

Traffic Congestion, APEC, Hurricanes, Tourism, Energy.

How Will Rail and HOT Lanes Do for Honolulu?

◆ What would rail do for future major conventions like APEC, Asia Development Bank, etc.?

Nothing! Remember that the rail dead-ends at Ala Moana Center. Rail is promoted in order to create many temporary jobs. It won't be well used because the bulk of its ridership comes from deleted bus lines. Rail cannot even go next to the Hawaii Convention Center for security reasons. If there is a rail line next to HCC, then security-sensitive events cannot take place there, which defeats the purpose of HCC.

◆ What if we had HOT Lanes instead of rail?

High-Occupancy and Toll lanes (the toll applies to low occupancy vehicles) would be about 11 miles long, between the H-1/H-2 freeway merge and Iwilei with exits at Aloha Stadium, airport, Kalihi and downtown.

Tampa built elevated reversible toll lanes (town-bound in the morning, out-of-town bound in the afternoon) in six years for less than \$350 Million; it opened in 2007. Tampa's reversible express lanes (REL) solved a big part of its congestion problem for the same cost that Honolulu is spending on rail design and promotion.



With HOT Lanes, during major events such as APEC we would have problem-free travel between the H-1/H-2 merge and downtown regardless of H-1 freeway closures. There would be no visible blight because HOT Lanes run mostly next to H-1 freeway and terminate one half mile before the waterfront. As a bonus, HOT lanes have no part in the destruction of Aloun Farms and the prime agricultural land that is planned to become a ~13,000 residential Transit Oriented Development (TOD) in the Ewa plains.



◆ What will rail do for a hurricane over Oahu?

Rail will shut down. It's standard procedure. After hurricane Ike on September 13, 2008, Houston highways recovered in 2-3 days. It took its rail transit two weeks to operate fully.

In a hurricane or other major storm, HOT Lanes can be converted to a resilient backbone for emergency and special services only. HOT Lanes will be elevated for 11 miles so they won't flood or get clogged by debris. They can be designed with resiliency in mind so light poles and signs won't collapse

and block the roadway. They will aid in quick response and recovery for Oahu.

◆ What will rail do for Waikiki and Tourism? And the UH-Manoa?

Nothing. Rail dead ends at Ala Moana Center. Over one billion dollars will be needed to backtrack to Kapiolani Boulevard to get to Waikiki. Rail will permanently blight the Convention Center and the spine of Waikiki: With the elevated rail and stations, sun will barely reach Kuhio Avenue.

Rail to the UH-Manoa is another one billion dollar waste without justification. UH-Manoa is in full session only 150 days a year. The rest of the time it's in summer session, final exam weeks, breaks, holidays and weekends. How does one justify one billion dollars for such partial usage?

In contrast, a substantial portion of traffic from the H-1 freeway will divert onto the HOT Lanes (e.g., similar to the relief of Likely Highway traffic congestion by the opening of the H-3 freeway.) This will result in less congested travel to Waikiki and UH. With HOT lanes traffic on H-1 freeway will be as if UH is in recess permanently.

◆ What will rail do for Climate Change?

It will promote global warming. The Final EIS for the rail shows that the project will save 2,440 million British thermal units (BTU) of energy each day, or 610,000 million BTU per year, based on the City's rosy forecasts of ridership. On the other hand, the rail's guideway and station construction will require 7,480,000 million BTU to be constructed. Dividing 7,480,000 by 610,000 gives 12 years. These 12 years are a major understatement because Hawaii's vehicle fleet is much smaller in engine size (more economical) than mainland fleet and the adoption of hybrid and electric vehicles is vastly larger on Oahu. In addition the national averages are based on low vehicle occupancy, whereas Oahu has among the highest transit and carpooling rates, so BTU per passenger mile is way lower on Oahu than on the mainland. Also as mentioned, City's ridership forecasts are exceptionally optimistic.

The City's BTU savings estimate may be wrong by a factor of 3 or larger, so it will take 30+ years for rail to "make up" its construction energy consumption. Before break-even is reached, rail will need multiple component replacements, repairs and refurbishments. In a decade, rail will be absurdly un-green compared to 3rd generation plug-in hybrid cars.

In contrast HOT Lanes reduce congestion and fuel consumption. HOT Lanes can promote green technologies by having a reduced or zero toll for electric vehicles. Their pavement can be retrofitted with conduit for contactless battery recharging for hybrid buses and electric mini-buses. HOT Lanes are in large part transit and high-occupancy vehicle facilities. Some call them "virtually exclusive busways" because they are built to serve express buses and vanpools, and the excess capacity is then sold to lower occupancy vehicles through a toll charge.

Hannemann used some retired directors of transportation to convey the message that "we can't build any more roads on Oahu." Nothing is further from the truth. The proposed HOT lanes will be about 33 lane miles in total size including their shoulder lane. In the last 10 years, over 100 brand new lane miles of highways were built on Oahu, such as Kalaniana'ole Highway widening, Ft. Weaver Road widening, North-South Road, and two large freeway interchanges and new streets in Kapolei.

HOT Lanes with their intelligent management center, automatic reversibility to serve morning and evening traffic, accommodation for hi-tech cars and buses would be a prime technological demonstrator for traffic-clogged cities in Asia. In contrast, nobody from Asia would visit Honolulu to learn from its archaic and noisy steel-on-steel elevated rail.

◆ What do they Cost?

Costs are a "moving target" because they are affected by final design, energy and materials pricing, etc. The HOT Lanes should cost under \$2 Billion and the Rail will cost over \$5 Billion.

Significantly, the HOT Lanes can be done in large part with private investment funds leaving the taxpayer with a less than \$1 Billion tax liability. In contrast, all of the rail's cost of \$5+ Billion is taxpayer funded. Most HOT Lanes in the United States were built as Public-Private Partnerships with shared investor-taxpayer risk.

Rail's construction cost will be followed by huge taxpayer financed subsidies which if operation, maintenance and equipment replacement costs are totaled would be over \$250 Million per year (forever.) In contrast, the operating costs of the HOT Lanes are relatively minimal, e.g., similar to those for the H-3 freeway.