

What Are “Third-Wave” State Economic Development Efforts? From Incentives to Industrial Policy

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“Third-wave” state economic development strategies have been widely acknowledged to reduce high-stakes incentives and promotions and have shifted emphasis from firm-based programs to broader regional programs. Although the change is well documented, less consensus has emerged about what has taken their place. Based on analysis of economic development programs in 16 states competing for high-technology industry, the study documented that the emerging third-wave economic development efforts—especially leadership, information, and brokering—are the essential tools by which states can establish their industrial policies. These policies are based on extensive strategic planning, public-private partnerships, foundations of technology, human resources and capital, and the development of strategic industrial clusters. The report concludes that the third wave is a state policy direction that focuses rather than replaces earlier strategies and that downplays expensive programs by mobilizing many established state programs to build strategic advantages in industry clusters that will stimulate the entire state economy.

Over the past two decades, the economic development literature has debated the utility or futility of large-scale, high-stakes state economic development incentives versus newer development strategies (Bartik, 1991; Blakely, 1994; Eisinger, 1995; Leicht & Jenkins, 1994; Marlin, 1990; Marvel & Shkurti, 1993). More recently, the focus has been on new paradigms or waves of state economic development policy (Leicht & Jenkins, 1994). Led by the National Governors’ Association, incentive-based competition for industrial locations has been criticized, and many states replaced it with cost-benefit-based assistance (Kayne & Shonka, 1994). The declining emphasis on incentives and firm-based assistance is now supplemented by what have been called “third-wave” economic development strategies (Herbers, 1990; Ross & Friedman, 1990). There is little consensus, however, about what third-wave strategies and policies mean, what techniques are involved, and how widely they have been adopted. As well, because few of the old or new techniques have been adequately evaluated, the impact of the techniques remains questionable (Accordino, 1994; Chernick, 1997; Goss & Phillips, 1997; Kudrle & Kite, 1989). The key unanswered question is, “What do third-wave states actually do in place of smokestack chasing and giving incentives directly to firms to generate needed jobs and increased earnings?”

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Industrial attraction efforts, or smokestack chasing of the first wave, gave way to new strategies, according to most analysts of state policy. The first wave was dominated by programs designed specifically to attract footloose firms from old industrial areas to growing regions, such as the South or West. The typical tools of the first wave were subsidized loans or direct payments to firms for relocation expenses, tax reductions, subsidies applied to the cost of plant facilities or utilities, and competitive and expensive industrial recruitment programs. By the early 1980s, states began operating many second-wave incentives that shifted focus from attracting out-of-state firms to retaining and expanding existing firms. Second-wave strategies offered indirect types of firm-level assistance, such as creating new businesses, increasing investment capital, developing incubators, or providing technical assistance to help local businesses grow or expand. Ross and Friedman (1990) note that states created programs to increase capital for small and medium-size businesses, accelerate technology transfer, or expand workforce-training programs. S. E. Clarke and Gaile (1992) note that cities adopted second-wave strategies that were characterized by a strong investment and entrepreneurial approach, such as the use of revolving loan funds, below-market loans, and enterprise zones or tax increment financing that enables benefits to be paid for by the recipients.

However, the second wave is giving way to the third wave, and states are exploring what this means. In general, third-wave strategies shift focus on local development by creating the context for economic growth through public-private partnerships, networks that leverage capital and human resources to increase the global competitiveness of a group of strategically linked firms. Ross and Friedman (1990) note that the need to invent new organizational approaches distinguishes third-wave programs. Third-wave programs do not eliminate first- and second-wave strategies, but they give specific purpose and focus to the use of these techniques. The key to third-wave programs is a supportive economic development marketplace rather than payments to firms. In a similar analysis, Fosler (1992) argued that

[States] are now more concerned with the overall performance of the state economy in achieving high levels of productivity and competitiveness that increase income and provide a high standard of living and quality of life for all residents. Instead of simply creating jobs, they seek high-skill jobs. Instead of simply promoting businesses that will create jobs, they are more interested in generating high performance businesses that are competitive in quality, attentiveness to customer needs, and timeliness, as well as costs. They are concerned with the ways in which workers and businesses interact in networks and clusters. And they are interested in the dynamics among those economic entities and related social and political institutions within the context of specific regions and communities. (p. 5)

Blakely (1994) argued that new state government efforts have focused on building institutions that are the “soft infrastructure” for economic revitalization. In a related study, Bradshaw (1993) argued that both multifunctional and multijurisdictional networks were the key to economic development.

Eisinger (1995), in an important recent article on state economic development strategies, contrasts new third-wave strategies, whose main goal is to “build general institutional or individual capacity,” with two other strategies: “industrial recruitment” and “entrepreneurial state programs [that risk state] resources to help indigenous businesses and entrepreneurs identify and capitalize on new markets and business opportunities” (p. 153). Eisinger concludes that, although all three strategies are being used at some level by states today, there is no evidence of a significant growth of third-wave programs. Although Eisinger acknowledges the limitations of his data to clearly identify third-wave programs, it is misleading, in our opinion, to contrast third-wave programs with entrepreneurial programs. Many of the best examples of collaborative partnerships for third-wave programs are aimed at building institutional capacity in program areas Eisinger classifies as entrepreneurial, such as high-technology promotion, technology transfer, business development, and job retention.¹ Following S. E. Clarke and Gaile (1992), we suggest that entrepreneurial programs are not second-wave programs but may be central to what they describe as “next-wave” programs.

Consensus of third-wave analysts is that the new programs reflect community and business collaborations designed to build entire industrial sectors that are globally competitive. Thus, the third wave is industrial-policy oriented rather than project oriented. It derives from the notion that a clear set of well-articulated public policies, combined with an effective business-community organizational structure, will facilitate new firm establishment as well as the retention and expansion of existing firms. In essence, then, the third wave incorporates the first and second waves through systems of collaboration that facilitate the creation, location, or relocation of firms because of the general attractiveness of the region.

The old incentives of the first and second waves are supplemented by the new strategies because state economies no longer grow due to a single successful firm. States and regions grow through complex industrial networks or clusters successfully competing in the global economy. These networks or industrial clusters are the springboard for the incubation of business (Held, 1996). The older incentives were too narrow because they relied too heavily on successfully recruiting or expanding a single firm. Government incentive programs were the limited tools of the first- and second-wave strategies. Third-wave efforts use these and other tools in new ways that build the capacity of the entire local economy.

