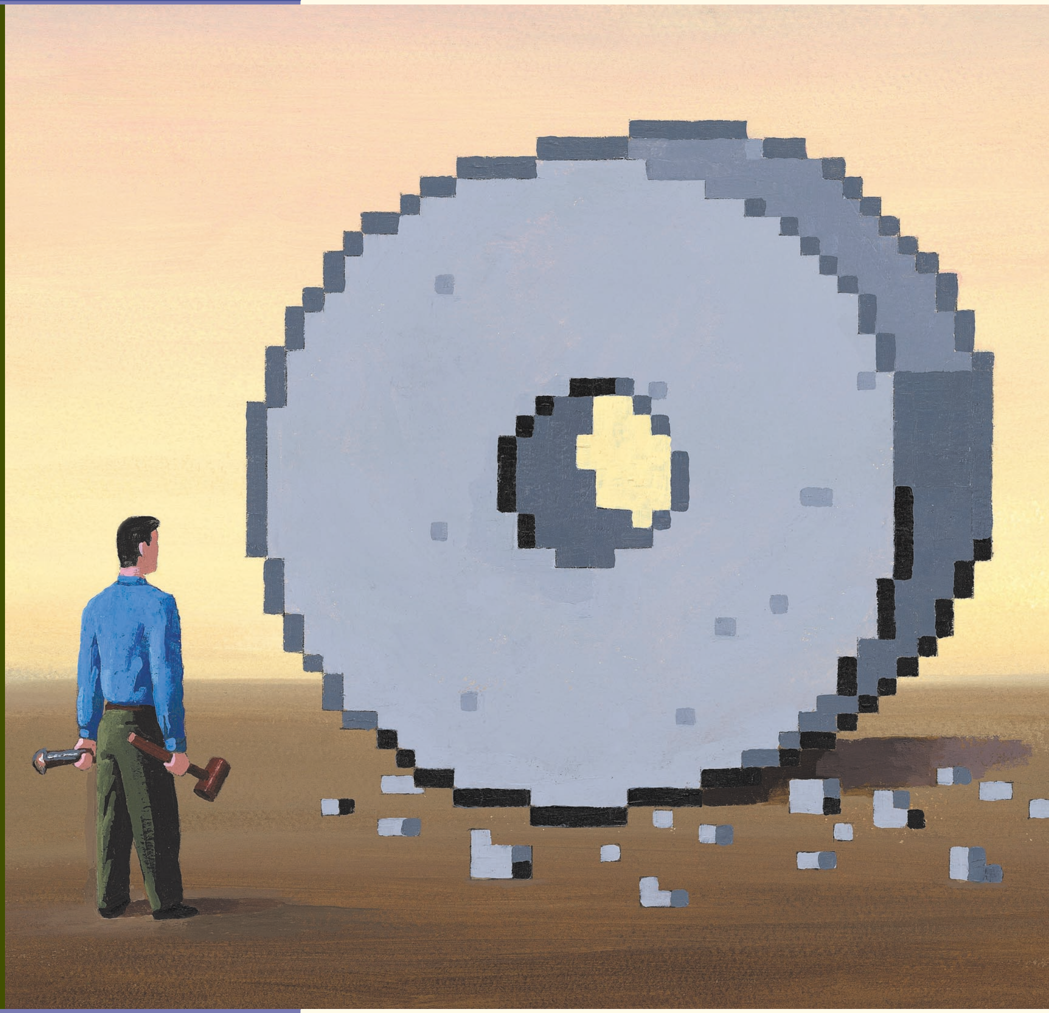
A Governor's Guide to Strengthening State Entrepreneurship Policy



NGA Center for BEST PRACTICES

Since their initial meeting in 1908 to discuss interstate water problems, the governors have worked through the National Governors Association to deal collectively with issues of public policy and governance. The association's ongoing mission is to support the work of the governors by providing a bipartisan forum to help shape and implement national policy and to solve state problems.

The members of the National Governors Association (NGA) are the governors of the fifty states, the territories of American Samoa, Guam, and the Virgin Islands, and the commonwealths of the Northern Mariana Islands and Puerto Rico. The association has a nine-member executive committee and four standing committees—on Economic Development and Commerce; Health and Human Services; Education, Early Childhood and the Workforce; and Natural Resources. Through NGA's committees, governors examine and develop policy and address key state and national issues. Special task forces often are created to focus gubernatorial attention on federal legislation or on state-level issues.

The association works closely with the Administration and Congress on state-federal policy issues through its offices in the Hall of the States in Washington, D.C. The association serves as a vehicle for sharing knowledge of innovative programs among the states and provides technical assistance and consultant services to governors on a wide range of management and policy issues.

The Center for Best Practices shares knowledge about innovative state activities, explores the impact of federal initiatives on state government, and provides technical assistance to states. The center works in a number of policy fields, including agriculture and rural development, criminal jutice, economic development, education, energy and environment, health, social services, technology, trade, homeland security, and workforce development.

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Foreword

This guide explains how governors can establish and implement policies that will support the growth of entrepreneurial firms in their states. Entrepreneurial growth companies—often referred to as "gazelle" businesses—account for a significant percentage of new job creation and are the catalysts for cluster-driven economic development. State strategies to address the unique needs of these firms increasingly are an important economic development tool.

Despite their importance to the economy, entrepreneurial firms often are not well-supported by government economic development strategies. Lack of knowledge regarding their economic contributions and misunderstandings of their nature and needs have in the past undermined state efforts to support them.

The information in this guide stems from a two-year NGA Center for Best Practices State Policy Academy on Entrepreneurship, supported by the Ewing Marion Kauffman Foundation. This academy convened a select group of state policy teams to address means of enhancing entrepreneurial capacity. These teams met with experts on entrepreneurial development, NGA Center staff, and other policy professionals to craft state-specific strategies in support of entrepreneurial growth. The insights and lessons gained from this process are presented herein.

This guide complements other economic policy titles published by the NGA Center for Best Practices, including *A Governor's Guide to Cluster-Based Economic Development, A Governor's Guide to Building State Science and Technology Capacity, A Governor's Guide to Trade and Global Competitiveness* and *A Governor's Guide to Creating a 21st-Century Workforce*.

Phil Psilos, formerly of the NGA Center for Best Practices, served as principal author of this report, with substantial contributions from Ellen Harpel of Business Development Advisors and Samuel Leiken and Steve Crawford of the NGA Center for Best Practices. Paul Kalomiris provided extensive research support for this publication. We are grateful to Erik Pages of EntreWorks Consulting for his editorial assistance.

Introduction

American entrepreneurship attracts admirers and imitators from around the world. Indeed, many policy makers and academics from other nations seek to capture this special American ability to innovate and turn innovations into successful, world class enterprises. Despite this admiration, efforts to identify the principles of entrepreneurship and to apply the American model elsewhere demonstrate little success and have not produced a guide for policy makers that will help stimulate entrepreneurship where it has not already sprung roots.

Therefore, a word of caution in using this guide is in order. It cannot simply be followed. It must be *applied* to specific circumstances and *used* to solve *specific problems*. For example, much has been made of an "entrepreneurial culture," and countless programs have been devised to create or stimulate one. Yet, entrepreneurial culture is not the same thing everywhere. Certainly the culture of the region in Massachusetts defined by Route 128 is as distinct from California's Silicon Valley as it is from Austin, Texas. Notwithstanding, each of these places is an entrepreneurial center.

Therefore, we strongly recommend to governors and state policy makers that before using this guide, they carefully examine the regions in their states where they are considering entrepreneurial initiatives. In particular, we suggest that states first do an inventory of programs they already provide to assist entrepreneurs. From this inventory it will be possible to derive a portrait of the entrepreneurial community from the state's viewpoint. For example, if the state emphasizes early stage financing programs, it is reasonable to assume that it believes that access to capital is a major problem. Likewise, if it focuses on entrepreneurship training, it is probably because policy makers think it lacks people who are skilled in business start-ups.

Once this portrait is drawn, the question of how well it squares with the views of entrepreneurs becomes critical. There is no better way to find out than to ask. Not only must successful entrepreneurs be questioned, but the failures as well (and often they are the same people!). Organizing a series of structured conversations with entrepreneurs in those regions where the state believes entrepreneurial potential exists has a number of advantages. Policy makers can learn from the horse's mouth as it were what the problems are that entrepreneurs face. What resources have they used to solve those problems, and what resources could they have used had they been available? Policy makers should include regional and local economic development officials in order to align state and local initiatives to the greatest extent possible.

In addition, all could study this guide together to see whether any of it should be applied locally or statewide. Sometimes meetings like this take on a life of their own, where, for example, a group of entrepreneurs decides to set up a mentoring program for would-be entrepreneurs or a speakers program at a high school or community college that wants to include entrepreneurship in its curriculum.

One result of this process could be a report to the governor that attempts to answer the questions that structured the conversations: what policies and programs work and do not work for entrepreneurs? What else is needed? What are entrepreneurs themselves willing and able to do? How can the state help? In the best of all worlds, the report should be part of a conversation with the governor and other leading policymakers in which entrepreneurs themselves speak to the issues that matter to them and offer state leaders an authentic voice on how the state can be most effective.

Executive Summary

Entrepreneurship is a key determinant of economic growth.

- Some experts attribute nearly 70 percent of economic growth to entrepreneurial activity and suggest that "one-third of the differential in national economic growth rates is due to the impact of entrepreneurial activity."[1]
- About 35 percent of the companies on the Fortune 500 list are displaced every three or four years by more rapidly expanding firms. Entrepreneurs ultimately propel the country's largest businesses; they do not just run small companies.[2]
- The National Commission on Entrepreneurship has determined that the Inc. 500 firms grow at an average rate of 1,312 percent over five years.

To prosper in an increasingly competitive global economy, it is vital that states develop a supportive environment for entrepreneurs through economic development and other policy vehicles. This report provides policy guidance and best practices to help governors and state leaders to develop or improve policies that support entrepreneurship.

Many governors recognize the critical role of entrepreneurs in developing competitive "clusters" of businesses and the centrality of entrepreneurs in the cluster-based model. "Clusters grow and develop principally as entrepreneurial companies spin off from larger, more established firms creating concentrations of competing and collaborating firms that find advantage in remaining located nearby."[3] Put more succinctly, "Entrepreneurial capacity is the fuel that drives the expansion of cluster growth."[4]

Yet, most state economic development efforts continue to be organized around traditional business retention and incentive-based industry recruitment programs. This has led to an emphasis on programs to enhance labor force skills, invest in infrastructure, and create a competitive tax and regulatory climate, among other factors.

These programs and the underlying effort to improve the ability of businesses to prosper in a state are still necessary, but they are no longer sufficient. They have become the expected base line rather than a competitive advantage. Entrepreneurialism and cluster-based development are essential to moving states beyond the lowest common denominator of state economic development policy.

Both the states and the federal government have important roles to play in creating an environment that supports entrepreneurship. Federal securities and intellectual property laws, research and development funding, monetary and trade policies, and the stable legal system provide the framework in which new companies grow and thrive across the nation. However, the state also plays a key role in determining the success or failure of entrepreneurial companies.

