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ABSTRACT

A conference held in September 2000 focused on entrepreneurship as a means to create more and better jobs in Appalachia and rural America. This report summarizes the conference proceedings. In part 1, successful rural entrepreneurs identify their challenges and needs. Entrepreneurial success requires a supportive community environment, diverse sources of capital, strong networks of service providers, and quality employees (produced by the local school system or attracted by quality-of-life amenities). Characteristics that promote success are desire, understanding of risk, and total commitment. Part 2 looks at innovative strategies to support entrepreneurs. These are categorized in the areas of: (1) entrepreneurship education for youth and adults (training for youth in schools and online, lifelong learning in entrepreneurship, business partnerships for entrepreneurial training); (2) improved access to capital (microenterprise, angel financing, development venture capital, small business investment companies, bank investments); (3) business incubation and technical assistance, (4) e-commerce and technology, and (5) sector-based strategies for rural communities. Part 3 outlines recommendations in each of these areas. Appendices list the conference steering committee, profile presenters, describe the Appalachian Regional Commission's Entrepreneurship Initiative, and list 42 references and 28 resource Web sites. (SV)

APPALACHIAN REGIONAL COMMISSION

Tools

FOR

ENTREPRENEURSHIP

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CONFERENCE PROCEEDINGS

Building New Economies in Rural America

September 17-19, 2000 | Clermont County, Ohio

The following organizations have provided financial support for the conference and proceedings:

Ford Foundation

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"Once in rural America we were all pretty much entrepreneurs, but a series of factors began to compromise that sense of independence. Restoring a base of homegrown businesses lies at the heart of a strategy to make Appalachia and rural America more self-sufficient. Creation of jobs for our people and by our people, so that the control of our economic life is not held by outsiders, is the overriding goal of our work in the area of entrepreneurship."

Jesse L. White, Jr.
Federal Co-Chairman
Appalachian Regional Commission

"For more than 25 years, the Ford Foundation has recognized the important role that small businesses play in creating strong rural economies. These firms strengthen local communities by creating good jobs and generating income for residents, including low-income families. We are pleased to support the publication of this report, which we hope will help stimulate more entrepreneurship, business development and job creation in Appalachia."



Susan V. Berresford
President
Ford Foundation



"During the past four decades, ARC and its 13 member states have had considerable success in Appalachia expanding the workforce, building new highways and water systems, and fostering the civic well-being of our people. These efforts have created a "New Appalachia"—one that is poised to become a major player in the nation's new economy. As the region's economy has changed, so too have our economic strategies. Entrepreneurship is now a key element of our economic development portfolio. Giving our people the tools they need to work for themselves has become a top priority."

Hon. Paul E. Patton
Governor of Kentucky
State's Co-Chairman ARC

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CONFERENCE / PROCEEDINGS SPONSORS



The following organizations have provided financial support for the conference and proceedings:

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Additional Conference Co-Sponsors:

Association for Enterprise Opportunity

Community Development Venture Capital Alliance

Consortium for Entrepreneurship Education

Foundation for Appalachian Ohio

National Business Incubation Association

National Center for Small Communities

National Commission on Entrepreneurship

National Foundation for Teaching Entrepreneurship

REAL Enterprises

Today's business pages are filled with stories about entrepreneurial start-ups; both their successes and failures. With all of this press—mostly focused on the technology sector—one would think that Silicon Valley, Research Triangle, North Carolina, and other technology centers are the only places entrepreneurship is thriving. Yet, it's also thriving and continuing to grow in Appalachia and in rural communities across the United States.

Rural entrepreneurs face significant challenges that are not shared by their urban counterparts. Rural America continues to suffer from a shortage of equity capital; very little outside venture capital is invested in the region. These communities also suffer from a "brain drain," where our best and brightest young people take their good ideas and energy to other parts of the country. And despite robust economic growth nationally, structural changes in declining sectors such as coal mining, manufacturing, textiles, and agriculture have disproportionately hit Appalachia and other rural communities.

The Appalachian Regional Commission (ARC) views entrepreneurship as a critical element in the establishment of self-sustaining communities that create jobs, build local wealth, and contribute broadly to economic and community development. Responding to these challenges, in 1997 ARC launched a multi-year, \$17.6 million Entrepreneurship Initiative to build entrepreneurial economies across Appalachia. ARC has focused support on four areas that support the infrastructure necessary for creating entrepreneurial economies:

- Educating current and future entrepreneurs through new training programs in middle schools, high schools, and community colleges;
- Improving access to private investment for local businesses through the development of new venture capital funds and microcredit debt funds;
- Nurturing new businesses by creating and maintaining business incubators throughout the Appalachian Region.
- Strengthening local economies by identifying and capitalizing on particular industries in which communities have a competitive advantage.

Three years later, ARC convened a conference of leading business executives, policy makers, and state and local development leaders to assess how this initiative has worked and to share best practices. ARC's Tools for Entrepreneurship conference was held in Clermont County, Ohio, September 17–19, 2000. More than 230 thought leaders from 27 states participated in this landmark event.

The conference focused in detail on how to use entrepreneurship to create more and better jobs in rural America. Among the key questions examined were: What are the best tools for local communities to use in helping entrepreneurs develop more homegrown businesses? What roles can national and regional leaders play in strengthening rural entrepreneurship? What investment opportunities are available for private, philanthropic, and public-sector partners?

This report summarizes the conference proceedings. We begin by addressing the needs of entrepreneurs, describing the challenges successful entrepreneurs overcome as they build their companies. We then focus on innovative strategies to support entrepreneurs in areas related to entrepreneurship education, technical assistance, access to capital, and sectorally targeted programming. And we conclude with future challenges and recommendations for further action.

I. Learnings from Entrepreneurs.

Who are successful entrepreneurs? What do entrepreneurs need to grow and prosper? Are they made over time, like John Morris, CEO of NetLearning, in Knoxville, Tennessee? Or are they born to it, like Joanne McGonagle, founder of Pasta Fresca, an Ohio-based manufacturer of pasta products? Regardless of background, entrepreneurs need certain

supports to be successful. According to Monica Doss, Executive Director of North Carolina's Council for Entrepreneurial Development (CED), the four most important things her membership needs are:

- An enabling culture—an environment that supports entrepreneurship.
- Diverse sources of capital, including access to both debt and equity capital.
- Strong networks of service providers willing and able to provide the unique services entrepreneurs need.
- The ability to find and retain quality employees

II. Innovative Strategies for Support.

The conference explored innovative strategies to support entrepreneurs that range from educational programs, innovations in financing, support for business incubators and networks, programs that target information technology and e-commerce firms, and other sector-based strategies.

Entrepreneurship Education and Training. Creating an entrepreneurial culture does not happen simply by creating a government program. Instead, it emerges through a mix of initiatives, ideas, and hard work. Important and effective programs for training youth have emerged, such as REAL Enterprises and the National Foundation for Teaching Entrepreneurship (NFTE). Zack McDougall, a high school junior from Topeka, Kansas, who operates a thriving computer support business, says entrepreneurship is “not actually a class you take, it’s a way of life.” And, entrepreneurship education is not just for youth; it also requires a commitment to ongoing education and training of the workforce. As Sam Leiken, Vice President of the Council for Adult and Experiential Learning (CAEL), noted, “Lifelong learning is no longer a choice. It is a necessity for working adults.”

Improving Access to Capital. Traditionally, access to capital has dominated discussions of entrepreneurship and small business. For some regions of the country, many of the pressures of finding financing to start or develop a new business have been reduced. Unfortunately, in many parts of Appalachia and other rural areas, capital access continues to be a problem. There is no “one size fits all” financing

strategy for entrepreneurs; each company and each company owner has different needs and interests at different stages in a firm’s life. These proceedings address several areas of development finance: microenterprise, angel financing, development venture capital, and the Small Business Investment Company program.

