafe to do so.

14. Remember that a tram may be carrying large numbers of standing passengers. They could get injured if the tram had to make an emergency stop.

15. Cyclists and motorcyclists should take particular care when driving or riding close to, and when crossing, the tracks. This is especially important if the rails are wet. You should take extra caution when crossing the rails at shallow angles, on a bend, and at a junction.

16. It is safest to cross the tracks at right angles (perpendicular). Other road users should be aware that cyclists and motorcyclists might need more space to cross the tracks with safety.

17. As a rule, tramway wire regulations determine overhead power wires at a certain minimum height above any carriageway. But they may be lower in some situations. Always ensure you have sufficient clearance between the wire and your vehicle.

18. Load your vehicle in such a way that you are very safe from the overhead wires.
19. Ensure that equipment is fully lowered if you drive vehicles with extending cranes, booms, tipping apparatus or other types of variable height equipment.

**HOW DOES THE TRAM BRAKE WORK?**

The grip of steel wheels on steel rails tends to be less than is the case with rubber tyres, though sanding (dropping gritty material on the track) does compensate if wheel slippage occurs.

Therefore, when light-rail systems or trams share space with pedestrians, automobiles and other road users, or where the vehicles operate on steep tracks, safety demands that the tram be fitted with electromagnetic track-braking for emergency use.

The power of electromagnetic track-brakes comes from electromagnetic attraction between the brake and the track.

They are intended to provide retardation beyond the adhesion limit of the wheels alone, which ultimately is limited by the weight of the vehicle.

Bogie means chassis or framework that carries a wheelset of the tram and as such track brakes are fitted on the bogies between each pair of wheels and in line with the running rails.

In operation they are first dropped into position on the rails, using air actuators, and then current is applied to strong electromagnetic coils within the shoes.

This pulls the brake shoes hard against the track with a force that can exceed the vehicle’s weight, and strong braking forces result.

Track brakes are typically recommended for use only in emergency situations, adding their force to the main brakes (electric brakes and disc brakes) – especially vital if a tram or train loses control and application of sand is ineffective, or the disc brakes have failed.

The risk of damage to the track work at railroad switches is great.
In practice, some rail systems use them much more frequently, to compensate for rails made slippery by weather conditions, or as a roll-back prevention measure on hills. Track brakes are usually operated by a driver’s emergency stop button mounted separately from the normal traction/brake controller.

Systems which use them frequently may have a separate switch to actuate the track brake without activating other emergency stopping measures.

On some systems, permanent magnet track brakes are used as parking brakes.

**TRAFFIC SIGNS (AMENDMENT) REGULATIONS 2019 - GN NO. 236 OF 2019**

**GOVERNMENT GAZETTE OF MAURITIUS NO. 115 OF 31 OCTOBER 2019**

**THE ROAD TRAFFIC ACT** has been amended to give legal framework to Light Rail Transit System commonly known as Metro Express introduced in 2019 by Local Authority.

The danger warning traffic sign for “Level crossing without gate or barriers” which was previously displayed as below

![Old Traffic Sign](image1)

is henceforth amended and it will be displayed as such

![New Traffic Sign](image2)

A32
Warning of level crossing without gates or barrier on a road on which there are light rail vehicles crossing ahead shall be given by sign A32.

This means that drivers of all motor vehicles are warned that Light Rail Vehicles may cross at junction. Further, there will be no barrier to separate the flow of traffic. Thus drivers are warned to stop their vehicles at the stop line and they are not allowed to cross the stop line when the light rail is crossing the junction.

**SINGLE TRACK – RAILWAY LINE – WARNING SIGN SHOWING LOCATION OF LEVEL CROSSING WITHOUT GATE OR BARRIERS**

The traffic sign supplemented with “GIVE WAY” sign shall be placed in the immediate vicinity of level crossings.

Basically this sign indicates that the railway line comprises only one track to be used solely by one light rail vehicle at a time.

**TWO OR MORE TRACKS - RAILWAY LINE - WARNING SIGN SHOWING LOCATION OF LEVEL CROSSING WITHOUT GATE OR BARRIERS**

This warning sign is used if the railway line comprises at least 2 tracks or more that may be used by two or more light rail vehicles at a time.

The sign shall be supplemented with “GIVE WAY” sign.
ADDITIONAL SIGNS THAT GIVE WARNING TO ROAD USERS THAT THEY ARE APPROACHING LEVEL CROSSING FOR LIGHT RAIL VEHICLES AT NEXT JUNCTION.

Three countdown markers, shown below, will indicate the distance from the light rail vehicle’s level crossing ahead.

These signs may be used at different intervals to keep the road user informed about the distance left to approach the level crossing.

Each slash represents 80 metres.

Number of slashes on the marker multiplied by 80 metres gives you an indication of the number of metres left to approach the light rail vehicle’s level crossing.

