## Thoughts and Facts on Traffic Congestion and Fixed Mass Transit

- "Traffic congestion is evidence of social and economic vitality: empty streets and roads are signs of failure."
- "Automobiles are central to metropolitan life and efforts to manage congestion must accept this fact."

Dr. Brian Taylor, UCLA professor of urban planning and Director of the Institute of Transportation Studies proposed these in his 1996 "Rethinking Traffic Congestion". I propose one more:

• "Congestion is a self-limiting problem. Perennial paralyzing traffic gridlock is a myth."

Taylor's first proposition means that a congested transportation system is indicative of a city that is a major activity center where much economic and social interaction takes place. Busy streets and ports are a byproduct of the high level of human interaction. We should be happy we live in vibrant city such as Honolulu.

Taylor's second proposition means that automobiles are tools people use to participate in all the activities that large cities have to offer and their use is the result of rational decision-making. When a segment of the Bay Bridge collapsed during the 1989 Loma Prieta earthquake, people switched to BART or other routes. However, soon after its reopening, traffic levels on the bridge returned to normal. Calamity did not have a lasting benefit on fixed mass transit.

Most large American cities have street capacities and residential neighborhood densities which are far different that those of most European and Asian cities. Failure to understand this as well as the utility of automobiles and the limitations of fixed transit leads to wasteful and ineffective actions to improve a city's transportation system.

Honolulu is built around the use of flexible transportation. Government policies foster urban sprawl and low density development in places such as Ewa Beach, Kapolei, Makakilo, Waikele, Mililani and Hawaii Kai. Most residential areas on Oahu depend on flexible modes such as private vehicles, buses and taxis for transportation.

The third proposition may go against short-term conventional wisdom, but it is historically undisputable. Modern American cities, many larger than Honolulu, were predicted to reach gridlock. That was in the 1970s and over 30 years later those cities have comparable congestion levels and in fact their congestion has improved on corridors with new highways – much like the reduction of congestion on Likelike Hwy. after the H-3 freeway opened.

Large cities have kept traffic congestion in check despite their marginal or failing fixed transit systems and the addition of several million in population. They did so by building highways and by using traffic engineering and demand management solutions along with the development of bedrooms and jobs in the suburbs.

Census data show that in 1995 the number of vehicles became equal to the number of drivers in the U.S. and vehicles have exceeded drivers ever since. The US reached automobile ownership saturation nearly 10 years ago. Automobile sales may be strong, but this only reflects the desire of people to own multiple personal automobiles tailored to their lifestyle. Each driver can only drive one vehicle at a time. The excess number of vehicles remains parked.

Plans for fixed mass transit projects as solutions to traffic congestion problems are unnecessary and threats of impending gridlock in Honolulu are improbable. They only help to divert efforts and resources from realistic and effective solutions.

Dr. Panos D. Prevedouros is Associate Professor of Transportation Engineering at UH-Manoa.

A list of his suggestions for reducing congestion on Oahu can be found at <u>http://www.eng.hawaii.edu/~panos/traffic2004.pdf</u>