

ENTREPRENEURSHIP SUMMIT
EXECUTIVE SUMMARY

KAUFFMAN FOUNDATION AND
THE INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

September 2008

Ewing Marion

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ABOUT THE SUMMIT'S SPONSORS

The Ewing Marion Kauffman Foundation, a private, nonpartisan foundation, works to harness the power of entrepreneurship and innovation to grow economies and improve human welfare. Through its research and other initiatives, the Kauffman Foundation aims to open young people's eyes to the possibility of entrepreneurship, promote entrepreneurship education, raise awareness of entrepreneurship-friendly policies, and find alternative pathways for commercializing new knowledge and technologies. It also works to prepare students to be innovators, entrepreneurs, and skilled workers for the twenty-first century economy through initiatives designed to improve learning in math, engineering, science, and technology. Founded by the late entrepreneur and philanthropist Ewing Marion Kauffman, the Kansas City, Mo.-based Foundation has more than \$2.4 billion in assets. More information is available at www.kauffman.org.

The International Economic Development Council (IEDC) is a nonprofit membership organization dedicated to helping economic development professionals do their jobs more effectively and raising the profession's profile. With more than 4,500 members in the United States and beyond, IEDC's mission is to provide leadership and excellence in economic development for its communities, members, and partners. IEDC's programs and services provide educational opportunities, analyze and disseminate information, and improve decision makers' responsiveness to economic development needs. The organization's Five-Year Strategic Plan for 2008–2013 addresses the challenges and opportunities of the twenty-first century and focuses on the three main themes of globalization, sustainability, and entrepreneurship to help its members create more high-quality jobs, develop more vibrant communities, and generally improve the quality of life in their regions. IEDC is based in Washington, D.C. More information is available at www.iedconline.org.

EXECUTIVE SUMMARY

Entrepreneurship support programs are designed to help generate innovation and stimulate U.S. economic growth by providing resources to potential and active entrepreneurs: education, training, and even funding. However, there currently is a dearth of information about the nature and effectiveness of these programs.

On April 1, 2008, the Ewing Marion Kauffman Foundation and the International Economic Development Council (IEDC) convened a meeting at the Kauffman Foundation to discuss how to improve knowledge about these programs' effectiveness and impacts. The meeting brought together forty experts, including heads of entrepreneurship programs and economic development professionals, to share their experiences and ideas for supporting potential high-growth firms. This document summarizes the insights and conclusions from this meeting.

The participants concentrated on four questions:

- What are the core components of an effective entrepreneurship support program?
- What is the essential infrastructure of an entrepreneurial eco-system?
- What are new avenues for research?
- What steps should be taken next to facilitate high-growth entrepreneurs?

Participants determined that effective entrepreneurship programs should structure their services to address entrepreneurs' core needs: providing relevant market knowledge, access to talent and capital, and participating in networks. Effective support programs build bridges between entrepreneurs and their peers, community organizations (such as schools and universities), arts and cultural entities, hospitals, businesses, and local governments. These bridge-building efforts ideally should be part of a broader regional vision, which public policies can promote.

Research on the value of these entrepreneurial support programs would be useful, especially to determine their impacts on local and regional economic development. The participants agreed it also would be beneficial to identify ways in which far-flung support programs might better connect with one another.

Participants further agreed that policymakers and other stakeholders need greater awareness about the importance of entrepreneurship to economic growth, and—to the extent that the research demonstrates it—the importance of entrepreneurial support efforts to facilitate entrepreneurial growth.

INTRODUCTION

Entrepreneurship plays an essential role in generating innovation and stimulating U.S. economic growth. Entrepreneurship support programs are designed to foster those entrepreneurial ventures and enhance local communities' economic vibrancy. These programs provide various resources—access to education, training, and funding to budding entrepreneurs—to support entrepreneurs and to help nurture an entrepreneurial culture.

As widespread as they are, however, very little is known about the nature and effectiveness of entrepreneurship support programs and practices in states, regions, cities, and towns. To begin to fill this gap, the Ewing Marion Kauffman Foundation and the International Economic Development Council (IEDC) convened an April 1, 2008 meeting of forty experts drawn from economic development organizations, entrepreneurship support programs, and foundations and associations that focus on entrepreneurship.

To focus the discussion, the participants concentrated on four issues:

- What are the core components of an effective entrepreneurship support program?
- What is the essential infrastructure of an entrepreneurial eco-system?
- What are new avenues for research?
- What additional steps should be taken to foster entrepreneurial growth?

KEY COMPONENTS OF AN EFFECTIVE ENTREPRENEURSHIP SUPPORT PROGRAM

U.S. entrepreneurship programs serve entrepreneurs with different goals—from high growth to “lifestyle” businesses—in different industries or sectors, and serving different markets. To be effective, therefore, support programs must provide something of value to a wide range of “customers.” Programs or support centers that have limited resources must concentrate on particular segments of the entrepreneurial population. Other programs that have greater financial support may be able to serve a broader base of entrepreneurs.