A. This traffic sign with 3 slashes on the marker represents \((3 \times 80) = 240\) metres distance away from approaching light rail vehicle level crossing.

B. This traffic sign with 2 slashes on the marker represents \((2 \times 80) = 160\) metres distance away from approaching light rail vehicle level crossing.

C. This traffic sign with 1 slash on the marker represents \((1 \times 80) = 80\) metres distance away from approaching light rail vehicle level crossing.

Local Information sign with the mention “Keep Crossing Clear” may complement to give adequate information to all road users so as not to obstruct the free passage of light rail vehicle on the level crossing.
**Edge of road lines**

**Paragraph 1**  
Edge of road line to give warning of the edge of the main carriageway shall consist of either of the following —

(a) a longitudinal marking consisting of broken white lines on the road with one metre painted and one metre gap. It shall be used as a warning line (H.3.2);

or

(b) a longitudinal marking consisting of a full white line and rib spaced 0.5 metre on the edge of a road. It shall be used as a warning line (H.3.3).

**Paragraph 2**  
The width of the lines shall vary from 100 millimetres to 200 millimetres.

**Paragraph 3**  
Edge of road line shall also be used to indicate —

(a) edge of the carriageway at a road junction or a lay-by, or at an exit from private drive onto a public road;

(b) edge of the part of the carriageway alongside the light rail corridor used by light rail vehicles;

(c) the boundary between emergency refuge area and an actively managed hard shoulder or the edge of a carriageway of a motorway; or

(d) the division between the main carriageway and a cycle lane through a junction.
Paragraph 4  Where longitudinal lines are used to mark the edge of a road, and longitudinal lines connected to transverse lines are used to demarcate parking spaces, bus stops, taxi stands, etc. on the road, the prohibition specified in paragraph I shall not apply.

WORD MARKINGS FOR PROHIBITION OF ROAD TRAFFIC ON LIGHT RAILS

The following word markings may be used on a red background for notification that entry is prohibited for all vehicles other than light rail vehicles.

TRANSVERSE MARKINGS FOR DELIMITATION OF CLEAR ZONE FOR ROAD TRAFFIC AT LEVEL CROSSINGS

Transverse markings consisting of yellow broken lines of a width of 200 millimetres with strokes of one metre long and gaps of 600 millimetres long (H.5.3), placed on the road at a level crossing, shall be used as a warning line beyond which a person or a vehicle shall not cross when a light rail vehicle is crossing. Such markings shall also be used to indicate the swept path for the guidance of light rail vehicle drivers.
YELLOW BROKEN LINE AND BOX ON RED BACKGROUND

Road markings at a level crossing consisting of yellow broken line H.5.3 and yellow box marking H6. on a red background, shall be used to indicate a ‘keep crossing clear’ zone for pedestrians and vehicles other than light rail vehicles.

ENTRY TO A PARKING ZONE OF MOTORCARS NEAR LIGHT RAIL STATION

To indicate, near a light rail station, the entry to a zone where parking of motorcars is authorised, whether subject to payment or not, sign C22 may be used.
QUESTIONS

1. The sign indicates
A. The school bus is not allowed here.
B. Route reserved for motor bus only
C. Near a light rail station, the entry to a zone where parking of motorcars is authorised.

Ans: C

2. Traffic Light sign has permitted Light Rail Vehicles (1) and (2) to proceed ahead whereby private car and school motor bus have to stop as the traffic light is displaying red light in their lane. Between the school motor bus and private car, which vehicle has properly and legally stopped at the right place?
A. The school bus as it has not crossed the yellow demarcation line.
B. The private car as it has not crossed the stop line

Ans: B

3. Which road marking sign indicates
i Notification that entry is prohibited for all vehicles other than Light Rail Vehicle?
ii Warning line beyond which a person or a vehicle shall not cross when a light rail vehicle is crossing and it also includes the swept path for the guidance of light rail vehicle drivers?
iii Transverse line that is used to demarcate parking space, bus stop, taxi stand, etc...?
iv Edge of road line to give warning of the edge of the main carriageway?

Ans: i – D    ii – C    iii – B    iv – A
QUESTIONS

Which sign indicates

1. 240 metres distance away from approaching light rail vehicle level crossing as each stripe on the marker represents 80 metres, so three red stripes amount to \((3 \times 80) = 240\) metres?
2. 80 metres distance away from approaching light rail vehicle level crossing?
3. 160 metres distance away from approaching light rail vehicle level crossing?

Ans: 1 – A  2 – C  3 – B

Which sign indicates

1. Local informative sign as to not enter the crossing if the exit is not clear?
2. Danger warning sign – Level crossing without gate or barrier?
3. Give way to tram circulating on a single track railway line?
4. Give way to tram circulating on a double track railway line?
5. Give way to Tram at level crossing?

Ans: 1 – D  2 – A  3 – B  4 – C  5 – BCD