

Civil Beat Question #2. What are the five best reasons to support or oppose the project? Please explain each reason.

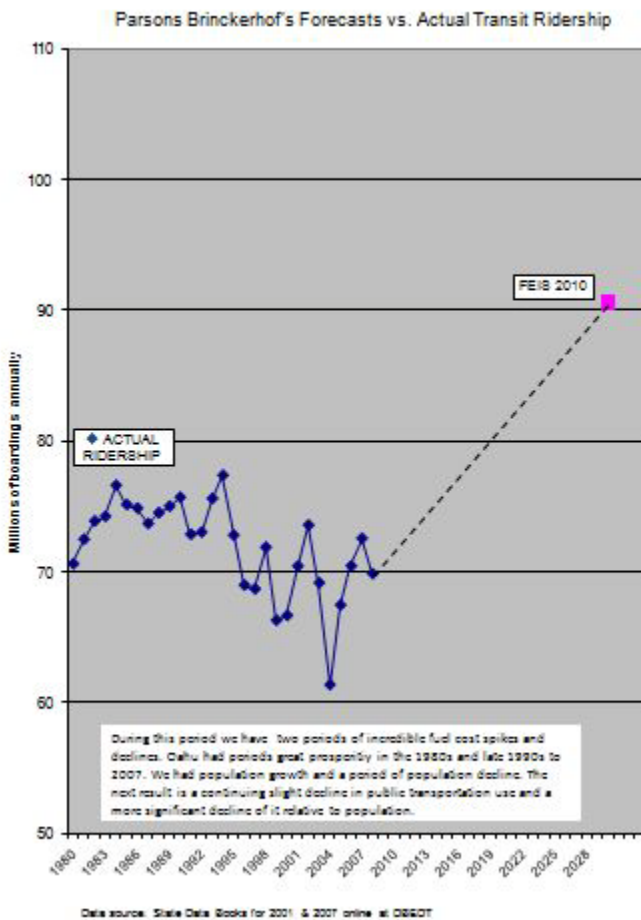
The five best reasons to oppose the project are a) the Final EIS is not credible, b) the elevated railway costs are too high for a city our size, c) a lack of benefits accruing from it, d) the visual and noise blight that would result, and e) building rail precludes spending on other alternatives.

a) The Final EIS is not credible.

The single most important reason to oppose constructing the rail line at this time is that the material presented in the Final EIS is not credible.

Ridership forecasts. In its response to our comments on the Draft EIS, the City says, “Honolulu transit ridership has grown over the past several years ...” This is, of course, nonsense. As can be seen from the graph, ridership peaked in 1984 after being socialized in 1972, and since then it has it ups and downs but is down about five to ten percent.

The Final EIS includes a No Build Alternative “to provide a comparison of what future



conditions would be if the [rail] Project was not implemented.” In short, this alternative is that we keep on doing what we have been doing.

The City forecasts ridership for the No-Build Alternative as 25 percent greater in 2030 than in 2007. (1992 Final EIS, p. 4-10

It should be noted that the 1992 Final EIS for rail projected a 21 percent increase in the No Build for 2005 and instead experienced a seven percent decrease.

The 2003 Final EIS for the BRT project projected No Build ridership increasing at 1.4 percent annually (FEIS p. 4-11) from 2002 levels of 73.5 million. By 2008 ridership had declined to 69.8 million. The City has withheld reporting its ridership data for 2009 and 2010.

What is most annoying is that PB Americas is fully aware of public

transportation's declining market share both locally and nationally. No metro area in the nation has maintained market share over any 20-year period despite vast subsidies spent by federal, state and local governments. Yet PB continues to forecast maintaining or increasing the No-Build market share for Honolulu even though we have had declining market share for nearly 30 years.

Projected energy savings. The Final EIS wants you to assume that there will, of course, be energy savings. This is highly unlikely. There are two kinds of energy usage: That used in rail construction and that

used in the daily operation of rail transit.

