Maryland Lures Chip-Makers East

"SciCom" is held out as solution to housing pressures, manpower shortage in California electronics industry

Some call it "the great Silicon Valley raid," but Maryland officials insist they are just out to "attract expansion potential." Maryland, in the throes of a new economic development program launched 2 years ago, is conducting an intensive campaign to make the area between Washington, D.C., and Baltimore a hotbed of high-technology enterprises to rival Route 128 near Boston and the Santa Clara Valley south of San Francisco, known as Silicon Valley because it is the heart of the semiconductor industry.

Route 270, which runs from Washington to Frederick, Maryland, is already thickly populated with high-technology enterprises that have sprung up over the past 15 years, nourished with the rich fertilizer of government contracts. Now the state's Department of Economic and Community Development wants to see the emergence of what one spokesman called a "golden triangle" of electronics firms in the 10-county region encompassed by Washington, Frederick, and Baltimore. This thriving community of the future already has a name: SciCom, for science complex. "Silicon Valley is well known to itself as Silicon Valley," explained James Belch, Maryland's director of business development. "This is our way of identifying with a singular voice.'

And so Maryland is engaged in an elaborate drive to get a piece of the action. The time is ripe: Santa Clara Valley is experiencing the pains of overgrowth. Now home to close to 1000 electronics companies, it has been expanding economically at seven times the annual rate for the nation. Two problems have become acute: space and manpower. The town of Sunnyvale has slapped a moratorium on new industrial development. The manpower shortage reflects the fact that demand for engineers is outpacing the production of graduates by 3 to 1, and is aggravated by spiraling housing costs. For example, the cost of the average house in Palo Alto went from \$56,000 in 1973 to \$150,000 in 1979. Although 40,000 to 50,000 new jobs are being created annually, only 12,000 new housing units are available each year. Firms are so hungry for technical manpower that some are paying employees bounties of up to \$1000 for recruiting an engineer and \$500 for a technician. The area is experiencing more than 6 percent annual increase in electricity needs, and brownouts are said to be likely if the Diablo Canyon nuclear plant is not allowed to begin operation. Industries are already looking outside California to expand and new electronics centers are now growing in other western states including Oregon, Texas, and Idaho.

Eastern states too, notably South Carolina, are engaged in attempts to woo the denizens of Silicon Valley, but according to the Maryland officials, no one is doing it on such a systematic and professional level as they are. The courtship is being led by James Roberson, director of the economic development department and one of the country's top industrial developers (Maryland got him from Rouse Company, developer of the new town of Columbia).

On 24 April, climaxing 15 months of scouting trips to chat up Silicon Valley executives, a direct mail campaign, and a full-page ad in the San Jose Mercury News, a delegation from Maryland was scheduled to play host at a fancy luncheon to be held at the Santa Clara Marriott. The delegation, headed by Maryland Governor Harry Hughes, was to include Roberson and other state officials, as well as prestigious members of the private sector including John Toll, a physicist and president of the University of Maryland, and several banking and electronics executives. Engraved invitations were sent to officers of 150 Silicon Valley concerns. The menu, entitled "Tastes of the Chesapeake," included oysters on the half-shell, sautéed oysters, cream of crab soup shipped from Maryland, and crab cakes prepared at the Marriott according to a special Maryland recipe.

The menu reflects the fact that the Maryland people are relying heavily in their pitch on emphasizing the quality of life in the East. "We want to give them an awareness of what this part of the world is like," said Belch, noting that many of the Silicon Valley people were educated in the West and haven't been anywhere else. Said Roberson: "Their perception is that this is not a desirable part of the country to live in." To show them how wrong they are, an elaborate 10-minute slide show, developed at a cost of \$30,000, will be shown at the luncheon, portraying the delights of the Maryland countryside and the Chesapeake Bay, and emphasizing the state's pro-business attitude, availability of space and manpower (Maryland boasts the nation's second-highest proportion of college graduates between 18 and 24, after Colorado), and "the nation's highest concentration of scientists and engineers." The Maryland people want to show the Californians that coming East would not be such a wrenching change. Said Belch: "If you make a physiographic and geographic comparison, Silicon Valley is similar to the Chesapeake Bay area if you turn it upside down."

At a preparatory meeting in Baltimore prior to the luncheon trip, Belch turned to military terminology to describe the "mission." Said he: "This is like planning the Normandy invasion, except it's a little more complicated. The paratroops are out there now"-in the form of a consultant from Maryland. "This is the staging area." Officials were all provided with thick briefing books containing the plan of attack, which included information on the vital statistics of each company and (according to Belch) their "hot button-what turns them on." Said Belch, "I've been in this business 20 years and I've never seen such an intense and well-organized mission."

Although most of the firms contacted have indicated that their expansion plans, if any, will be confined to California, some have shown interest in Maryland. But whether it will develop the allure of Silicon Valley remains to be seen. The federal presence is certainly a major factor (it is the customer in 50 percent of all electronics products sales), and Marylanders have been touting Johns Hopkins and the University of Maryland. But whether these lures can compete with the presence of Stanford, the spawning ground of integrated circuitry, is a question. "Obviously Stanford University holds great hypnotic power." notes the briefing book. And it quotes a saying that "if some of these engineers leave the shadow of Hoover Tower (the Stanford hallmark) they get the shakes.'

On the other hand, the pressures at Silicon Valley are such that one executive, John A. Young of Hewlett-Packard, has said, "We know we've got to get out of here." And SciCom is waiting with open arms.—CONSTANCE HOLDEN

SCIENCE, VOL. 208, 2 MAY 1980