Entrepreneurs often "fall between the cracks" of programs designed to support more traditional, less agile business models. In trying to fill this gap, however, states cannot and should not attempt to be the exclusive providers of entrepreneurship support services. Instead, they should aim to serve as a 'broker' for a variety of private and not-for-profit services and should adopt policy changes aimed at meeting the most compelling needs of entrepreneurs. State entrepreneurship policies appear more likely to succeed to the extent that states become "as entrepreneurial as the clients that they serve."[4] Entrepreneurs typically succeed by "leveraging resources they do not own."[5] Likewise, states do not and cannot own most of the resources required to create the conditions for company growth.

Governors and states can play a leading role in developing more entrepreneur-friendly environments by adopting policies and programs to serve the goal of business formation, survival, and growth, and by nurturing entrepreneurs and a culture of entrepreneurship. National surveys of entrepreneurs indicate that the five critical factors that state government can influence are[6]:

- diversity in sources of capital;
- an enabling culture;
- strong local networks;

- supportive infrastructure; and
- "entrepreneur-friendly" government.

How governors can influence these factors is the subject of this guide and can be summarized in the following strategies designed to achieve a more entrepreneurial environment:

1) Integrate Entrepreneurship into State Economic Development Efforts

- Make entrepreneurship part of the explicit mission of the state's economic development efforts
- Create Support Mechanisms for Entrepreneurs through Economic Development Programs
- Use Entrepreneurial, Capital, and Research Networks to Deliver Services
- Deploy the Workforce Development, Unemployment Insurance, and Community Development Systems to Support Entrepreneurs and Promote Entrepreneurship

2) States should use the education system to nurture and encourage future entrepreneurs

- Build entrepreneurial readiness through the State's K-12 schools
- Offer entrepreneurship education at public universities
- Support faculty entrepreneurship in the University System

3) Incubate Entrepreneurial Companies

- Provide Business Incubation Services through Physical Incubators
- Create Virtual and Remote Incubation Options for Rural and Remote Regions

4) Invest in Diverse Sources of Risk Capital for the State's Entrepreneurs and Growth Companies

- Develop a rich base of early-stage capital options
- Support angel investors
- Ensure that risk capital is available in underserved rural areas

5) "Get Out of the Way" through Regulatory Reform and Streamlining

- Remove legal restrictions on equity ownership by the state, public universities, and other government entities
- Put regulatory and licensing processes on-line
- Use one-stop business and licensing models

Through this strategic summary, the guide provides numerous best-practice examples of innovative state policies that can make entrepreneurship more robust and successful. The first section focuses on the importance of entrepreneurship to economic vitality. Section two discusses how poorly entrepreneurship is served by most existing state economic development policies and on what entrepreneurs want from states. The third section provides recommendations to governors and states for enhancing the entrepreneurial climate through policy and program changes. The last section describes a series of strategies governors and states can use to grow entrepreneurship.

Entrepreneurial Policy: An Essential Economic Development Strategy

SECTION I

Entrepreneurial firms are a critical part of all states' economies—the foundations of economic dynamism in the United States and worldwide. Yet, the term "entrepreneur" is often misunderstood, as is the role and importance of entrepreneurial firms in creating competitive regional economies and dynamic business clusters.

This chapter explores three questions that are foundational to state entrepreneurship strategies. First, what is an entrepreneur? Second, why do entrepreneurs and entrepreneurship matter to governors and states? Finally, what explains the rising tide of interest in entrepreneurship among governors and state economic development leaders?

Entrepreneurial Firms are Growth Leaders

The National Commission on Entrepreneurship (NCOE) defines entrepreneurs as leaders of small companies that are based on innovation and are designed to grow quickly—often at an annual rate of 15-20 percent. Small business researcher David Birch defines "gazelles" as firms that grow at least 20 percent per year over a period of five years. These firms are distinguished from the majority of small businesses whose main objective is usually to provide employment and income for the owner and the owner's family.

Entrepreneurial firms are a small but critical component of the economy, accounting for growth and employment far outpacing their numbers. New, fast growth companies (sales growth of at least 20 percent each year for four straight years) comprise about 350,000 firms out of a total of six million U.S. businesses with employees. These firms created about two-thirds of new jobs between 1993 and 1996.[7]

In sum, entrepreneurial companies are engines of growth and innovation to a greater extent than other types of firms and hold greater potential to enhance local and regional economies. Governors play an important role in supporting entrepreneurial firms to enhance state economic development. As the NCOE has written, "If entrepreneurial companies are the source for new jobs and reinvestment in communities, failure to foster entrepreneurship … is simply an unacceptable policy choice."[8]

Entrepreneurs and Entrepreneurship: Definitions

In a previous publication, the NGA Center for Best Practices adopted the following definition of **entrepreneurship**:

The ability to amass the necessary resources to capitalize on new business opportunities. The term is used frequently to refer to the rapid growth of new and innovative businesses and is associated with individuals who create or seize business opportunities without regard for resources under their control. (Jay Kayne, State Entrepreneurship Policies and Programs, Ewing Marion Kauffman Foundation, November, 1999, p. 3.)

A definition of the **entrepreneur** encompassing many of the agreed-upon elements of the term is offered by the State of Kentucky:

> En-tre-pre-neur n.[F, fr. OF, fr. *Entrepredre* to undertake]: one who organizes, manages, and assumes the risks of a business or enterprise. While an entrepreneur can be a small business person, not all small businesspersons are entrepreneurs. Entrepreneurial enterprises focus on new and innovative products and/or processes. They are growth-oriented and aggressively strive to capture market share. Entrepreneurial enterprises may begin as small businesses but often grow to be large firms, bringing wealth to their communities. Entrepreneurs frequently reinvest earnings to expand their original enterprise or to create new ventures.

"A Strategic Plan for the New Economy" State of Kentucky Office of the New Economy, Cabinet for Economic Development, Kentucky Innovation Commission, March 2002, page 42.

While these definitions are robust, one respected scholar notes that the concept of **entrepreneurship** is multifaceted, with components relating to:

1) cognitive mindset: thinking "entrepreneurially";
2) behavioral process: starting new businesses;
3) economic or sociological event: new firm formation;
4) approach to general/strategic management: Organization innovation and growth.

(Dr. S. Michael Camp, Entrepreneurship and Regional Economic Development: Issues and Opportunities, June 14, 2002. Presentation by Advanced Regional Technologies)

Entrepreneurship Is a Key Element in Developing Competitive Clusters

Economic development policy nationwide increasingly has become focused on promoting "clusters" of companies—a concept popularized by Harvard Professor Michael Porter and adopted, in some form, by most states as a new paradigm for economic development. As Stuart Rosenfeld has written, "clusters have become the *sine qua non* of economic development in the United States."[9]

However, there is an important difference between concentrations of companies and dynamic, growth-generating clusters, and that difference is frequently the presence of a dynamic entrepreneurial sector. The process of new company formation and spin-off far outstrips the potential of business recruitment in developing robust and dynamic clusters.

Throughout the year-long NGA initiative on *State Leadership in the Global Economy*—conducted in 2001-2002 under then-Chairman Governor John Engler of Michigan—several themes emerged:

- ***First, state competitiveness depends on the health of the state's industry clusters.*** A cluster is a concentration of similar, related, or complementary businesses and institutions, with active channels for business transactions, communications and dialogue that share specialized infrastructure, labor markets and services and are faced with common opportunities and threats.[10]
- ***Second, clusters expand because of the innovation, knowledge and know-how that is generated by and shared among these businesses and institutions.*** "Companies in strong industry clusters can innovate more rapidly because they draw on the local networks that link technology, resources, information and talent."[11] Innovation drives productivity and is the key to job and wealth creation.
- ***Third, the economic benefits of innovation come from entrepreneurs who translate innovation into a business practice.***

An important conclusion of the NGA's work is that "Clusters grow and develop principally as entrepreneurial companies spin off from larger, more established firms creating concentrations of competing and collaborating firms that find advantage in remaining located nearby."[12] Put more succinctly, "Entrepreneurial capacity is the fuel that drives the expansion of cluster growth."[13]

Important work by the National Commission on Entrepreneurship, the State of Maryland, San Diego's UC Connect, and other organizations highlights the role that entrepreneurs have played in building the most successful "model" cases of state and regional economic development.[14] In addition, states with high concentrations of advanced, technology-based industries realize that their sustainability depends as much on the future entrepreneurial activity of their residents as on the location decisions of large firms with headquarters out of state.

A New and Integrated Economic Development Approach

Despite the importance of entrepreneurs, NGA Center studies have found that new business formation is the least developed cluster-based strategy in most states.[15] Instead, most state economic development efforts continue to be organized around traditional business retention and incentive-based industry recruitment programs. These programs enhance labor force skills, invest in infrastructure, and create a competitive tax and regulatory climate, among other actions.

These programs and the underlying effort to improve the ability of businesses to prosper in a state are still important, but they do not necessarily address the needs of entrepreneurs. In fact, a significant mismatch between economic development practice and the needs of entrepreneurs continues to plague state efforts to encourage high-growth businesses. This mismatch reflects the longstanding focus of economic development on large firms or "small business" clients, the inflexibility and inadequacy of state programs relative to entrepreneurs' needs, and the need to provide support for entrepreneurship both as a career option and as a skill-set through states' educational institutions.

A New Focus on Entrepreneurship

In the current state fiscal crisis, many governors have turned to supporting entrepreneurship as a cost-effective way to promote state economic development. Numerous governors articulated entrepreneurship strategies in their 2003 state-of-the-state speeches and budget proposals. This occurs at a time of reduced capital availability, falling rates of new business formation, and an increasingly risk-averse attitude in the business community.

There are two principal reasons for gubernatorial interest in entrepreneurship: promoting entrepreneurship is cost-effective, and it involves relatively low risk.

A Cost-Effective Alternative to Incentive-Based Competition

Governors face a poor economic development climate as a whole. Since the economy's peak in early 2000, the U.S. economy has lost over 2.7 million manufacturing jobs through the impact of the economic slowdown, productivity improvement, and business relocations to low-cost production platforms abroad. These job losses also reflect a production slowdown fueled by global overcapacity in many industrial sectors.

Policies designed to lure companies to states are extremely expensive and unsuited to the requirements of an advanced economy.[16] An incentive package in the hundreds of millions of dollars range may be feasible in a time of rising state budgets, but at a time of severe revenue shortfalls the risks are much higher. Simultaneously, there is a danger of undercutting long-term state competitiveness by reducing the state's capacity to invest in advanced technologies, maintain a skilled workforce, and secure a robust infrastructure by spending scarce state resources on incentives for a single company or sector.

Low Relative Political and Financial Costs of Entrepreneurship Policies

Policies to support small businesses and entrepreneurs do not require the scale of investment associated with traditional economic development incentives. Costs that are incurred typically are invested either in the development of locally based resources that serve the business community—such as business networks or risk capital—or educational programs.

Wise investments in entrepreneurship also are not "all-or-nothing" bets. "Winning" at the entrepreneurship support game does not depend on the strategic decisions of a small number of firms. In the short term, entrepreneurial strategies are less ambitious with respect to job and wealth creation. In the long-term, however, a thriving entrepreneurial business sector can produce significant employment and wealth while attracting additional fast-growing firms that often bolster job creation.