At bottom, regardless of *who* they serve, all entrepreneurial support programs must structure *what* they provide to meet the most important needs of their entrepreneurial customer base: *providing relevant market knowledge, access to talent and capital, and participation in networks.*

To help diagnose problems and connect entrepreneurs to the resources they need, effective support programs should function as brokers in the community, building bridges between entrepreneurs and local organizations, such as schools and universities, arts and cultural entities, hospitals, and local government.

For example, when an entrepreneur needs funding, the support program should provide links to sources of capital that match the entrepreneur's financing requirements at various stages of development, from seed capital to loans to equity. Or, if the entrepreneur feels overwhelmed by the demands of starting a business, the program can provide opportunities for the new business owner to form strategic alliances with peers or mentors who can help with business planning.

Participants noted three essential features that enhance the effectiveness of any entrepreneurship support program:

- Ability to efficiently facilitate networks
- Management of peer-to-peer and mentoring programs
- Strength of the program's leadership

Facilitating Networks

Albert-Laszlo Barabasi, a University of Notre Dame physicist and one of the nation's leading experts in the science of networks, believes that networks, including social ones, determine our ability to succeed in virtually every aspect of life.¹ Support programs, such as KCSOURCELINK, that foster such networking among entrepreneurs and with industry, universities, and financial providers not only benefit entrepreneurs, but also are valuable to the local economy because they leverage knowledge and increase the capacity for wealth creation.²

Peer-to-Peer Networking and Mentoring

Researchers have identified the linkage of entrepreneurs with effective mentoring and coaching as one of the top "best practices" entrepreneurship support programs should pursue. Many believe that so-called "peer-to-peer" mentoring and coaching—advice provided by other entrepreneurs—is especially effective,

¹ Publications by Barabasi on this topic include, *Linked: How Everything Is Connected to Everything Else and What It Means* (Plume, 2003), and *The Structure and Dynamics of Networks*, with Newman, M., and Watts, D.J. (Princeton University Press, 2006).

² KCSOURCELINK connects emerging, startup and established small businesses throughout the greater Kansas City region, with 140 nonprofit resource organizations that provide business-building services. This model and service have been replicated in Charlotte, N.C.; Jacksonville, Fla.; Atlanta, Ga.; Toledo, Cincinnati, and Cleveland, Ohio; Milwaukee, Wisc.; and the West Alabama-East Mississippi region.

often helping entrepreneurial services candidates ascertain their own commitment levels and their abilities to sustain the implicit challenges of taking a startup to the marketplace.³

Peer-to-peer mentoring or coaching relationships require trust and commitment. Peers help identify entrepreneurial opportunities, influence perceptions about entrepreneurship as a career choice, and serve as good substitutes for direct experience.

The participants identified and discussed several successful peer-to-peer mentoring and coaching programs, which most often are provided for “second stage” entrepreneurs, or those with some track record:

- The Edward Lowe Foundation (www.edwardlowe.org) created and licensed the PeerSpectives Roundtable System as an innovative peer-to-peer tool that focuses on sharing experiences rather than giving advice. The foundation targets “second-stage” entrepreneurs and focuses on peer learning derived from the experiences of its founder, entrepreneur Edward Lowe, who yearned for a mentor when he started his business ventures. The foundation trains each PeerSpectives facilitator during a two-day training session. Roundtables typically comprise ten to twelve individuals from non-competing companies and are offered in Florida, Michigan, and Wisconsin, where programs were established through an exclusive statewide license.
- Spark (www.annarborusa.org) in Ann Arbor, Mich., has developed a Boot Camp Program that condenses the usual three-month learning curve to move a great business to the next level into two intensive days of learning. Startups learn how to improve their business plans and design effective investor presentations, as well as network and share ideas with fellow entrepreneurs and experienced business executives. The mentoring provided by established business leaders supplies Boot Camp participants with one-on-one advice from seasoned experts, many of whom have already traveled the path from startup to success.
- The St. Louis Enterprise Center’s Seminars for Success mentor program comprises a series of eight special seminars, each focusing on a specific discipline and/or topic of interest to mentors from the region. The program provides entrepreneurs with tax advice, legal direction, marketing strategies, and other valuable information to enhance their success. The center serves as an incubator for startup businesses in the region and is part of the St. Louis Development Corporation (www.stlouis.missouri.org).

³ The Foundation defines a second-stage entrepreneur as a) privately held, b) past the startup stage and focused on growth, c) generating between \$750,000 and \$50 million in annual revenue or having working capital in place from investors or grants, and d) employing ten to ninety-nine full-time-equivalent employees.