Nurturing New Businesses. The conference discussions on access to capital covered a wide range of issues, but one important unifying theme emerged: financing will do little if it is not accompanied by technical assistance and training for entrepreneurs. Local leaders need to work to create a culture that embraces entrepreneurs and teaches people that entrepreneurship is a viable and respected career option. The leadership of these individuals and the celebration of entrepreneurs and of risk-taking by community leaders and the local media help to create an entrepreneurial culture that fosters continued growth and prosperity in these communities.

But efforts to foster an “entrepreneur-friendly” business culture cannot be stand-alone efforts; programs that provide technical assistance to new firms are also required. Business incubators are one of the common and effective strategies for supporting start-up companies. Dinah Adkins, Executive Director of the National Business Incubation Association, offered some guidelines about how state and local development professionals can best nurture and grow firms. She presented a case study of the Northeast Mississippi Business Incubation System and used “lessons learned” from this experience as a guide for other forms of business services. And Sheilah Rodgers of West Company in Mendocino, California, emphasized that effective service providers need to offer a complete range of support to entrepreneurs.

E-Commerce. The boom in the information technology industry has generated a great deal of excitement in rural communities. However, this new industry could separate, more keenly than any other of the past, those citizens with the access, skills, and motivation to use the new technology from those without this access. Robert T. Joyce, President and Founder of Salvage Direct, based in Titusville, Pennsylvania, extolled the benefits of headquartering his

firm in rural Pennsylvania and argued that e-commerce business opportunities would continue to grow in rural America. He contended that expanding training and educational efforts and investing in infrastructure can pay big dividends in the fight to attract technology firms to rural America. Thomas Thornton, Managing Partner of divine interVentures, a private Chicago-based Internet incubator, presented a unique model for supporting e-commerce; a venture capital fund, that acts more like an operating company. And Thomas Rogers, President and CEO of Tennessee's Technology 2020, highlighted the cutting-edge services provided by his organization, such as the Center for Entrepreneurial Growth, the Tech 2020 Finance Corporation, and a new IT business incubator, Digital Crossing.

Building on Our Strengths. While many parts of rural America have lagged in economic growth, rural communities also possess powerful and unique strengths that provide them with economic comparative advantage. A number of national leaders in the effort to build on such homegrown strengths participated in the ARC conference. Anthony Flaccavento, Executive Director of Appalachian Sustainable Development (ASD), contended that sustainable development is locally rooted, builds on local assets and tradition, and seeks to foster regional self-reliance and respect for the local environment. June Holley of the Appalachian Center for Economic Networks (ACEnet) described the southeastern Ohio Food Ventures Center, which serves as an incubator for local food processing businesses. This center provides technical assistance, a facility with specialized food processing equipment, and it operates a Web site that contains a searchable database on topics like product development, marketing, and distribution for the food industry. Finally, Mark Kaser described the Kentucky Wood Products Competitiveness Corporation (KWPPCC), set up in 1995 to capitalize on the state's forestry tradition. These efforts are succeeding as Kentucky's wood products industry has grown by more than 50 percent in the past five years, adding more than 7,250 new jobs and \$286 million in new investment to cabinetry, furniture, and flooring producers.

III. Future Challenges and Recommendations

Thanks to the investments of ARC and others, the seeds for an entrepreneurial flowering have been planted. But nurturing these seedlings is a formidable undertaking. How can Appalachia and rural America continue to create jobs, build local wealth, and contribute broadly to economic and community development?

On the basis of the insights from conference speakers, discussions among conferees, and lessons learned from investments in Entrepreneurship, several recommendations clearly emerge. Promoting entrepreneurship in rural communities requires a range of interventions in the economic and social landscape to be successful. Some of these interventions are programmatic, focusing on developing the infrastructure required to support entrepreneurs. Some of these interventions are cultural, building the character and consciousness required for communities to sustain successful efforts. But all of these activities require the support of a broad range of actors: state and local political leaders, educators, financial institutions, and the business community. Only in this way can efforts to develop rural entrepreneurial economies have long-term sustained impact in rural America. Conference recommendations include the following:

Develop the infrastructure that underpins an entrepreneurial economy by supporting entrepreneurship education, fostering the formation of business networks, and improving access to investment capital

- Support **Entrepreneurship Education** by creating a focus on programs for youth, building sustainable institutions to implement these programs, and supporting ongoing adult programming.
- Foster the **Formation of Business Networks** by creating networks of entrepreneurs, leveraging the opportunities arising from new Information Technology (IT) industries, and focusing efforts on strategic sectors of the local economy.
- Improve **Capital Access** by building pools of equity capital, providing credit to micro entrepreneurs, and linking the provision of capital to technical support.

Build the culture and vision to provide ongoing support to entrepreneurs by engaging state and local political leaders, the business community, and forging links with institutional partners

- Seek **State and Local Political Leadership** to enhance the visibility of, and support for, entrepreneurial efforts.
- Engage **Business Leaders** to reach out and welcome entrepreneurs into the network of support and service providers in the community.
- Forge links with **Institutional Partners** (like bank regulators, State Departments of Education, universities, and trade associations) to expand the network for building a shared and sustained culture of entrepreneurship.

Work for the long haul

Keep in mind that all of this work—with political leaders, with the business community, and with institutional partners—requires time. As Brian Dabson of the Corporation for Enterprise Development notes, shifting the framework of development for rural communities takes many years and requires the ongoing support of many actors. Make sure that your strategic partners and funders understand that significant impact will not be immediately forthcoming, and that success is seen only with long-term commitment. Engage partners for the long-term success of your efforts, but be sure there are measurable short-term gains to sustain their commitment, and yours.

APPALACHIAN REGIONAL COMMISSION
Tools FOR
 ENTREPRENEURSHIP

September 17–19, 2000 Clermont County, Ohio

SUNDAY, SEPTEMBER 17

Opening Reception

MONDAY, SEPTEMBER 18

8:30 A.M.–9:30 A.M.

Opening Session

Welcome: Joy Padgett, Director, Ohio Governor's Office of Appalachia; **Robert L. Proud**, President, Clermont County Board of Commissioners.

Remarks: Jesse L. White, Jr., ARC Federal Co-Chairman; West Virginia Governor Cecil H. Underwood, ARC State's Co-Chairman

9:30 A.M.–10:45 A.M.

Learnings from Entrepreneurs

Entrepreneurs discuss what they need to succeed in today's economy.

Remarks/Moderator: Monica Doss, Executive Director, Council for Entrepreneurial Development; Ernst and Young 1999 National Supporter of Entrepreneurship/Entrepreneur of the Year.

Panelists: John D. Morris, President and CEO, NetLearning; Joanne McGonagle, Founder, Pasta Fresca.

11:00 A.M.–Noon

Learnings from Investors

Representatives of funding institutions discuss what they've learned from past investments and identify future funding priorities to support entrepreneurs and local economies.

Moderator: David C. Wilhelm, President, Wilhelm and Conlon Public Strategies.

Panelists: J. Jeffrey Pasquale, Vice President, Fifth Third Bank; Joseph A. Kayne, Director of Public Sector and Community Initiatives, Kauffman Center for Entrepreneurial Leadership; Christopher D. Brown, President, Capital Across America.

Noon–1:30 P.M.

