Our Transportation System is in Crisis – 97

Have we reached maturity in personal auto ownership in Trinidad and Tobago? Or, has the private auto industry achieved saturation? William Garrison and David Levinson, in their seminal work entitled "The Transportation Experience," show that all transport systems experience three stages of development: birth, growth, and maturity. In other words, they get started; they grow and develop; and then they deteriorate towards stasis. The authors argue that these stages are inevitable and irreversible in a transport system's life cycle, but policies may be introduced to organise, control, and steer the system in order to shape its performance.

From a transportation perspective, the authors speak of an analogy between birth, growth, and maturity, and three types of nations: undeveloped, developing, and developed. They lament the unjust application of tools appropriate for a nation at a developed state of transportation to a nation that is at a developing stage or worse. They recommend that the implementation of services should be suited to the particular nation situation.

Figure 1 gives the rate of growth of registered private automobiles over the period 1965 to 2004. Of course, the birth period is the late 1960s, while the growth period is the 1970 to the mid 1980s. There is a semi-maturity period (or stagnation of growth) in the recession years of the mid-1980s to the mid 1990s, and then there is growth again in the boom period to date. The questions to be answered are (a) for how much longer is this growth sustainable, and (b) how will we know when we are into the period of maturity (read developed status)!

The maturity stage of auto ownership is recognised by a gradual to rapid decrease in usage and/or registration of private vehicles. This rate of decrease is dependent on the level and effectiveness of auto disincentives and transit incentives applied. Auto disincentives are measures that increase monetary costs or decrease the convenience of auto travel, such as higher gasoline taxes, parking charges, limitations on street and parking capacity. Transit incentives are measures that result in decreased disutility of transit travel, such as increased frequency of service, reliability, comfort, lower fares, and construction of higher-quality transit mode.

Several auto reduction measures are being successfully employed by "developed" nations, and these measures will be discussed over the next coming weeks. Also innovative auto reduction strategies are being currently contemplated for application by several newly "mature" societies.

The growing traffic congestion headache may also function as a catalyst for maturity. Table 1 gives peak hour direction travel times and speeds for selected trip ends and routes. The peak morning average travel speeds to POS from the major urban areas of Arima, Chaguanas and San Fernando are all less than 20 kmph. In fact, from Arima and Chaguanas, along the highways, they are 14 and 13 kmph, respectively.

In a recent public poll conducted in Greater Vancouver, Province of British Columbia in Canada, transport problems rank the highest, with healthcare and crime following, second and third, respectively. Sixteen percent of private car drivers said they would switch to modes like transit, carpooling, cycling, motorcycling and walking if the cost of their trips increased by just 10 percent, and 60 percent of private car drivers would switch if costs doubled. Would any administration in Trinidad and Tobago consider higher road user taxes or even road tolls?

Private auto reduction policies are likely to have a very negative reaction from the vehicle import companies (new and foreign-used), and they would resist it. One suggestion would be to consider a programme of importation and replacement of various types of appropriate multi-seater transit vehicles for public and private sector operation. One thing is certain – we cannot avoid private auto reduction strategies for long, despite how politically terrifying!