Leadership

Successful entrepreneurial support programs also must have the “right” leadership. Ideally, the head of the support program should be an entrepreneur or have entrepreneurial experience.

Successful entrepreneurship program leaders serve as brokers and have knowledge of both the private and public sectors. These individuals must be sufficiently savvy to influence people over which they have no authority or control.

Many economic development professionals lead entrepreneurial support programs, although they may not have been entrepreneurs in the traditional sense. The key to success is that the leader must have an entrepreneurial spirit and be experienced in working with others across different sectors and industries. For example, Michael Finney’s drive and economic development background have made him instrumental in advancing innovation-based business development in the Ann Arbor region. As Spark’s president and CEO, he directs programs, resources, and support to firms at every stage, from startups to large organizations looking for expansion opportunities. A former vice president of the Michigan Economic Development Corp.’s emerging business sectors division, his experiences in providing seed and grant money to bolster the state’s life science research and commercialization efforts have been critical to his success at Spark.

Participants cited several examples where successful entrepreneurs also have helped lead or create successful entrepreneurial support programs.

Edward Lowe created a billion-dollar industry with Kitty Litter, which established the cat as the nation’s most popular pet. Once his business was successfully established, he started a new venture: fostering and nurturing entrepreneurs. As a result, Lowe committed a good part of his fortune to create a campus for entrepreneurs at a private 2,500-acre complex outside his boyhood hometown of Cassopolis, Mich. In 1991, he donated this estate for the headquarters of the Edward Lowe Foundation.

Steve Radley, founding director of the Kansas Center for Entrepreneurship, began his career in the private sector as an employee of a startup technology company that grew from \$6 million to more than \$175 million during his tenure. Radley went on to co-own two businesses, one that was sold to Champion Enterprises. His work experience has been vital in steering the Kansas Center for Entrepreneurship.

Maria Meyers, KCSOURCELINK’s first director since 2003, also has an entrepreneurial background. Meyers has developed small business ventures and

served as an advisor to other new business operations. Before joining KCSourceLink, she was chief operating officer for a Nebraska biotech company. Her varied professional experiences were critical in her making the idea of the resource network become a reality.

Ewing Kauffman applied his business experience and skill in forming the Ewing Marion Kauffman Foundation, which is devoted to advancing entrepreneurship and education. For over two decades, the Kauffman Foundation has supported a wide range of efforts to advance entrepreneurship throughout the United States.

The staff of the successful entrepreneurial support programs tends to be small due to funding constraints. However, participants noted, that, in each case, staff members were highly motivated. A strong and driven board of directors with connections in the community also was cited as important for support program success. Board members not only offer credibility, but often serve as mentors to potential entrepreneurs.

ESSENTIAL INFRASTRUCTURE OF AN ENTREPRENEURIAL ECO-SYSTEM

Entrepreneurs cannot do everything themselves. Like all of us, entrepreneurs must rely on a basic infrastructure to support their activities.

An entrepreneurial infrastructure ensures that knowledge, capital, talent, and networks to other entrepreneurs are easily accessible. Entrepreneurial support programs can be an important part of this infrastructure. The participants broadly agreed that these programs work best if they are part of a wider regional vision that promotes partnerships among key community players to sustain competitiveness in the global marketplace. Those players include K–12 schools, community colleges, adult education centers, universities, regional businesses, and economic development organizations.

Continued innovation is essential to economic growth. Thus, how can local policymakers, and entrepreneurial support programs in particular, best promote innovative entrepreneurship? The participants identified the following steps:

- Engage in partnerships with key community stakeholders
- Provide support in regulatory and business assistance
- Cultivate human capital for workforce development
- Facilitate access to capital
- Promote the commercialization of invention
- Create organizations as part of a wider regional vision

Engage in Partnerships

Partnerships with key community stakeholders are essential if entrepreneurship support leaders are to play an effective brokering role for entrepreneurs. In some

respects, the most effective partnership strategies resemble the approaches that economic development professionals use in their Business Retention and Expansion (BRE) strategies.

BRE programs identify companies that are at risk in a community and help them overcome economic difficulties that could result in shutdowns or relocations. The economic development professional collaborates with service providers in the region, including those in local, state, and federal government, as well as private and nonprofit actors who have a stake in maintaining and growing a robust business climate. Partnerships with educational institutions and other businesses in the region can help determine the industrial sectors that would enhance a region's competitive advantages and steer resources toward it. The combination of these measures not only may help at-risk existing firms but, in the process, also may help facilitate new companies' formation and growth.

Ease the Regulatory Process

Streamlining regulatory and licensing processes can be the most cost-effective and quickest approach a region can take to support entrepreneurial activity. Regulatory and liability-related costs, such as liability insurance, typically are more burdensome to entrepreneurs as a percentage of revenue than for larger existing enterprises. In addition, entrepreneurs rarely have the personnel to cope with bureaucratic red tape and delay.

