Feature Articles

BART: Expensive Flop or Commuter's Delight?

San Francisco's Bay Area Rapid Transit System has been under intense scrutiny by transportation planners and researchers since its inception, largely because it represents a brand new concept in rapid transit and will provide input, whether favorable or unfavorable, for the many similar systems now in the construction or planning stages throughout the world.

Two new reports on the BART experience contend (a) that the regular riders on the system are happy with it, although it needs to be more widely publicized to attract additional riders, and (b) that BART's designers misjudged the implications of the area's total transportation picture, with the result that automobile traffic volumes and road congestion are still at just about pre-BART levels.

A public opinion survey, conducted in July 1976 by Drossler Research Corporation, consisted of a random sampling of 900 people in the transit system service area, which contains about 2.5 million people. Inquiries touched on such subjects as why people ride and don't ride BART, frequency of riding, service evaluation, and knowledge of service destinations and hours.

Frequent riders gave the system high marks in their evaluation as opposed to infrequent riders and nonriders, suggesting that, if you try it over a period of time, you'll like it. Riders and nonriders alike showed an awareness that BART service performance was much improved this year over the same period last year.

Although the survey indicates that 75.7 percent of all people in the three counties served by BART have at one time or another ridden on the system, BART has so far attracted a steady 22 percent of the market.

The report suggests that speed, comfort, and destinations served seem to be the most important factors for the frequent riders, who made 80 percent of total daily trips taken on the system. Nonfrequent riders, who make the remaining 20 percent of the trips, saw it as a new transportation experience and used the system more for special trips. Also, many infrequent riders and nonriders were unaware of many of the key destinations served by BART, and only 55 percent of the frequent riders knew that the system operated late night service until midnight, indicating the need for a broadened information program for BART.

BART's problems go a little deeper than a mere information gap, contends Melvin M. Webber, of the University of California's Institute of Transportation Studies, in a recently published 40-page monograph, ***The BART Experience: What have we learned?*** Although Webber recognizes that BART is not yet fully operational and will ultimately alleviate its current operational problems, such as frequent breakdowns and poor schedules, he does raise questions concerning BART's basic design.

BART's designers, Webber maintains, misjudged the implications of the region's highway accessibility, pointing out that it is the door-to-door, no-wait, no-transfer features of the automobile that make it so attractive to commuters, not its top speed. The designers also misjudged the significance of the system's accessibility, sacrificing closely spaced stations in favor of overall high speed. And finally, Webber says, they misjudged the traveler's valuation of time spent getting ***to*** moving vehicles compared to time spent ***inside*** moving vehicles.

Early BART impact data reflect the uncertainty of the system design criteria, which were that the new system should (a) bring increasing numbers of peak-hour commuters from near their suburban homes to within a few minutes walk of their downtown offices, (b) be so attractive to travelers as to be more than competitive with the automobile, and (c) be financially viable.

As predicted, says the author, BART is serving large numbers of suburban commuters; however, people are traveling more by automobile and transit despite rising energy costs and undoubtedly as a direct result of the new travel capacities that BART has supplied. Half of BART's transbay riders come from buses, which it has replaced at a high cost. BART has not significantly changed automobile use, says Webber.

BART may have been influential in propagating downtown building, though Houston, Dallas, and Denver emphatically show that a BART type of rail system is not a necessary condition for a city building boom. BART has not yet had any visible effect on suburban development. In addition, high capital costs (about 105 percent of forecast) plus high operating costs (about 475 percent of forecast) are being compounded by low patronage (50 percent of forecast) resulting in an average cost per ride that is twice as high as the bus and 50 percent greater than the standard American automobile.

Webber concludes by noting that, instead of lavishing primary attention on in-vehicle travel time and physical amenities—features that require main-line rail on exclusive grade-separated right-of-way and ensure high construction and operating costs—the designers would have attracted more riders by adopting a more automobile-like technology. A system providing access within a short walk of home and delivery in the same vehicle within a short walk of the job would have been more likely to entice people out of private automobiles.

Webber's monograph is available for $1.50, including postage and handling, from the Institute of Transportation Studies (attention: J. Ramsey), 416 McLaughlin Hall, University of California, Berkeley, CA 94720. Checks should be made payable to the Regents of the University of California.