Solutions that land us in a fix

Building new roads is not the answer to sustaining the number of vehicles in the Klang Valley

THE number of vehicles in this country has increased tremendously over the past two decades. Based on statistics from the Transport Ministry, the figures quadrupled from as little as 5mil in 1991 to 21.4mil in 2011, with an average annual growth rate of 7.5%.

This growth is 3.3 times faster than the growth of population. The growing urban population and increasing household incomes have led to a rise in private car ownership in Malaysia. Furthermore, private cars in Malaysia are more reliable than other transport options. According to the Road Transport Department, about 48% of registered vehicles in the country are private cars and, in the Klang Valley alone, the number of private cars is currently 3.2mil and this is expected to reach 7mil by 2020.

Will the Klang Valley be able to sustain those 7mil private cars? Something must be done to reduce the volume of, or reliance on cars to make our transport systems sustainable. An obvious way to do this is to turn drivers into public-transit passengers. This is easy to advocate but challenging to accomplish, because the same forces that have made increased transit use urgent and necessary in Malaysia have also made it extraordinarily difficult to succeed.

Despite the Government’s initiatives since the mid-1990s to restructure the public transport system in the Klang Valley, Kuala Lumpur has one of the lowest public transport passenger levels in Asia. The Finance Ministry’s Economic Report 2011/2012 revealed that public transport usage in the Klang Valley declined from 20% in 1997 to 12% in 2008. The report also said that in 2010, only about 1.24 million trips each day were completed using public transport, with about 6mil trips made using single-occupancy vehicles.

The situation is especially concerning when comparing public transport usage in the Klang Valley with cities such as Singapore, Hong Kong, and London, where the proportion of public transport trips is 64%, 74%, and 90%, respectively.

So, why has Malaysia failed where others have succeeded?

In his book Green Metropolis, American author David Owen highlights elements that have made New York’s public transit system the most successful in the US and these elements are required to make any transit system successful. Owen said the most significant element in determining the viability of any transit system was population density.

When a certain density is reached, more people tend to walk and cycle, make less trips by private cars and use the transit system more.

Building houses on half-acre lots, or office buildings 150m from the road with a parking lot next to it will not encourage people to use public transit. As Owen said, “You can’t have successful transit if you create an environment that doesn’t support it.”

The second element is a lack of pleasant alternatives. According to Owen, New Yorkers use the subway not because they are more environmentally friendly but because owning and driving a car in the city is almost ridiculously horrible. Traffic congestion is common in the Klang Valley and the major roads surrounding the city centre are nearing usage capacity and land scarcity hinders the building of more roads and parking facilities.

Most of us view such conditions as an urgent environmental problem, since cars contribute to carbon pollution and global warming.

But traffic congestion can actually be beneficial, environmentally, because it urges drivers either into the public transit or onto the sidewalks.

Reducing congestion increases the productivity of solo driving, and that increases the incentive to drive. Hence, making cars more attractive than transit would be a loss for the environment.

In Malaysia, millions of ringgit have been spent to build a public transit system with an integrated rail network and one of the longest automated driverless metro systems in the world. More money was then spent to urge commuters to use it.

This itself is not a bad idea but the problem starts to appear when officials negate their own efforts to increase public transit usage by simultaneously spending millions to make it easier for people to get around in cars.

Our standard response to crowded streets or highways is to treat the congestion rather than the driving. We create additional capacity by building new roads or widening existing ones with new car lanes. But this only solves the problem temporarily as the new lanes only promote additional vehicles on the road.

Widening roads makes traffic move faster in the short term, but the improved conditions eventually attract additional drivers and entice current drivers to drive more, and congestion reappears. Because there are more cars, people then start thinking about widening roads again, and the cycle goes on.

There is no point in promoting new transit plans by relieving traffic congestion that ends up improving the lives of those who continue to drive.

What New York has done is the opposite. New transit is accompanied not only by population density sufficient to support it but also by a reduction in road capacity by steadily removing driving lanes while maintaining congestion at levels that drivers find troublesome, thereby giving them an ongoing incentive to embrace alternatives.

In the Klang Valley, although many urban areas are dense enough to support efficient public transit systems, they are often accompanied by eliminating diversity through elimination of other land uses such as commercial units and light industrial units in the development, forcing residents to travel further for commercial needs and work.

The mixed uses at the neighbourhood are actually part of the reason why residents walk, cycle or make shorter trips.

To have an environmental value, new transit has to be backed up by something that impels complementary reductions in car use. For instance, the physical elimination of traffic lanes or the conversion of existing roadways into bike or bus lanes, ideally in combination with higher fuel prices, parking fees, and tolls.

Needless to say, those ideas would invite an unwanted “disaster” in our country. But Owen argued, “They’re necessary, because you can’t make people drive less, in the long run, by taking steps that make driving more pleasant, economical, and productive.”

More concerted and intensified efforts need to be carried out to further increase the modal share of public transit to 50% from 18% and place Kuala Lumpur among the top 20 livable cities by 2020, as outlined in the Greater KL National Key Economic Area (NKEA).

Building a gorgeous transit system is not enough to make people use it in large numbers. If the local population is too spread out to be served efficiently and cost-effectively by transit, and if driving remains an acceptable alternative, then transit never achieves the ridership levels that were predicted for it.

Dr Zalina Shari is a board member of the Malaysia Green Building Confederation (MGBC) and a senior lecturer at the Faculty of Design and Architecture in Universiti Putra Malaysia (UPM). She is passionate about sustainability education as understanding and experiencing solutions will help to build critical mass of people that can make the difference our world needs.