Cities and economic development organizations can play a role in easing regulatory burdens. Developing simple Web sites and online processes, creating a one-stop shop for license applications, and decreasing the wait for approvals and permits to thirty days or fewer are good solutions. In San Antonio, Tex., for example, the city has facilitated the process by placing all regulatory offices in the same building. The Arlington Economic Development Commission in Virginia is discussing ways to make its permitting process more accessible by providing "customer service," which would make the process feel more like a visit to the neighborhood hardware store than to a regulatory center.

Developing Human Capital

One of the most often-cited challenges entrepreneurs face is finding talented and skilled employees who have the flexibility and drive to succeed in an entrepreneurial environment. Meeting this challenge depends on improving the educational system, starting at the K–12 level and focusing more on a STEM (science, technology, engineering, and math) curriculum.

Recent data indicate that U.S. students lag behind other countries in math and science, ranking twenty-eighth in math literacy and twenty-fourth in science literacy among the forty countries participating in the 2003 Program for International Student Assessment (PISA). Embracing youth as a source of

economic growth and exposing them to innovation is an important approach for cultivating future entrepreneurs.

Project Lead the Way (PLTW) offers one promising approach for imparting STEM skills and encouraging interest in STEM-related careers. PLTW is a high school-based engineering curriculum combining STEM instruction with hands-on experiences with real world problems. The PLTW curriculum now is offered in more than 2,000 schools in forty-eight states and the District of Columbia. The Kauffman Foundation, with matching funds from local businesses and philanthropies, has brought PLTW to Kansas City-area high schools. In addition, in 2007, the Boeing Company provided funds to the University of Missouri–Rolla to support the university’s efforts to introduce engineering to Missouri’s middle and high schools.

School-based entrepreneurship programs also can play a significant role in enhancing a community’s entrepreneurial culture. The National Federation for Teaching Entrepreneurship program offers entrepreneurship instruction and experiences to at-risk youth in high schools around the country and in other selected countries. Similarly, The Enterprise Center (TEC) in Philadelphia, which offers business education opportunities for residents of all ages, concentrates on harnessing youth entrepreneurship. Each year, TEC trains hundreds of aspiring young entrepreneurs through its award-winning youth program, YES (Youth + Entrepreneurship = Success), which features in-school, after-school, and camp classes. The curriculum enables participants to learn how to write a business plan, network with established entrepreneurs, access startup capital via the Angel Network, and receive credit toward graduation.

Universities and colleges are a principal source of high value-added human and intellectual capital. Serving as growth engines, university-related initiatives that foster entrepreneurship can help budding entrepreneurs develop viable and successful business ventures. Consider these examples:

- The Donald W. Reynolds Governor’s Cup Oklahoma (www.okgovernorscup.org) is one of the largest cash award pools in the United States. The Governor’s Cup is designed to encourage Oklahoma university and college students to act upon their ideas and talents. The Governor’s Cup has drawn entries from nineteen campuses statewide and has attracted more than one hundred innovative ideas. More than 300 students have tested their entrepreneurial skills and knowledge while competing for more than \$300,000 in cash prizes. To date, seven teams are exploring commercialization of their technology-based business concepts, which include bio-markers for identifying prostate cancer, and preventative vaccinations for gingivitis and periodontal disease in small animals. In addition, community experts have provided nearly \$150,000 in in-kind commercialization services in finance, legal, marketing/branding, Web hosting, and human resource management.

- The Voinovich School of Leadership and Public Affairs at Ohio University (www.voinovichcenter.ohio.edu) combines programs and partnerships to increase Appalachian Ohio's economic competitiveness. Professional staff from the Appalachian Regional Entrepreneurship Group and students in the Integrated MBA Program provide operational and technical assistance to both startup and existing businesses in the region, helping fill the expertise gap. In addition, through partnerships, including those established through the Southeast Ohio Third Frontier Entrepreneurial Signature Program, the Voinovich School is helping expand business assistance and early-stage investment funding for businesses. A recent economic impact study conducted by the Voinovich School revealed that Ohio University's Innovation Center firms created an estimated 344 jobs and generated \$12.6 million in labor income in Athens County in 2006.

Some universities are acknowledging the importance of the connection between economic development and higher education. The University of Arizona, Cleveland State University, and George Mason University recently created positions of vice president for economic development. George Mason University and Prince William County in Virginia have combined the university's academic and research needs with the county's innovation-led growth strategy. This university-centered economic development program encompasses workforce development in both creating new jobs and targeting educational offerings (bioinformatics) to industry's workforce needs.