What Entrepreneurs Need from States

The rates of new business formation and growth in the states and regions indicate that the climate for entrepreneurship is not uniform across the United States. Public policy is not responsible chiefly for these different conditions; yet, both federal and state government policies play important roles in creating the environment for dynamic entrepreneurial growth. The accompanying text box illustrates federal policy innovations that helped create a supportive national playing field for entrepreneurship.

States also can provide an environment conducive to entrepreneurial activity. However, most state economic development policies do not address the unique needs of entrepreneurs. Industrial recruitment policies target large firms, while small business support programs unintentionally may neglect the special issues faced by entrepreneurial growth companies.

Establishing the Framework: Federal Policies 1958-1998

At the federal level, the National Commission on Entrepreneurship identifies five major public policy contributions that have enhanced the U.S. entrepreneurial environment (NCOE, American Formula for Growth, October 2002). These are:

1) creating **financial markets** to fund entrepreneurial growth companies through favorable tax and capital gains status for investors, regulatory changes permitting investment in venture capital vehicles by pension funds, and providing a stable regulatory environment for equity transactions;
2) providing **research and development and patent and trademark protection** for technologies that underlie many growth companies through federal funding and legal changes in commercialization of university research results
3) investing in **technically talented people and enabling them to move to growing companies** through laws that promote the risk-taking necessary to entrepreneurship, including stock options, stock ownership, accounting standards, and bankruptcy law;
4) opening **new market opportunities and easing entry for growing companies**, through expanding international trade agreements, deregulation, and antitrust decisions and legislation; and
5) establishing a **robust and dependable physical, environmental, cultural, and recreational infrastructure**.

These and other policies, including a stable and transparent legal environment relatively free of corruption and able to enforce contract laws, constitute the current framework in which entrepreneurs operate.

**Source: National Commission on Entrepreneurship, American Formula For Growth, October, 2002*

Overlooking the Needs of the Entrepreneurial Sector

There are a number of reasons that states unintentionally fail to meet the needs of entrepreneurs. These include:

- lack of flexibility in economic development programs;
- limited range of services relevant to the entrepreneur;
- focus on large economic development projects;
- doing little to create a pipeline of future entrepreneurs and firms;
- lack of expertise in unique finance needs and instruments; and
- insensitive regulatory climate.

Lack of flexibility in traditional economic development programs

State administered economic development programs operate within a framework of legislative authorization and institutionalized procedural safeguards that necessarily reduce responsiveness. Yet, entrepreneurs, by their very nature, are required to adapt to changing business circumstances more rapidly than government-sponsored programs can change. In fact, the very qualities that make entrepreneurs good at what they do—ability to make fast decisions and to manage a relatively high degree of risk—can make them poor clients of government services. In contrast, many economic development programs require time-consuming approvals and verifications of qualifications for services, bureaucratic administrative procedures, and involve delays that render such programs of limited use to entrepreneurs.

Limited range of services relevant to entrepreneurs

Supporting entrepreneurship through traditional economic development programs may also be difficult because there is no way to know what services or expertise an entrepreneur will need at a particular phase in company development. Entrepreneurs typically do need assistance with problems that present themselves at various stages of business development. Access to a network of qualified service providers, solutions to financial and management issues, regulatory compliance assistance, and references or information on service providers are among the needs. In many states, services do exist but are poorly coordinated, dispersed, and difficult for entrepreneurs to access. States simply cannot provide all of these services directly—and should not try.

To meet these needs, states need to begin to behave more like entrepreneurs themselves, ensuring access to services that they do not control or own. This may represent a major navigation change in economic development practice. This challenges states to "be as entrepreneurial as the clients they serve." Later sections of this guide explore how states can use network-based approaches to do exactly this.

Focus on large economic development projects

Traditional economic development focuses on major clients, large wins, and job creation numbers. Focusing on large firms and deals means that many early-stage growth companies are invisible to policy makers. When these new ventures do face market difficulties, public intervention is often too late to have much effect. Moreover, tight state budgets mean that economic developers often lack the resources to pay serious attention to companies with little revenue and few employees. Yet, these can be the very companies with high growth trajectories and high potential for wealth creation in the community.

Reaching out to entrepreneurial businesses requires a tailored approach. Arizona's experience with its optics sector is instructive. Through a 1992 statewide planning process, Arizona identified over 100 small optics related companies based in and around Tucson that were previously unknown to state and local economic developers. Yet these spin-offs from the University of Arizona represented one of the region's most dynamic growth sectors. Because these firms were quite small, they were ignored and not even recognized as a coherent sector. Thanks to this outreach process, the companies were better able to access services and now have a collective voice in addressing the state's economic development-related investments.

Underdeveloped efforts to build a pipeline of future entrepreneurs and companies

Except where it relates directly to a specific issue of competitiveness (e.g. workforce shortage, workforce development, or worker re-training), economic development policy does not tend to concern itself with the cultivation of specific skills in the workforce. The educational system provides important opportunities for efficient interventions with K-12 students, university students, and university faculty, but few states utilize this system as part of a unified economic development approach. Workforce development systems, unemployment insurance, and community development policy also provide potentially important points of leverage for encouraging individuals to pursue entrepreneurial careers. Many states—Maine, for example—allow displaced workers to pay for entrepreneurship training using their retraining benefits, and in Massachusetts, the Regional Employment Board of Berkshire County decided to use federal job training funds for entrepreneurial training. Founded in 1989, Berkshire Enterprises has trained over 800 individuals in self-employment skills and has assisted over 400 new businesses starts.

Lack of expertise in the unique financing needs of growth companies

Economic developers typically do not understand how the financial needs of entrepreneurial growth companies differ from other small businesses or from established clients. Financing a growth company requires a broad array of debt and equity options designed for high-growth companies, including different phases of equity, gap and bridge financing, and advice on support for public share offerings that rarely are available through states programs. Both small businesses and large companies are better served by traditional, existing financial markets. Small business finance and loan programs, such as debt finance offered by the Small Business Administration and state-based Small Business Development Centers, may be essential for many traditional businesses and businesses without high-growth expectations, but they do not necessarily serve the needs of entrepreneurs whose balance sheets cannot support debt financing and who often need highly specialized, technical assistance.

Insensitive regulatory climate

The voice of the entrepreneurial community is rarely present in important public policy discussions—ranging from taxation of capital gains to workforce policies—and states easily can neglect the unique needs of these firms. There is a dangerous potential to stifle growing sub-sectors of companies through the unintended consequences of policies, particularly if the state authorities are aware only vaguely of emerging growth businesses and sectors.

The most burdensome regulations typically are those that require interaction with multiple agencies to complete a single task, those that impose new burdens on companies when they begin hiring employees, and those that are not transparent and navigable easily by lay persons.

One high-regulation state's policy institute surveyed small business owners and reached the following conclusion:

"The sheer size of this paperwork burden is difficult to comprehend. A single business owner with no employees must comply with 35 sets of regulations from 18 different local, state and federal agencies. If the business creates one additional job that number jumps to 58 sets of regulations enforced by 28 different agencies—altogether making more than 100,000 regulatory requirements. Many small business owners report that their employment decisions are based as much on the additional costs of taxes and regulations as on the economic needs of their business. Sole proprietors often say they will never hire an employee, even if their business could support one, because the administrative burden is simply too great."[17]

A greater awareness of entrepreneurial businesses' sensitivities to regulations can help states maintain a more entrepreneur-friendly business climate and prevent regulatory missteps that disadvantage growth companies.

SECTION III

What States Can Do for Entrepreneurs

While there are many factors related to entrepreneurship that are not under state control, there remain several things state government can do to create a more supportive environment for entrepreneurial companies. States should focus on policy and program changes involving the factors that set them apart from other states. These areas offer the greatest potential for eliminating competitive disadvantages or creating powerful competitive advantages. According to a survey by the National Commission on Entrepreneurship in July 2000,[18] there are five principal factors in which regional entrepreneurship performance vary. These represent the critical factors that state government policy can influence.

- **Diversity in Sources of Capital** Policy goals should include building the risk capital sector, organizing networks of angel investors, supporting funds and programs to provide seed capital to new businesses, and encouraging the banking sector to include resources for non-traditional lending.
- **Enabling Culture** States should work toward building a shared regional vision that includes both traditional business leaders and new entrepreneurs. Creating high-profile public awards that celebrate and recognize the important community contributions of local entrepreneurs is one manner of doing so. Governors also should provide opportunities for entrepreneurs to "give back" to the community by participating in educational activities and mentoring networks. Governors also can lead efforts to ensure tolerance of diversity and an ethic of information sharing among companies, both of which are cultural features that encourage wider entrepreneurial activity.
- **Strong Local Networks** Governors should support networks of entrepreneurs providing mentoring, services, education, and information. In emerging entrepreneurial regions, these networks frequently are formalized through chambers of commerce, incubators, or other institutions, while in more established regions these networks tend to reach a critical mass and become self-sustaining. In many cases, special attention may have to be given to opportunities that allow minorities and women entrepreneurs to access these networks.
- **Supportive Infrastructure** Governors can work to build a sector of business service providers who are attuned to the needs of entrepreneurial companies, which often include advanced transportation, telecommunications services, and good colleges and universities. NCOE found that universities often do not serve as key entrepreneurial supports; however, they can and do when they are combined with other factors including high quality of life, an open culture, and willingness to collaborate with entrepreneurial companies in education and training, research, technology transfer, and commercialization.[19]
- **"Entrepreneur-Friendly" Government** States should work to become more entrepreneur friendly, both symbolically and practically. Entrepreneurs value government officials and public leaders who recognize and communicate the importance of entrepreneurs' contributions to their communities, and who put this into practice by working to achieve greater efficiency through regulatory streamlining, uniformity, and transparent compliance practices.

State government policy alone cannot create an enabling culture, diverse capital base, or supportive infrastructure out of whole cloth. Rather, states should aim to remove the most important barriers and fill the most glaring gaps in these areas through policy and program actions. The above actions can serve to create a more supportive environment for entrepreneurial companies to grow. The next section examines innovative practices that governors and states have enacted.

The Governor's Key Role in Building an Entrepreneurial State

As in many areas of state policy, there is no substitute for the governor's direct involvement in promoting the state's goals. Yet, policy changes alone are often insufficient. Success may also require a transformation in the attitudes and culture of state government and the state's business, university, and educational communities. For this, direct gubernatorial leadership and personal involvement are especially important given the governor's unique leadership role and position of influence.

The growth and development of entrepreneurial companies requires more than available capital and skills. It also demands a supportive environment in which entrepreneurs can build their companies and flourish as respected members of the community. Yet, as often as not, barriers to entrepreneurship are attitudinal or cultural, and therefore are extremely difficult to remedy through traditional policy instruments. Governors are the only leaders at the state level capable of being the catalysts for cultural changes across state institutions that can lead to real and lasting change of the business environment.

SECTION IV

Strategies to Support Entrepreneurship

Governors can pursue a number of strategies to encourage entrepreneurship in their states. Based on the NGA State Policy Academy on Entrepreneurship and the experience of numerous states both before and concurrent to the policy academy effort, five beneficial actions that states can take have emerged. They are:

1) integrate entrepreneurship into state economic development;

3) nurture entrepreneurs and potential entrepreneurs through the education system;

4) incubate entrepreneurs and entrepreneurial businesses;

5) invest in the development of diverse capital sources; and

6) get out of the way through regulatory reform and pay attention to how new regulations affect entrepreneurial businesses.

