



Designed to Fail

By Randal O'Toole

Are American cities competing to see which can come up with the most ridiculous transit proposals? If so, Honolulu will probably win, hands down. The nation's 52nd-largest urban area has only about 950,000 people, yet it is spending \$5.3 billion, or more than \$5,500 per resident, to build a single 20-mile rail line. That's probably a greater cost per person than any rail system ever built—and it is just for one line, not a complete system.

The line will be entirely elevated, yet they plan to run just two-car trains, each "train" being about the length of a typical light-rail car (just under 100 feet). This means it will have the high costs of heavy rail and the capacity limits of light rail.

One of the many deceptive claims about the project is that it is "high-capacity transit." In fact, the two-car trains were planned to have only 64 seats. The city says it will ask the railcar builder to increase this to 76 seats, a change order that will no doubt add to the cost. As the Antiplanner's colleague, Wendell Cox, says, "the number of seats is the least of their problems."

Minimizing the number of seats maximizes railcar capacity because you can fit more than two or three standees in the space of a seated person. But planners expect the average rider to travel 9.3 miles on trips lasting more than 20 minutes (nationally the average heavy-rail and light-rail trips are both less than 5 miles). Many Honolulu bus riders question whether people will be willing to stand for 20-minute trips.

With 64 seats, the two-car trains supposedly have room for 254 standing passengers. But that's at "crush capacity," which is far more crowded than Americans are willing to accept. Assuming the city increases the seating to 76 seats, actual loads are likely to be limited to a total of about 150 to 200 people per train. At a maximum of 20 trains an hour in each direction, the line will be able to move about 3,000 to 4,000 people per hour inbound in the morning and a similar number outbound in the afternoon. By comparison, a highway lane

can easily move 600 buses per hour, and at 40 seats per bus that represents 24,000 people per hour, none of them having to stand.

However, it is not likely that the rail line will often be filled to capacity. The line will connect East Kapolei with Honolulu. East Kapolei today is basically a few small businesses surrounded by farm land. The original plan was to go to Kapolei, which has about 35,000 people, but the city decided it didn't have enough money to go that far. Between East Kapolei and Honolulu the rail line will pass through Waipahu (33,000 people), Pearl City (48,000 people), and by Pearl Harbor Naval Base (which houses about 20,000 people most of whom work right on the base and won't be riding the train to work). The rest of the rail line goes through light industrial and commercial areas.

In other words, the rail line will serve, at most, about 15 percent of the residents of Oahu and probably no more than 20 percent of the jobs. That means no more than about 3 percent of workers will both live and work on the rail line.

Planners' ridership projections are questionable. They estimate the line will attract 116,340 riders per day in 2030. Since they are planning to run 488 trains per day (244 in each direction), that represents an average of 238 riders per train trip. Given an average trip length of 9.3 miles, that means an average of 110 passengers on board the two-car trains at any given time. Since the American light-rail cars carry an average of 24 people, and the most crowded (in San Diego) carry just 37 people, 110 is highly optimistic.

By 2015, the city hopes to complete and begin operating a segment between East Kapolei and the Aloha Stadium. In other words, it will go from a place where few live to a place that has only a few events per year, mainly high school football games and weekend swap meets. Even when major events take place at the stadium, the rail line will be of little use: the stadium holds 50,000 people, but at 4,000 people per hour in each direction it would take more than six hours to empty the stadium via the train.

The full rail line won't be open until 2019. By that time, the first driverless automobiles will probably be on the market, eventually eliminating the need for transit of any sort. (Ironically, the Honolulu trains themselves will be driverless, similar to the driverless trains in Copenhagen.)

Honolulu requested bids for railcars from several different companies and asked the bidders to include the cost of operating and maintaining the system for 10 years in the bid. The high bidder was the Italian firm [Ansaldo](#), so naturally the city [picked that company](#). Honolulu city councilman Tom Berg

[argues](#) that the city should have picked someone else, not only because the other bids were lower but because Ansaldo has had trouble meeting its contractual obligations in other cities and is losing so much money on railcars that it is thinking of [getting out of the business](#) completely. The city rejected Bombardier's bid because it supposedly included an "inappropriate condition," but Bombardier says it was not a condition but merely a request for clarification.

In order to pay for this and other rail contracts, Honolulu's city manager quietly "[suspended](#)" the city's debt limit without consulting the city council or, apparently, the mayor. As Wendell Cox [points out](#), the city faces billions of dollars in expenses fixing its sewer, water, and other infrastructure, and spending \$5.3 billion on rail, which at best is a luxury (and at worst a curse) will make it harder to do anything else.

Rail proponents argue that the project will relieve congestion, but even the final [environmental impact statement](#) says that, at every place evaluated, congestion will be worse in 2030 with the project than without it (see page 3-51). One reason congestion will be worse is because the city is moving to approve large new housing projects at East Kapolei with the expectation that people living there will take the train to work. But, as Cascade Policy Institute CEO John Charles told audiences in Honolulu, 70 to 95 percent of travel from transit-oriented developments in Portland is by auto, so those new housing projects are likely to further increase traffic congestion.

Nor will the project save energy: at 2,020 BTUs per passenger mile, Honolulu's bus system already uses less energy than almost every other light-rail and heavy-rail line outside of New York City. By 2030, under the Obama fuel economy standards, the average car on the road will also use only about 2,000 BTUs per passenger mile, and cars in Hawaii (where gas prices are higher than the rest of the U.S.) will probably use even less.

The Antiplanner wonders if employees at Parsons Brinckerhoff and other consulting firms who helped plan this and so many other expensive rail projects sit around laughing at the gullibility of city officials. Once people adopt the "we need a rail line at any cost" mentality, they are all too likely to be victimized by projects like this one.

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