

TECHSTARTS: THREE NEW COMPANIES

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SPECIAL REPORT
How states and cities
compete to lure high tech

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Laissez-faire

Some states are continuing on a more traditional path toward a high tech economy: self-promotion and hustling. One of the biggest success stories of 1984 was Oregon. Although it offers little in the way of official incentives, Oregon has aggressively courted companies running out of room in Silicon Valley. It promotes cheap land and housing, natural beauty, clean water (lessening the need for pretreatment), and overall "livability."

The tactic has worked. Oregon is now home to major facilities of such California-based concerns as Intel, Hewlett-Packard, National Semiconductor, and Spectra-Physics—along with Tektronix, a native company and the state's largest private employer. Once ensconced in the state, these companies spin off new ventures at a steady clip. In the Portland area alone, some 300 companies sought first-round financing during the last two years, according to Steve Peterson of the city's development commission.

In the last year, Oregon has focused its recruitment campaign on Japan. The state signaled its welcome last July with a landmark change in its method of taxing foreign companies. Under the old "unitary tax," a company paid the state a percentage of its total worldwide income. Under the new "water's edge" policy, a foreign firm need declare only income earned in the U.S., a much smaller figure. Repeal of the unitary tax uncorked a Japanese invasion: Nippon Electric Co., Fujitsu, Seiko, and Kyocera all plan to build plants in the state over the next three years.

Oregon's laissez-faire approach succeeds because the private sector fulfills all of business's needs, says John Anderson, director of the Oregon Economic Development Department. The state has an ample pool of venture capital, so the government does not have to offer new-business support services. The privately funded Oregon Graduate Center fosters cooperation between universities and high tech industry and provides office and lab space for technology-based companies. Oregon real estate speculators are also developing facilities designed for high tech start-ups, Anderson adds.

By contrast, many of the more activist states feel they are compensating for the deficiencies of the private sector. Without the state's prodding, companies "would innovate too slowly, and we can't afford to wait" lest jobs be lost to more productive plants elsewhere, says a Michigan official. The state believes its entry into the venture capital arena, with its pension fund set-aside, will help instill a "venture culture"—a bold, risk-

THE HIGH TECH SWEEPSTAKES

taking mentality in the business community—to replace the complacency brought on by decades of dependence on the seemingly invincible auto industry.

But even states with less visible intervention play key supporting roles in building high tech industry. "These companies didn't come knocking on our door—we went out and invited them," says Oregon's Anderson. An aggressive "action council" comprising various agency heads streamlines the recruitment process and helps remove bureaucratic obstacles to an Oregon siting. The state can work with local officials, for example, to accelerate the construction of a sewer system in the community to which a company wants to move.

With few exceptions, state high tech programs are too new to allow accurate assessments of their success. Most have arisen since 1980 and cannot be expected to pay off for a decade or more, according to OTA's Phelps. What's more, benefits are hard to measure; some of what the states sponsor would happen anyway with private or federal dollars. And states cannot always keep tabs on what their intervention has produced; Wisconsin's Innovation Center, for example, doesn't know what has become of many of the inventions it has evaluated. Costs, too, can be elusive; Minnesota has little idea how much revenue it will lose because of its new technology transfer tax credit, says Schaffer of the state's Energy and Economic Development Department.

To complicate matters, it is often difficult to distinguish the truly new measures from old ones going under new names. "States have been doing many of these things all along," says OTA's Phelps; the last few years have brought more money and publicity but little that hasn't been tried before. "A lot of this stuff is good old-fashioned boosterism with high tech colors," he says.

There's nothing wrong with that, Phelps asserts, as long as states don't expect too much, too soon: "It took them 50 years to get into their present economic situations, and it may take another 50 years to get out." He cites North Carolina's Research Triangle Park to demonstrate the necessity for patience. Started in the early '60s with both private and state support, the park drew few tenants for about eight years. Then IBM moved in and was followed by Data General, Union Carbide, Northern Telecom, and others; 20,000 people now work in this business community surrounded by Duke University, the University of

North Carolina, and North Carolina State.

Some observers say that states are setting unrealistic goals. "There's often a mismatch between a state's resources and the technologies it is choosing to emphasize," says Charles Minshall, a researcher at Battelle Memorial Institute's applied and technical economics department (Columbus, Ohio). "You can't build a biotechnology industry without a world-class hospital or biological research center in place," he says, contending that some of the state biotechnology efforts rely on "average teaching hospitals."

For the most part, though, states recognize their weak points and are working to strengthen them. States short of venture capital, like Michigan, are making public money available to entrepreneurs; states with below-average schools, like South Carolina, are spending significant sums to improve them; states dependent on declining "smoke-stack" industries, like Pennsylvania, Ohio, and Michigan, are sponsoring R&D both to modernize old plants and to breed new job-producing industries; states with antidevelopment reputations, like Oregon, are changing laws and official attitudes to become more hospitable; states that have already achieved success at recruiting, like North Carolina, are devoting more attention to "growing their own" companies that create few jobs at first but form the essential foundation of a stable high tech economy.

Free-marketers like Moore of Coopers & Lybrand contend that a state government best serves high tech industry by getting out of the way. Moore says that Silicon Valley, the prototypical high tech boom area, came about with little formal help from the state of California.

But that doesn't mean states should stay out, says author Magaziner. "It's easy to throw up your hands and glibly say the marketplace will take care of everything," he says. "But governments do make a difference," especially in accelerating the flow of ideas, people, and technology between universities and businesses. As MTDC's Crowley says in reference to Route 128 industries, "Who do you think built and widened the highway that made all this development possible?"

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For further information see RESOURCES on page 74.