Lunch

Remarks: Thomas V. Thornton, Managing Partner, divine interVentures: "E-commerce and the New Economy." Special Presentation, Charles L. Thiemann, President, Federal Home Loan Bank of Cincinnati

2:00 P.M.–3:00 P.M.

Youth Entrepreneurship

Students discuss starting businesses and the entrepreneurship education programs that supported their efforts.

Moderator: M. Catherine Ashmore, Executive Director, Consortium for Entrepreneurship Education.

Programs featured: EntrePrep (Kauffman Center for Entrepreneurial Leadership), National Foundation for Teaching Entrepreneurship, REAL Enterprises.

3:15 P.M.–4:45 P.M.

Roundtables of Ideas (Concurrent Sessions)

- **Entrepreneurial Education and Training:** a discussion with some of the nation's leading providers of experiential and online curricula for youth.

Moderator: M. Catherine Ashmore, Executive Director, Consortium for Entrepreneurship Education.

Panelists: Rick Larson, National Director, REAL Enterprises; Jean Mahoney, Director of BizTech Field Marketing, National Foundation for Teaching Entrepreneurship.

- **Workforce Development, Attraction, and Retention:** how to help entrepreneurs develop a quality workforce in a rural labor market.

Moderator: Greg Bischak, Senior Economist, ARC.

Panelists: Lenore Mason, Placement Specialist, Ohio Valley Goodwill Industries; Samuel Leiken, Vice President for Public Policy and Government Relations, Council for Adult and Experiential Learning.

- **E-commerce and Internet-Based Businesses:** growing firms in the information technology industry.

Moderator: Chris Brazell, Program Manager, ARC.

Panelists: Thomas C. Rogers, President and CEO, Technology 2020; Robert T. Joyce, President and Founder, Salvage Direct.

- **Venture Services:** new ways professional-services (such as marketing, accounting, law, and engineering) firms can provide support to entrepreneurs.

Panelist: Thomas V. Thornton, Managing Partner, divine interVentures.

- **Learnings from Philanthropies:** foundation perspectives and priorities.

Moderator: Leslie Lilly, President and CEO, Foundation for Appalachian Ohio.

Panelists: Renata Hron, Senior Program Officer, Hitachi Foundation; Mary M. Hunt, Program Officer, Claude Worthington Benedum Foundation.

- **Sustainable Development:** balancing growth, community needs, and the environment.
Moderator: Sakina B. Thompson, Senior Policy Advisor to the Federal Co-Chairman, ARC.
Panelists: Anthony Flaccavento, Executive Director, Appalachian Sustainable Development; Tamar Datan, Director and CEO, Center for Compatible Economic Development, The Nature Conservancy.

6:30 P.M.–8:30 P.M.

Dinner
Investing in Rural Communities—The New Markets Initiative and Small Business Investment Companies: Aida Alvarez, Administrator, U.S. Small Business Administration.

TUESDAY, SEPTEMBER 19

8:00 A.M.–9:45 A.M.

Development Finance Strategies: Bringing Capital to Underserved Communities
 The roles of development venture capital, microcredit loan funds, and angel networks in under-served communities.
Moderator: Karen A. Mocker, Senior Advisor–Community Affairs, Federal Reserve Bank of Cleveland.
Panelists: Bill Edwards, Executive Director, Association for Enterprise Opportunity; Steve Mercil, President and CEO, Minnesota Investment Network Corporation; L. Ray Moncrief, Executive Vice President and COO, Kentucky Highlands Investment Corporation.

10:00 A.M.–11:30 A.M.

Roundtables of Ideas (Concurrent Sessions)

- **Microcredit Strategies:** small business lending that makes a difference.
Moderator: Karen A. Mocker, Senior Advisor–Community Affairs, Federal Reserve Bank of Cleveland.
Panelists: Bill Edwards, Executive Director, Association for Enterprise Opportunity; Phil Black, Director, Community Economic Development, People Incorporated of Southwest Virginia; Louisa Mittelgluck Quittman, Financial and Program Advisor, Community Development Financial Institutions Fund, U.S. Treasury.
- **Development Venture Capital and the New Markets Initiative:** equity investing with a double bottom line.
Moderator: Kerwin Tesdell, President, Community Development Venture Capital Alliance.
Panelists: Lynn Gellermann, Managing Director of Development Funds, Wilhelm and Conlon Public Strategies; L. Ray Moncrief, Executive Vice President and COO, Kentucky Highlands Investment Corporation; Kerwin Tesdell, President, Community Development Venture Capital Alliance.
- **Sector-Based Strategies:** building on local competitive advantage.
Moderator: Greg Bischak, Senior Economist, ARC.
Panelists: Karen Jacobson, Vice President of Finance and Development, Appalachian By Design; Mark D. Kaser, Executive Director, Kentucky Wood Products Competitiveness Corporation.
- **Successful Business Incubation Strategies:** nurturing emerging firms.
Moderator: Chris Brazell, Program Manager, ARC.
Panelists: Dinah Adkins, Executive Director, National Business Incubation Association; June Holley, President, Appalachian Center for Economic Networks.
- **Business Development for Minorities and Women:** strategies for success.
Moderator: Sakina B. Thompson, Senior Policy Advisor to the Federal Co-Chairman, ARC.
Panelists: Alan P. Branson, Vice President for Business Development, Enterprise Corporation of the Delta; Sheilah Rogers, Executive Director, West Company.
- **Learnings from the Field:** priority needs and best practices in rural entrepreneurship.
Moderator: Erik R. Pages, Policy Director, National Commission on Entrepreneurship.
Panelists: Alan D. Barkema, Vice President and Economist, Center for the Study of Rural America, Federal Reserve Bank of Kansas City; Stuart A. Rosenfeld, President, Regional Technology Strategies; Erik R. Pages, Policy Director, National Commission on Entrepreneurship.

Noon–1:30 P.M.

Lunch and Closing Session

Policy Implications: Where Do We Go from Here?

Address: Douglas K. Mellinger, Chairman, National Commission on Entrepreneurship.

Moderator: Ray Daffner, Manager–Entrepreneurship Initiative, ARC.

Panelists: Brian Dabson, President, Corporation for Enterprise Development; Alan D. Barkema, Vice President and Economist, Center for the Study of Rural America, Federal Reserve Bank of Kansas City; Kris W. Kimel, President, Kentucky Science and Technology Corporation.

Conference Welcome: Building New Economies in Rural America

The following report summarizes the conference proceedings. The conference began by addressing the needs of entrepreneurs, describing the challenges successful entrepreneurs overcome as they build their companies. We then focus on innovative strategies to support entrepreneurs in areas related to entrepreneurship education, technical assistance, access to capital, and sectorally targeted programming. And we conclude with programmatic and policy recommendations for further action.



Jesse L. White, Jr.

Conference Welcome THE STATE OF ENTREPRENEURSHIP IN APPALACHIA

Jesse L. White, Jr., ARC Federal Co-Chairman; **West Virginia Governor Cecil H. Underwood**, ARC State's Co-Chairman; **Joy Padgett**, Director, Ohio Governor's Office of Appalachia



Cecil H. Underwood

Historically, Appalachia has been one of the nation's poorest regions. As the nation's economic climate has changed, new industries have emerged and fast growing entrepreneurial businesses have influenced local economies. Today, fast growing entrepreneurial companies account for nearly two-thirds of net new jobs in the United States. Yet the Appalachian region

faces both opportunities and obstacles as it seeks to create a strong entrepreneurial base.