Integrate Entrepreneurship into State Economic Development Efforts

Governors should take action to ensure that entrepreneurial business development becomes part of the core mission of their state's economic development policy and programs, and is integrated into the mission of related organizations such as the science and technology organizations, and the workforce development system.

1) Incorporate Entrepreneurship into the Mission of Economic Development

Governors should make entrepreneurship development part of the explicit mission of the state's economic development efforts. The most formal level of integration entails incorporating entrepreneurial business sector outcomes into the corporate goals of the state agency, as the **Michigan** Economic Development Corporation has done in calling for the state to make more risk capital available to Michigan companies *(See text box)*.

Similarly, **Kentucky**'s New Economy Strategic Plan—the state's blueprint for economic development in the knowledge economy—is built on the premise that development of an entrepreneurial business sector should exploit the state's unique competencies in several clusters. One of the main goals of the New Economy strategic plan is to "create and maintain a thriving entrepreneurial climate supported by programs that inspire and facilitate the commercialization of ideas." Kentucky's Office for the New Economy is charged specifically with "(c)reating the commercialization and entrepreneurship infrastructure that will grow knowledge-based, innovation-driven companies" (*Kentucky New Economy Strategic Plan*).

Former **Maine** Governor Angus King lent his personal support to entrepreneurship strategies in his final year as chief executive, Governor King said he wanted his legacy to include "starting the process of making Maine one of the most entrepreneurial states in the nation." Working directly with the Ewing Marion Kauffman Foundation, the state of Maine developed an entrepreneurship action agenda designed to fully utilize the state's existing resources in support of this goal, an

Michigan

Michigan has added Entrepreneurship to its 2003 Corporate Objectives, based on the state's entrepreneurship agenda. This objective is designed to "Further diversify the state's economy through small business growth by establishing a statewide network of entrepreneurial education institutes, expanding support for the Small Business Development Centers, increasing federal research grants, and visiting at least 1,000 Michigan small businesses, 500 of which should be fast growing."

Mission
To improve and diversify opportunities for Michigan residents through the creation of an entrepreneurial environment

Goals

1. to develop and nurture an entrepreneurial culture in Michigan;
3. to grow, recruit and retain managers capable of growing companies at all stages of development;
4. to more effectively develop raw technologies into commercially viable products and services;
5. to engage existing Michigan companies as stakeholders in developing entrepreneurial companies in Michigan as early adopters of products and technologies; and
6. to make more risk capital available to Michigan companies.

agenda released by the new governor, John Baldacci, in April of 2003.

In other states, entrepreneurship efforts have become centerpieces in state strategies.

Former **Utah** Governor Mike Leavitt articulated a strategy to work with the state's 'economic ecosystems' that explicitly would link entrepreneurial companies with anchor companies, universities, and venture capital as keys to prosperity and innovation. Leavitt launched the Utah Technology Alliance in 2001 with the explicit goal of "accelerating Utah's emergence as a center for technology and entrepreneurship" (Press Release, Gov's Office, August 28, 2001).

In **Maryland**, the combined efforts of the Maryland Technology Development Corporation (TEDCO), Department of Business and Economic Development, and the governor's office led to a statewide focus on entrepreneurship through the technology-focused legislative summit dedicated to the subject in early 2002. At this summit, the first of a series of studies tracing the "family tree" of Maryland's bioscience sector was released that highlighted the important contribution of entrepreneurial spin-off companies in the state's economic growth. This study has been followed by a "*Maryland Technology Genealogy Series*" permitting government stakeholders a clearer understanding of how dependent on entrepreneurship Maryland's successful economic development efforts have been.

Enterprise Facilitation in Kansas

In the spirit of rural self-reliance, Enterprise Facilitation in **Kansas** has initiated a program to develop community entrepreneurial capacity. Enterprise Facilitation is a proprietary method developed by the Sirolli Institute designed to build community capacity for entrepreneurial business development through a community-wide support network. This process has been used in **Idaho**, **Minnesota**, **Oregon** and **South Dakota**, as well as in Australia, Canada and New Zealand.

Five Enterprise Facilitation demonstration projects have been set up in some of the poorest and most remote parts of Kansas, spearheaded by the Commerce and Housing Department and with the direct support of former Gov. Bill Graves and current Gov. Kathleen Sebelius. The state is paying the majority of costs (66 percent) for each of the pilot projects with federal Community Development Block Grant funds. The participating communities must raise the remaining funds. The total cost of the program is $1.5 million, of which CDBG funds will pay $1 million.

Over the first six months of these 30-month projects, volunteer boards of 35 to 50 local residents are established. Each volunteer must attend a day-long training session, the first step in the process to develop local capacity. The board receives training in policy issues associated with development, the hiring and firing of a facilitator, and board member responsibilities. Boards are responsible for hiring a facilitator who will manage the local team and coordinate entrepreneurial support activity. Board members also must commit to introducing the facilitator to 10 people they know, thereby personally informing the community that a free and confidential service is available in the community and providing a method to receive referrals.

At the end of the 30 months, the communities are projected to have a well-established capacity for assisting entrepreneurs in developing their plans into tangible businesses, an outcome that potentially could retain high school and college graduates in small, rural communities, and motivate those who have left the state to return.

Louisiana incorporated entrepreneurship into the 2003 update of its Vision 2020—the state's long-term strategic plan—as a key economic development goal. The state's stated objective is "(t)o aggressively encourage and support entrepreneurial activity," and its plan incorporates detailed benchmarks to track progress over time. The state legislature has acted to make this change of focus more permanent through incorporating benchmarks on entrepreneurial performance—new business starts and business "churning" rates—into the state's long-term economic performance measurement system.

Outreach to the state legislature and statewide stakeholders also promoted integration of an "innovation and entrepreneurship" initiative into the 2003 Louisiana legislative session. The legislature in 2003 created a Small Business and Entrepreneurship Commission that includes representatives of all state agencies, legislators, and one "serial" entrepreneur (founder of sequential new businesses). This Commission will serve as the state's single body responsible for strategic policy to support new business creation. In addition, the Commission will be responsible for monitoring the impact of policy and regulatory decisions on entrepreneurs, and will identify and monitor governmental obstacles to new business creation and growth. A joint legislative committee on Science and Technology, created in this legislature, will also contribute to this mission. A restructuring of Louisiana Economic Development (LED) initiated by the Governor's Office focused the state on the competitiveness of its business clusters and also has provided the state with a more balanced economic development focus. The department's core business development staff is focused heavily on emerging industries in the state, resulting in greater focus on entrepreneurs.

2) Act as a Broker to Deliver Support for Entrepreneurs

Governors should ensure that state economic development programs focus efforts on entrepreneurs and growth companies commensurate with their importance to the state's economy.

Economic development program interventions should be steered towards giving entrepreneurs access to a variety of services, many of which will be provided by the private and not-for-profit sectors rather than by the states. The most promising public entrepreneurship support programs function as "brokers" or coordinators of resources and rely heavily on specialized outside providers rather than providing direct services.

Several states have begun to move towards this so-called "broker" role in entrepreneurship policy.

The **Oklahoma** Center for the Advancement of Science and Technology (OCAST) sponsors the Oklahoma Technology Commercialization Center (OTCC) through a contract with the private, nonprofit Oklahoma Technology Development Corp. The center works with Oklahoma companies, inventors, researchers and entrepreneurs to turn technological innovations into business opportunities. The center provides, directly or by referrals, statewide access to the specialized business development services that are required to take new technologies from concept to market. The center also works closely with technology development, technology transfer and economic development professionals in the public and private sectors to expand the state technology base.

Services provided through the center include technology assessments and technical concept analysis, engineering, testing and prototype development, market research and analysis, economic feasibility studies, development of strategic marketing plans development of strategic business plans, and access to early stage risk capital.

State networks of Small Business Development Corporations (SBDCs) can be an important tool in providing business start-up resources to entrepreneurs. The **Michigan** Economic Development Corporation is using existing SBDCs to provide services and connections to entrepreneurs. A proposed increase in funding to the SBDCs would provide training and program development focused on this "network" approach.

Former **Kansas** governor Bill Graves took a community-based approach. Graves was instrumental in securing funding for the expansion of a community-based "Enterprise Facilitation" strategy as a core rural

Entrepreneurship in Louisiana Vision 2020

Entrepreneurial companies–high growth businesses that quickly bring innovations to market–dominate job growth in the United States. States seeking to increase the number of quality jobs must include a focus on the needs of entrepreneurs and their companies in order to nurture these fast-growing companies that are shaping the future of our economy. A rapidly growing company with its headquarters in a rural area can be the primary catalyst for economic development. Louisiana must infuse pro-entrepreneurship policies into state laws in ways that help to create a climate that encourages and rewards entrepreneurial behavior.

Benchmarks to track progress toward Objective 2.5 include:

- business incubators per 10,000 business establishments (number and rank among the states);
- new business starts;
- business churning rate;
- a number of women- and minority-owned businesses;
- a percentage of total employment in "gazelle" firms (with annual sales revenue that has grown 20 percent or more for four consecutive years); and
- annual Small Business Innovation Research (SBIR) awards (total awards per 10,000 business establishments and total dollars awarded).

economic development effort in 2002. This strategy, based on the Sirolli Institute's[20] model, trains a broad array of actors in small communities to serve as a community support network for entrepreneurs, providing direct services, referrals, and access to information of benefit to new entrepreneurs *(see text box on page 15)*.

As a model for how a statewide system can operate, **Maine's** KEEP program defined three critical principles that should drive public support for entrepreneurship: specialization, system marketing and common intake. These principals ensure that each member of the system, acting as a broker, can direct standardized information for referrals to the most appropriate specialized providers.

- **Specialization** refers to the need for a network of specialized service providers rather than having a one-size-fits-all program aimed at entrepreneurs.
- **System marketing** means "marketing efforts promote the value of the system as a whole over the value of the programs offered by individual service agencies."
- **Common intake** form that is used by all members of the system ensures that the information necessary to identify promising entrepreneurs and companies is collected *at whatever point the prospect enters the system*.

3) Bolster Entrepreneurial, Capital, and Research Networks

Governors and state departments of economic development should work to incorporate entrepreneurial and capital networks into their states' economic development efforts. Robust local networks of investors, service providers, and entrepreneurs are key players in a thriving entrepreneurial sector. Where such networks exist, states should work with them on statewide strategic planning, consultation on new policies to support entrepreneurship, and assessing needs.

Where networks are underdeveloped, absent, or closed to new participants, states can encourage their development through endorsements, the offering of in-kind support (meeting space, logistical support, etc.) and by acting as catalysts to intelligent network formation through statewide initiatives.

As an outgrowth of the NGA Policy Academy process, several states either initiated or renewed efforts to incorporate existing networks of entrepreneurs and growth businesses into state economic development efforts. In **Nevada**, the governor, lieutenant governor, and state economic development director's offices have developed close working ties with local angel investor networks and the state's technology council. These three actors have, since 1999, collaborated with the Sierra Angels investor group to jointly confer an "Entrepreneur of the Year" award. In addition to enhancing the state's image as "entrepreneur-friendly," this dialog permits the state to deliver more effective support for specific companies identified by local investors as high in potential.