It is easier to discount incentives than to offer better alternatives for state economic development strategies. The purpose of this article is to detail the context for the emerging third wave based on systematic research and observation in 16 states. The core of the new third wave is best thought of as state-level industrial policies that couple place and programs through the design of a soft structure of economic and social networks supporting firm growth and stability. In spite of the well-publicized, and perhaps exaggerated, increased competition among states for large industrial plants and research centers (Hanson, 1993), third-wave strategies look very much like the industrial strategies of the largest global firms as they position themselves for global competition. This article examines state program and budget data to illustrate the relationships among the traditional approaches states take to economic development and the emergence of third-wave approaches. State management of the industrial policy infrastructure is critical, and low-budget state roles in strategic planning, marketing, financing, and regulation have come to replace the costly firm-based incentives of the past. In this new third-wave environment, state efforts in management, partnerships, strategic soft infrastructure, integrated industrial clusters, and networking together form an effective state-level industrial strategy.

Research Approach

In 1992, the authors initiated a study to determine how much variation there was in the expenditures for incentives and promotional activities by 16 of the leading states with large high-technology sectors. (See Bradshaw, Nishikawa, & Blakely, 1992, for a full discussion of the methodology.) These states had competed for a number of well-publicized facilities, and all had innovative economic development programs. The purpose of the study was to compare expenditures and programs in these states, trace their recent development efforts, and assess their direction. There was no attempt in the study either to evaluate each state's programs or expenditures according to cost-benefit criteria or to use the data to build a business climate ranking. Instead, the study aimed to see what the leading states thought were their most important goals and to identify ways their economic development program and budgets were oriented toward these objectives.

Sixteen states with strong economic development initiatives and competitive high-technology sectors were selected, from which data were collected on state funds budgeted for economic development programs and promotional activities; the availability and use of tax, financing, and other incentives; and the organizational structure of the state's economic development program. The states were chosen for their diversity in terms of economic development efforts, with special emphasis on obtaining a variety of perspectives rather than on random chance. The selected states were Arizona, California, Colorado, Florida, Georgia, Illinois, Massachusetts, Nevada, New Mexico, New York, North Carolina, Ohio, Oregon, Texas, Utah, and Washington.

The research procedure was to contact the director (or top staff member) of the leading economic development agency in the state and obtain agreement to cooperate in the study. In general,

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TABLE 1
Economic Development Priorities in 15 Leading Technology States

	<i>State's Ranking</i>	<i>Average Rank</i>
Retain and expand existing businesses	15	4.3
Diversify economic base	10	2.3
Raise skill level of workforce	8	1.7
Increase international trade	10	1.6
Develop entrepreneurs and new businesses	5	1.2
Attract firms to locate in state	7	1.1
Expand business opportunities in depressed areas	6	0.9
Expand tourism	5	0.8
Build or rebuild infrastructure	4	0.7
Promote high-technology industries	4	0.4
Provide employment for welfare recipients	0	0.0

NOTE: Based on a question asking respondents to rank the five most important economic development goals of their state. Items ranked were scored *first* = 5, *second* = 4, *third* = 3, *fourth* = 2, *fifth* = 1, *no rank* = 0. One state did not answer.

all the states were willing to cooperate because they understood the importance of reliable and detailed information on the character of the programs that promote economic development. A copy of our 10-page questionnaire was then faxed to the state. Once the state had a chance to compile needed information, a long phone interview was completed and recorded, lasting from 20 minutes to more than an hour. The detailed interview was supplemented by as many as 10 additional phone interviews with budget officers and program leaders, and written materials were collected to complete a detailed understanding of economic development efforts in each state.

MOVING BEYOND THE SECOND PHASE

The 16 state economic development departments reported that many of the first- and some of the second-wave programs are now low priorities in their states.

Changing Priorities

The interviews and review of published materials supplied by the states provide overwhelming evidence that states are reevaluating their economic development priorities and reducing the emphasis on first-wave programs while expanding the focus on second- and third-wave programs. **These state priorities involve more than showing an awareness of a new politically correct lingo; they reflect a significant reorganization of priorities.** State respondents were given a list of 10 priorities and asked to give the ranking of the top 5. These data are shown in Table 1.

When asked about their first-priority goal, 14 of 15 states aimed to retain or expand existing businesses or to diversify their economic base, as opposed to policies that supported specific incentive packages. **The highest ranked item, retention and expansion of existing businesses, scored a total average for the 15 states of 4.3 points out of a maximum 5.0 points for the top-priority item.** Expansion and retention programs are the core of second-wave programs, but they are also the basis for developing regional clusters and an industrial core. Other high-ranking efforts include raising the skill level of the workforce, increasing international trade, and developing entrepreneurs and new businesses. On the other hand, the classic tools of the first wave—business attraction and infrastructure development—were significantly lower priorities. Business attraction was a priority of 7 states, but it had an average rank score of only 1.1 out of the maximum 5.0. Infrastructure development was listed as a priority by only 4 states, whereas tourism promotion was a priority in 5. The data on these priorities do not specifically identify third-wave goals, so they should not be overinterpreted. It is clear, however, that the main economic development targets of the selected states downplay goals achieved by incentives while emphasizing objectives in which state network and soft infrastructure count.

Two items (welfare and high-technology attraction) received very little interest by the states at the time the survey was done, although public policy has rendered them increasingly important. Surprisingly, providing employment for welfare recipients was not a priority of any state, but it probably would be a higher priority since welfare reform. Promoting high-technology industries was selected as a top-five priority by only four states, although most state economic development agencies commented on how developing high-technology industries was a major priority; perhaps they did not feel that the word “promoting” fit their program goals for high technology, or perhaps they felt other state agencies, such as higher education, had more credibility in this arena.