The conference's opening session highlighted remarks by ARC Chairman Jesse White, Jr. Dr. White began by referring to the "real magic" of the ARC: its ability to work in a bipartisan manner across many levels of government. He then turned to a review of progress with ARC's Entrepreneurship Initiative. Through this program, the Commission has funded projects that include: support for youth entrepreneurial education,

such as the Rural Entrepreneurship through Action Learning (REAL) Enterprise program; creation and capitalization of development venture capital funds; targeted support for specific strategic industries such as wood products, value-added food processing, and ceramics manufacture; and support for business incubators.

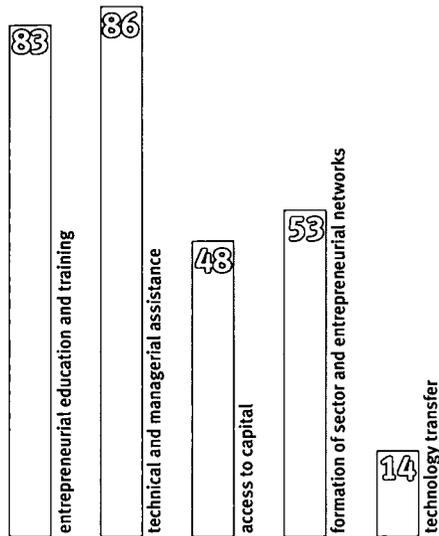
Through September 2000, the Entrepreneurship Initiative has funded 169 projects, providing a total of more than \$13.9 million of support for a range of program activities. In addition to ARC funds, these programs have leveraged \$13.2 million from other sources to support activities targeting the region. The fifty projects that have been completed report the creation of 249 new businesses, and creation or retention of 587 jobs in the region. The 119 ongoing programs are projected to create 486 new businesses and create or retain 3,585 jobs in the region. These projects address all five of the key elements of an entrepreneurial economy (see table).

Dr. White noted that the Initiative's achievements are not limited to hard data about new businesses and new jobs. The program has also helped spark a "very heartening national conversation . . . around this notion of new markets." Thanks in part to ARC's pioneering work, in July, 1999 President Clinton took his first New Markets Initiative trip to Hazard, Kentucky, in the heart of Appalachia. He

Joy Padgett



**ARC investment in Entrepreneurship, 1997-2000
Projects by Activity**



Note: totals are greater than 169 because some projects have multiple activities

West Virginia Governor Cecil Underwood began his remarks with a personal history. During his first term as West Virginia Governor in 1959, he met with several of his fellow governors who were also struggling with the effects of mechanization in the mining industry and the loss of thousands of jobs. The idea of a public-private partnership to invest in Appalachia emerged and, in 1965, resulted in the creation of the ARC.

Governor Underwood applauded the role of the ARC in many areas, especially in the planning of the Appalachia development highway system. He also pointed to the continuing challenge of bringing new jobs and industry to some of the region's poorest counties in southeastern Ohio, eastern Kentucky, and southern West Virginia.

Presently, West Virginia is placing great emphasis on improving quality of life for its citizens, and especially for children living in poverty. Governor Underwood is also seeking to improve access to capital in West Virginia's poorest counties. Across West Virginia that state has invested more than \$2 million in a dozen microcredit loan funds. And in McDowell County, the poorest county in West Virginia, the state has created a \$300,000 microloan program and is in the process of building a new 300-acre industrial park for new businesses.

Governor Underwood's optimism was echoed in welcoming remarks by Joy Padgett, Director of the Ohio Office for Appalachia, and by Bob Proud, County Commissioner for Clermont County, Ohio. Mr. Proud described the boom in development in western Clermont County, but he also recognized the need for spreading this development to other parts of the region. Ms. Padgett discussed Ohio Governor Robert Taft's efforts to revitalize Appalachian Ohio. The state has created a new "Economic Focus Group" designed to foster the development of new businesses.

offered an optimistic note, arguing that "The clouds are gathering to make a national commitment to these markets that have for too long been overlooked."

A new economic development approach based on entrepreneurship is the key to helping rural and small-town America restore its independence and self-sufficiency. Dr. White noted that such progress is really a return to the region's roots, when farmers, artisans, and small business were the backbone of Appalachian communities. Restoring and rejuvenating this entrepreneurial heritage will ensure that the region can compete and prosper into today's global marketplace.

Dr. White concluded by noting that the purpose of the Entrepreneurship Initiative is not just to create new jobs, but to also instill a whole culture and a deep infrastructure for new business creation. His final comments were telling: "I've always said the Fortune 500 started in garages somewhere. We want them to start in the garages of Appalachia and create the great companies and the great jobs here. There's no reason why we can't do it!"

Conference Proceedings

The conference proceedings are organized into three sections. We begin by addressing the needs of entrepreneurs in Section I and describing the challenges successful entrepreneurs overcome as they build their companies. We then offer innovative strategies to support entrepreneurs in Section II, focusing on four areas:

- **Educating Entrepreneurs:** providing quality training to youth, students and business people.
- **Improving Access to Capital:** helping entrepreneurs find capital to start and grow new businesses.
- **Nurturing New Businesses:** creating and maintaining incubators and other service providers who can provide the expertise to help start and grow new businesses.
- **Building on our Strengths:** exploiting and expanding the competitive advantages in people, resources, and technology that already exist in Appalachia.

We conclude with Section III, program and policy recommendations for further action.

I. Learnings from Entrepreneurs

Monica Doss, Executive Director, Center for Entrepreneurial Development, Research Triangle Park, North Carolina; **John Morris**, President and CEO, NetLearning, Knoxville, Tennessee; **Joanne McGonagle**, Founder, Pasta Fresca, New Lexington, Ohio

Who are successful entrepreneurs? What do entrepreneurs need to grow and prosper? A number of business owners participated in our conference discussions, but three entrepreneurial leaders provided keynote addresses to the conference, challenging participants and offering some clear guidance on how programs can best support and nurture entrepreneurship.

Monica Doss, Executive Director of North Carolina's Council for Entrepreneurial Development (CED), helped frame our discussions by highlighting the many challenges facing entrepreneurs and those who provide support to them. She

argued that entrepreneurs can develop from all sorts of backgrounds; they can be born or made. In other words, some entrepreneurs simply have the "fire in the belly" and jump out and start a company. But other entrepreneurs are made; these men and women may have good ideas and skills, but they are uncertain about starting a business. This latter group may need additional support, training, and other services. Yet regardless of their origins, entrepreneurs have unique interests and needs. They cannot be treated like traditional small businesses or like large corporations; they need unique services designed for growing companies.

Doss and CED spend a great deal of time looking for new opportunities for their region. As part of this work, CED regularly polls its members on their interests and needs. The most recent poll included some interesting results. According to Doss, the four most important things her membership needs to be successful are:

- **Enabling culture**—an environment that supports entrepreneurship. Are entrepreneurs respected in the community? Are they treated as a strange subculture, or as part of the general business networks?
- **Diverse sources of capital**, including access to both debt and equity capital.
- **Strong networks**—of service providers willing and able to provide the unique services entrepreneurs need.
- **The ability to find and retain quality employees**—including the quality of K–12 education and the local quality of life.

She concluded with a prescient point: "If you're in this game, it's for the long haul." Passion and persistence are critical because fostering entrepreneurship is a long-term process. There is no single best solution, and no single program that works best. Tailoring programs to local needs and being willing to change (and change quickly) are part of the game. As markets, technologies, and business models change, entrepreneur support groups, like CED, must also be open to change.

In many ways, John Morris, CEO of NetLearning, fits in the category of an entrepreneur made over time. John did not jump into businesses right out of college or high school.

Instead, like most people, he took a job with a large institution, spending much of his early career with the Tennessee Valley Authority and the Oak Ridge National Laboratory. But Morris ultimately caught the entrepreneurship bug, became involved in two start-ups, and then began his own company, NetLearning, which develops computer-based training software for health care and utility companies.