Washington has given entrepreneurs and its technology council input into the policy process, permitting those who speak for the entrepreneurs to comment on legislative programs and on gubernatorial initiatives to support entrepreneurs. Governor Gary Locke's keynote address at a 2002 Youth Entrepreneurship Organization conference significantly raised the profile of that organization within the state and communicated the governor's commitment to a state entrepreneurship agenda.

Michigan and Maryland have long-standing commitments to leveraging existing entrepreneurial networks in technology-based industries. The **Michigan** Life Sciences Corridor's steering committee, which includes entrepreneurs as well as venture capitalists, executives of established life sciences companies, and leaders in the research community, helps set state policy. The **Maryland** Technology Economic Development Corporation (TEDCO) is a quasi-public entity that serves as a focal point for coordinating state efforts to support emerging businesses. TEDCO serves as a focal point for the state's networks of companies, entrepreneurs, venture capitalists, and university researchers, and serves an important 'brokering' function.

State recognition of the entrepreneurship agenda also may act as a catalyst for network formation among entrepreneurs who perceive the need for specific changes in the state's climate. In the course of an NGA-run statewide entrepreneurship policy academy conducted in **Missouri**, a group of the state's entrepreneurs formed the Entrepreneurial Growth Company Survival Coalition to advocate for the regulatory reform needs of entrepreneurial growth companies.

4) Deploy the Workforce, Unemployment, and Community Development Systems to Support Entrepreneurs and Promote Entrepreneurship

Governors should harness essential state functions outside of economic development—such as workforce development, unemployment insurance, and community development—to support entrepreneurship.

One of the most innovative and longstanding programs of this type is **Maine**'s Enterprise Option. The Maine Enterprise Option allows individuals who are receiving unemployment benefits to continue doing so while they are in the process of starting their own business or working at that business full time. Individuals may apply up until the time they have 18 weeks' worth of unemployment benefits remaining. They also must have a specific business idea in mind. Once accepted into the program, participants must attend a series of business startup seminars covering topics such as business plan development, marketing and financing.

Similarly, in early 2003, **Missouri** launched a new workshop called *FastTrac NewVenture* for dislocated workers interested in becoming entrepreneurs. During a free, five-day workshop, individuals are given the opportunity to explore the potential for starting their own businesses. The workshop helps individuals develop the key business skills necessary to create, launch, manage, and grow successful businesses. Funded through the federal Workforce Investment Act, this program is a cooperative effort of the Missouri Department of Economic Development, Division of Workforce Development, Missouri Career Centers, the University of Missouri Outreach and Extension, and the Ewing Marion Kauffman Foundation.

Illinois has incorporated entrepreneurship training into its *Workforce Advantage* program, initiating special workforce training options for residents of disadvantaged rural and urban locations. According to the Governor's Office: "The Illinois Workforce Advantage (IWA) is a place-based initiative aimed at strengthening the economic and social infrastructure of depressed communities. Under IWA, Coordinators work with leaders in each community to assess needs, design services and delivery systems and then find ways to fund particular projects, coordinate services with state agencies and develop public private partnerships. Several IWA grants will integrate entrepreneurship education strategies with other community economic development and workforce development initiatives in IWA's target communities."[21]

Nebraska EDGE (Enhancing, Developing and Growing Entrepreneurs) provides tailored training for entrepreneurs. This state-supported program allows rural communities to tailor training courses to local needs and abilities. The program is run by the Center for Applied Rural Innovation at the University of Nebraska at Lincoln and is sponsored by the Nebraska Department of Economic Development. Communities interested in hosting a training course must submit a work plan explaining how they will manage and sponsor a course. Courses offered by a community cost about $9,000. Communities with approved plans receive a $3,000 grant to support the local course. Communities are encouraged to assemble a coalition of small business associations, banks, accounting and legal firms, media, educational institutions, local government, and others interested in supporting entrepreneurship development. From this coalition comes a manager to oversee the course locally. The coalition also can select an instructor from their community or choose from a statewide pool of certified instructors. Since its formation in 1993, more than 50 courses have been taught, reaching more than 1,250 entrepreneurs. Aside from providing grants to support Nebraska EDGE, the Department of Economic Development promotes the training courses throughout the state.

Nurture Entrepreneurs through the State's Education System

States should use the K-12 and post-secondary education systems to nurture and encourage future entrepreneurs. Contrary to popular conceptions, successful entrepreneurs are developed and "made" rather than born.[22] Cultivating the pipeline of entrepreneurial companies therefore must begin with nurturing entrepreneurial skills and values in the population as a whole rather than at the inception of a company.

1) Build entrepreneurial readiness through the State's K-12 schools

Schools should incorporate entrepreneurship-related skills and attributes into the K-12 academic curricula. Three core skill areas—opportunity recognition, marshalling of resources, and business venture initiation in the presence of risk—-should be the focus of K-12 curricula.

Education in the K-12 range can help nurture a more entrepreneurial culture by influencing the beliefs, values and career perceptions among young people. Incorporation of supportive curricula and non-curricular activities can cultivate potential entrepreneurs by providing awareness, readiness, knowledge, and skills.

Entrepreneurship education is distinguished from education in business management by its focus on three critical aspects of the entrepreneurial process: opportunity recognition, marshalling of resources in the presence of risk, and building a business venture. Business management, in contrast, focuses only on the last of these three areas, leaving out most of what is unique to entrepreneurs. The education process can instill the value components of the first two at a relatively early age—far before students will be required to apply technical skills of traditional business management.[23]

Surveys of America's youth consistently indicate a high degree of interest in pursuing an entrepreneurial career path.[24] A number of successful organizations promote entrepreneurship among youth, including the National Foundation for Teaching Entrepreneurship, Future Business Leaders of America, and Junior Achievement, to name a few.

Strong curricula exist and have been developing over time through experiential learning and a focus on "awareness, readiness, or application of knowledge and skills acquisition by youth."[25] At the primary grade levels, the inclusion of such curricula raises awareness of career options in the entrepreneurship field and can begin to develop readiness for more specific skill development at later stages of education.

There are, however, at least two obstacles to better integration of entrepreneurship education into K-12 curricula. First, neither the concept nor value of entrepreneurship education is clearly perceived by educators. In general, policymakers must overcome a lack of understanding and support among teachers, administrators, and superintendents of public education. Overcoming these obstacles depends on an education process in which governors are in an excellent position to act as a catalyst.

The second obstacle relates to the new requirements introduced in public education systems through standards-based testing. It is difficult to convince educators that an additional curricular area should be added in the context of new requirements that consume classroom time and scarce resources.

Getting entrepreneurship education into the K-12 classrooms, therefore, requires a high degree of creativity and adaptability in formulating and selling the program. A few states' activities provide options for how to approach this challenge:

- **Provide Curriculum to K-12 Teachers**
  In **Iowa,** the John Pappajohn Entrepreneurial Center at the University of Iowa provides summer teacher training in entrepreneurship skills. Participating teachers can access on-line course materials, presentations, interactive lessons, and ongoing support

for entrepreneurship curriculum enhancement throughout the following school year.

- **Use entrepreneurship to teach existing standards**
  In Washington County, **Maine**, a state-sponsored regional demonstration project is using entrepreneurship education as a student retention educational option for at-risk middle school students. An introduction to entrepreneurship is provided to all middle-school students using the Kauffman Foundation's "Making a Job" curriculum, which teaches opportunity recognition and resource marshalling through interactive learning experiences.

- **Include entrepreneurship education in state competency standards**
  Nevada, in early 2002, became the first state in the nation to institute an entrepreneurship component in statewide high school competency examinations. This was achieved after the state's superintendent of public education attended the NGA State Entrepreneurship Policy Academy and served—along with the Governor, Lieutenant Governor, and Director of Economic Development—as an advocate of entrepreneurship education to the state's education community.

- **Reach out to teachers and educational leaders to build awareness of entrepreneurship as a profession and career path**
  In **Utah**, simple outreach to high school guidance counselors by members of the technology entrepreneurship community provided a cost-efficient venue in which to educate educators on how to guide high school students towards technology and entrepreneurial career pathways.

To achieve this innovative outcome, states will need to pay close attention to local educational conditions and work with local school districts, superintendents of public education, local foundations, and other stakeholders to promote a better understanding of how entrepreneurship can serve existing educational goals while enhancing future career options for students.

2) Public universities should provide entrepreneurship education

States should encourage publicly funded universities and colleges to incorporate entrepreneurship curriculum and non-curricular (activities) into business, engineering, and liberal arts education. Universities serve an essential function in developing the skills, attitudes, and career paths of next-generation entrepreneurs. As research and development centers, universities also produce important technological innovations that can, under certain circumstances, be transformed into core technologies for new commercial enterprises. It is no surprise that many states have made collaboration with universities a central aspect of state entrepreneurship policy.

Currently, 54 universities nationwide have entrepreneurship centers that are members of a national consortium *(See Appendix 1)*. Both publicly funded and private universities have worked to integrate entrepreneurship-oriented education into their range of capabilities. Additionally, over 120 schools worldwide are currently part of the Kauffman Collegiate Entrepreneurship Network,[26] and 497 affiliate schools offer academic majors or minors in entrepreneurship.

In numerous states, including Minnesota and Louisiana, entrepreneurship curricula have been integrated into publicly funded undergraduate engineering schools as part of a statewide emphasis on entrepreneurship. Through the NGA State Policy Academy on Entrepreneurship, Idaho, Washington, Mississippi, and Nevada have adopted or strengthened this emphasis. Other states are pursuing a systematic approach to expanding statewide access to this curriculum.

The University of **Maryland**'s Entrepreneurship Citation is a two-and-one-half-year program that combines academic coursework and practical experience as well as seminars and mentoring opportunities for undergraduates interested in pursuing careers in entrepreneurship. Sixty percent of enrollment is reserved for students from outside the business school. Undergraduates who are accepted into the Citation program take four courses in entrepreneurship and complete an in-depth business plan project that is judged by a panel of entrepreneurs and venture capitalists in the final semester of their studies. Courses in the program include:

- Starting & managing the Entrepreneurial Venture – semester 4
- Financing the Entrepreneurial Venture – semester 5
- Growth Strategies for Emerging Companies – semester 6
- Business Plan for the New Venture – semester 7

The John Pappajohn Entrepreneurial Center at the University of **Iowa** also offers an undergraduate certificate in entrepreneurship to students from liberal arts, business, and engineering schools. Twenty hours of entrepreneurship coursework is required, including these four core courses:

- Entrepreneurship and New Business Formation
- Capital Acquisition and Cash Flow Management
- Entrepreneurial Marketing
- Managing the Growth Business

Students are also required to take two relevant electives from the disciplines of business planning, technology, innovation, legal, financial, consulting, strategic management.

A consortium of universities and community colleges in **Maine**, led by the University of Southern Maine (USM) and the University of Maine (UM), is pursuing a system-wide approach to entrepreneurial education at the collegiate level. With support in the form of a grant from the Kauffman Collegiate Entrepreneurship Network, the universities are developing a core entrepreneurship curriculum that will be available through distance learning technology to the entire University of Maine system and the state's community colleges. In addition, the universities will conduct a Summer Institute in Entrepreneurship to develop and enhance entrepreneurship educators' skills. Overall, this system will provide access to entrepreneurship education to over 40,000 students across all areas of Maine.