States in the study also showed a great deal of variation in the extent to which they focused on attracting firms to locate there, with some states holding strong to the belief in the value of their attraction programs. Georgia, as well as a number of other states, was not deterred from being in the attraction business. When asked, these states reported that they gave highest priority to recruiting outside industrial firms to invest in plants and to create jobs in their state. Georgia, for example, carefully measured performance of economic development efforts on the basis of the number of new plants and jobs located in the state and was very clear about its role in business attraction. In reality, most states have retained some of their attraction programs, although the emphasis seems to shift depending on the economy and political climate. Even in those states that are de-emphasizing attraction, the respondents were quick to remind us that they would compete for major plants if the opportunity presented itself. On the other hand, with changing political leadership, several states were volatile with regard to traditional economic development strategies and consequently are reentering the attraction competition with increased budgets aimed at attracting firms, in spite of the overall direction of the economic development agency. As Eisinger (1995) emphatically put it, attraction efforts are highly visible, with strong political momentum and perceived benefits.

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Expenditures for Economic Development: Where You Look Determines What You Find.

State budgets for economic development provide a good indicator of the emphasis states give different economic development activities. In this study, we asked many questions of the selected states regarding their economic development budgets in different categories. The effort to find out how much states spend for attraction incentives or business-related programs is difficult, because identifiable incentive expenditures are but the “tip of the iceberg” in terms of overall economic development activity and effectiveness. Tax incentives are rarely summed because they are lost revenue instead of expenditures. Similarly, getting total budgets for state economic development programs is nearly impossible because each state organizes different types of expenditures within different agencies, with some types of programs woven into others so completely that they cannot be untangled.

Moreover, effective state economic development activities make full use of the financial and other resources of businesses, local economic development organizations, regional organizations, private citizens, and communities, which in total contribute more than the state does. Even so, the role of the state in funding these dispersed functions varies greatly, with some states more involved than others are.

In addition, effective economic development activity in state government is a multiagency effort that links the economic development department with the departments of agriculture, education, employment, trade, and even natural resources. Most agricultural states have significant programs to expand farm work and market state products. Education departments carry the bulk of the responsibility for training, adult education, and other programs. Economic development technology programs and projects are developed and transferred through research in state universities and colleges. Employment departments with responsibilities for managing the unemployment system, job placement activities, and workforce-training programs are often unconnected with economic development departments. International trade, film boards, and marketing programs are put in different agencies depending on the state. Thus, it is nearly impossible (although we attempted to do so) to develop standard budget-reporting categories to distinguish economic development functions from the more traditional activities of many state agencies.

TABLE 2
Expenditures for Economic Development Programs, 1992 (in thousands of dollars)

<i>State</i>	<i>Total Economic Development</i>	<i>Attraction and Retention</i>	<i>Other Economic Development</i>	<i>Promotions</i>	<i>Tourism</i>
Illinois	13,503	7,442	6,061	0	26,340
Oregon	13,502	1,879	11,623	339	2,479
Ohio	11,470	6,700	4,770	270	5,050
California	10,623	2,003	8,620	890	3,700
Washington	9,249	3,032	6,217	35	2,123
New York	8,567	2,600	5,967	0	4,061
North Carolina	8,153	5,891	2,263	989	5,122
Georgia	7,400	3,000	4,400	1,285	6,000
Florida	7,203	1,023	6,180	692	13,800
Texas	5,580	3,300	2,280	20	10,000
Nevada	4,076	2,726	1,350	640	2,700
New Mexico	4,041	1,807	2,234	350	5,000
Utah	3,703	1,304	2,399	1,340	3,600
Arizona	3,463	1,563	1,900	437	5,700
Massachusetts	3,037	950	2,087	1050	9,165
Colorado	2,665	1,115	1,550	200	9,700

NOTE: Total economic development includes attraction, retention, small business, international, film programs, research, and other. These data exclude federal funds as much as possible. It was generally impossible to separate attraction from retention programs. The other economic development column includes all other economic development programs except attraction and retention. Promotions include advertising, trade shows, public relations, and related activities but not visitor centers and state travel magazines.

The data do not permit identification of budgets for first-wave programs because tax cuts are not budgeted and direct incentives are most typically funded by agencies that provide services such as job training and by localities that offer other assistance. The data do show the diversification of state economic development functions that support second- and third-wave programs. The budget for these programs is shown in the first column of Table 2. The core of second-wave economic development efforts is in expansion, retention, small business, international marketing, film, and economic development research. State programs included in the budgets include support for loan funds, operating small-business assistance centers, coordinating recruitment efforts, and providing various incentives. In addition, some of the most focused efforts included in these budget items include film offices, which identify and arrange for sites where films are made, and establishing and operating foreign trade offices. In 1992, 4 of the 16 states in our study spent more than \$10 million on economic development programs. The states varied greatly in per capita effort, with California spending only 36 cents per person compared to Oregon, which spent \$4.75. (The Oregon Lottery, which started in 1985, contributed more than \$325 million to the state's economic development effort, including \$63 million in 1992. Some of these funds were included in state programs, although most went elsewhere.)

The striking thing about these data is that, as expected, the states best known for aggressive first-wave economic development programs, such as North Carolina and Georgia, are not necessarily the top spenders for the major state programs and that states such as Illinois, Oregon, and Ohio with the largest budgets have relatively specialized efforts to which their spending is allocated. Overall, however, state economic development program budgets are quite small, and state incentive efforts remain dispersed within state government and other agencies. Nonetheless, the evidence is that state economic development budgets do not include the massive budget amounts that lead directly to uncontrolled incentive-based competition.

Spending on Economic Development Promotions Is Small

State spending for economic development-related promotion efforts is a strong indicator of the extent to which the state relies on attraction and other first-wave efforts. The data show that promotion spending at the state level is small compared to the second- and third-wave program budgets.

Expenditures on promotions by the 16 states in our survey totaled \$8.5 million compared to the \$116 million budgeted to economic development programs. The highest state promotional budgets for economic development are just more than \$1 million per year. With few exceptions, states are reducing their industrial promotion efforts. New York, Washington, and Illinois reduced their expenditures to zero. By contrast, Massachusetts, which eliminated promotions due to budget difficulties, hopes to revive its promotional program as the economy improves. The size of the state seems not to condition expenditures for promotions, as illustrated by California, whose promotional effort is about average for states, although it is very small on a per capita basis. In general, overall economic development promotional budgets are inversely related to the state's total economic development program budget. A number of the top states in total economic development program budget ranked among the lowest of the states in promotions. Illinois, Oregon, Ohio, and Washington all had leading state budgets for economic development but spent little on promotions. Utah and Massachusetts, which had a minimal overall economic development budget, chose to spend heavily on promotions. Georgia and North Carolina were also major spenders on promotions in keeping with their continuing attraction efforts.