Morris focused his remarks on challenges he faced in becoming an entrepreneur. First and foremost, he emphasized that money is often tangential to a successful entrepreneur. Funding is certainly needed, but funding alone cannot create a successful business. Like many employees at Oak Ridge, Morris had technical skills, and a desire to run his own business. Yet he lacked knowledge about how to get started, and more importantly, he was afraid of failure. This fear took several forms: Are my ideas good enough? What about my family's financial future? How do I do the basics of managing a business? Ultimately, he concluded that the worst-case scenario of failure was not so risky, and that the upside of starting a new business was too great not to act.

After Morris got into the entrepreneurship game, NetLearning succeeded and prospered. He left the audience with three keys to success:

- **Desire:** Entrepreneurs must have passion and drive.
- **Understand the Downside:** Entrepreneurs must understand the risks associated with new firms.
- **Focus, Focus, Focus:** Entrepreneurs cannot "start a business on the side." It requires 100 percent commitment.

Joanne McGonagle, founder of Pasta Fresca, an Ohio-based manufacturer of pasta products, represents an entrepreneur who was born into it. Ms. McGonagle caught the entrepreneurial bug early. She started Pasta Fresca right out of graduate school. Like many entrepreneurs, she did not initially have a vision of growing a major business. Instead, she sought a means to provide self-employment (or avoid employment!) and to remain near her hometown in rural Ohio.

Council for Entrepreneurial Development



Research Triangle Park, North Carolina.

www.cednc.org

Monica Doss, Executive Director

The Council for Entrepreneurial Development (CED) was founded in 1984 to stimulate the creation and growth of high-impact companies in the greater Research Triangle area. CED achieves its mission by providing programs and services in four major areas: education, capital formation, mentoring, and communications. Through these efforts, CED provides entrepreneurs with the knowledge and skills that ensure their success and at the same time heightens awareness of the contribution that entrepreneurial companies make to our communities and our economy.

CED was one of the first regional entrepreneurship organizations in the United States. At the time of its founding, Research Triangle Park boasted a number of technology-based companies, but could point to very few local start-ups and very little venture capital investment in the region. Further, the importance of entrepreneurship was not well-recognized in North Carolina, and no government or university funding was available to support CED's creation. Local business leaders created and funded CED, and entrepreneurs have led CED ever since. Doss attributes the program's success to their leadership.

CED has a host of programs, but much of its early work dealt with capital formation. Its first venture capital conference, held in 1986, attracted a handful of venture capitalists, but this event has grown over time, and it is now one of the organization's signature offerings. In 1986, only \$28 million in venture capital was invested in the region. Last year, new investments topped \$1.2 billion.

Initially Doss and others assumed that accessing capital would be enough to spark entrepreneurship in North Carolina. Once a few venture capitalists were in the region, they assumed (falsely) that their problems would be ended. They soon learned that other tools, such as technical assistance, were needed. CED has sought to meet these needs through its FastTrack business development programs, and industry-specific roundtables for biotechnology, information technology, and other sectors. Most importantly, entrepreneurs needed a local network to provide opportunities for mentoring, peer contacts, and information sharing. One of CED's most popular roles is to simply serve as a meeting place for these networks, a place where entrepreneurs can informally share ideas. In recognition of CED's outstanding work, the group was awarded the 1999 Ernst & Young Entrepreneur Supporter of the Year Award.

Pasta Fresca was initially supported with a grant from the state of Ohio (which targeted support to businesses opening in under-served rural counties), and it soon began selling frozen ravioli products to restaurants in the region. The firm grew rapidly and began facing very typical growing pains. Production could not keep up with marketing, and satisfying new customers posed a challenge. Joanne solved the production challenges through strategic partnerships with other producers, and several big grocery customers embraced the product. Pasta Fresca's products have even broken into the Asian market, thanks to marketing assistance from Ohio's Department of Agriculture.

Joanne McGonagle is most proud of the firm's role in providing quality jobs and learning opportunities for young people in Appalachian Ohio. She started the firm so that she could remain near home, and she is happy that Pasta Fresca now offers the same opportunity to others. Both Pasta Fresca and NetLearning are living proof that entrepreneurship is an effective means to stop the "brain drain" of talented youth from rural America, and a means to provide high-quality jobs to the local workforce.

These illuminating lessons were echoed throughout the conference, and they served to link the real-life needs of entrepreneurs with the programmatic work of ARC and its state and local partners.

II. Innovative Strategies to Support Entrepreneurs

Educating Entrepreneurs

M. Catherine Ashmore, Executive Director, Consortium for Entrepreneurship Education; **Rick Larson**, National Director, REAL Enterprises; **Jean Mahoney**, Director of BizTech Field Marketing, National Foundation for Teaching Entrepreneurship; **Samuel Leiken**, Vice President for Public Policy and Government Relations, Council for Adult and Experiential Learning.

Thinking for the long term was one of the unifying themes of our conference. In practice, this “art of the long view” means that a successful entrepreneurship strategy takes time. While there may be some short-term benefits of new companies and new jobs, the true objective is to create a culture that embraces entrepreneurship. Entrepreneurs can emerge anywhere, but they are more likely to emerge and succeed in a region that embraces innovators and risk-takers.

Creating such a culture does not happen through a government program. Instead, it emerges through a mix of initiatives, ideas, and hard work. And, most importantly, it emerges through education. When a region's adults and youth learn to respect and honor entrepreneurs, and seek to emulate their example, an entrepreneurial culture is arising.

Across the United States, the news is quite heartening. Recent Gallup polls show that more than 70 percent of America's youth have an interest in starting their own businesses. Important and effective programs for training entrepreneurs are emerging. Many of these initiatives, such as Rural Entrepreneurship through Action Learning (REAL) Enterprises, have been supported by investments from ARC and its state partners. A recent study of the programs of the National Foundation for Teaching Entrepreneurship (NFTE) found that NFTE graduates had benefited from improved communications skills, had more interest in starting a business, and started a business at much higher rates than comparable non-NFTE students.

One of the conference highlights was a plenary session that introduced three young entrepreneurs to the audience: Jessica Black, a high school senior from Swainsboro, Georgia

who started an embroidery business through the assistance of REAL Enterprises; Megan Spenski, a Marshall University senior from Huntington, West Virginia, who obtained an internship and part-time employment thanks to the Entrepreneur Prep program sponsored by the Kauffman Center for Entrepreneurial Leadership; and Zach McDougall, a high school junior from Topeka, Kansas, who operates a thriving computer support business.

The students offered inspiring stories of how they got into business, and how various educational initiatives eased their passage into the world of entrepreneurship (see sidebar, page 14). Each youth entrepreneur touched on his or her business experience and offered some real nuggets of wisdom. This perspective was echoed by Jessica Black who noted how the REAL program had not just taught her how to start a business, but also how to be a leader in her community. Cathy Ashmore, a panel moderator and Director of the Consortium for Entrepreneurship Education at Ohio State University, highlighted many important education themes for both youth and adults and introduced her consortium's lifelong learning model. The Consortium believes that entrepreneurship is a lifelong process that has at least five distinct stages. Educators at each stage should focus on their area of competence and form partnerships with other institutions that specialize in providing complementary services. The Consortium believes there is room for entrepreneurship everywhere in our educational system.

Lifelong Learning Model

Consortium for Entrepreneurship Education

Stage 1—BASICS: In primary grades, junior high, and high school, students should experience various facets of business ownership.

Stage 2—COMPETENCY AWARENESS: The students will learn to speak the language of business and see the problems from the small business owner's point of view.