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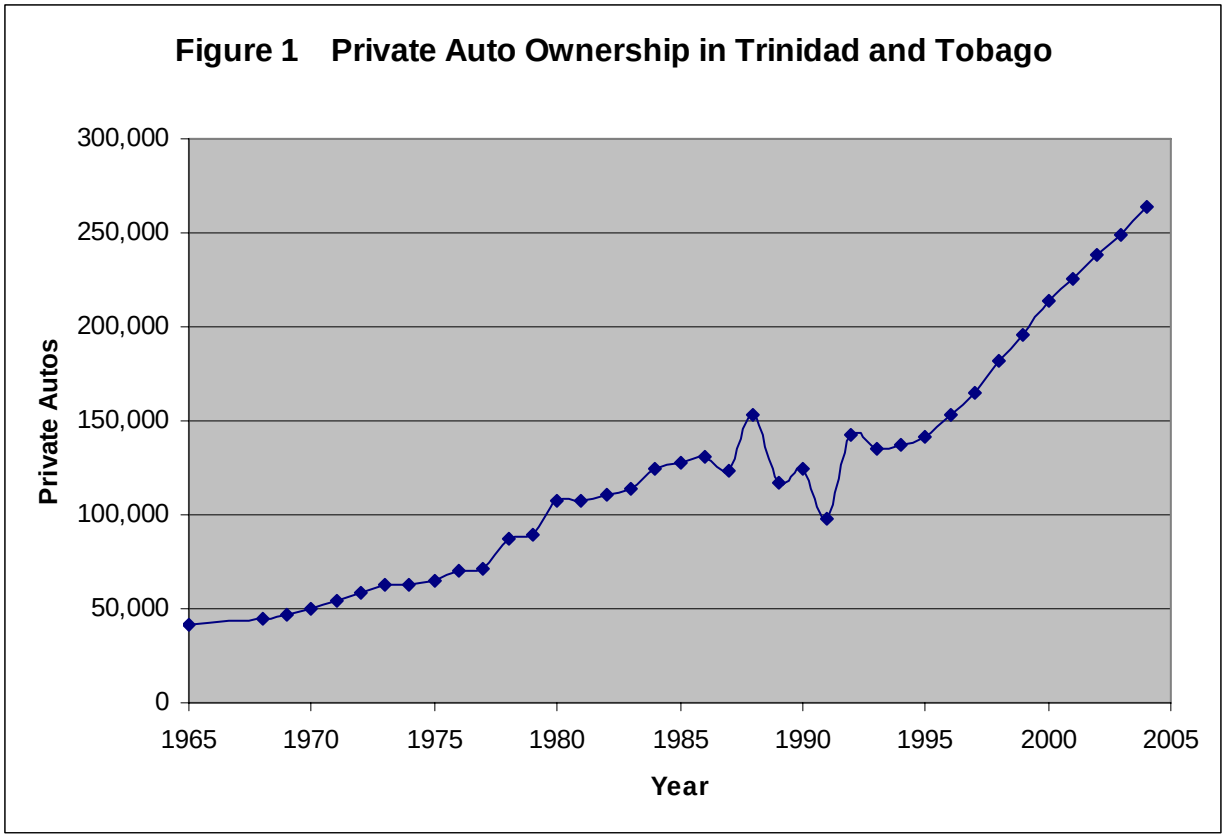

Table 1: Selected Trips, Routes, Peak Hour, Peak Direction Travel Time

Adapted from CNTS Diagnostic Report, September 2006

Trip	Approximate District Distance (km)	Route	Peak Hour Period	Travel Time (mins)	Approximate Average Travel Speed (kmph)
Arima to Port of Spain	26	Churchill-Roosevelt / Beetham Highway	AM	108	14.4
Port of Spain to Arima	26	Churchill-Roosevelt / Beetham Highway	PM	48	32.5
Arima to Port of Spain	26	Priority Bus Route	AM	34	45.9
Port of Spain to Arima	26	Priority Bus Route	PM	32	48.8
Arima to Port of Spain	26	Eastern Main Road	AM	93	16.8
Port of Spain to Arima	26	Eastern Main Road	PM	72	21.7
Chaguanas to Port of Spain	24	Uriah Butler / Churchill-Roosevelt /Beetham Highway	AM	110	13.1
Port of Spain to Chaguanas	24	Uriah Butler / Churchill-Roosevelt / Beetham Highway	PM	43	33.5
San Fernando to Port of Spain	58	Solomon Hochoy / Uriah Butler / Churchill-Roosevelt / Beetham Highway	AM	130	26.8
Port of Spain to San Fernando	58	Solomon Hochoy / Uriah Butler / Churchill-Roosevelt / Beetham Highway	PM	66	52.7
Point Fortin to San Fernando	43	Southern Main Road	AM	53	48.7
San Fernando to Point Fortin	43	Southern Main Road	PM	64	40.3
Princes Town to San Fernando	11	Naparima-Mayaro Road	AM	21	31.4
San Fernando to Princes Town	11	Naparima-Mayaro Road	PM	24	27.5