

This past June at the Rio+20 United Nations Conference on Sustainable Development, multi-lateral development banks committed US\$175 billion for sustainable transportation over 10 years. Sustainable transportation has the capability to support sustainable development and enhance the quality of life in urban centres, such as reduced energy use and GNG emissions, improved access to goods and services, and safer roads. The transformation of public transport or transit is a major tool in this regard.

Forward thinking societies have embraced this opportunity through (1) leadership in encouraging sustainable high quality living through a vision of maximizing road space for people instead of for cars; (2) appropriate national transport policies; (3) commitment to invest in the correct kinds of projects, such as transit, and land use integration; (4) public education of the benefits of sustainable transportation; and (5) sharing of knowledge by States that have implemented successful strategies.

Last week, I suggested renaming of buses, including maxi taxis, which are closer in size to buses than they are to taxis, in order to facilitate the establishment of a correct context for the development and management of national transit. In addition, a fundamental component for promoting transit use is organizing preferential treatment for buses. *“Equal treatment of all vehicles in streets—including public and private, high and low quality capacity, passenger and freight—is an illogical and inequitable anachronism that often results in increased cost and travel time to all participants in urban travel. An extremely important but often ignored fact is that the purpose of passenger transportation is to move people; movement of*

*vehicles is a means toward that goal but not a goal in itself. Furthermore, it is always desirable to perform a given amount and quality of transportation by a minimum number of vehicles..In addition to this, public transport should be favoured over private because it provides a basic transport service to the entire population, it is more economical, and it has much lower negative side effects per person-km.”* (Prof. Vukan Vuchic, 2007, *Urban Transit Systems and Technology*, p. 240).

Dr. Vuchic is Foundation Chair Professor of Transportation Engineering, Department of Electrical and Systems Engineering, as well as, Professor of City and Regional Planning at the University of Pennsylvania. He has been consultant on many projects including, the Bay Area Rapid Transit (BART) in San Francisco, where he has been consultant in operations and planning from 1991 to present; the Washington Metropolitan Area Transportation Authority (WMATA), 1998 to 2002, and various transportation planning projects, peer reviews and consultant to mayors in Belgrade, Caracas, Edmonton, Lima, Manchester, Mexico, Naples, New York, Perth, Phoenix, Rome and Toronto. He has been a long-serving advisor to the Singapore Government, and the nation is considered the paragon of public transport in the world.

Professor Vuchic has been a partner with my firm’s consulting team on previous projects.

The effectiveness of bus preferential treatment is the level of competitiveness of transit with respect to auto. Exclusive bus lanes provide the highest transit advantage, while mixed traffic lanes provide the least, with High Occupancy Lanes (HOV), somewhere in between, depending on the HOV arrangement.

One of the most difficult obstacles to overcome is the perception that road space is more effectively utilised by permitting more access by vehicles, without an understanding or care that it should be more people in the vehicles per unit of road space. The result is that the public and consequently the decision-makers usually oppose dedicated bus lanes, as they are seen as a waste of valuable road space.

How does one determine whether a bus lane is justified? According to Vuchic (2007, p. 245), it is *“...when buses carry as many people as autos carry per lane in the remaining lanes.”* He suggests that the easiest introduction and most effective operation of bus lanes is on streets that have three or more lanes per direction. He adds that even where only two through-lanes are available, one can be reserved for buses; the other traffic has one lane and in the incidence of vehicle breakdown, the bus lane can be used to bypass the blockage.

Operations of the current three directional lanes of the north-south highway (Uriah-Butler) and the upcoming widening of the Solomon Hochoy Highway to three directional lanes should analyse the impacts of a dedicated lane for transit. The study would include (a) Which lane is for transit: outside lane or innermost lane? (b) Should the lane be physically separated from the other lanes, so illegal use will be impossible unless done at the start of the lane; and (c) Should the lane function as an HOV or exclusive bus lane?

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