

Our Transportation System is in Crisis - III

This week we examine the parking component of the transport system in the country. Many of us do not realise that, when addressing traffic congestion problems, vehicle parking issues are more significant contributors than traffic volumes. The rate at which traffic flows is ultimately dependent upon the ability of the parking facilities (on-street or off-street) to absorb vehicles that are being fed from the roadway system. This means that while roads are being continually widened to increase their capacity, we are experiencing the “nuts bottle syndrome” of traffic being jammed at the constriction caused by vehicles seeking to park or un-park.

The rate at which vehicles can park or un-park is dependent on several factors: availability of parking spaces; knowledge and convenience of the locations of these parking areas; how readily visibility or easily identifiable are these spaces / areas; and, how quickly the vehicle can manoeuvre into or out of this space. Too little parking will lead to increased traffic circulation and congestion, while too much parking is costly to provide and maintain and uses up valuable land area. The moving vehicle (whether standstill in traffic or not) occupies land space and so there is not only a cost of the vehicle occupying road space, but there is also a benefit of the vehicle moving persons. Therefore, the higher the number of people occupying the vehicle per unit of road space, the higher the benefit. The parked vehicle only occupies valuable land space, and so only costs, and this cost is higher for more valuable land and also built parking facilities, and is not dependent on a trip. The parked vehicle therefore adds no value, and in this country each vehicle is parked for at least 80 to 90 percent of the time.

It is now impossible to get a legal on-street park during the daytime in POS, and extremely difficult even for an illegal one. The privately operated off-street parking lots are often completely filled particularly during pre-lunch periods.

In general, for a person to own a car there has to be one parking place at both the residence and work. Also, there needs to be additional parking spaces for other purposes, such as shopping, etc. Applying a standard of 50 sq. m. of land space to accommodate each person who owns a car (used by Washington State Department of Transportation), would require at least 12.5 sq. km of space to accommodate only private cars, and excluding buses, taxis, maxi-taxis, trucks and other commercial vehicles, or about the size of the entire land area of the capital city of POS just for providing only car parking for the people of Trinidad and Tobago. Of course, the car parks may be provided in multi-level garages to minimise land-take, but the illustration above is to establish the huge parking demand for a transport policy that favours high personal car ownership.

Table 1 shows the parking supply and demand data for downtown Port of Spain for the periods 1966, 1996 and an estimate for 2005. Overall parking demand remained relatively constant between 1966 and 1996, but has almost doubled in the last 9 years. In 1966, the parking demand exceeded supply by 1,000, and the excess demand decreased to 500 in 1996, but today about 3,000 additional parking spaces are needed in Port of Spain.

It is undisputable that the private automobile brings tremendous comfort and convenience to our daily lives; however, the issues of associated land consumption, heavy reliance

on petroleum resources, and enormous air pollution have to be considered. While I would not prescribe a transport policy that encourages private ownership of automobiles, I would argue that if Government intends to continue to pursue such, then it is mandatory that parking be provided, not necessarily free of charge, but to meet the demand. The problem is that it may be impossible to predict the ultimate demand for car ownership and parking.

The Police have advertised that that they will soon be rigorously enforcing parking regulations. Seeing that the legal on-street and off-street parking facilities are just about filled, it is expected that cars would now be seeking out areas without parking regulations, resulting in a wider coverage of the aesthetically unappealing intrusion on-street of freely parked cars into the urban area. The primary purpose of the police wreckers should be to free up the capacity of roadways that have a critical need for smooth traffic flow. However, it is well known that the police favour certain streets that are perhaps convenient for their wrecking operations, and completely ignore others. For example, traffic is always frustrated due to double parking on Sackville Street between Richmond and Edward Streets, and on Park Street between Frederick and Henry Streets.

Taxis (and maxi-taxis in areas outside of Port of Spain) occupy terminals that have out-grown the capability of holding the numbers required, resulting in spill-over. This existing plethora of on-street taxi and maxi-taxi stands cannot be sustained, and in many cases utilise valuable on-street parking space. Any plan for public transport must provide off-street facilities in a reorganised fashion.

Next week, we examine Light Rail Transit (LRT) Systems.

TABLE 1 Parking in Downtown Port of Spain				
	Parking Supply		Parking Demand	
	Off-Street	On-Street	Off-Street	On-Street
1966	2000	1500	1660	2840
1996	4000	500	3000	1000
2005 *	5000	300	8000	
* Estimated				



Figure 1 Parking on the Pedestrian Pathways



Figure 2 Derelict Vehicles Stored on the Footpaths



Figure 3 Massive Expanse of High Value Land Space used for Car parking