Stage 3—CREATIVE APPLICATIONS: Experiential learning situations encourage students to create a unique business idea and carry the decision-making process through to a complete business plan.

Stage 4—START-UP: After adults have had time to gain job experience and/or further education, many are in need of special assistance in launching their business ideas.

Stage 5—GROWTH: A series of continuing seminars or support groups can help new entrepreneurs recognize potential problems and deal with them in a timely fashion.

Youth Entrepreneurship

Education starts with youth, and several leading national youth entrepreneurship education programs outlined their unique programs at the conference. REAL Enterprises began operations in 1990, and is now used in more than 500 schools and community centers in 37 states, explained National Director Rick Larson. Like other programs, REAL trains both teachers and students, from kindergarten through high school. The REAL program helps students write business plans, includes tight linkages with local entrepreneurs, and uses an experiential learning model. This

approach helps students to be successful in both work and life. After all, skills such as public speaking, ethical behavior, and effective writing are not only relevant to business. REAL has also created REAL Online, an Internet-based course for distance learning.

REAL's mantra is "standards, not standardization." No two communities and no two entrepreneurs have the same needs and interests. Thus, a "cookie cutter" approach is doomed to failure. REAL's activity based curricula allows educators and students to decide what approach works best in their community.

Young Entrepreneurs Highlight Experience



Left to right: Zack McDougall, Jessica Black, Jesse White, and Megan Spenski

Zack McDougall was like a lot of young kids today. He was handy with a computer thanks to years of video games and computer programming at home. It had reached a point that whenever computers broke down at Zack's school, Kansas' Topeka High School, the first response from students and teachers was "Call Zack." But, it wasn't until Zack received training in entrepreneurship from Youth Entrepreneurs of Kansas (using a curriculum from NFTE) that he realized that his knack for computers could produce a viable business. Zack soon graduated from "whiz kid" to business owner.

Zack's company, TCS (Total Computer Solutions) is now booming, and he provides a whole range of computer consulting services to his clients. These services include consultation on new computer purchases, assistance with set up, troubleshooting, and instruction in software and Internet usage. Zach's business idea earned him second place in the Kansas state business plan competition, and widespread recognition in his local community. Moreover, Zack and his fellow student have caught the entrepreneurship bug. He has described how entrepreneurship classes had "caught on like wildfire" in his high school, and helped provide him with the confidence to go

forward with his business plan. As Zack sees it, entrepreneurship is "not actually a class you take, it's a way of life."

Megan Spenski knew that she wanted to go to college, but she wasn't sure about what she wanted to be when she grew up. At first, she thought about being a lawyer. Then, in her junior year in high school, she signed up with the EntrePrep program offered by the Ewing Marion Kauffman Foundation at Marshall University near her home in Huntington, West Virginia. She was soon introduced to the basics of business plans and how to start a new company. Soon after, she signed up for an internship with a local logistics firm called Allied Warehousing, and her business education really began.

Thanks to the EntrePrep program, Megan has worked for Allied Warehousing for four years while completing her business degree at Marshall University. Today, she is the company's assistant controller while still attending school. She has gained invaluable knowledge about how business works, but, more importantly, she has gained empowerment. Megan not only knows that she can start a business; she knows exactly how to go about doing it.

Jessica Black, Founder of Creative Images in Swainsboro, Georgia, was used to succeeding in life. She was a hard-working A student; she was popular among her classmates, and she was a finalist to be Miss Georgia in the Miss America pageant. But, none of this experience prepared her for the hardest job of her life: starting an embroidery business.

Jessica learned about starting a business through the REAL program offered at her local high school. The program provided her with classroom training, as well as contact with local entrepreneurs who provided a "real world" perspective on starting a business. The main lesson for Jessica was the need for determination. As she noted, "I didn't know how hard it was to start your own business." Opting to start an embroidery business, Jessica soon learned the ins and outs of business plans, inventory, and cash flow. Soon, the business was growing and Jessica even began offering new products to her customers. Business is booming today, and Jessica continues to juggle the life of a high school senior and budding entrepreneur.

Jessica feels that this experience has done more than teach her about the business world. She's learned about leadership and honed her public speaking and communications skills. And, most importantly, she's learned patience. As Jessica put it, it's "a lesson in patience" when you must remain home to fill customer orders, when other kids are going out on the town. But, thanks to this patience, REAL has "changed her life," opening doors that she would have never had access to without her experience as an entrepreneur.

NFTE is one of the United States' oldest programs for youth entrepreneurship. Created in 1987, NFTE targets students in grades 7 through 12. Its work is focused on low-income, at-risk youth. Thus, many of its programs are targeted to inner city youth. But, as NFTE's Jean Mahoney told the conference, its basic principles apply just as easily to Appalachia. NFTE also trains teachers, and, since 1987, it has trained 1,200 teachers and more than 30,000 young people in 43 states and 14 countries.

Ms. Mahoney introduced conference participants to BizTech, NFTE's Internet-based learning program. BizTech seeks to combine entrepreneurship education with learning about information technology, science, and math. Thanks to this powerful online tool, students can learn how to operate and start a business, and even write a complete business plan—and all of this can happen regardless of where the student resides. This online initiative should be especially helpful in more isolated rural communities, where access to such training may be more difficult.

EntrePrep was developed and is supported by the Kauffman Center for Entrepreneurial Leadership. It is targeted to high school students, but the program is an outside-of-school learning experience. At the end of their junior year, participants spend a week at the EntrePrep Summer Institute (usually offered by a local college) where they learn the basics skills, knowledge, and attitude needed to start a business. During their senior year, students intern with a new

company where they learn a host of business skills, such as marketing, bookkeeping, and general office activities.

Entrepreneurship Education for Adults

Entrepreneurship education is not just for youth; it also requires a commitment to educating and training the workforce. Some well-established adult training programs, like FastTrac and NxLevel, address the needs of adult entrepreneurs (see Appendix D, Resources). Sam Leiken, Vice President of the Council for Adult and Experiential Learning (CAEL), discussed best practices for workforce development. Leiken devoted a good portion of his remarks to CAEL's recent efforts to retrain workers displaced by the closure of Levi Strauss factories in Virginia, Tennessee, and a number of other states. CAEL designed transition centers in every plant, and managed a program that provided \$6,000 to each employee for education, relocation, or self-employment. More than 13,000 employees used these services (see box).

In a time of rapid change due to globalization and the emergence of new technologies, both workers and company owners must initiate a new approach to workforce development. As Leiken noted, "... Lifelong learning is no longer a choice. It is a necessity for working adults." The earlier notion that people were done with education after they got a degree or certificate is an anachronism in the new economy. Leiken illustrated this point on the basis of his experience in assisting displaced senior managers at Digital

Partnerships for Entrepreneurial Training



Left to right: Frankie Slay, Economic Ventures; Mary Montgomery, Tiny Ones Daycare and former displaced Levi Strauss employee.

In Appalachian Tennessee, where 2,300 jobs were to be lost at a Levi Strauss plant closing, ARC partnered with the Levi Strauss Foundation to jointly fund a local entrepreneurship-training program involving former employees. Levi Strauss was Knox County's largest manufacturing employer, contributing more than \$40 million annually to the Knoxville economy. In an effort led by CAEL, extensive employee profiling was undertaken which identified 630 former Levi Strauss employees with a strong interest in starting their own businesses. The training program served two distinct groups of former Levi Strauss employees. The first group, those with a rudimentary knowledge of business practices, were primarily in need of advanced entrepreneurial support and training. The second group were former employees in need of more intensive assistance and personal mentoring in order to integrate into the economic mainstream prior to starting a microenterprise. The local Small Business Development Center acted as a partner to provide entrepreneurial training for the first group of former employees, and a new organization, Economic Ventures Inc, trained the second group of employees in microenterprise development.