Entrepreneurial education and training are not confined to the formal educational system. Entrepreneurship support programs also have a role to play. Community Capital Development (CCD) (www.seattleccd.com) in Seattle, Wash., which focuses on minority and women business development, concentrates its efforts on education and training before providing any financing. CCD has partnerships with other business education providers, including local community colleges and universities. Startup entrepreneurs receive counseling and business plan development instructions that include tax and finance information, and help in understanding business legal structures. Existing business owners receive counseling related to developing marketing or growth plans for their firms based on results they already have achieved. CCD has provided more than \$22 million in loans to entrepreneurs, and has educated and trained more than 12,000. Entrepreneurs who have received CCD assistance have created more than 1,600 jobs to date.

Raising Capital

Raising capital is a key challenge for any entrepreneurial venture. The most common external sources of small business financing include direct lending, revolving loan funds, micro-loan programs, and state and federal financing programs. Other sources can be found through the conventional banking system

or through city governments that provide economic development professionals with bond and creative tax incentive funding options.

Several federal programs, including the Small Business Administration's 7(a) and Small Business Innovation Research (SBIR) programs, provide startup financing that encourages research and development efforts, and targets the entrepreneurial sector, providing support for commercializing innovation. SBIR funds a company's critical startup and development stages and is the single largest source of seed funding in the United States, but it is very competitive: only 10 percent of the proposals are funded. An entrepreneur has to choose the type of capital funding that is most appropriate for his or her firm, whether debt or equity capital. Appendix 1 provides more information on types of business finance.

At some point, high-growth companies typically require a significant injection of funds to sustain that growth. Although "venture capitalists" seem to get most of the media attention for providing these funds, in the participants' view, "angel investors"—wealthy individuals or groups of such individuals—tend to be more common suppliers of outside equity. Having a strong entrepreneurial support program in a city or region can provide comfort to either funding source and, thus, increase the chances that it will be provided.

One concern the participants expressed about venture capitalists is that they concentrate too much of their attention and money on the two coasts, overlooking the entrepreneurial opportunities in the country's vast middle. For this reason, in part, some states have launched their own venture funds in an effort to stimulate innovation and increase employment:

- In Mississippi, where the lack of access to capital is widely believed to inhibit local economic growth, especially in the high-tech sector, the state legislature in 2007 approved a package authorizing five new state funds to support early-stage, high-tech companies and to build an in-state market for private equity investment. The Mississippi Technology Alliance, a nonprofit organization that works closely with the state to provide services to investors and entrepreneurs, will administer the funds.
- Pennsylvania's Ben Franklin Technology Partnership has successfully facilitated public-private investment collaboration to drive early-stage opportunities.
- The Texas Emerging Technology Fund (www.emergingtechfund.com) provides early-stage financing and business development support to increase the likelihood of emerging firms' long-term success in Texas.
- The Detroit Renaissance in Michigan is leveraging the connection between innovation and entrepreneurship through a \$100 million venture capital fund. By investing in venture capital firms to support their

investments, rather than making direct investments in the companies, the fund helps generate an increased mass of funding for technology startups and university spin-offs. The initiative functions together with the state's Twenty-First Century Jobs Fund, which fosters growth in life sciences, alternative energy, and advanced automotive technologies, with funding focused on emerging technology sectors.

The trend toward state-funded venture funds is relatively new and, thus, little is known about their performance in generating returns on investment or fostering job growth. This is an important topic for future research.

Commercializing Innovation

Technology commercialization fosters economic growth by linking university research and development to entrepreneurs and established firms that have the ability to commercialize them. Effective regional economic development plans should facilitate this process. But universities bear primary responsibility for effectively commercializing their faculty's discoveries, by virtue of the Bayh-Dole Act of 1980, which enabled universities (and their faculties) to retain intellectual property rights to commercial applications developed from federally funded research.

Universities since have centralized many of their commercialization activities. Participants expressed concern, however, that too often universities have become overly bureaucratic, hindering rather than facilitating commercialization of useful technologies. In particular, businesses have complained about the delays and difficulties in negotiating licensing agreements—one reason that economic development professionals encourage their clients to seek SBIR grants to conduct research themselves in lieu of, or as a supplement to, dealing with universities. Technology matched to local entrepreneurs should be the goal. Therefore any programs that cross-fertilize entrepreneurs and university researchers should strengthen local economies.

States and localities are taking other measures to foster university commercialization. In Texas, Governor Perry has proposed that all public universities make research commercialization one of the several factors considered when granting tenure to professors. State officials also requested that the words “technology commercialization” and “economic development” be added to university and college mission statements. In 2006, Texas A&M University⁴ became what is believed to be the first public university in the United States to formally incorporate commercialization (as measured by deal flow) into its criteria for granting tenure.

⁴ The Texas A&M System includes nine universities and a statewide health science center.