Responding to unequal access to entrepreneurship education in **Michigan**'s colleges and universities, the Michigan Economic Development Corporation established the Michigan Entrepreneurship Education Network (MEEN) to strengthen statewide access to entrepreneurship education and a grant program through the University Entrepreneurship Program Development Fund to assist universities statewide in curriculum development. The statewide entrepreneurial learning network was started with a grant to the University of Michigan to inventory and put on the Internet the curricula of all university-level entrepreneurship coursework at the state's publicly funded universities. The fund provides grants of $15,000 to $30,000 to Michigan colleges and universities for curriculum development and implementation on a 1:2 matching basis. The program is supported by MEDC and sponsored by the University of Michigan Business School's Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies,

MEDC has also provided $40,000 in annual support for a statewide Business Plan Competition that has been held at the University of Michigan for the past two years. In addition to encouraging entrepreneurship among the state's students, this competition has helped develop the state's network of potential angel and seed investors, many of whom were (unexpectedly) in attendance at these forums.

Other examples of non-curricular support for entrepreneurship include the **Tennessee** Technology Development Authority's business plan competition, which offers a $3,000 cash prize to each year's winner chosen from submissions by teams that include at least one Tennessee undergraduate or graduate student. **Maryland**'s extensive entrepreneurship education program, which includes an annual business plan competition, an intensive "entrepreneurship track" through the Campus Entrepreneurship

Intensive Entrepreneurship Development at the University of Maryland

Business plan competitions also can be integral components of more intensive strategies to encourage entrepreneurship. The University of Maryland offers a business plan competition that aims to find new venture ideas and build successful businesses. All UM undergraduate and graduate students, as well as alumni who graduated in the previous five years, can compete for up to $50,000 in prize money under the University of Maryland Business Plan Competition. Prizes are awarded in three categories–emerging company, small business and concept-stage. Quality of business plan, viability of business, management team, financing strategy, and exit strategies are among the elements upon which teams are judged.

The UM business plan competition is one part of the university's Hinman Campus Entrepreneurship Opportunities (CEOs) program, a program open to select students from all academic disciplines. Participants are referred to as CEOs. One of the program's unique features is a special residence hall equipped with conference rooms equipped with teleconferencing systems and IP view stations, a computer lab and state-of-the-art technology that provides CEOs with an incubator-like business environment. Each resident's computer has voice, data and video communications capabilities and wireless access.

In conjunction with the CEOs program, the University of Maryland also oversees the Maryland Technology Enterprise Institute, which includes the Technology Advancement Program, the university's incubator for technology start-ups. In addition, UM's Entrepreneurship Citation Program, a selective program with sequential courses, is open to undergraduates, and the Smith School's Dingman Center for Entrepreneurship provides community outreach programs in entrepreneurship.*

**Source: State Science & Technology Institute Weekly Digest, April XXX, 2003*

Opportunities program, and an Entrepreneurship Citation Program—leading to a certificate in entrepreneurship—is described in the accompanying text box.

3) Support Faculty Entrepreneurship in the University System

The state university system should support and encourage faculty entrepreneurship and commercialization of university-developed technologies. Turning academic researchers into entrepreneurs is not and should not be the goal of state policy. Instead, leveraging the full potential of commercially viable research from the state's public (and private) universities and ensuring institutional support for those faculty members with an interest in entrepreneurship are two important goals for state policy.

Governors should encourage public universities to examine the university entrepreneurial environment and work with leaders to make changes where appropriate. Some of the areas of examination may include the following questions:[27]

- Are faculty members encouraged by the administration to pursue entrepreneurial ventures?
- Are faculty members encouraged by the administration to collaborate with private industry? With entrepreneurial companies?
- Do university intellectual property policies discourage entrepreneurship?
- Do university intellectual property policies discourage commercialization of research results?
- Does the university provide resources to assist faculty entrepreneurs?
- May faculty members use sabbatical leaves to pursue an entrepreneurial venture?
- Would faculty entrepreneurs be encouraged by their peers if they pursued an entrepreneurial business venture?

The University of **Virginia** institutionalized its commitment to faculty entrepreneurship by founding Spinner Technologies—a "for-profit subsidiary of the UVA Patent Foundation, created in 2000 to help faculty entrepreneurs commercialize their technology through formation of start-up companies." Spinner Technologies offers start-up assistance, referral services, advisory services, and office and lab space to faculty entrepreneurs and is co-located with the UVA campus. The company was founded after the university's successful technology transfer group—University of Virginia Patent Foundation—realized that it could not provide all of the services and resources needed by faculty entrepreneurs, particularly given the 80 percent increase in university faculty invention disclosures over the past five years. According to the UVA Web site, its mission is part of a larger university commitment to promoting a "broad, regional technology economy" providing benefits to the university's research portfolio, creating jobs for graduates and expanding in the university's research park (UVA Patent Foundation).

Kentucky is employing a promising approach to faculty entrepreneurship as part of the state's New Economy Strategic Plan. The state is working to pair interested academic research faculty with successful entrepreneurs within the state. This recognizes that not all academic researchers have the skills or disposition to become entrepreneurs but focuses on deploying appropriate state resources to commercialize new technologies and create new companies.

Incubate Entrepreneurial Companies

States should pursue physical, virtual, and remote business incubation strategies to raise the rates of company formation and survival by focusing on connecting early-stage growth companies with the resources, skills and networks they need to succeed. In particular, states should partner with universities and regional stakeholders to establish or improve physical incubators in appropriate locations through encouragement and co-investment. In less geographically advantaged locations, states should provide satellite facilities that help connect entrepreneurs to resources that are available elsewhere, or establish Internet-based incubation strategies that provide these resources to dispersed entrepreneurs.

1) Provide Business Incubation Services through Physical Incubators

States should ensure that business incubators are available in areas where geographical concentrations of entrepreneurs and potential companies exist. While states do not need to be the principal investor, the state should be a catalyst and serve as an active partner in local or regional incubation strategies as partners to universities, counties, and communities. These strategies should focus on meeting demand for start-up business space, connecting new businesses to high quality specialized services that help businesses to succeed, and encouraging new company formation and growth.

Incubators are usually physical structures in which start-up companies are housed in close proximity to other companies and to incubator staff and management that work to assist entrepreneurs in meeting their business challenges. Successful incubation relates to the services provided to companies in the incubation system, rather than the physical space that incubators provide to start-ups. While space may be important to some companies—particularly in the biotechnology and life sciences fields where the needs for specialized facilities are greatest—connections to specialized services in the region and access to peer experience, and the expertise of incubators' professional managers and board members are even more valuable. In some cases, such as

Business Incubation Defined

A business incubator is an economic development tool designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services. A business incubator's main goal is to produce successful firms that will leave the program financially viable and freestanding.

These incubator "graduates" create jobs, revitalize neighborhoods, commercialize critical new technologies and strengthen local and national economies.

Critical to the definition of an incubator is on-site management, which develops and orchestrates business, marketing and management resources tailored to a company's needs. Incubators usually also provide clients access to appropriate rental space and flexible leases, shared basic office services and equipment, technology support services, and assistance in obtaining the financing necessary for company growth.

(Source: National Business Incubation Association, http://www.nbia.org/resource_center/best_practices/index.php)

Pennsylvania's Ben Franklin Partnership, what began as a physical incubator and technology transfer program has evolved into a hybrid, with the goal of providing access to capital for start-up and early-stage businesses.

Numerous states have pursued successful business incubation strategies during the last two decades through investment in community- and university-based incubators. Most incubation efforts today are run as partnerships between state, local, university, and private investors or contributors, relieving the state of the burden of financing such operations. **Maryland** is pursuing new incubation projects in partnership with Montgomery County and Anne Arundel Counties focused on life sciences and homeland security sectors respectively, while **South Dakota** has structured these efforts as a public-private partnership, with the majority of capital costs borne by the private sector.

Incubators may be co-located with universities, or may exist as free-standing community-based institutions or structures. The University of **Nebraska** at Lincoln developed a model incubator facility in a new technology park near its main campus in the late 1990s, funded entirely through private contributions. The site was constructed in such a manner that it could be easily expanded, and foundations were laid for new buildings to house growing companies at the outset of the project. This permitted companies in later phases of development to continue to benefit from the services provided by the adjacent incubator, while meeting their expansion needs. A similar research park and incubator at **Iowa** State University recently reported a net economic impact of $88 million per year after nearly 16 years of operation.[28]

Illinois has created eight Illinois Technology Enterprise Centers to serve technology-based entrepreneurs, innovators and small businesses by assisting them with critical business startup and marketing needs. The regional centers, supported by the state's Department of Commerce and Community Affairs, help entrepreneurs locate pre-seed and early stage financing; help innovators in high growth and high technology sectors further their technical and/or managerial skills, and assist with new product development and marketing, thus nurturing new venture development in Illinois.

2) Create Virtual and Remote Incubation Options for Rural and Remote Regions

States should encourage entrepreneurship among rural and remote populations by providing remote access to entrepreneurship resources, either through satellite centers or through on-line service delivery.

Because of long travel distances and dispersed population, many states with large rural populations are less able to use to universities to serve as primary anchors for local entrepreneurship support efforts. In these cases, states should develop innovative Internet and online service strategies for company incubation. Virtual and remote incubation options ensure that statewide constituencies can access services, either using the online or through local points of contact who are well-versed in resources available elsewhere in the state.

States including Washington, Kentucky, and Minnesota realize that the full potential of entrepreneurship support can only be realized if populations outside of dominant urban areas are well-served by these resources. **Washington** is in the process of building an on-line entrepreneurship support system to reach populations in the eastern parts of the state. **Minnesota**'s Virtual Entrepreneurship Network and BizPathways perform a similar function, and are profiled in the accompanying text box.

In **Kentucky**, the state is developing twenty-one Innovation and Commercialization Centers—remote business centers in locations around the state—to ensure that entrepreneurs in remote areas have access to the same technology and services as companies in urban and suburban markets. These centers will primarily connect businesses to resources and networks available elsewhere in the states, rather than attempting to provide these services directly. These regional "points of contact" will stand alongside other existing resources to provide a

Minnesota's Virtual Entrepreneurship Network and BizPathways

Through the Rural Entrepreneurship Initiative, the state of Minnesota identified four challenges to its rural entrepreneurship development efforts: access to capital, access to technical assistance, access to technology, and a cultural background that tends to discourage individuality, and therefore entrepreneurship.

Minnesota Rural Partners (MRP), the state rural development council, used a federal grant to produce two mechanisms that will address these challenges. MRP created the Virtual Entrepreneurial Network (VEN) and BizPathways. VEN organizes rural entrepreneurs and service providers from across the state. Entrepreneurs and service providers join VEN by registering on the BizPathways Web portal, (www.bizpathways.org) where entrepreneurship resources are aggregated for easy access.

Entrepreneurs register with BizPathways by entering details about themselves. BizPathways uses customization technology to alert users of relevant resources available. The idea is to help entrepreneurs understand what must be done at every stage of company development. It is designed to get entrepreneurs to the right resources at the right time. This is perhaps more critically important when dealing with rural entrepreneurs because they often are geographically isolated and valuable resource information may be far-flung. BizPathways also stores entrepreneurs' business plans and allows the user to access their plan at any time, such as when making presentations to potential investors.

point of access for entrepreneurs, rather than a single source of support.

