

The City must stop saying “Light Rail” when the correct term is “Heavy Rail”

A Google search (“light rail” Honolulu) yields 92,500 returns. The use of “light rail” to describe the Honolulu proposal has become ubiquitous despite the protestations made by honolulutraffic.com.

“[Slater] calls the 1992 proposal a heavy rail project. Typical Slater fudging. It was light rail by any industry standard. Ask the real experts. Check the newspaper clippings.” [Letter to the Editor, Bill Brennan, Mayor’s Press Secretary, August 10, 2005.](#)

The following American Public Transportation Association (APTA) definitions are at:
<http://www.apta.com/research/stats/rail/definitions.cfm>

Heavy rail (metro, subway, rapid transit, or rapid rail) is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from which all other vehicular and foot traffic are excluded; sophisticated signaling, and high platform loading. If the service were converted to full automation with no onboard personnel, the service would be considered an automated guideway.

Light rail (streetcar, tramway, or trolley) is lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

The following Federal Government definitions are at:

http://www.fta.dot.gov/printer_friendly/index_4414.html

Heavy Rail

Heavy rail service is characterized by high-speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed electric rails; separate rights-of-way from which all other traffic is excluded; sophisticated signaling, high platform loading and a heavy passenger volume.

Light Rail

Light rail is an electric railway with a lighter passenger volume compared to heavy rail. Passenger cars operating singly (or in short, two-car trains) on fixed rails in shared or exclusive right-of-way, low or high platform loading characterize light rail service. The vehicle’s power is drawn from an overhead electric wire.

Note that light rail (**streetcar, tramway, or trolley**) is characterized by an overhead electrical source and a lighter passenger volume neither of which characterize the Honolulu project. Heavy rail (**metro, subway, rapid transit, or rapid rail**), on the other hand, has high-speed, heavy passenger volumes and separate rights-of-way, all of which do characterize the Honolulu project.

Attached are four pages from the Federal Transit Administration’s *Characteristics of Urban Transportation Systems*. Available at: <http://ntl.bts.gov/lib/6000/6600/6613/Characte.pdf> Tables B2, B3, B5, & B6.

The first two pages show the average speeds for both light and heavy rail lines. The light rail systems all show average speeds of less than 20 mph. Heavy rail lines, on the other hand, all show average speeds greater than 20 mph. The average for all heavy rail system is 30 mph. The City’s Requests for Information (RFI) (at: www.honolulutraffic.com/RailRFI.pdf) require speeds such that the train can travel 20 miles in forty minutes, or 30 mph.

Tables B5 & 6 also review peak hour light and heavy rail passenger volumes. Light rail volumes are all less than 7,000 per hour except for two pre-1960 special situations. Heavy rail volumes are nearly all in excess of that. The RFI requires 9,000 passengers per hour peak hour.

Clearly, Honolulu's proposed rail line is "heavy rail," not "light rail."

The clincher that the city is aware of "light rail" being an invalid use of the term is that nowhere in any federally approved document produced by the city, such as the Alternatives Analysis series, does the city refer to it as "light rail" — only to Hawaii residents.

In 1991, when Councilmember Gary Gill got his first look at what we were actually going to get when the spin was all over, he cried, "My God! It's a train; a Godzilla of a train." Of course, it was a train just like this one would have to be a train — a heavy one.