Incorporating Entrepreneurship in a Regional Strategy

The participants strongly agreed that entrepreneurship support programs should be part of a wider regional plan. One such example is the Kansas Center for Entrepreneurship (www.networkkansas.com), created as a component of the Kansas Economic Growth Act of 2004 to establish entrepreneurship and small business as economic growth and community development priorities. Known as Network Kansas, the Center interacts with key stakeholders in the state to help entrepreneurs locate various resources.

Network Kansas' unique database enables counselors to research the network and provide tailored information to match entrepreneurs' needs, referring them to partners within the network. The Center also tracks entrepreneurs' progress through a software program called Biz-Trakker, developed by the Kauffman Foundation and KCSOURCELINK. Via the Center, entrepreneurs from rural and distressed communities can access grant or loan funding from Startup Kansas by working with local nonprofit business support providers. The Center also cooperates with Wichita State University's Center for Entrepreneurship to inventory the entrepreneurial education being taught in the state.

Kansas is also seeking to facilitate technology-based entrepreneurs through its KTEC PIPELINE program. PIPELINE identifies potential high technology entrepreneurs, and then matches them with best-in-class training, resources and mentors.

The Ben Franklin Technology Partnership (BFTP) (www.benfranklin.org) in Pennsylvania, established in 1982, also operates statewide, fostering entrepreneurial development as its main economic development strategy. Through its statewide network, supported by the Pennsylvania Department of Community and Economic Development, BFTP provides capital and expertise in technology, finance, and business that help entrepreneurs and established businesses overcome challenges and plan for growth. The BFTP operates through a regional structure, allowing the program to respond to its constituents' needs and to partner with other regional organizations with common goals, creating an interactive network of programs and services. According to one study, between 1989 and 2001 alone, every dollar invested in BFTP yielded nearly \$23 of additional income to the state, and BFTP boosted Pennsylvania's economy by \$8 billion.

One of the most successful of the BFTP partners is Innovation Works in Pittsburgh, Pa. In its 20-plus years of activity, Innovation Works has helped create some of the most successful technology companies in Southwestern Pennsylvania. Headed by a former entrepreneur, Rich Lunak, Innovation Works provides expertise (through its staff with extensive private sector experience) and financing to aspiring technology entrepreneurs.

JumpStart, based in Cleveland, Ohio, performs related functions for potential and actual entrepreneurs in Northeast Ohio. In particular, it not only assists new companies with funding and expertise, but has a range of networking and educational programs to give individuals who are thinking about taking the “entrepreneurial plunge” information to enable them to make an informed decision about whether or not to do so. Like Innovation Works, JumpStart has a team of experienced former or current entrepreneurs available to advise entrepreneurs and their companies.

Future Research

Given the fact that many entrepreneurial support programs have been established relatively recently, there so far have been insufficient data to evaluate them and specifically identify the services and strategies that appear to be the most cost-effective. Nonetheless, it is clear that research of this kind is necessary.

The participants believed it is especially important not to limit measurement of the entrepreneurship support programs’ impact to the number of jobs that program clients may create. This narrow focus ignores the intangible aspects of entrepreneurial growth: the demonstration of the effects of one or several successful entrepreneurs on others who are thus encouraged to launch their own companies, or the possible long-lasting change in the local “entrepreneurial culture” effects that may benefit an entire area, which is totally apart from any additional jobs the support efforts may “create” at the firms that may be helped.

A key challenge for both researchers and those actively engaged in providing entrepreneurial support is to develop other metrics for measuring the impact of programs in this area. This is important not only for those operating the programs, but also to help educate elected officials, local governmental executives, and the broader public about these programs’ nature and impact.

A new study, sponsored by the Appalachian Regional Commission (ARC), provides recommendations. The study, which assessed the impact of the ARC’s Entrepreneurship Initiative, details program results and also provides suggestions and guidelines for measuring such programs—beyond traditional economic development measures such as new job creation—in the future. The recommendations include assessments of entrepreneurship investments’ impact on community attitudes, business operations, and overall regional economic prosperity.

Future Action

Conference participants expressed a need for entrepreneurship support programs to communicate more and share more information. This should both

help the programs and build inter-community networks that can help entrepreneurs.

One helpful measure would be to devise a collaborative software program that could help organizations and entrepreneurs connect across communities. This sort of program should be created in a language that facilitators and entrepreneurs universally understand. Organizations then could connect, share best practices, and maintain a database on current resources that cross borders and industries. It is possible that a resource center currently being developed by the Edward Lowe Foundation would serve this purpose.

The escalation of globalization increases the importance for U.S.-based entrepreneurs to have a network with global reach. Indeed, some existing entrepreneurial support programs already provide information and contacts that extend outside the United States. One such example is the Larta Institute (www.larta.org), which serves as an entrepreneurial hub for high-tech and life sciences companies worldwide. With an extensive network of experts, the Larta Institute has facilitated approximately \$1.6 billion in outside funding on behalf of the entrepreneurs it has assisted.