Even in first-wave promotional efforts, states are forming partnerships with others to achieve their goals. The state role in promotions is usually limited to supporting localities by producing print or video materials that cities and counties can use, although few states provide some matching funds for these promotional advertisements. Most advertising for business attraction in magazines such as *Site Selection* is done by communities, counties, and regions through their development organization, not by the state economic development agency. More and more, states are recognizing that localities are more effective in targeting and following up on promotional activities than are centralized bureaucracies, and the budget data show this.

What appears to be occurring is that states are discovering that the best promotional strategy is to have a coherent, well-articulated third-wave economic development program aimed at specific industries. This allows states to use local and corporate cosponsors in industry-specific advertising under the banner of trade associations or the local public utility, involving more people from the relevant industry in the state's economic development mission. Moreover, general advertising has not been cost-effective, according to our respondents. Instead, hard news and specific information about the benefits of an area for a particular industrial cluster often do not need an expensive promotional campaign. **By contrast, bad press can hurt a state's economic development image and potential. There is little doubt that events like the Los Angeles riots had a long-term and deep impact on business location decisions.** Conversely, the good press Los Angeles received during boom years had a positive impact on location decisions. Promotion activities are generally less important than hard news.

States, therefore, have few courses of action available to them with respect to promotion activities. More is not better in this arena. States like North Carolina, Oregon, and Washington have developed sophisticated approaches to ensuring that people know what the states' goals are and which industries match those goals.

Few Taxes, No Taxes, and Tax Breaks

The research on how tax rates affect economic development suggests that low tax rates have limited impact on business locations or economic growth (Lynch, 1995; Smith, Ready, & Judd, 1985; Vaughan, 1980), **with higher tax rates offset by higher levels of tax-financed services** (Bartik, 1991). In addition, high taxes are balanced with state tax breaks in places where they are particularly high unless prohibited by custom, laws, or state constitution. Actual tax rates and benefits are much too complex to compare easily in a general economic development study such as this; it is clear, however, that a number of competing patterns can be discussed. Low tax states such as Nevada, which has no corporate income tax, lack tax incentives because there is little or nothing to discount. In addition, several states are prohibited by constitution (Arizona) or custom (Georgia) from offering tax incentives.

Tax incentives in high-tax-rate states are targeted to retaining competitiveness in specific markets. **In New York, for example, selected businesses can lower their taxes by locating in targeted**

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areas, investing in selected types of equipment, or employing disadvantaged people. Many states offer tax assistance to companies that face difficulty in meeting strong environmental standards. In addition, virtually every state offers sales tax exemptions for manufacturing machinery purchased for use in the state, and exemptions from tax are available for goods being shipped through the state, goods exported or imported in state "free ports," and materials or fuels used in manufacturing. These exemptions seem to be almost universal now.

State-sponsored enterprise zones have also become widespread as a means of concentrating tax and other incentives to attract businesses to disadvantaged areas. State enterprise zone programs preceded the federal enterprise zone programs, and most remain active. Of the states in this study, only three do not have state-level enterprise zones or their equivalent. Nevada has a zone, but it is inactive. The most common and significant incentive in enterprise zones is a job tax credit that is worth thousands of dollars per disadvantaged employee hired and retained. In addition, states offer incentives of training, financing, property tax exemptions, and other benefits. Most states have a limited number of zones in which to target benefits. The clear exception is Texas, which has more than 100 zones, but most of these are not funded, and benefits are decided on a business-by-business basis depending on the expected employment patterns for the firm.

Beyond the First Wave

The first-wave state attraction and promotional efforts that persist are part of a longer and more coherent state development effort. The emphasis at the statehouse is shifting away from attraction programs, as indicated by state priorities, budget categories, and tax policies. The budget data also provide a clear picture of what the alternative is becoming. State government increasingly helps substate regional areas compete and structures relations with both local governments and the private sector. The new state role is leadership for a broad-based and diversified economic development effort.

POLICY PRIORITIES FOR STATE INDUSTRIAL STRATEGIES

States embracing third-wave approaches have much more complex economic development strategies. These strategies mobilize state resources that provide both sectoral and locational contexts in which existing or new industrial clusters can flourish. In the past decade, state economic development programs have been transformed into state-level industrial policy. The states covered in this report are no longer content with just competing for new factories, but they are developing specific third-wave strategies aimed at strengthening both firms and regions in particular industrial sectors. These emerging state programs concentrate on providing the financial, infrastructure, and technical bases required to build new industrial capacity in emerging industries and/or to assist the existing firms to penetrate new international or domestic markets. The type of industrial policies pursued by leading states are moving in a direction similar to that of international powers like Japan, Singapore, Taiwan, Germany, and Italy, with strong economic planning in support of key industries and locations. This is a curious turn of events because individual states are moving in a direction the United States as a whole has avoided.

The reasons for this new industrial strategy approach clearly can be seen. States, as reported by the officials we interviewed, recognize that they are in an international economic competition and that merely moving firms around a state is a zero-sum game. States believe that they have a role in helping private industry compete in the transformation to the new industrial environment of the 21st century. New knowledge-based industries, exotic technologies, vast networks of collaborating industries, and a restructuring of industrial power may necessitate state involvement in a more strategic sense than ever before. Thus, we discovered that states are creating industrial policies that involve an identification of industries and industrial sectors believed to have a high potential for expansion and that can stimulate other economic sectors in the state. State policy is forming partnerships around selected initiatives that are believed to increase the strategic advantage of the state

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in encouraging firms in these targeted industrial sectors. Industrial policies are the clearest example of third-wave economic development efforts because of their explicit focus on creating the context for industry-wide development, in contrast to first- and second-wave policies that focus on specific firms and their needs.

