

# Good Road Network Vital for Progress

Dr. (Eng) **JAYALATH EDIRISINGHE**

**S**ri Lanka is blessed with a very well connected road network. Sri Lanka's road density is over 1.60 km/km<sup>2</sup> according to the available information. The conditions and quality of the roads are comparable with that of the economically developed countries. Therefore, the contribution to national development through an effective transport system should be appreciated and admired.

By nature, the public often complain about traffic congestion. According to many studies carried out by researchers, it was revealed that the average speed of vehicles in urban areas is below 15 km/hr during the rush hour. Even in non-urban areas, the average speed is not more than 25 km/hr. It takes over four hours at any given time of the day to travel from Kandy to Colombo. Therefore, it is important to understand the effects of various improper and illegal activities such as encroachments, which lead to hinder the smooth flow of traffic.

Among the few reasons for traffic congestion on the main roads are the effects of roads connected to the main roads which are highlighted in this article.

## Connecting roads

Road connections are inevitable in a road network. Sometimes all the connected roads are given the same priority with respect to the importance of roads and traffic flow. In other cases, connecting roads can be classified as main roads and minor roads. In whatever the situation, when connections are provided, the safety and convenience of all road users should be given priority. Therefore, the opinions of experts should be sought in such situations as there are various techniques and rules available.

The main idea of presenting this article is to educate the general public also about connecting minor roads as well as private properties to main roads without paying adequate attention to the safety and convenience of vehicles plying on the main roads.

According to basic traffic laws, priority is given for the vehicles on main roads. Precautions are proposed to minimize disturbance to the flow of traffic on main roads as it is often higher than on minor roads.

Whenever there is a necessity to provide a connection to a roadside facility (building or land) it is always recommended to seek the available options to provide through an existing by-road diverting from the main road. If the connection is to a hospital, this condition may be neglected considering the importance of even a minute to transfer a critical patient to a hospital. When there are frequent connections to main roads, each time when a vehicle enters the main road as well as diverting from the main road, traffic on the main road can be interrupted. That may lead to a local traffic congestion of up to a few hundred metres depending on the traffic situation on the road. Similarly, when there are many individuals requesting access to roads from a main road, it is recommended to combine all those and provide only one connection to the main road and sub-divide to individual facilities after diverting from the main road. If it is difficult to apply

such conditions to existing facilities (buildings and lands) attention should be paid at least when new connections are requested.

Unfortunately, this mistake of providing individual connections to many buildings and lands is practiced in newly constructed by-pass roads also. Buildings providing parking using the space between the building and the road also come under this category. When there is such parking, authorities should assure that there will be only one or maximum two openings to the main road.

If providing direct access to a property from a main road is unavoidable, entrance from the main road to the property should be a wide opening – bell mouth (larger opening at the entrance) for the smooth flow of vehicles. Further, the gate should be placed leaving adequate space for a vehicle to park and wait until the gate is open without interrupting the traffic flow on the main road.

When there are bus halts and access roads are next to each other on the same side of the road, it is highly recommended to place the bus halt after the access road.

Vehicles coming from the same side

as on the bus halt will find it difficult to turn from the main to minor road as it has to drive in front of the bus. Similarly, vehicles turning from a minor road to the main road will also be an issue due to visibility problems, especially when it turns to the right side (same direction as the bus was moving). Even the passengers should be knowledgeable and vigilant on these issues as sometimes buses stop before the side road even if the bus halt is placed properly after the side road.

## Traffic rules

According to the prevailing traffic rules in the country, if the centerline of the main road is marked with a broken line or a single continuous line, vehicles are allowed to drive across such lines to enter a building or a land on the opposite side. Therefore, such junctions having double lines as a centerline marking can lose the trust and the respect to road signs and markings.

Access roads closer to railway level crossings also become death traps or the main reason for traffic congestion when adequate attention is not paid.

This becomes very important due to the very bad attitude of drivers.

Though it is recommended to have a de-acceleration lane when vehicles move away from major roads to a minor road and an accelerating lane to enter a major road from a minor road, it is not always possible on normal roads though it is practiced effectively on Expressways. Anyway, adequate attention should be paid for the gradient of connecting a minor road at the connecting point with the major road. Especially, if the minor road connects with an upward steep gradient, controlling of vehicles will be difficult at the connecting point leading to various inconveniences including accidents. Therefore, if there is a gradient, the slope should be managed prior to the connecting point and an adequate space be maintained to easily manoeuvre vehicles at the connecting point.

It is doubtful whether some of the access roads to roadside facilities were constructed with proper approval and technical evaluations. Some access roads from such properties are connected with the main roads at dangerous bends. In some situations, the centerline is marked as a double line. There are situations where road side drains are blocked to construct access roads to road side facilities.

As such, rules and regulations should be strengthened to provide maximum benefits to the public. Subject matter experts should have the freedom to enforce such rules while educating the public on the negative impacts due to the improper actions of some which are beneficial to a minority while compromising the benefits of the majority.

**Dr. (Eng) Jayalath Edirisinghe – Faculty of Engineering, University of Peradeniya**

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Expressways will boost trade and business opportunities.