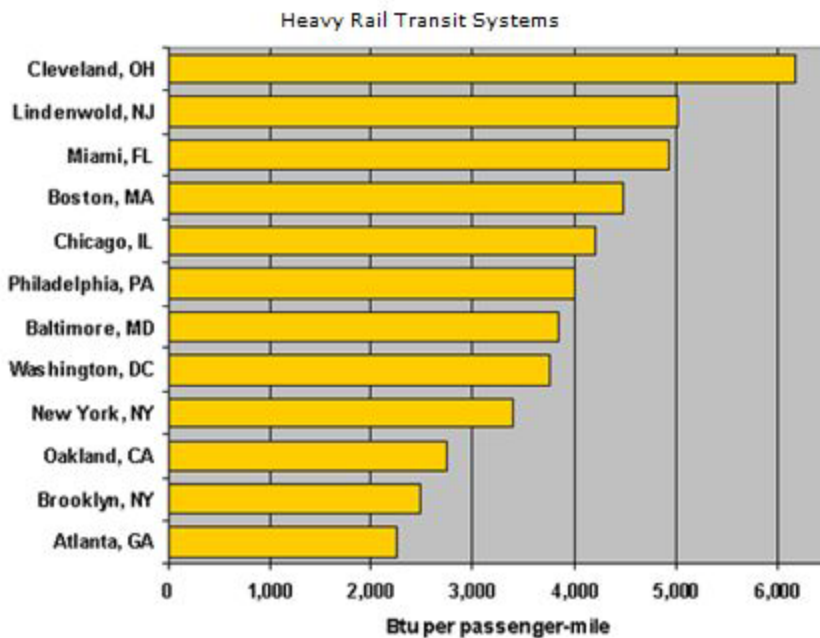
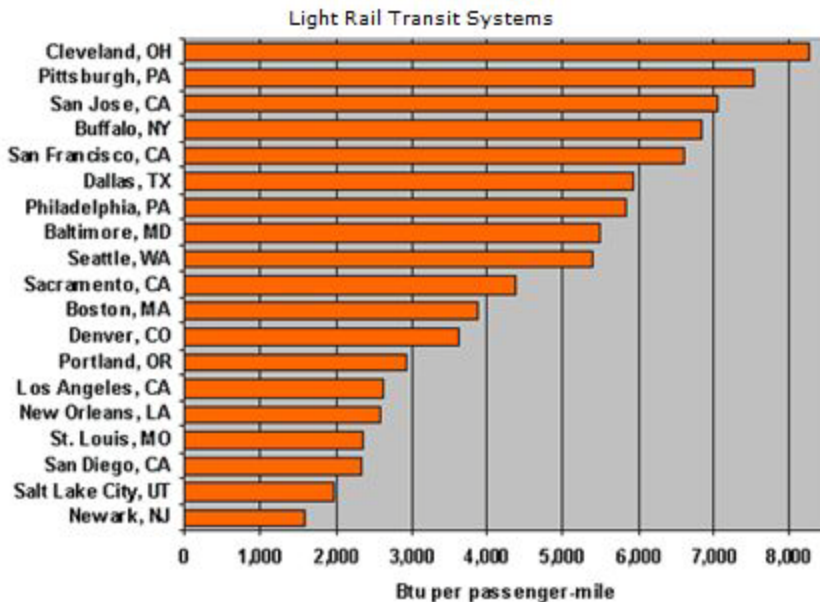
For daily usage the City is relying on industry averages. When the City relies on industry averages, distorted by some lines heavy mileage and energy efficiency, it provides a totally different result than when the individual transit lines are examined.

The individual lines clearly show that the average rail line has energy usage per passenger mile greater than the 3,514 Btus for the passenger car (source: U.S. Department of Energy Data Book, Table 2.13).

