Our Transportation System is in Crisis - II

This week we examine the people component of the transport system in the country. People either travel on foot or in vehicles, including bicycles, etc. All road users are pedestrians at some part of every journey even if it just a short walk from office to car park. Pedestrians are the most vulnerable road users. Because they are unprotected from vehicles it is essential to consider their needs within the transport system and to give them greater consideration than other road users.

The Ministry of Works and Transport 1996 Port of Spain East West Corridor Transportation Study showed that most of the downtown sidewalks did not have the capacity to handle pedestrian demand. For example, the pedestrian volume on Frederick Street during the morning rush period (both sides and both directions) was 4,000 persons per hour, and at City Gate more than 9,000 persons per hour crossed South Quay at Broadway headed for destinations in the downtown area. Clearly, there is a tremendous need to give priority to minimising pedestrian – vehicle conflicts, which would serve to reduce traffic delays as well as increase pedestrian safety.

The following example is given because the only region of Trinidad where traffic flows have been studied extensively (whether exclusively or as part of other studies) is the East West Corridor between POS and the Uriah Butler Highway. Table 1 gives the morning peak hour vehicle traffic into POS from the east for all three routes (Beetham Highway, Priority Bus Route, and the Eastern Main Road) at a screenline just east of the Central Market Flyover. The data for the years shown were taken from various reports published and unpublished.

In the 30 years between 1966 and 1996, morning peak hour westbound vehicle traffic on the Beetham Highway, just in front of the WASA sewage pumping station, increased annually by only 0.33 percent. However, in only 9 years between 1996 and 2005 its annual rate of growth is a staggering 8 percent.

This means that over the last 9 years the numbers of vehicles added to the traffic flow into POS from the east has risen steadily every year by 8 percent. In fact, this rate of growth of traffic exactly matches the annual rate of growth of vehicles registered by the Licensing Office over the same period, thus emphasizing the centralised status of POS for conducting activities. This increase in traffic was made possible by adding an additional lane on both carriageways of the Beetham (in fact two lanes were added westbound near WASA), and of course, by cheaper cars and increased income for some.

Likewise, the annual rate of growth of vehicles on the Priority Bus Route over the last 9 years has also been 8 percent, while there is no opportunity for increased traffic growth on the Eastern Main Road as it has been operating at its capacity during peak periods for almost 25 years.

What is perhaps more interesting is the information on the persons travelling in the vehicles on those routes. Unfortunately data was only available for the year 1996, and they showed that 5,953 persons were travelling on the Beetham in 2,176 vehicles at that screenline; on the PBR 4,933 persons were in 485 vehicles; and, on the EMR 9,193 persons were in 1,835 vehicles. In other words, the Beetham had average vehicle occupancy of 2.7 persons; PBR had 10; and, EMR had 5. Put another way, this means that the PBR carried just about the same number of persons as the Beetham and Churchill-Roosevelt Highways, but in one-quarter the number of vehicles, or that the PBR and EMR combined carried more than 70 percent of everybody from the east and south but in one-half the number of vehicles on the Beetham and CRH.

What is the lesson for us? Well, to answer that, let us first examine the projected person travel growth. The 1996 study forecast that person travel in the East-West Corridor and the entry points into POS was expected to increase at an average annual rate of 1.03 percent with a low rate of 0.70 percent and a high rate of 1.43 percent. The data above showed that in the year 1996 a total 20,070 persons were heading into POS in 4,496 vehicles from the east during the morning peak hour. Table 2 gives the forecast person travel demands for the various scenarios during the weekday morning peak hour into POS from the east. From it we could conclude that with continued current thinking, four lanes would be required right away for the Beetham and CRH, together with increased private car usage of the PBR (especially since to the uninformed it has so much capacity). By 2010, yet another lane would be required for Beetham and CRH, or perhaps the PBR may be made one-way westbound?

Or a new transport policy may be framed within the context of maximising person travel access. For example, if the existing third lane of Beetham and CRH was exclusively for vehicles with 5 or more persons, and the PBR was reverted to its originally conceived operation of exclusively high volume vehicles, there would be immediate and major relief in the traffic congestion situation, and there would be hope in meeting the future person travel demands. Of course, there are major enforcement and management issues. But, the

thinking that has got us into our problem will not get us out of it.

TABLE 1 TRAFFIC FLOW INTO PORT-OF-SPAIN FROM THE EAST

	Morning Peak Hour Westbound Traffic (vehicles per hour)			
	1966	**1981**	**1996**	**2005**
Beetham Highway East of Market Flyover	2,040	2,224	2,176	4,253
Priority Bus Route East of Market Flyover	-	-	485	1,007
Eastern Main Road East of Market Flyover	not available	2,472	1,835	2,220

TABLE 2 FORECAST PERSON DEMAND INTO PORT-OF-SPAIN FROM THE EAST

	Weekday Morning Peak Hour Person Trips into POS from the East			
	2005	**2010**	**2015**	**2020**
Low	21,370	22,129	22,914	23,728
Average	22,009	23,166	24,384	25,666
High	22,806	24,484	26,285	28,219