Another concept discussed at the conference was “economic gardening,” an innovative, entrepreneur-centered strategy developed in 1989 by Littleton, Colo., which since has emerged as a prototype for economic development professionals looking for additional methods to stimulate economic growth for their communities. Economic gardening focuses on facilitating innovative firms’ formation and growth by making use of and strengthening a community’s conventional infrastructure (notably, transportation and education), as well as intangible assets and services, such as financial resources and business cultures that support entrepreneurship. Appendix 3 discusses economic gardening in greater detail.

CONCLUSION

Fostering entrepreneurship is essential to continued economic growth. Economic development professionals support entrepreneurs and raise awareness of the importance of entrepreneurial development as a key factor in strengthening local economies.

As more experience and information are gained about who entrepreneurial programs serve and what services they provide, researchers in the future should be better able to evaluate these programs’ effectiveness and determine how they might be improved to further strengthen entrepreneurial growth.

APPENDIX 1: CAPITAL SOURCES FOR ENTREPRENEURS

Entrepreneurs often finance with their own equity, outside equity (provided by angel investors or, more rarely, by venture capitalists), or by tapping various sources of credit, including bank loans (typically only where collateral is available), revolving loan funds, micro-loan programs, and state and federal financing programs.

Revolving loan funds (RLFs), available in many communities, are widely used economic development finance tools that recycle loan repayments into new loans. RLFs can be used to leverage private sector funding and usually fill the gap between the capital a business needs and the capital provided by conventional lending sources.

Micro-loan programs also provide small loans—typically up to \$35,000—to new and existing small businesses. These unsecured loans tend to have short maturities. Micro-loans are often vital to entrepreneurs from disadvantaged populations who seek to start or expand business ventures.

The Small Business Administration's (SBA) 7(a) program can help provide loans for early-stage small firms, and those with weaker credit and collateral. The SBA's Small Business Development Centers (SBDC) also provide management assistance to current and prospective small business owners.

The SBA Small Business Innovation Research (SBIR) program encourages research and development efforts and targets the entrepreneurial sector, providing support for commercializing innovation. SBIR funds a firm's critical startup and development stages.

APPENDIX 2: YourEconomy

In May 2008, the Edward Lowe Foundation launched an interactive resource center, YourEconomy, which provides detailed, up-to-date information that follows business performance across time and across the country. Of particular significance, this data enables YourEconomy users to track individual companies through various stages of development as they begin and end, expand and contract, and move in or out of a region.

The YourEconomy data are designed primarily for groups and organizations working at the local or regional level to support business growth and economic development. The Web site, <http://www.youreconomy.org/>, should benefit policymakers and community leaders by giving them a better understanding of how job creation occurs within regions, along with other economic-growth indicators.

APPENDIX 3: ECONOMIC GARDENING

Economic gardening is an economic development model that embraces the fundamental idea that entrepreneurs drive economies. The model seeks to create jobs by supporting existing companies in a community. The concept, pioneered in 1989 in Littleton, Colo., when the state was in a recession, was established as an alternative to recruiting firms' traditional economic development practices. It initially was based on research by MIT's David Birch, who suggested that most new jobs in any local economy were produced by the community's small, local businesses. In Littleton, city leaders observed that only 3 to 5 percent of all companies were "high growth," but determined that those "gazelles" were creating the great majority of new jobs.

Economic gardening connects entrepreneurs to resources, encouraging the development of essential infrastructure and providing entrepreneurs with needed information. The Littleton economic gardening initiative provides local entrepreneurs with access to competitive intelligence on markets, customers, and competitors that is comparable to the resources customarily only available to large firms. Included in the market information category are database and data mining resources, and geographic information systems.

Since 1989, Littleton (population 45,000), has added 12,000 jobs, with no incentives. Although no formal studies of economic gardening's impact exist, it is widely believed in Littleton that the concept has made an important contribution to this result.

By the late 1990s, a number of communities (including Lake Elsinore, San Bernardino, Chico, and San Luis Obispo, Calif.; Santa Fe, N.Mex.; Lancaster County, Pa.; Steamboat Springs, Colo.; the state of Wyoming; and the North Down Borough of Northern Ireland) were beginning to investigate and experiment with economic gardening. Major states like California regularly include economic gardening discussions in their state economic development conferences, and cities like Oakland and Berkeley have small pilot economic gardening projects underway.

The Edward Lowe Foundation is especially interested in the concept and is supporting such programs that assist second-stage companies.

APPENDIX 4: ENTREPRENEURSHIP SUMMIT ATTENDEES, APRIL 1, 2008

- 1. Mr. Dan Berglund**
President & Chief Executive Officer
State Science and Technology Office
Westerville, Ohio

- 2. Ms. Angie Cantrell**
President & Chief Executive Officer
Appalachian Center for Economic Networks (ACEnet)
Athens, Ohio

- 3. Mr. Kurt Chilcott, CEcD, FM, HLM**
President & Chief Executive Officer
CDC Small Business Finance Corp.
San Diego, Calif.