Industrial policy coexists with and co-opts first- and second-wave economic development efforts and strategies as appropriate. Thus, within a state, industrial plan programs are in place to create new business, open new opportunities for existing business, and assist new entrants to business such as women and minorities while facilitating the attraction of firms in which there is a strategic advantage. The rationale advanced for pursuing this multiwave strategy appears to be the rekindled interest in business formation as a major economic engine and the desire to attract firm headquarters, which will ensure continued growth of all levels of production facilities in key industries. More significant, states realize that they must strengthen their institutional resources, through which firms can capitalize on strategic opportunities within the new world economy.

Strategic Planning as Industrial Policy

States are becoming increasingly sophisticated in their economic development planning efforts, and these are leading directly to industrial policy. Several of the states have commissioned major strategic-planning efforts. The strategies are epitomized by Washington, Nevada, and Florida, which have developed detailed targeted approaches to economic development. In Florida, the entire approach to economic development has been rethought and reorganized into a new nonprofit corporation called Enterprise Florida. This corporation forms the base for a new public-private partnership designed to develop and diversify the state's economic base. This partnership places more responsibility on the private sector to lead, fund, and cooperate with the state in fashioning its economic directions. Nevada produced a finely tailored strategic plan with specific measurable action plans leading to concrete goals. Similarly, Washington developed TEAM Washington as a vehicle to determine the industrial sectors in which the state can be competitive and to forge new strategic alliances within the state and across the international border with Canada.

Washington and Florida are scarcely alone in embarking on this direction. Of the states studied, virtually all have or are in the process of developing strategic plans. The consequence of these plans is to move beyond simple firm-based first-wave strategies to multiple strategies that are the foundations for long-term efforts (see M. K. Clarke, 1986). Utah is one of the best examples of how clear and specific a plan can be with respect to industrial targeting and detailed attraction strategies. The Illinois plan, "From Rust Belt to Revival," says it all with respect to that state's direction. Among other states, Colorado has built its strategy on strong coalitions of public and private interests and now is focusing on strengthening its educational system for a long-run competitive capacity.

The potential of the strategic-planning process to push state economic development into third-phase economic development programs is illustrated by the California Economic Strategy Panel's program, *Collaborating to Compete in the New Economy* (1996). Mandated by the legislature, the first California plan came well after similar efforts in other states, but the ambivalence of the legislature to an overall plan was illustrated by the fact that state funds were not allocated to it. Corporate contributions, donated in-kind services, and participation by dozens of nonprofit groups were required to complete the analysis. More than 100 industry leaders worked to develop an innovative approach of identifying clusters of industries in each of five geographic and economic regions. The process was explicitly bottom-up but included collaboration at the highest levels of government and industry.

The state economic development plans are characterized by four important features. First, the plans are a product of new partnerships between the public and private sectors. In essence, government is not trying to go it alone. Second, the strategies avoid an emphasis on attraction but put the priority on retaining and expanding existing industries, especially in targeted sectors. This is particularly true of "rust belt" states like Ohio and Illinois. Third, the strategies aim at building a new economic base of small and usually high-technology, growth-oriented firms. Finally, the strategies are linked to budget allocations and to ongoing program evaluation.

Planning and Partnerships

The plans are typically a result of a broad set of public-private partnerships. Although some of the planning documents were broad-based public participation exercises, others were internal documents produced by consultants. Most reflected a consensus of experts within the state's executive branch about the direction the state should go with regard to economic development after evaluating private sector input. None had a major goal of developing a grassroots or community approach to economic development; New Mexico used the planning process to generate extensive public input of ideas and support for their overall process, but the process did not lead to a redirection of their economic development effort.

Some states have a carefully articulated strategy for economic development that is very specific about ways to diversify the economy, to retain strengths, and to expand potential growth sectors. As M. K. Clarke (1986) notes, strategic planning typically leads to or accompanies a proliferation of programs in addition to the first- and second-wave attraction efforts. For example, Nevada engaged in a strategic-planning process in the early 1980s that led to a carefully focused business diversification program, including an initiative to attract businesses from California. In addition, Nevada supported this effort with their *Assessment of the 1985 Nevada State Plan for Economic Diversification and Development* (Commission on Economic Development, 1991). Utah's *Blueprint* is updated annually. *Oregon Shines* was followed by *Oregon Benchmarks*, which established performance measures. In Texas, the strategic-planning effort was largely used for one legislative effort (reforming the workmen's compensation program), and in Georgia, the use of a planning document was not even considered necessary; one person said, "We like what we are doing. Other states come to see what we are doing because we are so successful" (personal communication, n.d.).

The plans promoted by the states addressed the potential and the strategies for increasing the high-technology and growth sectors of the economy. The identification of what was possible and desirable varied by state, with some focusing on adaptations of existing technologies, such as automotive parts or steel, whereas others focused on the newest and emerging growth industries including computers, biotechnology, communications, and materials sciences. The strategic effort to expand capacity in the growth industries included research and development programs or facilities, special incentives and tax credits, and certain industry-specific expenses, marketing, and promotional activities.

Finally, the planning process is an ongoing one in most states, involving both evaluations of progress and revisions or updating of plans. This ongoing effort will continue to ensure that the plans remain effective and that state programs respond to the plans. In many states, economic development budget processes have been linked to the plan and its success. The key feature of the strategic-planning process is focusing the state's efforts on a set of industrial targets.

Public-Private Links to Support Industrial Growth

The states also have generated a variety of public-private partnerships that assist in an economic development program going well beyond the planning phase. What seems most significant is that these joint efforts are largely aimed at reducing the working barriers between business and government and improving the entrepreneurial climate. For example, in Georgia, most of the industrial leads come from a close link between government and business on the Industrial Development Commission. Chambers of commerce are active in most states, particularly Florida. TEAM Washington includes an elaborate network of development organizations, and many states have advisory councils. Massachusetts uses a wide network of "quasi-public" organizations to bridge between state government and business in providing financing and other services the state cannot provide. Most states use the private sector to assist in the public relations effort, especially entertaining business contacts. These organized efforts greatly multiply expenditures beyond what is contributed by state economic development budgets.

The state role in these partnerships leads increasingly to the decentralization of programs and personnel to regional offices. Most states have a number of local offices, and all states use local

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economic development organizations to assist in the delivery of their programs. On the other hand, several states have given their regional offices a great deal of responsibility, and they are the major modes for processing loans, making bids for business locations, or monitoring which firms need retention and expansion assistance.

