

# CHAPTER I

## Summary

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Over the past 20 years, several regions of the United States have developed strong local economies based on fast-growing, technology-based industries. Encouraged by the success of “high-technology” industries in California’s Silicon Valley, Massachusetts’ Route 128, and North Carolina’s Research Triangle, many other States have launched government initiatives to promote similar high-technology industrial development of their own.

OTA’s census, carried out as part of the ongoing assessment of *Technology, Innovation, and Regional Economic Development*, has identified 150 State government programs with at least some features directed toward high-technology development. Only a few of these initiatives, however, are dedicated assistance programs focused on the needs and problems of high-technology businesses. Using the narrower definition of a “dedicated” high-technology development program—chartered and at least partially funded by the State, and specifically targeted on the creation, attraction, or retention of high-technology firms—OTA identified a total of 38 programs in 22 States. Most of these initiatives have been launched within the last 3 years.

OTA also found that the States define “high-technology development” in many different ways. In most cases, State officials consider their high-technology initiatives to be a natural and even unavoidable extension of their different economic development strategies. As a result, their high-technology initiatives show a great deal of variety in form, purpose, and level of funding. In general, however, the dedicated programs provide services that address four central needs of high-technology firms, particularly those of entrepreneurial businesses engaged in

the development and commercialization of innovative products and services:

- *technical assistance*, including access to technical facilities and equipment as well as the consulting services of experienced personnel to conduct feasibility studies or patent searches;
- *manpower assistance*, including access to scientific and technical personnel as well as highly skilled labor;
- *business assistance*, including access to consultants who can help the entrepreneur put together a business plan or management team, as well as assistance with licensing and permitting or through subsidies for sites and facilities; and
- *financial assistance*, particularly access to risk capital (whether through brokerage services, or direct State equity investment, grants, or loans and loan guarantees), but also including fiscal assistance such as research and development tax credits, technical training credits, and other tax incentives and concessions.

OTA has not yet completed its evaluation of the effectiveness of these State efforts and their impacts on related Federal policies and programs for high-technology industry. It should be noted, however, that only a few of the high-technology development programs have been in place long enough to show measurable results or impacts. Further, the States that have launched these initiatives often had considerable high-technology development prior to the State government’s intervention, making it difficult to assess the specific impact of the dedicated programs on further development.