Invest in Diverse Sources of Risk Capital for the State's Entrepreneurs and Growth Companies

Governors should work to ensure that a diversity of sources of risk capital are available to the state's entrepreneurs—both in metropolitan and rural regions. As an over-arching goal, states need to diversify the sources of available risk capital to provide the maximum opportunity for company formation and survival at critical phases rather than focusing on development of the traditional venture capital industry. In particular, states should 1) develop a rich base of early-stage capital options, including innovation capital to support early stage companies, 2) support angel investors through tax credits and other financial support, and 3) ensure that risk capital is available in underserved rural areas. These goals should be achieved through incentives to private investors with limited direct investment of state funds.[29]

Participants in the NGA State Policy Academy on Entrepreneurship found that companies' greatest needs were in the early stages of innovation capital and in the $200,000 to $3 million range. In the early phases, companies/products have not demonstrated sufficient commercial potential to qualify for private investment. Below $200,000, individual investors—personal savings, friends, and family—frequently are tapped for investment. Companies requiring funding above $3 million typically are well served by traditional venture capital investors, although there is some evidence that in the post-boom economy, institutional venture capitalists are concentrating investment above $5 million, creating a new gap between the $3 million and $5 million levels.

There are five basic forms of risk capital:

1 **Research and development capital**—funds invested in support of basic research and development.

2 **Innovation capital**—funds invested for applied research to develop new products.

3 **Seed capital**—funds invested to support new and young companies without fully established commercial operations, launch new products, or continue research and product development.

4 **Venture capital**—long-term equity capital invested in rapidly expanding enterprises with an expectation of significant capital gains, often for product roll-out. Recipient companies typically have demonstrated sales but are not yet profitable.

5 **Mezzanine capital**—capital invested with a structure involving subordinated debt, generally in profitable, established companies.

Each form is delivered by different entities, has distinct outcome measures, and has varying degrees of risk and reward. All of these factors must be taken into account in considering how to make sure these resources are more available. Forms of capital are complementary, and often they are used together to meet the capital needs of an individual company.

A focus on developing traditional venture capital vehicles is insufficient for most entrepreneurs. In fact, even in 1999, at the height of the venture capital boom, venture-backed companies accounted for less than one percent of new businesses—only 4,000 of some 700,000 business starts.[30] (In some cases, an over-emphasis on traditional "institutional" venture capital can work against economic development goals. Company founders relinquish a high degree of ownership and control when funded by institutional venture capital firms. This can be particularly troublesome for states seeking to develop a thriving entrepreneurial sector for the first time, since venture capitalists may require companies to relocate their operations to locations closer to the funders, experienced managers, and concentrations of talent.

Diversify Sources of Seed and Venture Capital through State Incentives and Investment

Two states in particular have developed comprehensive legislation to provide for greater capital availability along a whole continuum of phases. In 2002, Iowa crafted a comprehensive risk capital strategy combining tax credits to angel investors, enabling legislation for a fund-of-funds, tax credits to early-stage companies, and tax credits to investors in **Iowa**-focused venture funds. See the accompanying text box for details.

Omnibus legislation passed in 2000 established the infrastructure for venture capital assistance programs in **Kentucky**. The law created four commercialization funds that address early-stage funding needs for entrepreneurs. The Kentucky Commercialization Fund earmarks funds for university researchers, providing money for applied research on products and services close to being marketed. The Research & Development Voucher Fund enables small and medium-sized businesses to undertake research and development work in partnership with Kentucky universities. The Kentucky Rural Innovation Fund sets aside funding so that small and medium-sized rural-based businesses can conduct research and development with Kentucky colleges and universities. The Commonwealth Seed Capital

Iowa Moves to Diversify Sources of Capital in 2002 Legislature

In Iowa, four pieces of legislation signed into law during the first half of 2002 address venture capital and seed capital needs as well as general entrepreneurial assistance.

The "Angel Investor" law creates a tax credit for investments in qualifying businesses and community-based seed capital funds. This bill allows a tax credit of 20 percent of the amount of an investment made in the form of cash to purchase equity in a qualifying business or community-based seed capital fund. Tax credits may be used against personal and corporate income taxes, financial institutions franchise taxes, insurance premium taxes, or the credit union moneys and credits tax. An individual investor can claim up to $250,000 in a single year (five individual investments in five separate qualifying businesses). The maximum amount of tax credits authorized under the legislation is $10 million. The law was House File 2271.

The "Iowa Fund of Funds" law creates the Iowa Capital Investment Board, in order to mobilize venture equity capital in Iowa. The board will determine tax credit eligibility and develop a system for registration and authorization of the tax credits. The bill also creates the Iowa Capital Investment Corporation which will conduct a national solicitation for investment plan proposals from qualified venture capital investment fund allocation managers. The focus will be on businesses that are within Iowa and who are committed to maintaining a physical presence in Iowa. The Iowa Fund of Funds will provide loan guarantees and other related credit enhancements on loans to rural and small business borrowers within the state of Iowa. The law was House File 2078.

One law defers the taxable income of qualified startup businesses. Businesses must be at least 25 percent funded by venture capital. Taxes may be deferred for the first three years the business operates. If a deferral is approved, the taxpayer must pay taxes on the deferred taxable income in five equal annual installments during the five tax years following the three years of deferral. If the taxpayer has a net loss during a tax year during the three-year deferral period, the loss may be applied to any deferred taxable income during that period. The deferral helps new businesses from a cash flow standpoint. The law was House File 2592.

One law provides tax credits for equity investments in venture capital funds. Investors may take a credit of up to 6 percent of their equity investment in certified venture capital funds. The Iowa Capital Investment Board will issue tax credit certificates and certify venture capital funds. Up to $5 million in total credits are authorized. The law was House File 2586.

Fund provides money for early commercialization of products. This complements the state's Bucks for Brains Program, which funded the attraction of top-flight college and university professors to Kentucky institutions.

The state legislature addressed angel funding in 2002 by approving the governor's New Economy legislative package. The Kentucky Investment Fund Act, which offered a 40 percent tax credit on personal or corporate income tax for venture capital investments made in small Kentucky companies, was updated to make banks and insurance companies eligible for the tax credits, and to allow not-for profit investors to sell or transfer their tax credits.

Provide Seed and Innovation Capital

States should develop innovative mechanisms to fund company formation in the very early stage, providing grants for commercial development of technology created by academic researchers and by federal research grant recipients. Small increments of state support can be particularly effective in getting companies through pre-seed stages and stimulating private investment in later phases. Grants of $50,000 to $250,000 are typical in these phases, and complement more restrictive funds from federal grants.

States may be one of the only sources of investment in this early phase of companies for two reasons. First, federal research grants usually permit exploration of commercial potential but do not support business development expenses. Secondly, potential products and services in this phase are pre-commercial, and therefore too risky for most private investors.

States including **Michigan** through its SBIR (Small Business Innovation Research) assistance program, **Maryland**, through its university technology transfer fund, and others use "SBIR matching" programs to identify high-potential research and provide limited grants to firms that have been awarded these research contracts. States can also use NSF and NIH awards to identify research that is deserving of this investment.

In **Oklahoma**, the Oklahoma Center for the Advancement of Science and Technology (OCAST) Technology Business Finance Program (TBFP) makes state appropriations available for "pre-seed investment" opportunities with qualifying Oklahoma advanced technology companies. Companies can use these funds for proof of concept, market analysis, business planning and other business development needs which are not usually allowed under federal grants. These funds also require complementary cash investments and in-kind contributions by eligible companies.

Provide Tax Credits and Financial Backing to Angel Investors and Angel Networks

States should consider providing tax credit incentives and financial backing for private "angel" investment in early stage companies. Angel investors are high net worth individuals who invest their money in companies in the seed- and early-stages. They are typically successful entrepreneurs or business people who bring scarce expertise and developed networks to the table. They also may serve important functions in mentoring and advising nascent companies.

Angels play an important role in funding companies in phases in between individual and institutional investment, and increasingly are recognized as a critical component to the state's entrepreneurial community. Over 300,000 angel investors were estimated to have invested approximately $30 billion in 2002 in over 50,000 deals, far outpacing the institutional venture capital market. Angel investors represent a particularly important source in funding companies in the $100,000 to $3 million range.[31] Because angel investors are usually local or regional investors, they tend to be more rooted in the state's business community, and less likely to promote companies moving out-of-state.

Formalized networks of angel investors— essentially legally structured investment pools—have experienced rapid growth over the past three years, growing from around 50 organized groups nationwide in 1997 to over 170 by 2002.[32] Many angels are also moving towards participation in formalized networks to permit "syndicated" or multi-angel investments in the $3 to $5 million range, particularly as institutional venture capital in this range has become scarcer in the 2000-2003 periods.[33] As these groups continue to formalize, they represent another powerful set of networks that should be used by states to encourage early-stage company growth.

The most widely practiced state support for angels is delivered through tax credits for angel investors. Typical tax credits for angel investors are 20 percent to 30 percent of the amount invested, although some states offer credits of between 50 and 100 percent of investment. **Virginia**, **Maine**, **Vermont**, and **West Virginia** offer credits of up to 50 percent of investments subject to certain limitations. **Hawaii** offers a tax credit of up to 100 percent in qualifying high-technology businesses over five years.

States are also working to provide other forms of financial support to angel networks. In 2002, **Ohio** provided a grant of $1 million to Cincinnati's Queen City Angels network to start an early-stage technology company fund under Governor Bob Taft's Third Frontier Technology Initiative. **Pennsylvania** has moved to reduce the risks of angel investment by providing financial backing to Ben Franklin Technology Partners of Southeastern Pennsylvania in order to start the nation's first angel investment insurance vehicle. The state provided a $2 million grant permitting Ben Franklin to insure angel investors for up to 25 percent of their investments, up to $200,000. Investors pay an annual fee of 1.5 percent of the total invested for this coverage.

Provide Capital Options for Rural Entrepreneurs

States should also work to develop specific risk capital options directed at entrepreneurs in rural areas. In many cases, investors (often from metropolitan areas) view entrepreneurial rural businesses as too small, with less growth potential, and outside the traditional investment opportunity in terms of location, type of operation, and management experience. All of these factors combine to make deals less attractive to traditional investors.

States and regions have responded by developing a variety of non-traditional investment vehicles and organizations designed to provide capital access to rural entrepreneurs or serve as conduits to funding options for businesses outside of major metropolitan areas. These range from efforts to develop lending capacity in community-based financial institutions (see Appendix 2) to full-scale venture capital funds aimed at rural areas, as in **Adena Ventures**, a $34 million venture capital enterprise created to provide equity investments and technical assistance services to small businesses operating in central Appalachia (*see text box above*).[34]

Adena Ventures is a $34 million venture capital enterprise created to provide equity investments and operational assistance to small businesses operating in central Appalachia. The Fund's mission is to promote sustainable and shared economic development in the region while generating market-rate returns for its investors. Fund goals include: creating new companies, spurring new employment opportunities, commercializing new technologies and generating new sources of income and wealth in a region that has fallen behind the rest of the nation in these important economic categories

Among its institutional investors are public and private sector organizations, including: Ohio University, the West Virginia EDA, several of the most respected banks in the country, AEP (one of the largest utilities in the country), and a public pension fund. In addition to institutional investors, the U.S. Small Business Administration designated Adena Ventures the first New Markets Venture Capital company in the country and is providing the Fund with significant financial leverage which more than doubles the money available for investment in central Appalachia.