Some states have a program highly focused on a small number of targets, whereas other states have pursued a broad, diversified approach. Nevada, for example, has chosen to focus economic development efforts on diversification in a strategic effort to supplement tourism and gambling industries with other strategic programs, and Colorado adopted a three-pronged approach to reverse the “climate of despair” that involved business climate and attraction efforts, public works, and air quality improvements. These efforts stand in sharp contrast to the New York strategy, which has special programs for many subgroups and industries, creating a “shotgun” approach that responds to opportunities and needs wherever they may be. It is not possible to say that a focused or diversified approach is preferable, because each responded to the particular needs in that state.

BUILDING THE FOUNDATIONS: TECHNOLOGY, HUMAN RESOURCES, AND CAPITAL

Increasingly, states are demonstrating an interest in using their fiscal resources to assist new or existing firms in improving technology and efficiency in production of products or services. Ohio has a special technical development effort in the “Thomas Edison” program to provide funding and technical assistance to new enterprises. As David Osborne (1990) points out, programs to improve technology have been embraced by many states, although the benefits of these programs often fail to become “catalysts, fostering needed actions and interactions, that ideally will become self-sustaining” (p. 56). New York has the most complex set of programs, ranging from an Urban Development Corporation to assist firms in economically depressed areas to a Science and Technology Foundation to facilitate the commercialization of new technologies. Massachusetts has a Community Development Finance Corporation to provide venture capital and small-business loans, along with technical assistance to new firm startups in disadvantaged communities or minority businesspersons. Ohio’s Minority Development Financing Commission is aimed at providing technical help and financing to minorities to increase their access to the business community.

The new approach to state involvement in the financing of business is to get beyond handing out money. Most states have a loan program or guarantee of some sort, and most have explicit targets for their loan programs in terms of community development or jobs for specific targeted groups. Many states think that investing in small businesses makes good business sense in that the jobs created are important. States also have different rules about using state funds for business loans. Several states have laws that do not allow state funds to go to private companies, and in those states, financing incentives must be creative. Arizona has used lottery funds for this purpose, and Massachusetts has created “quasi-public organizations,” whose function is to use public and private funds for business assistance. Many states allow public funds to be used only for the last piece to fund a project already supported by private and community loans. Although state funding in some states provides high-risk capital to leverage other sources of funding, New Mexico has a large fund that is invested conservatively in low-risk investments.

Focus on Clusters

The key to third-wave economic development programs is the identification and examination of key industry clusters specific to each region (see Waits & Howard, 1996). Clusters were defined in the California strategic plan as “geographic concentrations of competing, collaborating, and related businesses that drive the economies of California’s regions, and therefore, the state” (California Economic Strategy Panel, 1996, p. 7). Put another way, industry clusters are regional basic industries seen not as isolated firms but as interlocking businesses that have advantages due to their proximity to each other, being in a common network of supplier and support industries, and sharing access to a specialized infrastructure of technological, educational, financial, and market services.

In addition, the cluster is supported by the specially skilled labor force that is attracted to a strategic industry, the investors who provide venture capital and other financing, the professional and industrial associations specific to the industry, the research and development institutions from which new innovation originates, the marketing efficiencies deriving from a consolidated region, and the community structures that support a growing business (see also Held, 1996).

Industry clusters can be identified intuitively or empirically. The California strategic analysis focused initially on nine industry clusters based on local interest and statistical verification of the existence of the cluster. The clusters chosen were telecommunications, health care technologies, multimedia, environmental technologies, entertainment, apparel and fashion design, information technologies, wood products, and diversified manufacturing. What distinguishes these clusters from other industrial groups is that each is already established and is growing, each has considerable overall growth potential through the application of new technologies, and each depends on an extensive network of specialized public and private resources. These resources, the economic foundations of the clusters, include 11 factors that the strategy panel considered essential: "education and workforce preparation programs, research and technology, capital, information infrastructure, physical infrastructure, tax and fiscal policies, regulatory climate, marketing, supplier development, quality of life, and industrial networking" (California Economic Strategy Panel, 1996, p. 25). Given the clusters, the strategic plan focused on how state policies and local actions could strengthen the foundations by which the current firms in the region can become the international leaders in their field. Cluster analysis is the core of an industrial policy because it selects a core set of firms for which detailed analysis is feasible. In addition, the cluster can generate its own capacity to identify its needs and continue to grow.

Becoming Global

All states have given increased attention to their international programs, and now all have established at least one foreign office (see Kudrle & Kite, 1989). These offices provide trade leads for export markets for products produced in the state, and they help identify foreign firms wanting to invest in a plant in the United States.

All the sample states are engaged in international activities. Astoundingly, every state has or has had at least one foreign office. All the states in the study except Arizona and New Mexico had an office in Tokyo at the time of the interviews; many are in Europe and Mexico City as well as selected other cities. At the time of the interviews, Illinois, Florida, and New York had seven foreign offices; Utah six; and California, Texas, and Ohio five. These overseas offices are not merely tourism promotion outposts; in fact, they reflect strategic selections of locations where each state has identified business opportunities for local firms as well as investment opportunities for foreigners in the United States. Texas views its economic future as intimately tied to the fate of the proposed North American Trade Agreement. As a result, Texas is actively engaged in forging relationships with Mexico. California saw the need to have offices in Mexico but not in Canada. International offices are another aspect of strategic planning and management on the part of each state industrial policy.

Economic Development Strategies as Networking

Because overall state budget allocations for economic development are indicative of the type and direction of state policy, it is clear that state efforts are increasingly indirect and involve networking, brokering, and marketing. In the third wave, economic development effectiveness is derived as much from nonbudget activities as from those that have a large budget attached to them. For example, several states have developed large loan pools from joint bank and industry programs instead of from state-allocated funds. Loan guarantee programs have an advantage in that a small amount of state money can be leveraged and reused to guarantee loans through banks. Thus, economic development loan programs do not have to have state money loaned, which saves the state budget millions of dollars.

In the third wave, economic development effectiveness is derived as much from nonbudget activities as from those that have a large budget attached to them.

