ATI The Alliance for Traffic Improvement

Seeking cost-effective ways to improve traffic congestion

The Case for HOT Express buses vs. rail transit

The Alliance for Traffic Improvement proposes a two-lane reversible highway operating between the H1/H2 merge in the Waikele area and Pier 16, near Hilo Hattie. It would have three or four entrances/exits at each end and be operated on HOT lane principles.

Let's explain what HOT lanes are and why they are so favored by the U.S. Department of Transportation.

- "HOT lanes" is the acronym for **H**igh **O**ccupancy/**T**oll lanes.
- "HOT Express buses" is ATI's term for buses traveling on the uncongested HOT lanes.
- Buses and other very high occupancy vehicles, such van pools, are given priority and are not charged tolls.
- Automobiles pay tolls for using the HOT lanes and these are collected electronically.

We believe that the flexibility of Express buses on reversible HOT lanes are a better alternative than fixed rail transit in the Leeward Corridor.

The map shows the proposed route of the HOT lanes and is almost identical in its alignment to that proposed for the "light" rail line except that the proposed rail line begins in Kapolei.

HOT lane tolls are changed every few minutes in order to modify the anticipated traffic load. The object of the toll is to manage the traffic so that the HOT lanes traffic always flow freely. Higher tolls discourage drivers from using the HOT lanes; lower tolls, on the other hand, encourage more drivers to use them. In this way, by varying the toll price, traffic on the HOT lanes is kept balanced and uncongested.

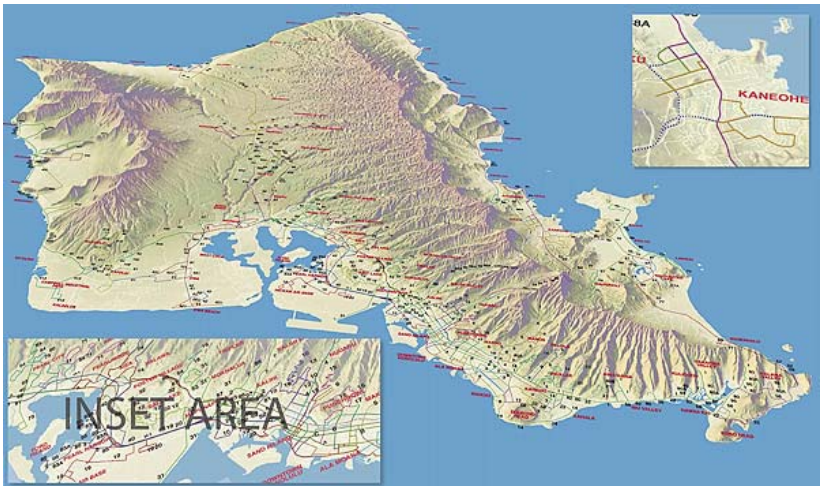
The picture to the left is a rendering of the Tampa, Florida, reversible tollway, now under construction and due to open in mid-2006. Note that it has three lanes and two safety lanes and is therefore wider than the two-lane highway we are proposing for Honolulu. Tampa, Florida, with a population three times our size, has no rail transit and instead is

building HOT lanes.

You will often hear that building highways does not work as they just keep filling up with cars. That, of course defies common sense, which tells us that if highways expand at the same rate as travel demand, then the prevailing congestion rate will stay the same. The TTI annual study says precisely that. **READ THEIR FULL STATEMENT.**

Rail proponents often talk of rail as a "high-capacity spine" for Honolulu. However, our bodies' spines only carry our nerve signals from our tail bone to our neck whereas most nerve signals travel from the brain all over the body and head to toe. And so, "spine" is a good analogy for rail's inability to offer riders complete trip without transfers.

On the other hand, HOT buses can be head-to-toe; they are far more likely to offer a door-to-door trip than can a fixed rail line. With HOT buses, you catch a bus in your neighborhood and the bus goes on the HOT lanes way at uncongested highway speeds all the way into town; it takes you where you want to go. No taking the bus to one end of the spine and then averaging 22.5 mph on the "snail rail" line to your destination station before you transfer from the end of the "spine" to a bus and then to your ultimate destination.



As you can see from TheBus map (click here for **a much larger version**), Honolulu has 4,200 bus stops all over the island, whereas the rail line will have only 19. Virtually everyone will have to use buses to get to the rail stations and most likely a bus to get from the destination station to the workplace.

Put another way: With the HOT lanes option, if you live in Mililani, you can take a HOT Express bus from neighborhood roads onto the regular H-2 freeway and transfer onto the HOT lanes in the Waikele area at the H1/H2 merge. From there you travel at 55 mph into town until you take the off ramp onto Nimitz Highway at Pier 16, where you can be dropped of at various bus stops throughout Honolulu. This is a faster option than the 22.5 mph "snail rail," offers fewer transfers, and does not require a tax. In addition, the space not occupied by buses and vanpools will be occupied by toll paying automobiles.

Consider the advantages of HOT lanes:

- HOT buses able to travel at 55 mph while on the HOT lanes will be a faster trip than rail with multiple transfers and a slow 22.5 mph average speed.
- By making their return trip on a relatively uncongested freeway, buses will be able to make two trips from Leeward communities in the time it presently takes to make one.
- Van pools will also be able to be far more competitive with the private automobile in both time and money cost.
- A large number of buses will be taken off regular highways and freeways.
- Over 4,000 automobiles an hour will be pulled off the regular freeways by using the HOT lanes; 3,000 automobiles an hour will pay the toll and 1,000 commuters currently driving will transfer to buses and other very high occupancy vehicles. This amount is significantly higher than was projected for the 1992 rail transit project.

And HOT lanes will not require the tax increase that rail transit needs for its very expensive construction and its operating losses.

The proposed reversible HOT lanes would cost $1.0 billion and are eligible for the same $500 million federal "New Starts" funding as a rail system. In addition, a further $200 million would be

raised for the HOT lanes by by selling the future stream of tolls, which is a normal procedure for helping to fund tolled highways. That leaves a net local funding of $300 million, which can be handled within existing tax collections.

And, while rail will increase public transit operating losses by $56 million annually (the 1992 plan projected $45 million, which, allowing for inflation would be $56 million today), the HOT lanes approach would cost far less than $10 million.

Rail proponents have desperately tried to reposition our proposal into a "light" rail vs. highways argument. However, the discussion should be quite simply whether buses on HOT lanes or rail transit offers the best alternative.

For further information about HOT lanes, use the following links:

"Lexus lane" argument | Tampa Expressway | Public Roads Magazine

www.valuepricing.org | FHWA's Guide to HOT lane Development

Reason Foundation on Transportation | Innovation Briefs | FHWA Report

San Diego and Houston

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