

Editor's Comment

Where have all the traffic engineers gone ?

Traffic engineers can take comfort in the knowledge that the profession is probably relatively insulated from the effects of the inevitable economic downturn which will follow this period of prolonged economic growth and development across Australia. That is, a economic downturn will probably only bring back the demand for traffic engineering services and traffic engineers to a level commensurate with the resources available in the profession.

Every traffic engineer, traffic engineering company and traffic engineering division of authorities across the entire country is currently stretched to the limit. This is occurring against a background of very few engineering graduates being attracted into the profession.

Few engineers have entered into the traffic engineering profession based on a burning desire to pursue a career in traffic engineering. The usual path into traffic engineering has been typified by "flowing with the tide of circumstance". The sailor's saying "it's the set of the sail and not the gale which determine the way she goes" can hardly be applied to people entering the traffic engineering profession. It is "the gale and not the sail" which brings people into traffic engineering.

The explanation for the parlous state of traffic engineering lies in a number of factors. Firstly, there is and has never been a recognised undergraduate or arguably even a post graduate qualification in traffic engineering. Secondly, tertiary institutions have for ever confused graduates and others by submerging traffic engineering in transport planning - a relationship without cold logic. This distortion is supported by Engineers Australia (EA) which immerses the traffic engineering profession in "transport" branches of a civil engineering college. When EA states that "Engineers Australia is the national forum for the advancement of engineering and the professional development of our members" it is more than evident over many years that they have never had traffic engineering in mind.

The plight of the profession even goes to the Yellow Pages which for years has refused to introduce a "traffic engineers" category into the directory.

It would be nice to think that traffic engineering is part of transport planning but in fact it is not. How much transport planning skill and understanding do you need to design an intersection and coordinate signals ? But if the profession is to establish an identity which is capable of attracting new entrants it must escape from the transport planning label. How many traffic engineers in Councils and consultancies could with a conscience describe themselves as a transport planner ?

True, a good traffic engineer should understand the fundamentals of transport planning. But does a traffic engineer really affect the relationship between and delivery of alternative transport modes or does he or she just practice traffic engineering in the context of a relationship dictated by others ? I think so.

In differentiating traffic engineering and transport planning it is also important to consider just what the "traffic" term means in "traffic engineering". Too many interpret it to mean the movement of road traffic. But a traffic engineers real role is to plan and design for the movement of all forms of "traffic" whether this be pedestrians, cyclists, cars, trucks, buses, golf carts, pigs and goanas. Whilst a traffic engineer may be required to predict a relationship between transport modes, it is not his or her usual role to plan or dictate the relationship.

The first step towards attracting quality entrants to the profession is to adopt a body which can effectively represent the profession in a manner which concisely defines traffic engineering. The Institute of Transportation Engineers (ITE) and Australian Institute of Traffic Planning and Management (AITPM) leave Engineers Australia in a shadow when it comes to representing and promoting the traffic engineering profession. Engineers Australia has done and continues to do nothing for traffic engineers and the profession. It is rude for EA to monitor professional development amongst traffic engineers whilst virtually not even recognising the profession and certainly having done little or nothing to promote or develop the profession.

ITE effectively downgrades the profession by not declaring itself as a traffic engineering body, despite its membership. That leaves AITPM as the only existing group which comes close to defining and representing the traffic engineering profession. However, even AITPM suffers a lack of courage to clearly define itself in traffic engineering, apparently fearing that to do so would be to attract less membership. For the good of traffic engineering AITPM or another group must assume the role of representing traffic engineering. If only because there are not enough traffic engineers to spread between multiple groups, traffic engineers must desert organisations like Engineers Australia which only pretend to represent them or are ineffective even if they don't pretend.

One thing is for sure, in relative terms at least, the traffic engineering profession is on the decline. Some might say, so what, who cares ? I'll tell you who cares. It is the development sector which calls upon traffic engineers to design the traffic movement systems into developments. It is business which suffers the costs of freight and personnel sitting in traffic congestion. It is Joe Public who sits in traffic congestion or gets involved in a road crash. It is the mums and dads who sit at home wondering whether their children are safe on the roads. It is the country as a whole because there is a clear relationship between the GDP growth and the efficiency of its movement (traffic) systems.