TABLE 3
Selected Examples of State Industrial Policy Initiatives

Leadership	<ul style="list-style-type: none"> Emphasis by governor on economic development Business welcome events Business councils, industrial development associations Worker compensation and tort reform Environmental ombudsmen Lotteries Building of community capacity to do attraction and retention
Information	<ul style="list-style-type: none"> Technical assistance and standards University outreach programs Electronic bulletin boards Site information Partnerships to do planning and promotions
Brokering	<ul style="list-style-type: none"> Permit one-stop shops Coordination of economic development with other programs (e.g., housing) Interstate regional cooperation Marketing

One of the most significant things we learned in the process of doing the interviews was the prevalence of strategic networking efforts within states with successful economic development programs relative to state goals. An industrial policy is one that mobilizes state resources to address the focused interests of selected industrial groups. Thus, the best state programs are flexible and energetic efforts that generate widespread business and community support within the state to support a targeted industrial cluster. Instead of first-wave programs that offer incentives directly to firms, the successful third-wave state economic development program stimulates a network of inexpensive administrative programs that link the state with the growing industrial cluster in support of the strategic plan. What would these activities look like?

The interviews with 16 states allowed a collection of examples of strategic third-wave programs that help build successful industrial strategies. These are summarized in Table 3. What is interesting about these examples is that they are all low-budget and relatively minor parts of the overall economic development picture, but the top economic development officials in the selected states chose these as some best examples of how they were working to ensure that their state was as competitive as possible.

Leadership. Leadership is one of the most important parts of a successful economic development strategy, according to the states we interviewed. When the governor, for example, is interested in economic development, works hard with the economic development agency, ensures that the agency gets the resources it needs, and makes public appearances on behalf of the economic development effort, the state has top-level leadership that can mobilize state resources on behalf of economic development interests (see Boeckelman, 1996). This takes several forms. In Colorado, the governor reportedly located the economic development director's office very near his, attended most of the daily economic development planning meetings, and spoke of economic development at every public presentation he made. Continuous attention to economic development paid off in a focused strategic plan to revitalize the lagging economy. On the other hand, governors can play an important symbolic role that reinforces other economic development efforts in which they play a less central role. For example, in Nevada, new businesses were invited to join the governor at an economic development banquet, welcoming firms that had located in the state. The publicity for the state was good, and businesses enjoyed coming to the event, but the cost was not high. Similarly, in Georgia, the Industrial Development Association sponsors events at the Masters' golf tournament where local businesspersons bring out-of-state recruitment prospects. The events at the Masters' include high-level state participation, but the cost is picked up largely by private donations.

In addition, leadership plays a large part in helping to establish business councils, industrial development associations, and other organizations at the local level that promote local businesses.

Joint Venture Silicon Valley is one of the most impressive local organizations that have taken on major leadership roles in enhancing the development of this California region. Several states took strong leadership roles in advocating reform of workmen's compensation, tort law affecting business growth, and land-use policies that were deemed unfriendly to business. A particularly interesting project was to establish an environmental ombudsman to work with businesses to help resolve business-environmental problems. These state leadership roles are critical to solving many of the barriers that block effective industrial development.

Information. A second role that states can play in third-wave programs is to provide ample information to businesses about the changes in technology as well as the potential for business cluster expansion. Good data and specialized research units in state government are important building blocks for any economic development effort, according to the respondents. Several states have outstanding research facilities in conjunction with universities that meet industry research needs. The Edison Institute and California's Micro project are examples of research and training programs that become the foundations of an industrial cluster. State leadership in technology is increasingly acknowledged as the backbone of new and expanding industrial development programs that create jobs and build firms. Computerized databases and even development models are available from state agencies, often disseminated by electronic bulletin boards or Web pages. As more states become interested in promoting industrial clusters, the electronic information base for each will be essential to ensure that emphasis is on the right places.

More critical is the role of information to all aspects of the industrial location process. If states limit the use of incentives, information may be the most important tool. For instance, information on the availability of parcels of property, educational programs, export finance experts, fiber optic cables, or other resources becomes a tool that states can provide to local communities to assist firms considering locating in their area. Information can be the primary resource for the location of an industrial cluster in one area rather than another. For example, the California alternative energy industry cluster is a direct result of the information provided by the state on the location of wind and geothermal resources, the dissemination of information about markets and regulations, and the assurances of all parties that problems would be identified and solved.

Brokering. The third function that states can play in the third-wave industrial policy is to broker (in an organizational sense) the resources needed by the network to expand. For example, a number of states were establishing one-stop shops that facilitated permit approvals for businesses. There are limits to the extent states can simplify the permit process, but Georgia established a guarantee that permits would be granted in 90 days by negotiating different agency requirements into simple applications. Several other states also have established one-stop shops to simplify meeting environmental or building permits. States also have established internal organizational programs to coordinate economic development with other programs such as housing, agriculture, or education. Perhaps the state role in linking cities and counties with businesses to network for selected industries is the most significant role for the third wave. For example, these roles have long been established by states to promote tourism. Localities join with the tourism industry to jointly promote an area, and they often agree to specialized taxes for promotions. The success of marketing vacations, events, or conventions has set models that can be used to link various participants together to jointly promote an area for everything from light manufacturing or trade to medical research. Biotechnology corridors, software centers, and silicon bayous are examples.

The role of networking is the classic low-cost economic development tool. Hatch (1991) points out that the best role for the state is to "concentrate its resources on coordinating services to groups of firms, providing strategic information on growing markets, and catalyzing manufacturing networks" (p. 40). These efforts require that the major economic development role is to be a "broker" who mobilizes firms into cooperative systems in which common needs are addressed and specialized services are collectively acquired as a regional hub around which an industrial structure can be formed. This is the future of economic development.

