

and the origin of his journey is recorded on the card. Upon leaving the train, the passenger again inserts the card, and the exact fare for the number of miles traveled is subtracted from the value of the card. If the cost of the journey exceeds the amount remaining on the card, a light appears telling the passenger to go to the "add fare machine." The complexities of this technology would seem to invite a massive amount of confusion as well as a multitude of schemes to beat the system. But BART officials claim they can get the bugs out and operate their system with a minimum of manpower.

The ease with which BART developed the new technologies required for the system contrasts sharply with the difficulties encountered in actually building the line. From its inception, BART faced the task of reconciling the often conflicting interests of the several communities it was to serve. At times, the task was nearly impossible.

Noticeably absent from the BART system are the populous regions to the north and south of San Francisco. Just prior to the 1962 bond election, San Mateo County (to the south) withdrew from the district. Fearing that rapid transit would retard suburban growth and development, several large property holders in San Mateo County brought the necessary pressure to bear on the county's Board of Supervisors. Without the tax base from the more populous San Mateo County, the district could not afford to extend the system to Marin County. Consequently, BART became a three-county system with the 1962 election.

San Mateo County could still join the BART system sometime in the future. Such an association might come about if BART decides to construct a line to San Francisco Airport, which is located in San Mateo County. The project is now in the planning stages.

After the 1962 election, BART planners began to determine the specifics of the system. That was no easy task. The location of virtually every segment of track, as well as the location and design of each station, led to a dispute between BART and a local community. Moreover, the voice of a given community was not always united behind a particular demand, as various interest groups vied for their own benefits.

As BART's Director, B. R. Stokes said in a recent speech, "Rapid transit systems are no immaculate conceptions

Fellowship Panel Protests Cutbacks

A group of psychologists that was called together by the National Academy of Sciences to recommend fellowship awards has staged a mini-revolt and is protesting the Nixon Administration's fellowship cutbacks and its "continuation of the war in Southeast Asia," which is blamed for inflicting "damaging consequences" on higher education. The group was rebuffed when it sought cooperation from the Academy and from the National Science Foundation (NSF), so the panel members are now, on their own, circulating a petition among colleagues on other Academy-appointed panels. The petition does not mention the Nixon Administration by name, but it protests policies that are being carried out by the incumbent Administration.

The mini-revolt broke out last month when the Academy, which has a contract to help select NSF fellowship winners, convened 11 different panels to recommend the winners from among some 9000 applicants for NSF graduate fellowships in 1971-72. About 150 scientists participated in the selection process, but one of the groups—Behavioral Sciences Panel A, dealing with psychology—became so upset over a sharp cutback in fellowship money that it decided to make a public protest.

K. Edward Renner, professor of psychology at the University of Illinois, told *Science* he and his fellow panelists became disturbed after hearing details about the cuts in NSF's graduate fellowship program. The total number of fellowships awarded dropped from 2582 last year to 1969 for 1971-72. The number of new awards was cut almost in half, while only 56 percent of the applications for renewal could be honored compared with more than 90 percent in previous years. Renner said he was particularly disturbed that "nobody objected or said anything." Instead, the scientists just "shuffled off silently" to their individual panel meetings to award what money there was.

Psychology Group Dissents

The psychology group, however, decided not to acquiesce silently in its assigned task. The group discussed various actions that might be taken, then decided to circulate a petition among all panelists with the idea that the Academy would forward the petition to President Nixon and to the news media. But the Academy balked, as did an NSF representative at the meeting. The dissidents were not even allowed to use 11 sheets of paper and the typewriters in the offices where they were working, and they were denied permission to circulate their petition.

Renner charges that the Academy and NSF were afraid of "political repercussions" that might jeopardize the fellowship program. But Wayne C. Hall, director of fellowships in the Academy's office of scientific personnel, said the Academy refused to help the dissidents on the basis of long-standing policy that it is not appropriate for a committee that is convened for a particular purpose—in this case the recommending of fellowship winners—to make sweeping pronouncements on other issues. "We encouraged them as individuals to do whatever they wanted, but not under the auspices of the Academy," Hall said. "We're disturbed, too, about cutbacks in funds for fellowships. And many of us, as individuals, are concerned about the Vietnam War. But we don't necessarily see a connection between the two."

Frustrated in their efforts to use the Academy as a podium, the psychology group is now mailing its petition to the members of the other ten panels. The petition has already been endorsed by 11 of the 12 members of the psychology panel (one refused to sign). Renner says it is too early to tell what the response will be from the others. At this writing he has received about ten endorsements and five refusals to endorse—the latter coming from people who either support the Vietnam War or else feel it is improper for fellowship panels to make such a protest. The Academy, meanwhile, has received perhaps half a dozen letters from panelists who say they refuse to endorse such a petition.

—PHILIP M. BOFFEY