The U.S. Department of Energy has elaborated on this stating,

“Because of the inherent differences in the nature of services, routes available, and many

additional factors, the energy intensity of transit rail systems can vary substantially among systems. The charts below show that for 2000, light rail systems varied from 1,600



Btu per passenger-mile to over 8,000 Btu per passenger-mile; energy intensity for heavy rail systems ranged from 2,200 to 6,200 Btu per passenger-mile.” [U.S. Dept. of Energy: Fact #221: June 17, 2002](#)

The Final EIS makes no attempt to make the case that the Honolulu line would have energy savings from operations. Its operations would be heavily peaked, with full trains running into town in the morning rush hour, and empty when returning, with the opposite true in the afternoon rush hour. There would be light use during the rest of the day. Such operations rarely lead to energy efficiency; energy savings result from heavy use in both directions as seen in the world’s larger rail systems.

In any case the overriding consideration is the energy used in rail’s construction. The City details in Table 4-21 of its Final EIS that the rail project will save 396 million British thermal units (BTUs) of energy each day, or 144,540 million BTUs per year. Even if you buy that, Cato Institute's Randal O'Toole points out that page 4-206 of the FEIS says project construction will cost 7.48 trillion BTUs. That means it will take 52 years of savings to pay back the energy cost. Long before 52 years are up, huge energy investments will be needed to replace rail cars, worn out track, and other infrastructure. So there is likely no net energy savings.

Population forecast. We believe the City may have deliberately avoided using the latest state population forecasts, which were available to them in August 2009 and which had significantly lowered the population forecast for 2030. We believe they may also have avoided the tables showing population by age group, which shows that the commuting group, those aged 20-64, declines from 2005 to 2030.

Obviously, totally different ridership and congestion data will result from computer models if both the latest population forecast is used for 2030 together with the age group data.

b) Costs are too high for a city our size.

Metro area	Rail Cost in \$billions	Population	Cost per capita	Population Ranking
Washington DC	\$18.2	5,358,130	\$3,403	9
San Francisco	\$13.3	4,274,531	\$3,107	13
Los Angeles	\$12.3	12,872,808	\$953	2
Honolulu	\$5.3	905,000	\$5,875	55
Atlanta	\$4.2	5,376,285	\$779	8
Dallas	\$3.6	6,300,006	\$565	4
Portland	\$3.0	2,207,462	\$1,345	23
Seattle	\$2.9	3,344,813	\$857	15
Baltimore	\$2.7	2,667,117	\$1,015	20
Miami	\$2.0	5,497,709	\$365	7

The \$5.5 billion cost of rail, before cost overruns, is out of all proportion to any metro area our size given due regard to Oahu's relatively high public transportation ridership and relatively high population density.

The Cato Institute's Randal O'Toole has produced a well-documented list of all urban rail lines, both heavy and light rail, built in the U.S. since World War II together with their capital costs, all shown in 2009 dollars.

This allows us to compare the Honolulu rail proposal's projected costs of \$5.3 billion with those of other U.S. metro areas. Bear in mind that the other cities' costs are actual, whereas Honolulu's is projected and cost overruns for rail projects are the norm with an average of 40.6 percent according to the FTA's own study.

Only three other metro areas have spent more than Honolulu intends to spend. They together with [their populations](#) are Washington DC, San Francisco and Los Angeles, all with far greater populations than Honolulu. We have included the nine most expensive metro area rail installations together with Honolulu's. Clearly the outlier is Honolulu with a cost per capita of population nearly double that of the next highest and several times that of the average, and that is before any cost overruns.

The costs for rail are irresponsible, in total and for size of community.

c) Lack of benefits.

The City forecasts that the elevated railway will increase person trips by public transportation from six percent of all trips to seven percent.

According to the City, we currently experience 71,800 vehicles hours of delay (VHD) and that will increase if we do nothing (the No-Build Alternative) to 104,700 VHD by 2030. If we build the rail line it will reduce VHD by 2030 to 85,800, an 18 percent reduction from the No-Build but a 20 percent increase from today's level. This is not good enough since the 75 percent of trips by motorists will still result in a 20 percent increase in vehicle delay. The Managed Lane Alternative will do better for both transit users and motorists.

d) Visual and noise blight

At the heart of this issue is that of the environmental harm of an elevated rail transit line thirty feet wide at an average of 35 feet elevation accommodating trains every 1½ minutes (three minute intervals in both directions) during the peak commuting time and three minutes at other times traversing the entire center of urban Honolulu including the waterfront.

