## Indicators of the impending shortfall in rail ridership

The City has grossly overestimated the ridership forecast for Honolulu rail. As demonstrated below, actual ridership is likely to be less than half the City's forecast of 116,300.

One of the primary assumptions in the City's ridership forecasts is that ridership increases with population growth. The proof of that is their forecasts for the No-Build Alternative, essentially TheBus, in their documents has always shown a 20-30 percent increase in bus ridership. That has never been the case either nationally or locally. In Honolulu, for example, while population growth over the past 30 years has increased by 25 percent, bus ridership has declined 11 percent. The peak year for transit use was 1986. <u>State Data Book</u>, (tables 18.25 & 1.06).

The FTA is <u>fully aware</u> (see also) of this fallacy of this through face-to-face and email communication with us. Given their acknowledgement and agreement about this fallacy it is incomprehensible why FTA allowed the City to get away with it in the Final EIS.

The City projects that the percentage of commuters using public transportation will increase from <u>6 percent to 7.4 percent</u> if rail is built. But the percentage use of public transportation by commuters in all cities with rail declined <u>between 1980 and 2000</u>, (Table 4.13) regardless of whether they had rail by 1980 or subsequently built rail. The sole exception was San Diego which built a rail line in 1981 and increased its percentage use from 3.3 to 3.4 percent.

The Washington, D.C., <u>Infrastructure Management Group</u> (IMG Rebel) reviewed the rail plan on behalf of Governor Linda Lingle and found that in comparing the City's ridership revenues against fare increases the City did not allow for the negative effects of fare increases. Using <u>the American Public Transportation Association's study of the relationship</u> <u>between fare and ridership changes</u> IMG Rebel suggests that the City's planned 35 percent fare increase in future years <u>would produce a reduction in ridership of approximately 12</u> <u>percent vs. the 11 percent increase projected.</u>

IMG Rebel points out that a <u>2007 Federal Transit Administration report</u> (p. 19) shows that overall rail ridership estimates were in error by an average of 40 percent. However, IMG Rebel notes that FTA found that new rail systems tend to have higher errors than extensions of existing systems. Actual ridership was 47 percent less than estimated for new rail projects, while extensions of existing projects were off by 35 percent. Honolulu's rail project would be a new rail system.

IMG Rebel concludes that, "Post-rail transit system usage and fare revenue are likely to be substantially lower than that projected in the current Financial Plan, since the Plan's

projection would require an unprecedented and unrealistic growth in transit utilization for a city that already has one of the highest transit utilization rates in the country."

All U.S. rail lines in MSAs of less than 4 million population					
City (MSA)	Population		Miles of	<b>Rides per</b>	riders per
	(millions)	Daily rides	rail	mile	million pop.
Seattle	3.7	41,000	20.4	2,010	11,081
Minneapolis	3.5	71,400	21.8	3,275	20,400
San Diego	3.3	123,300	53.5	2,305	37,364
Denver	2.8	76,600	48.0	1,630	27,357
St. Louis	2.8	47,600	46.0	1,035	17,000
San Juan	2.6	32,800	10.7	3,065	12,615
Charlotte	2.4	16,700	9.6	1,740	6,958
Portland	2.4	122,900	60.0	2,048	51,208
Pittsburgh	2.4	22,281	26.2	850	9,284
Sacramento	2.3	45,300	42.9	1,056	19,696
San Jose	2.0	33,400	42.2	791	16,700
New Orleans	1.3	22,900	22.3	1,027	17,615
Salt Lake City	1.2	67,300	44.8	1,502	56,083
Buffalo	1.1	17,100	6.4	2,672	15,545
Average of the above			1,786	22,779	
Honolulu forecast	1.0	116,300	20.7	5,618	116,300
% reduction needed to be average				-68.2%	-80.4%

<u>The table below</u> shows actual ridership for all U.S. rail cities of less than four million population, followed by an outlier: Honolulu's rail ridership projection:

The Final EIS forecasts for Honolulu rail and San Juan's Tren Urbano (which is the only other elevated rail system to be built in recent years) are remarkably similar: 116,300 and 114,492 daily riders respectively. Actual ridership for San Juan turned out to be only 27,567 daily, which was 76 percent less than what had been projected. San Juan's combined bus and rail ridership declined from 32.6 million the year before rail opened to 26.4 million two years after, and it never recovered. Parsons Brinckerhoff who prepared the Honolulu ridership projection also prepared San Juan's.

There are no indicators other than computer models, which depend on the variables fed in by humans, that show any indication that the Honolulu rail project would achieve anything other than less than half of what it presently projects.