

Our Transportation System is in Crisis - 76

Driving on a six-lane divided carriageway with three lanes in each direction is much different from that on the two lanes of a four-lane highway. Changing lanes is a more complex matter, yet to this writer's knowledge the driving tests may not have upgraded to include this critical component. There are currently more than 80 km of three-lane routes and counting. There ultimately would be more than 400 km of three-lane routes judging from the programme by the Ministry of Works and Transport (MWT). So driver training and education have to be boosted to address this need. Traffic accidents reported in the press these days often state that "the driver was given a bad drive and lost control of his vehicle." In the case of three-lane routes, could it be that one of the motorists was guilty of improper lane-changing?

Today, however, I would like to address another significant issue concerning three-lane routes: the use of appropriate traffic signs. There appears to be a need for overhead signs. According to the Institute of Transportation Engineers, Traffic Signing Handbook, overhead signs are desirable (a) when there are visibility problems (b) on three or more through-lanes in the same direction, (c) when there is very heavy traffic, and (d) when there is a high percentage of trucks in the traffic stream.

Traffic signs in the national Highway Code are based on studies conducted in the late 1970s for the Government by Halcrow-Fox from the United Kingdom. Although Halcrow-Fox discussed the location of traffic signs for three-lane dual carriageways, it was only from the perspective of roadside traffic signs, not overhead traffic signs.

There are three categories of traffic signs in the Highway Code: Danger Warning Signs, Regulatory

Signs, and Informative Signs. Danger warning signs warn road users of possible danger on the road and inform them of its nature. Regulatory signs advise road users of special obligations, restrictions, or prohibitions with which they must comply, and failure to obey is an offence. Informative signs or guide signs give drivers directions to towns and places of interest whilst travelling, and/or provide them with other useful information.

Any motorist on the Churchill-Roosevelt Highway (CRH) could confirm how difficult it is to see the signs outside the left shoulder from the right lane of the three through-lanes. New roadside informative signs have recently been placed on the shoulder of the westbound carriageway of the CRH giving directions to places like Aranguéz, Eastern Main Road, El Socorro, and Barataria. These require the motorist to enter the right-turning lane at the appropriate intersection along the route. Visibility of these signs is a major issue, and consideration should be given to using overhead signs.

It should be possible to install overhead signs on the existing overhead structures along the highways, such as the existing and new pedestrian overpasses. In the case of the CRH there are pedestrian overpasses between the Aranguéz Road and El Socorro Road, at Don Miguel Road, San Juan, between UWI, St Augustine and Southern Main Road, Curepe, and at Pasa Road, Tunapuna. There is also the overhead bridge at the Barataria Interchange.

According to the United States Department of Transportation, Manual on Uniform Traffic Control Devices (MUTCD) 2003 Edition, if overhead signs are warranted, the numbers of signs at these locations should be limited to only those essential in communicating pertinent destination information to

the road user. Further, regulatory signs should not be used in conjunction with overhead informative sign installations. The manual also states that because road users have limited time to read and comprehend sign messages, there should not be more than three informative signs displayed at any one location either on the overhead structure or its support.

Back to the CRH example, overhead signs on the westbound route of the pedestrian overpass between Aranguéz Road and El Socorro Road could safely and conveniently provide directional information to get into the correct lane for El Socorro, Barataria, Port of Spain, etc. Likewise at Don Miguel Road pedestrian overpass, overhead signs could direct motorists to Barataria, Eastern Main Road, Lady Young Road, Port of Spain, etc.

The MUTCD does not recommend mixing informative and regulatory signs, so regulatory signs, such as speed limit, and any restriction to particular classes or types of vehicles, may also be placed as overhead signs where directional or other informative signs are not being used. Regulatory signs may also be placed on the mast arm of traffic signal pole structures at intersections.

The use of existing overpass structures and traffic signal mast arm would reduce costs of overhead signs and the likelihood of confusion and missed information from roadside signs on three through-lanes.

The design of these overhead signs would have to consider (a) the colours, as the current white lettering and blue background may not be appropriate against the backdrop of the sky, and another background colour may have to be assessed, such as green; and (2) the type of night-time visibility required, as retro-reflectivity (which

depends on the headlights of vehicles) will not be suitable, and lighting may be required.

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