CONCLUSION: BEYOND ORTHODOXY

The nature and purpose of the economic development programs in each state are unique to that state and, for the most part, an appropriate response to its particular economic and political context. In this study, the emphasis has been on what the states think works well and what does not. This leads to a realization that, at the same time one state is increasing emphasis on third-wave programs, another is expanding second-wave programs to support individual firms. It was not the purpose of this study to determine whether a state was pursuing the best strategy but simply to note that states are basing their overall strategy on detailed industrial strategy. There is presently no one orthodoxy of state economic development efforts in which there are enlightened leaders and laggards; instead, **states become active in what works well and then reorganize if they are not satisfied.**

The high level of reorganization in state economic development departments leads to the conclusion that there has been much dissatisfaction with past programs and experimentation with third-wave strategies. In spite of the attention given to incentives (and concern over their excessive costs), incentive-driven industrial attraction is but a small part of the overall economic development effort by state economic development programs. **The day-to-day state efforts that provide technical assistance, facilitate permits, build infrastructure, train employees, market state products and tourism, and process federal funds are the unsung heroes of state economic development programs. Many of the most successful things that states do are neither glamorous nor expensive; these programs are the core of an effective industrial strategy.**

The third wave, then, is a policy direction instead of a set of expensive programs. It is an acknowledgment that, with the complexity of the global economy, **a region must be coordinated to compete and that the advantages of one state over another lie in how resources are networked and mobilized to ensure growth of a whole economic cluster.** Because the third wave is not a set of programs, it is difficult to either quantify or evaluate, and its main tools, such as leadership, information, and brokering, are as old as economic development itself. The program goals that are important in the third wave are the same ones that have been important in previous efforts, such as **innovative research, appropriate technical training, available capital, cutting-edge infrastructure, and market advantages.**

Third-wave economic development efforts, then, focus multiple existing resources of state government on a continuing broadening of the foundation for effective economic development. From the first wave's focus on attracting firms external to the state and the second wave's focus on both internal and external firms, the third wave gives emphasis to the community and institutional resources that allow firms to succeed in what is an increasingly global context. Indeed, the ultimate success of third-wave efforts is not measured by short-term gains but by what has been described as a positive-sum industrial policy, in which all firms benefit from state efforts and the industry expands due to its global advantages rather than local incentives.

NOTE

1. Eisinger (1995) classifies **education and job training, industrial modernization, building local government capacity, and industrial clusters or networking as third-wave capacity-building programs.**

REFERENCES

- Accordino, J. J. (1994). Evaluating economic development strategies. *Economic Development Quarterly*, 8(2), 218-229.
- Bartik, T. (1991). *Who benefits from state and local economic development policies?* Kalamazoo, MI: Upjohn Institute.
- Blakely, E. J. (1994). *Planning local economic development: Theory and practice.* Newbury Park, CA: Sage.
- Boeckelman, K. (1996). Governors, economic theory, and development policy. *Economic Development Quarterly*, 10(4), 342-351.
- Bradshaw, T. K. (1993). Multi-community networks: A rural transition. *Annals of the American Academy of Political and Social Sciences*, 10(4), 164-175.

- Bradshaw, T. K., Nishikawa, N., & Blakely, E. J. (1992). *State economic development promotions and incentives: A comparison of state efforts and strategies* (Working Paper No. 584). Berkeley: University of California, Institute of Urban and Regional Development.
- California Economic Strategy Panel. (1996). *Collaborating to compete in the new economy*. Sacramento, CA: Trade and Commerce Agency.
- Chernick, H. (1997). Tax progressivity and state economic performance. *Economic Development Quarterly*, 11(3), 249-267.
- Clarke, M. K. (1986). *Revitalizing state economies*. Washington, DC: National Governors' Association.
- Clarke, S. E., & Gaile, G. L. (1992). The next wave: Postfederal local economic development strategies. *Economic Development Quarterly*, 6(2), 187-198.
- Commission on Economic Development. (1991). *Assessment of the 1985 Nevada State Plan for Economic Diversification and Development*. Carson City, NV: Author.
- Eisinger, P. (1995). State economic development in the 1990s: Politics and policy learning. *Economic Development Quarterly*, 9(2), 146-158.
- Fosler, R. S. (1992). State economic policy: The emerging paradigm. *Economic Development Quarterly*, 6(1), 3-13.
- Goss, E. P., & Phillips, J. M. (1997). The effect of state economic development agency spending on state income and employment growth. *Economic Development Quarterly*, 11(1), 88-96.
- Hanson, R. L. (1993). Bidding for business: A second war between the states? *Economic Development Quarterly*, 7(2), 183-198.
- Hatch, C. R. (1991). The power of manufacturing networks. In R. S. Fosler (Ed.), *Local economic development: Strategies for a changing economy* (pp. 33-40). Washington, DC: International City Management Association.
- Held, J. R. (1996). Clusters as an economic development tool: Beyond the pitfalls. *Economic Development Quarterly*, 10(3), 249-261.
- Herbers, J. (1990). A third wave of economic development. *Governing*, 3(9), 43-50.
- Kayne, J., & Shonka, M. (1994). *Rethinking state development policies and programs*. Washington, DC: National Governors' Association.
- Kudrle, R. T., & Kite, C. M. (1989). The evaluation of state programs for international business development. *Economic Development Quarterly*, 3(4), 288-300.
- Leicht, K. T., & Jenkins, J. C. (1994). Three strategies of state economic development: Entrepreneurial, industrial recruitment, and deregulation policies in the American states. *Economic Development Quarterly*, 8(3), 256-269.
- Lynch, R. G. (1995). *Do state and local tax incentives work?* Washington, DC: Economic Policy Institute.
- Marlin, M. R. (1990). The effectiveness of economic development subsidies. *Economic Development Quarterly*, 4(1), 15-22.
- Marvel, M. K., & Shkurti, W. J. (1993). The economic impact of development: Honda in Ohio. *Economic Development Quarterly*, 7(1), 50-62.
- Osborne, D. (1990). Refining state technology programs. *Issues in Science and Technology*, 6(4), 55-61.
- Ross, D., & Friedman, R. E. (1990). The emerging third wave: New economic development strategies. *Entrepreneurial Economy Review*, 90, 3-10.
- Smith, M. P., Ready, R., & Judd, D. R. (1985). Capital flight, tax incentives and the marginalization of American states and localities. In D. Judd (Ed.), *Public policy across states and communities* (pp. 181-201). Greenwich, CT: JAI.
- Vaughan, R. J. (1980). State tax incentives: How effective are they? *Commentary*, 4(1), 3-5.
- Waits, M. J., & Howard, G. (1996). Industry clusters. *Commentary*, 20, 5-11.