- 4. Ms. Della Clark**
President
The Enterprise Center
Philadelphia, Pa.

- 5. Mr. Dennis Coleman, CEcD, FM**
President & Chief Executive Officer
Saint Louis County Economic Council
St. Louis, Mo.

- 6. Mr. John Coombe**
Senior Advisor
Intellectual Property & Technology Transfer
Denver, Colo.

- 7. Ms. Monica Doss**
President
Council for Entrepreneurial Development
Research Triangle Park, N.C.

- 8. Mr. Sidney Elliott**
Director of Business Strategy
Georgia Research Alliance
Atlanta, Ga.

- 9. Mr. Mark Ellison**
Director
Texas Emerging Technology Fund
Austin, Tex.
- 10. Mr. Jeff Finkle, CEcD**
President & Chief Executive Officer
International Economic Development Council
Washington, D.C.
- 11. Mr. Michael Finney**
President & Chief Executive Officer
Ann Arbor SPARK
Ann Arbor, Mich.
- 12. Mr. Bo Fishback**
Vice President of Entrepreneurship
Kauffman Foundation
Kansas City, Mo.
- 13. Mr. Chris Gibbons**
Director, Department of Business/Industry Affairs
City of Littleton, Colorado
Littleton, Colo.
- 14. Dr. Randall Goldsmith**
President & Chief Executive Officer
Mississippi Technology Alliance
Ridgeland, Miss.
- 15. Mr. Jon Gregory**
President & Chief Executive Officer
Golden Capital Network
Chico, Calif.
- 16. Dr. William Harris**
President & Chief Executive Officer
Science Foundation Arizona
Phoenix, Ariz.
- 17. Mr. Jeff Kaczmarek**
President & Chief Executive Officer
Economic Development Corporation of Kansas City, Missouri
Kansas City, Mo.

- 18. Mr. Tim Kane**
Senior Fellow, Research and Policy
Kauffman Foundation
Kansas City, Mo.
- 19. Mr. Michael Kirchhoff, CEcD**
Vice President, Business Retention & Recruitment
Economic Development Corporation of Kansas City, Missouri
Kansas City, Mo.
- 20. Mr. Paul Krutko**
Chief Development Officer
City of San Jose, Office of the City Manager
San Jose, Calif.
- 21. Mr. Mark Lange**
Executive Director
Edward Lowe Foundation
Cassopolis, Mich.
- 22. Mr. Ray Leach**
Chief Executive Officer
JumpStart
Cleveland, Ohio
- 23. Ms. Penny Lewandowski**
Director of Entrepreneurship Development
Edward Lowe Foundation
Cassopolis, Mich.
- 24. Dr. Bob Litan**
Vice President for Research and Policy
Kauffman Foundation
Kansas City, Mo.
- 25. Mr. Rich Lunak**
President & Chief Executive Officer
Innovation Works
Pittsburgh, Pa.
- 26. Mr. Greg Main**
President & Chief Executive Officer
i2e
Oklahoma City, Okla.

27. Mr. Bob Marcusse

President & Chief Executive Officer
Kansas City Area Development Council
Kansas City, Mo.

28. Ms. Maria Meyers

Managing Director
Institute for Entrepreneurship and Innovation
Kansas City, Mo.

29. Ms. Amy Millman

President
Springboard Enterprises
Washington, D.C.

30. Dr. Ioanna Morfessis, HLM

Founder & President
IO.INC
Phoenix, Ariz.

31. Ms. Shari Nourick

Consultant
International Economic Development Council
Washington, D.C.

32. Mr. Stephen Radley

Director
Kansas Center for Entrepreneurship
Wichita, Kan.

33. Mr. Jim Robbins

Director
Environmental Business Cluster, San Jose Incubators
San Jose, Calif.

34. Ms. Robin Roberts Krieger, FM

Executive Vice President
Greater Oklahoma City Partnership
Oklahoma City, Okla.

35. Ms. RoseAnn Rosenthal

President & Chief Executive Officer
Ben Franklin Technology Partners of SEPA
Philadelphia, Pa.

36. Mr. Rohit Shukla

Chief Executive Officer
The Larta Institute
Los Angeles, Calif.

37. Mr. William Sproull

President & Chief Executive Officer
Richardson Economic Development Partnership
Richardson, Tex.

38. Mr. Jim Thomas

Founder & Chief Executive Officer
Seattle CCD
Seattle, Wash.

39. Dr. Joel Wiggins

President & Chief Executive Officer
Enterprise Center of Johnson County
Lenexa, Kan.