Get Out of the Way

State laws and regulations should be streamlined with the goal of reducing the costs of regulatory compliance for entrepreneurs. States should try to ensure that legislation, regulations, and other requirements do not have a disproportionate impact on entrepreneurial growth companies. States also should eliminate regulations that impede universities and public entities from owning equity in for-profit ventures.

All businesses suffer when the cost of compliance with necessary state and local regulations is excessive or when regulatory processes are inefficient, duplicative, or non-transparent. A Byzantine system of business permitting and reporting around financial, environmental, unemployment insurance, and other requirements can diminish significantly a state's competitiveness. If complex and redundant permitting and reporting procedures plague businesses at the county or municipal level as well, the negative effects on business competitiveness can be multiplied.

Growth companies are disproportionately affected by poorly structured and inefficient business regulations. They typically are resource-scarce in a number of ways, and may be doubly affected by the cost of filling out numerous forms for compliance with federal, state, and local laws and regulations. They also typically lack management expertise in compliance and rarely can afford to hire non-core staff for compliance activities. Potential entrepreneurs may never undertake starting a business if regulatory barriers are too high. In such cases, early-stage companies may be tempted to move to jurisdictions where regulations are less burdensome. Simplifying regulatory compliance and registration burdens can determine the survival and retention of a state's growth companies.[35]

Pursue Regulatory reform and streamlining to reduce unnecessary regulations on business

Extensive, state-wide regulatory streamlining activities have been the centerpieces of numerous governors' economic development initiatives in the recent past. During the 1990s, governors of Alabama, California, Florida, Iowa, Maryland, Massachusetts, Michigan, New York, Virginia, and Washington actively engaged in regulatory reform efforts, including executive orders on regulatory review, task forces, direct reduction of unnecessary regulatory burdens, and changes in rulemaking in state agencies.

According to a comprehensive report on state regulatory streamlining published in 2000,[36] state efforts to reform regulations have fallen into several general categories, the most important of which, for entrepreneurs, are:

- review and oversight of rules;
- streamlining of regulations and procedures; and
- economic impact analysis of new rules.

Review and Oversight of Rules

States should pursue comprehensive reviews of rules and regulations to initiate reform efforts. Reviews may be focused on eliminating unnecessary or duplicative regulations, harmonizing state and federal regulations to reduce compliance burdens, or providing waivers or variances. In the last decade Maine, Maryland, Minnesota, Missouri, Nevada, New Hampshire, New Jersey, New York, North Carolina, and Pennsylvania all have undertaken rigorous regulatory review initiatives.

In 1995, **New York** Governor George E. Pataki created the Governor's Office of Regulatory Reform (GORR) to improve the state's economic climate through a common-sense regulatory policy and improved permitting processes. The GORR Web site includes a strong personal statement reflecting the Governor's leadership on the issue: *"If you're getting the runaround or being unnecessarily hounded by one of our state agencies, call our Office of Regulatory Reform. We will intervene. We will take care of the problem. And we will do it fast."* According to a report on the GORR's first three years of operation, regulatory reform eliminated over 700 redundant or unnecessary regulations, and saved individuals, businesses, and municipalities over $1.78 billion in compliance costs. The rate of adoption of new regulations slowed 50 percent in this period.

Recently, **Georgia** Governor Sonny Purdue announced a similar regulatory overhaul aimed specifically at reducing regulatory burdens on entrepreneurs. Other states have appointed a Small Business Advocate or Ombudsman to serve as an internal advocate for reforming and streamlining regulations that affect growth businesses. Former **California** Governor Gray Davis announced the creation of this position in his 2003 state-of-the-state speech, while **Louisiana** has constituted a joint committee of the legislature to serve a similar function.

Streamlining Regulations and Procedures

Streamlining efforts are intended to make regulatory compliance easier for companies while maintaining regulatory protections intact. States including Washington, Michigan, New York, Wisconsin, Florida, Minnesota, and Missouri have undertaken important streamlining initiatives.

Numerous states have pursued a **one-stop** business registration and licensing model. A one-stop center may be either a physical or Internet-based location at which companies can complete all registration and licensing procedures at once. **Washington's** Unified Business Identifier (UBI) offices issue businesses a single identifier used in common by all state agencies. Its Master License Services (MLS) permits businesses to apply for all relevant business licenses with a single form that can be obtained and submitted at the state's UBI centers.

Michigan is deploying Internet technology to reduce administrative costs by reducing duplicative paperwork for businesses. In total, state agencies have over 600 separate forms to gather information for regulatory oversight. In order to decrease this burden, the state has developed an on-line business registration tool to eliminate duplicate data entry. Companies enter their company's standard information—ownership, tax identification, directors, etc.—only once, the information is stored on-line, and this information is automatically filled-in on any future required state forms obtained through the service.

In **New York**, the Governor's reform of permitting processes was estimated to have saved over $62 million in state agency and private sector compliance costs during the 1995-1997 period, and a central permitting assistance service handles approximately 75,000 inquiries per year. This service, part of the Governors Office of Regulatory Reform, provides additional assistance to large, complex projects requiring the involvement of multiple agencies through the Master Application Process. This effort was credited with the creation or retention of over 4,500 jobs and assisting in the generation of over $800 million in new investment in the same period.[37]

Wisconsin created "Quick-Start LLC," an on-line corporate information database and registration service easing the process for creating Limited Liability Corporations, a favorite business model for start-ups because of its flexibility in later transfer of ownership. This effort is aimed at streamlining the process of business creation for new entrepreneurs.

Economic Impact Analysis of New Rules

Another important step governors can take is to require that agencies analyze the economic impact of proposed new regulations and rules. States including Arkansas, California, Florida, Indiana, Kentucky, Maine, Maryland, Michigan, Minnesota, Mississippi, Nevada, New Hampshire, New Jersey, New York, North Dakota, Virginia, and Washington adopted some requirement of this type in the 1990s.

States should also consider removing legal restrictions on equity ownership by the state, public universities, and other government entities In many states, public entities such as public universities and state government agencies are prohibited by law or by the state constitution from owning equity in private companies. This may discourage universities from investing judiciously in new companies formed out of university-developed technology. It can also limit states' ability to receive a return on investment from capital investment programs described in the previous section. **Texas** and **Oklahoma** recently passed legislation to permit universities to own equity stakes in companies, and **Arizona** currently is pursuing constitutional reform to this end.

These reforms can serve to put states, universities, and companies in a more advantageous position by conferring greater flexibility on state governments, universities, and companies alike. Equity investment is preferred by many early-stage companies, since debt can constrain operations and companies may be years away from generating significant revenues. States are interested in capturing the benefits of research and development activities, and permitting universities to creatively respond to the needs of entrepreneurs and companies for non-debt investments.

Conclusion

This guide is being released at a time of mounting concerns about the loss of manufacturing jobs and the movement overseas of some technology jobs. States may not be able to determine trade policies or influence international currency valuation, but they can do something about creating jobs. The old notion of recruiting companies from elsewhere risks becoming more and more a race to the bottom. Competing with other states is one thing, but competing with nations whose cost of living and wage costs are a fraction of our own creates a tilted playing field, where winning can be a form of losing. Modern economic development intensifies "creative destruction." Jobs lost to increased productivity, overseas competition, and technology do not come back. They must be replaced. Governors and states will continue to play a leading role in encouraging entrepreneurship because encouraging start-ups and helping dynamic companies to grow can lead to new and better jobs.

Just as entrepreneurship means aiming at a moving target, writing a guide to entrepreneurship means that new ideas and practices develop as fast as they can be recorded. Thus, this guide is very much a work in progress. As states and others invent new ways to encourage entrepreneurship, the NGA will continue to record lessons that others can use. Exchanging information about entrepreneurship is a win/win proposition for states because entrepreneurship is about growth and expansion and making a bigger pie rather than carving the existing pie into smaller pieces. In this context, one state's gain is not another's loss. Instead, one state's gain is a beacon to light the way for other states to gain.

Appendix 1

Universities and Colleges with Entrepreneurship Centers (Members of the National Consortium of Entrepreneurship Centers)

Babson College

Ball State University

Baylor University

Benedictine College

Boston University

Bradley University

Brigham Young University

Carnegie Mellon University

Colorado State University

Community College of Indiana

Cornell University

Council for Entrepreneurial Development

DePaul University

Drexel University

George Mason University

Georgia State University

Indiana University

Iowa State University

John Carroll University

Kennesaw State University

Lamar University

Loyola Marymount University

Massachusetts Institute of Technology

Northeastern University

Northern Kentucky University

San Diego State University

Southern Methodist University

St. Louis University

Stanford University

Syracuse University

Texas Christian University

Tufts University

University of Akron

University of Arizona

University of Cape Town (South Africa)

University of Colorado

University of Hawaii

University of Illinois Chicago

University of Iowa

University of Maryland

University of Michigan

University of Missouri Kansas City

University of Nebraska

University of North Carolina

University of North Carolina-Greensboro

University of Notre Dame

University of Portland

University of South Carolina

University of Southern California

University of St. Thomas

University of Virginia

University of Washington

University of Western Ontario

University of Wisconsin – Madison

Wake Forest University

Wichita State University

Appendix 2

Non-Traditional Risk Capital Resources: Examples From the States

A. Publicly Funded, Publicly Managed Institutions

- Small Enterprise Growth Fund (Augusta, ME)
- Minnesota Technology Corporation Investment Fund/MIN-Corp (Minneapolis, MN)
- Iowa Product Development Corporation/Iowa Seed Capital Corporation (Des Moines, IA)

B. Privately Managed Funds with Public Funding or Incentives

- Iowa Capital Corporation (Des Moines, IA)
- Colorado Rural Seed Fund (Boulder, CO)
- Northern Rockies Venture Fund (Butte, MT)
- Oklahoma Capital Investment Board (Oklahoma City, OK)
- Partner Funds: Pacesetter and MESBIC Venture Funds (Dallas, TX)
- Massachusetts Technology Development Corporation (Boston, MA)
- Kansas Venture Capital, Inc. (Overland Park, KS)

C. Community-Level Equity Programs

- Ames Seed Capital Fund, Inc. (Ames, IA)
- Siouxland Ventures, Inc. (Sioux City, IA)
- McAlester Investment Group (McAlester, OK)

D. Certified Capital Companies (CAPCOs)

- Louisiana CAPCO Program (Baton Rouge, LA)
- Missouri CAPCO Program (Jefferson City, MO)

E. Community Development Venture Funds

- Coastal Ventures Limited Partnership (Portland, ME)
- Kentucky Highlands Investment Corporation (London, KY)
- Cascadia (Seattle, WA)
- Northeast Ventures (Duluth, MN)
- Appalachian Ohio Development Fund (Athens, OH)

F. Small Business Investment Companies (SBICs)

- First United Ventures (Durant, OK)
- North Dakota SBIC (Fargo, ND)
- North Carolina Economic Opportunities Fund (Raleigh, NC)

Endnotes

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