The effect of elevated rail on the built environment has not been adequately addressed in the Final EIS. The following requirement that there be discussions about the built environment is not fully addressed.

Shall include discussions of ... Urban quality ... and the design of the built environment including the reuse and conservation potential of various alternatives and mitigation measures.¹

¹ CFR1502.16(g)

Many environmental organizations have gone on record as being opposed to such an elevated structure. The following are some quotes from their recent statements on elevated rail:

Outdoor Circle: *The lack of specific descriptions of how to overcome the visual misery that will be heaped upon the O'ahu landscape leaves our organization with little confidence that damages to the visual environment can or will be mitigated as the project moves forward ... Of equal concern to The Outdoor Circle is the pending fate of literally hundreds of street trees. Honolulu has fostered a worldwide image of being a city full of beautiful trees. It's an important part of Honolulu's appeal to both residents and visitors ... The Outdoor Circle believes the City has deceived the public about the visual impacts the project will have on our communities and our quality of life.*

Historic Hawaii Foundation: *The proposed Honolulu Transit Corridor project will have a dramatic impact on the landscape of the island of O'ahu; this includes not only the direct impact to specific parcels, but primarily the visual effect on the landscape and historic resources. HHF is concerned that the Draft EIS does not accurately take into account these larger impacts, but rather focuses on those adverse effects caused by the direct taking of land.*



Hawaii's Thousand Friends: *Elevated fixed rail routes will negatively impact the established landscape of Honolulu and significant view planes makai to mauka ... The rail line will be the ugly and block views with concrete rail beds 30-feet wide supported by pillars that are 35-40 feet high and six feet in diameter spaced at 150 feet intervals.*

Hawaii Architects position: *... the proposed elevated rail structure will block mauka and makai view corridors particularly along Nimitz Highway through historic Chinatown and Downtown ... Elevated rail stations and structures along the waterfront will make a poor situation worse by introducing an additional physical and visual barrier ... We are concerned that the areas below elevated rail structures and stations will become blighted, "nuisance" environments and that the*

lack of natural public sightlines into stations will diminish safety and security for passengers waiting on platforms. The proposed elevated platforms and concourses will also impede convenient access for both able-bodied and disabled users.

The elevated rail violates the Oahu General Plan, which states, in part, that we must,

Protect Oahu's scenic views, especially those seen from highly developed and heavily traveled areas & Locate roads, highways, and other public facilities and utilities in areas where they will least obstruct important views of the mountains and the sea.

There has been inadequate consideration of the detrimental effects of elevated rail. What has happened in other communities that once had an EI, such as New York's 3rd Avenue EI? What are the detrimental impacts of the elevated sections of Miami's Metrorail and San Juan's Tren Urbano? What happened in San Francisco when they removed the Embarcadero Freeway segment?

e) Building rail precludes spending on other alternatives.

The costs of rail to local taxpayers will \$4 billion plus cost overruns. This amount, together with the EPA sewer settlement of \$7.2 billion (with inflation and financing), will take all the oxygen out of the air, so to speak. It will not allow real traffic congestion relief allowed by some of the following examples:

Freeway bottleneck relief projects. As an example, the projected widening of H-1 freeway at the Middle Street Merge area could lead to reductions of travel times of up to 20 minutes according to Hawaii DOT's Director Morioka.

Traffic signal optimization. Proper optimization and synchronization of traffic signals together with regular adjustments when sufficient traffic engineers are employed for the work involved could lead a reduction of in-town travel times of 30 percent or more.

Low height underpasses. Traffic in Honolulu can be reduced significantly by constructing a few key low-height underpasses for highly congested intersections. These underpasses have a limited height, usually at least eight feet high that allows for vanpools, automobiles, light to medium sized trucks, and vans to fit, but not taller vehicles. Lower height underpasses are much more compact and therefore easier and cheaper to construct in the limited space of existing intersections. (See Appendix A for greater detail.)