With the support of this training and a local microloan program, more than 100 former employees have started their own businesses, the rest deciding to seek full-time employment with other companies.

Equipment Corporation (DEC) in Massachusetts. Nearly all of these senior company officials, many with Ph.D.s, were obliged to return to school to obtain new skills that prepared them for work with newer high technology firms in the region.

Leiken also noted that the field of higher education remains very slow to change. Employers, communities, unions, and other institutions must pressure and work with higher education officials to encourage them to embrace change. And when educators recognize the need for change, they will need support to implement these changes. In CAEL's work with Levi Strauss, Leiken found that many rural educational institutions were overwhelmed with the demand for support services. A more robust network of program support for such schools is needed.

Leiken concluded his presentation with a final challenge to all conference participants. The power of lifelong adult learning is clear. Yet such services are only available to those who work for the right company. Most businesses, especially those in rural America, do not provide such learning opportunities. The best means for expanding such training is through Lifelong Learning Accounts, where individuals and employers voluntarily contribute to a fund that operates like a 401(k) account. These accounts can then be used by workers to return to college or to receive other forms of needed training. CAEL is now leading a national campaign to create a new program of lifelong learning accounts for all Americans.

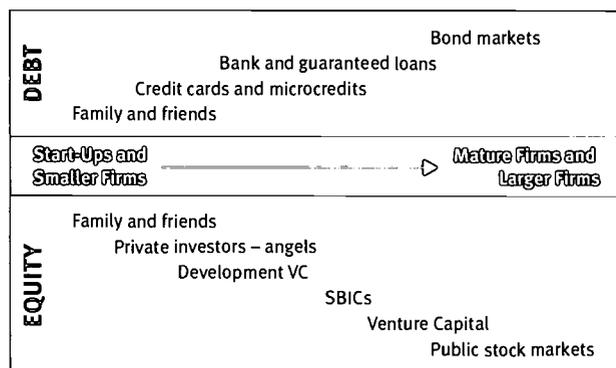
Improving Access to Capital

Phil Black, Director, Community Economic Development, People Incorporated of Southwest Virginia; **Christopher D. Brown**, President, Capital Across America.; **Bill Edwards**, Executive Director, Association for Enterprise Opportunity; **Lynn Gellermann**, Managing Director of Development Funds, Wilhelm and Conlon Public Strategies; **Steve Mercil**, President and CEO, Minnesota Investment Network Corporation; **Karen A. Mocker**, Senior Advisor–Community Affairs, Federal Reserve Bank of Cleveland; **L. Ray Moncrief**, Executive Vice President and COO, Kentucky Highlands Investment Corporation; **J. Jeffrey Pasquale**, Vice President, Fifth Third Bank; **Louisa Mittelgluck Quittman**, Financial and Program Advisor, Community Development Financial Institutions Fund, U.S. Treasury; **Kerwin Tesdell**, President, Community Development Venture Capital Alliance; **David C. Wilhelm**, President, Wilhelm and Conlon Public Strategies.

Traditionally, access to capital has dominated discussions of entrepreneurship and small business. For some regions of the country, many of the pressures of finding financing to start or develop a new business have been reduced. John Morris of NetLearning reflected this view with his point that financing is often a secondary concern in creating entrepreneurial firms. Unfortunately, in many parts of Appalachia and other rural areas, capital access continues to be a problem. However, a host of promising solutions are emerging, and the conference highlighted several of these new ideas and concepts.

There is no "one size fits all" financing strategy for entrepreneurs. Each company and each company owner has different needs and interests at different stages in a firm's life. For the inexperienced first-time entrepreneur, microenterprise often makes sense. Entrepreneurs who require more substantial amounts of funding often turn to individual angel investors or venture capital firms. Since the banking industry does an effective job of providing debt financing to growing firms' innovations in development finance tend to focus on the provision of non-debt, or equity, capital that is in such short supply in our rural communities. These proceedings address several areas of development finance:

- Microenterprise
- Angel Financing
- Development Venture Capital
- Small Business Investment Companies (SBICs)
- Bank Investments



Adapted, U.S. Small Business Administration.

¹ "Financing Rural America," Federal Reserve Bank of Kansas City, 1997. "Capital and Credit Needs in the Appalachian Region," Mt. Auburn Associates for the Appalachian Regional Commission, 1998.

MICROENTERPRISE

Rural America has a strong demand for expanded access to microenterprise programs, according to Bill Edwards, Executive Director of the Association for Enterprise Opportunity, the national trade association for microenterprise. Edwards started with some basic definitions. AEO defines microenterprise as “a sole proprietorship, a partnership, or a family business that has fewer than five employees.” Microenterprises are too small to access commercial banking services, typically seeking loans under \$35,000 in size. Microentrepreneurs often do not have the credit history (or they may have a bad credit history) to obtain unsecured consumer debt from banks or credit card companies, nor do they have personal assets to invest in their emerging business.

The U.S. microenterprise business is booming, with more than 700 different programs now in place across the country. While most programs are run by nonprofits, they take many forms. When the industry first started, new organizations that only provided microcredit dominated the field. Today, many large community-based development organizations offer some form of microenterprise funding and support.

The typical microenterprise has a single employee/owner, and many of these self-employed entrepreneurs start their businesses because of downsizing, unemployment or underemployment. As downsizing has hit Appalachia, interest in microenterprise has grown. For example, Edwards noted that many of the displaced Levi-Strauss employees in Tennessee have opted to start their own microbusinesses (see sidebar, 15). Interest in microenterprise is also quite strong among new immigrants and those who have recently left the welfare rolls. For low-income people, self-employment, according to Edwards, “offers the chance to use their talents, realize career dreams and find fulfillment that is rarely possible with options for low-wage labor.”

Working with microenterprises requires unique expertise. Most of those who use these programs have little if any business experience, and thus they require extensive training and mentoring. In fact, recent studies show that most of these new entrepreneurs require 45 hours of technical assistance before a loan can be made. This training

and technical assistance is critical to prepare entrepreneurs for effective use of their microloans. These loans can range in size from \$500 to \$25,000, but AEO estimates that the current U.S. average is \$15,000.

As microenterprise has become institutionalized, the amount of funding from both public and private sources has grown. The U.S. Small Business Administration has provided more than \$80 million to microloan programs since 1992, and the Treasury Department's Community Development Financial Institutions Fund (CDFI) has invested almost \$300 million in local financing programs since 1994. In addition, other federal funding sources include the Departments of Agriculture and Housing and Urban Development as well as several leading foundations and religious organizations.

ANGEL FINANCING

Entrepreneurs seeking non-debt financing face a number of challenges. Many venture capital funds only seek deals in excess of \$2 to 3 million (the average VC investment in 2000 was more than \$9 million). Thus, business owners seeking equity funding in the range of \$50,000 to \$1 million often must look elsewhere. Entrepreneurs typically rely on personal savings, retained business earnings, and support from friends, family, and business associates. As a result, business creation and expansion efforts, especially those based in rural communities, may be underfinanced and thus vulnerable to short-term market downturns. Finding additional sources of risk capital encourages more start-up activity and helps expansion efforts by existing firms.

Angel capital offers one means for filling this gap. Angels are individuals, either working on their own or in networks, who invest in new and growing businesses. Steve Mercil, President and CEO of the Minnesota Investment Network Corporation (MINCORP), introduced the conference to the world of angel investing. MINCORP focuses on expanding opportunity in rural Minnesota. It runs a number of interesting programs, but among its most innovative initiatives is the Regional Angel Investor Network (RAIN) fund.

