

A great city is rather like the human body, requiring effective circulation to survive and prosper. A healthy body demands well-functioning arteries for transport of food and oxygen to provide life-giving energy, for pathogen fighting defences and removing waste. Transport arteries in a city have similar functions. People and materials have to be conveyed in and out, police, fire fighters and ambulances need to be able to move around unrestricted and wastes and other products have to be transported away. The city suffers when its arteries become congested and sclerotic.

Sydney is showing signs of severe sclerosis. Traffic movement is noticeably congested and slower. During peak times traffic becomes gridlocked. It can take an hour to travel a few kilometres. Transport arteries have to be freed up.

Government responses to this imperative have been mostly negative or inadequate. The Wran government sold off allocated transport corridors. Arterial road initiatives by subsequent governments such as the M4 and M5 were built with insufficient capacity and soon became overloaded.

The new initiative, the CBD Eastern Suburbs Light Rail project at a now estimated cost of \$2.2 billion. Will this improve overall transport in Sydney?

The history of this project is not encouraging. The initial objective does not appear to have been transport improvement but rather a long-standing attempt by Sydney Lord Mayor Clover Moore to force cars and trucks off the road. Car free streets populated by light rail, bicycles and pedestrians were envisaged between Circular Quay and Central railway station. How travellers from elsewhere were to get to the route to utilise it was never thought through. Ultimately the State Government agreed to this proposal, and in an attempt to make it more viable, decided to extend it to the south-eastern suburbs.

How does the project now stack up? Cars cannot just be forced off the road. They are an important part of our standard of living and contribute enormously to the productivity of our economy. Public transport cannot go from everywhere to everywhere and a degree of personalised transport is essential. The Environmental Impact Statement (EIS) reveals that greenhouse gas emission difference per passenger kilometre between cars and public transport is surprisingly small. Even large cities featuring excellent public transport such as Hong Kong, Moscow and Tokyo experience severe traffic congestion and longer journey times to work than those experienced in Sydney.

The indicated performance in the EIS, in terms of passenger capacity, is way beyond any known light rail system and verges on the physically impossible without shutting down most of the non-light rail surface transportation system along the alignment. It will fail to relieve traffic congestion mainly because light rail lines do not have much record of ever achieving that, but also because the patronage projection appears impossible to achieve. Further, it could actually have a highly negative effect, because operating a rail line with 67 metre long vehicles as frequently as

proposed would severely limit the movement along, and particularly across, the light rail corridor.

As the project will significantly hinder existing transport facilities it seems that \$2.2 billion would be better spent on alternatives. This necessitates a system on a different grade, such as driverless underground heavy metro-style rail. In addition to the advantage of not interfering with existing traffic, metro rail trains have four times the passenger carrying capacity of light rail units. The difference becomes much larger when one takes into account light rail delays caused by cross pedestrian or vehicular traffic in its path. Underground metro rail would avoid additional significant negative above ground impacts associated with the light rail project such as reduced accessibility of homes, businesses, parks and other facilities along the route, the elimination of parking spaces and the cutting down of 760 street trees.

Metro rail possibilities that come to mind include

- a metro type subway under Pitt Street
- and/or subways extending the current system:
- from Central railway station to Kingsford along the proposed light rail route or
 - from Bondi Junction to Kingsford or
 - from Green Square to the south eastern suburbs.

As with the light rail proposal, these possibilities will considerably reduce the number of buses required to travel into the CBD.

Each of these metro rail options, while probably costing about the same as the light rail proposal, would be much more beneficial than a traffic-blocking light rail scheme. Each would enable more people and freight to be effectively delivered than the light rail scenario. Of course, measures would still have to be taken to reduce car traffic on congested routes, such as perhaps utilising a GPS-based congestion pricing system to charge for road use.

Sydney requires healthy arteries, not Dinky Toy projects to appease posturing politicians.