

HONOLULU CITY LIES¹

Honolulu Department of Transportation Services Chief Planner Hamayasu's article is titled "The truth about rail, traffic and HOT lanes" but there is little truth in it. (Please see: <http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=/20061117/OPINION03/611170325/1110/OPINION>)

Mr. Hamayasu asserts that building the HOT expressway for about one billion dollars is a guess by non-engineers and that this estimate is totally inaccurate and unrealistic. He is flatly wrong because this estimate is supported by civil engineer Linda Figg, president of Figg Bridge Engineering and the company's chief bridge engineer Denney Pate, P.E. after both took a field tour of the proposed HOT expressway alignment on Oahu in mid-October 2006. The additional significance of these experts is that they designed Tampa's reversible expressway.

Then Mr. Hamayasu uses some Tampa numbers in attempting to show that the facility cannot pay for itself. However, his numbers are all wrong. The facility is beating forecasts. The people responsible for Tampa's expressway have already informed Honolulu's City Council that their expressway serves "approximately 75,000 trips a day and almost 80% of that traffic (over 50,000 trips) falls within the morning and afternoon peak hours."

The point of HOT facilities is not "to take the public for a ride" and become a cash cow for government or a private operator. But HOT lanes can definitely pay for a good part of their construction cost and all of their operational costs. Any rail system in the U.S. pays only a small fraction of the operational cost and none of the construction cost. In other words, all taxpayers are taken for a ride.

Two points about HOT lanes should be made clear:

- HOT lanes are primarily an express high-occupancy-vehicle and public transit carriageway with the ability to zip buses along (i.e., buses can travel 10 miles in roughly 10 minutes). Buses and vanpools use the facility free of charge at all times.
- The emphasis of HOT is not on T=toll. However, the toll enables the government or other project owner to sell unused space to low occupancy vehicles. Tolls can generate a substantial cash flow to pay for the facility. Also variable tolls enable the management of the facility to control the number of low occupancy vehicles on it to prevent traffic congestion.

For a three lane facility like Tampa's, over 4,000 low occupancy vehicles per hour can use the facility along with city buses, tour buses and vanpools. Over 5,000 vehicles per hour will vacate the H-1 freeway prior to its merge with the H-2 freeway. Mr. Hamayasu claims that this won't provide significant congestion relief. He is simply wrong.

One must be careful to design proper ramps for the HOT facility. In the City's Alternatives Analysis report the managed lanes HOT expressway has been "engineered to fail by design." It has too few ramps and it is abruptly terminated onto a surface street near a traffic light. In a proper design, the following ramps should be provided:

- A ramp near Pearl Harbor to serve the strong employment in the area.

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- A ramp into Aloha Stadium to serve events and use the mostly empty parking lot as a park-and-ride facility for express buses.
- A ramp onto Lagoon Drive to serve the airport and Mapunapuna.
- A ramp onto Waiakamilo Street to serve Kalihi.
- A ramp onto Nimitz Highway, at the point where it widens to four lanes, to serve Honolulu's center and points beyond. In addition a flyover to King St. or to Hotel St. (for *TheBus* only) could be considered.

The City's AA modeled a 2-lane reversible facility with three off-ramps: Aloha Stadium, Nimitz Hwy. and King St. (After reviewing the document, it is unclear how the King St. exit works since the City's design seems to terminate onto Nimitz Hwy.) It would be much better and the price would be only marginally higher if the facility was three lanes wide – it will still have the same footprint– and had five or six off-ramps. (Tampa's has a three lane mainline and six off-ramps.)

A properly designed HOT expressway for about one billion dollars will serve the same people who work in these areas, will allow them to use their preferred means of transportation, will allow them to park at their same spot (if they drive) and they will accomplish this in 15 to 30 minutes instead of 50 to 75 minutes in the morning.

If needed, for evacuations and emergencies, the expressway would provide fast access. Also connections can be engineered onto and from the H-3 freeway to aid connectivity and evacuations. The system can be a simple reversible operation: In-bound in the morning, and out-bound in the afternoon. However, it can also be managed flexibly by having the Aloha Stadium/H-3 freeway as the focal point in midday or weekend operations, so one side of the facility could go from Waikale to Aloha Stadium, and the other side from Iwilei to Aloha Stadium. This would provide a lot of flexibility to accommodate different needs. Contrast that to a slow train coming by every five minutes. What a waste of infrastructure!

