

The Ho'opili TIAR is Unacceptable

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A critical element in approving any land use changes is the **Traffic Impact Analysis Report** or TIAR. The Friends of Makakilo and Save Oahu's Farmlands Alliance asked me to review B. R. Horton's TIAR submitted to the state's Land Use Commission (LUC) as part of the process for obtaining the approval to convert prime agricultural land to a residential development.

Let me quickly dispense the argument that my review of the Ho'opili TIAR may have been biased by the fact that Ho'opili contains two rail stations and is being billed as an exemplary Transit Oriented Development (TOD) of the proposed rail which I oppose.

The TIAR shows that Ho'opili's transit trips are modest. If 50% of transit trips are made by rail, this results in 166 riders in the AM peak hour -- two bus loads and that's it:

- Ho'opili does not work for rail proponents because it generates *manini* ridership.
- Ho'opili does not work for rail opponents because deleting it does affect the projected rail ridership substantially.

The first phase of Ho'opili barely justifies a basic bus service and the full development may benefit from limited express bus service. But as a ridership generator for rail, it is worthless, as all suburban TODs are. Suburban development and rail never go together.

Now back to the TIAR and why LUC should reject the petition on the basis of an inadequate TIAR alone.

“The planned year 2020 level of development is expected to occupy approximately one third of the total Ho'opili project site” stated on page E-2 is a hugely important statement. This means that **all outcomes presented in the TIAR are only 1/3 of the whole**. This is a “salami tactic” to get Ho'opili going without any disclosure of its total effects. A whopping **67% of the Ho'opili's total effects are nowhere to be found**. Therefore, this report should be deemed UNACCEPTABLE without at least an illustrative (approximate) full build-out scenario along with mitigations and final impacts. These numbers are simply “cheating” both decision makers and the community as they omit 67% of the potential impacts.

In the study's Methodology for Freeway and Junction Analysis, the “... operating conditions were evaluated using the HCM 2000 methodology.” The current version is HCM 2010, but that's a minor problem. HCM is not an appropriate tool for this application. The Federal Highway Administration (which has H-1 Freeway oversight) does not recommend such simple models for complex corridor and freeway analysis because they ignore congestion effects. The freeway operations in the Ho'opili area are dominated by the H-1/H-2 merge and other secondary bottlenecks. The TIAR's segment by segment freeway and ramp analysis is entirely inappropriate. Also the H-1/H-2 merge is totally absent, therefore the presented results are UNACCEPTABLE.

The TIAR preparer assumed that Ho'opili will adopt a Traffic Demand Management composed of nine (9) major actions such as extensive biking, carpooling, tele-work, etc. Absolutely no other place in Hawaii has any four of these nine TDM actions occurring at the same time so at best this is a pie-in-the-sky assumption that artificially reduced the traffic impact of Ho'opili.

The TIAR preparer claimed that the Oahu MPO planning model allows them to take an up to 30% trip reduction due to the integrated character of the Ho'opili community. However, there is no proof that this is a valid or prudent assumption. I cannot think of a more integrated community on Oahu than Kalihi. Arguing that Kalihi folks make 30% fewer trips is baseless and likely wrong. These multiple traffic reductions make the assessment of Ho'opili's traffic impacts.

The freeway mitigations shown in the study are localized band aids and none of them address the merge of the H-1 and H-2 freeways. Worse yet, I note that the furthest downstream section of their mitigations is always a 3-lane "choker" so all these actions actually force more traffic flow onto bottleneck sections. The proposed freeway mitigations are UNACCEPTABLE.

The LUC Docket A06-771 "2020 TIAR" that I reviewed includes over 300 pages of computer traffic analysis output. All of it with simple Equation Type models, which are inappropriate for congested freeway corridors, as mentioned above. What I found surprising is that the memo for freeway analysis relating to Ho'opili agreed upon by State DOT, and two consultants of B. R. Horton is dated October 9, 2009 but nearly all of the computer outputs were dated August 20, 2009. So: (1) Freeway and ramp analysis was done before the State/Developer MOU, and (2) This TIAR is stamped "April 2011 update" but the traffic analyses are from summer 2009.

The TIAR states that "neither the City and County of Honolulu nor the State of Hawaii have guidelines for identifying the transportation impacts caused by the project." This is a sad statement for our city and state and it is true. Solid technical criteria for the judgment of properly quantified traffic impacts are absent. Therefore, developers hire consultants to present a picture of the impacts and then government and top level decision makers arrive at an ad hoc determination about what's wrong with the picture, if anything. This simply perpetuates arbitrary, capricious and favoritism-prone decision making.

Regardless of the lack of City and State criteria, the outputs of this analysis are by and large worthless. The report describes the 2020 plan with only one third of Ho'opili developed. **The partial and biased TIAR using questionable methodology should be found UNACCEPTABLE for permitting the conversion of prime agricultural land to any other land use that obliterates the current active agricultural use of the land.**