Mr. Hamayasu's exaggerations about necessary street widening projects are entirely unnecessary. All we need is (1) for the city to provide enough resources including expert manpower to optimize traffic flow operations, (2) for the police to clear accidents efficiently and manage special events properly, and (3) to build a handful of grade separations similar to those in Singapore, Taiwan and Washington. D.C. to accommodate heavy flows that, even today cannot be accommodated by traffic signals during peak periods.

The following picture contains an approximate simulation of the town-bound H-1 freeway and the proposed HOT lanes for the section between Aiea and Iwilei. It would be of great benefit to them and the community at large if the City Council would grant us a couple of months and some funds (to the Civil Engineering Department at UHM) to provide specific answers as to the benefit of this facility using current traffic loads along with traffic load expectations from the City's Alternative Analysis.

Figure 1. Sample corridor from Aiea to Iwilei, with Managed Lanes.

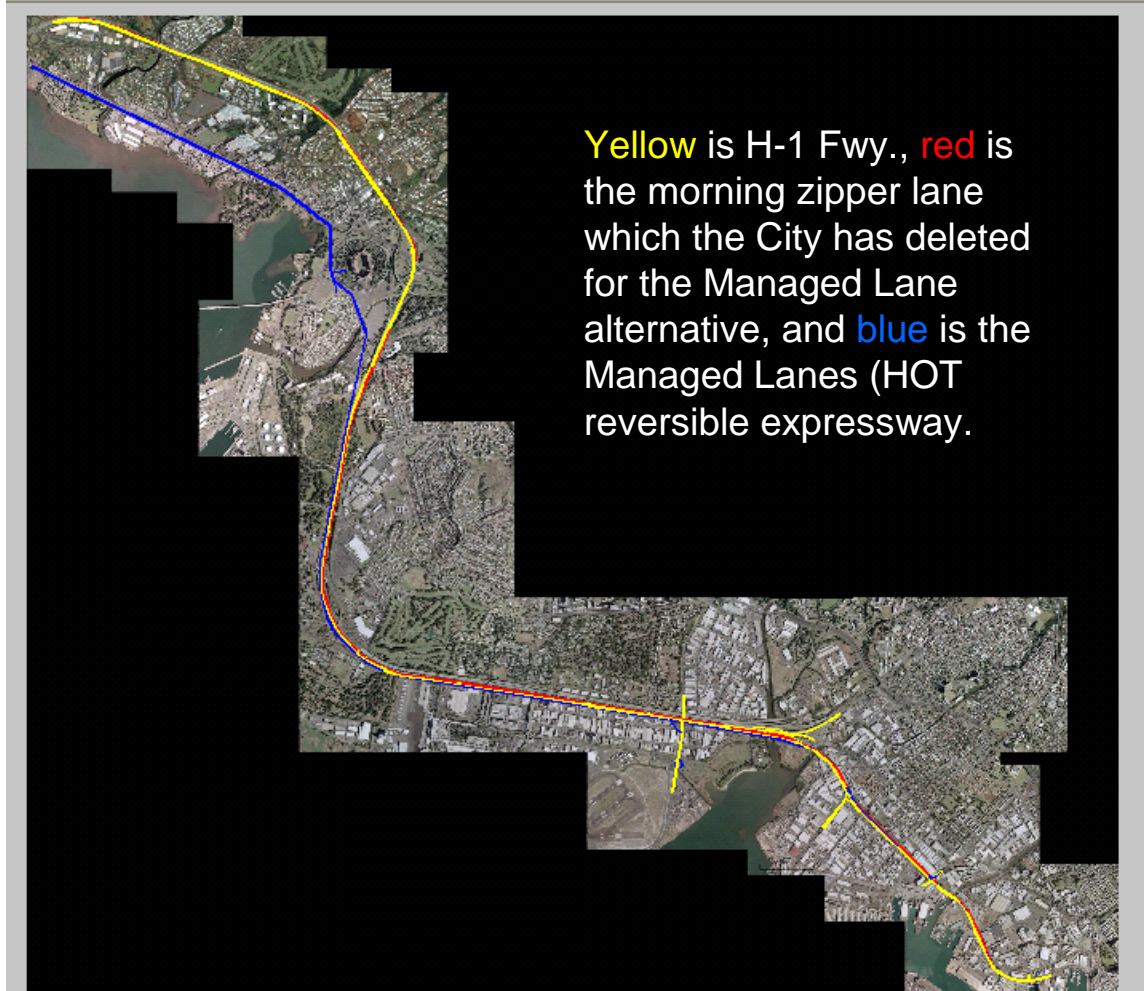


Figure 2. Sample off-ramp detail at Waiakamilo Street. In the afternoon, the same ramp in the median becomes the on-ramp.