Mercil began his remarks by highlighting the growing importance of angel investors. The term “angel investor” arose in the early 1900s and referred to investors who

backed risky Broadway shows. Today, angels still make risky investments, but they no longer are limited to Broadway. Today's angels are most often successful entrepreneurs who want to invest in other businesses—for a variety of reasons. Some are eager to leverage their earnings and create greater wealth, others are interested in being part of the excitement of growing companies, and still others believe that they are helping their communities by growing more successful businesses. Whatever their reasons for being angels, more and more businesses have begun to rely on them. Angels provide both money and hands-on assistance. They often sit on a business's board of directors and/or provide advice on technology development, human capital, and managing growth. They also often introduce business owners to lawyers, accountants, and venture capitalists skilled in helping a business to grow.

Today the United States boasts more than three million angels who invest more than \$50 billion in new companies each year. Angel investors can fill a major gap in rural financial markets. Thanks to their business success, they often make patient investments that at the same time can be consummated quickly, and they are more likely to invest in early-stage start-ups than are other types of financiers. Rural areas often have good companies, but they lack sufficient deal flow to attract established institutional investors. Angels live throughout the United States, and thus they offer

an important resource for rural areas bypassed by traditional venture capital firms.

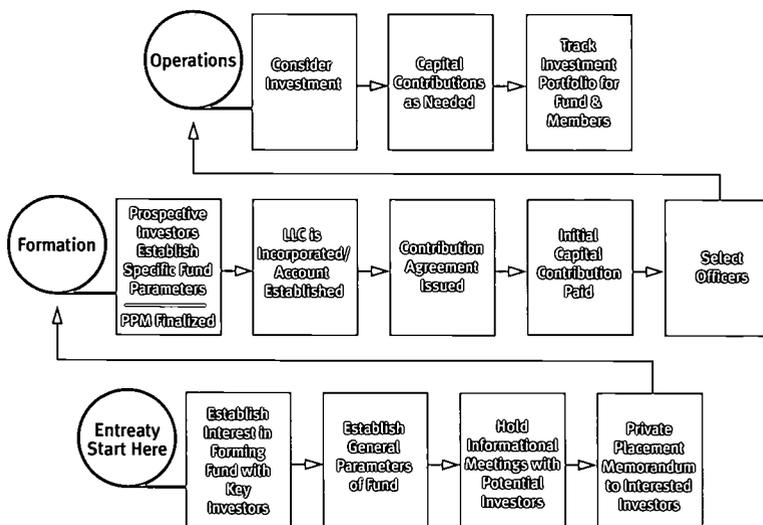
But angel investing also has disadvantages. Angel investors can be difficult to locate. They also often invest in what is familiar, and they are less willing to invest in risky innovations or new ideas. Finally, each individual angel controls limited amounts of capital.

One way to enhance the impact of local investors is to organize networks of angels. This can be difficult, as each investor has different financial needs and different investing preferences. MINCORP's RAIN program is designed to ease the task of creating angel networks. MINCORP's vision was to form several angel investor groups and to provide a framework for discovering deals, undertaking the due diligence, and structuring investments.

Lakes Venture Group, LLC, based in Alexandria, Minnesota, served as the prototype for RAIN. Lakes Venture Group was started in 1995 by a group of seven investors located in north central Minnesota. They created a small fund (capitalized at \$70,000) to invest in start-ups in their region. Two years later, the group had yet to make an investment because of a lack of deal flow and problems with structuring deals. In 1998, MINCORP began to cooperate with them, and the fund was significantly expanded and institutionalized. New investors were added, and the fund's capitalization grew to \$550,000. And, most importantly, the fund made six investments in early-stage companies based in rural Minnesota.

Thanks to this experience, MINCORP has developed a template for organizing similar angel investor funds (see diagram). These funds take the form of a limited liability company. Capitalization of each fund is \$500,000 to \$1 million, and each investor is expected to invest between \$30,000 and \$50,000. The members manage the fund, and each investor gets one vote when considering a potential investment. The proceeds from the fund are distributed in proportion to each member's investment.

Organizing, Capitalizing & Operating A RAIN Angel Fund



Source: MINCORP

A number of important lessons learned have emerged from this experience. Local leadership is critical. Investors drive the formation of angel networks, and, if local investors lack interest and confidence, creating such a network is difficult. Development organizations can support these networks by managing administrative tasks, so that investors can focus on the portfolio companies. Finally, the networks must reflect the local business culture; the investment style and practices of the fund must be appropriate for your region.

Development Venture Capital Funds

In addition to this discussion of angel investing, the conference proceedings included presentations from experts in the venture capital industry. Contrary to popular perception, the industry is not monolithic. Venture funds specialize in different business sectors, early- and later-stage investing, and in different sized deals. Development venture capital funds, which seek to use the tools of venture capital to promote business growth in distressed areas, have grown in importance. Several representatives from this growing sector participated in the conference. In addition, investors from more traditional venture capital funds (SBICs) also shared their insights.

Two of the leading thinkers in the field of development venture capital, L. Ray Moncrief, Executive Vice President and COO of the Kentucky Highlands Investment Corporation, and Kerwin Tesdell, President of the Community Development Venture Capital Association, spoke at the conference.

Kerwin Tesdell offered a snapshot of the state of the Development Venture Capital (DVC) industry. The industry is quite young. Only a handful of DVC funds existed in 1990. Today, the United States boasts more than 50 funds in place or in formation; at least 10 other funds are located overseas. Harvard University's Julia Rubin, who has studied this sector, estimates that U.S.-based funds now have \$300 million under management and have invested more than \$140 million. These numbers are small when compared to national figures of venture capital investment (\$35 billion invested in 1999), but they are significant in the community development sector.

DVCs seek to tap the proven approach of traditional venture capital, but for a different purpose: to bring new investment to regions and sectors not able to access traditional sources of investment capital. In many ways, DVC funds look like traditional venture capital funds. They make equity investments, take seats on the boards of portfolio companies, and provide extensive managerial and technical expertise to the companies. Since DVC funds often work with less-experienced entrepreneurs, this technical assistance is truly critical—often more important than the financing itself.

While DVC funds share many similarities with traditional venture funds, significant differences also exist. Most significantly, DVC funds seek to promote a “double bottom line”: providing positive financial returns for business, and social benefits for distressed communities. Money for these funds comes from sources with similar interest in the double bottom line: foundations, government agencies, and banks fulfilling their Community Reinvestment obligations. Banks provide more than one-third of all money for DVC funds, and their role in financing the industry is growing rapidly.

Quite understandably, DVC funds are much smaller than other venture funds. They have an average capitalization of slightly less than \$10 million, and average investment in a single company is about \$370,000. In comparison, the average investment by traditional VC firms in 1999 exceeded \$9 million.

Most of these funds are relatively new, so detailed data on their performance remains somewhat limited. Thus, it is still too soon to make a definitive judgment on the overall impact of the DVC industry. Yet, early studies of rural DVC funds show a strong performance, often on a par with that produced through the Small Business Investment Company (SBIC) program.

Ray Moncrief supplemented Tesdell's bird's eye view with a perspective from the ground up. Kentucky Highlands Investment Corporation (KHIC) is one of the nation's oldest and best-established DVC funds. Overall, the fund has invested more than \$65 million in more than 145 companies, and these portfolio companies have, in turn, created more than 8,000 jobs. Even more impressively, 65 percent of those hired in these firms were previously unemployed or on welfare.

Creating New Investment Funds



David Wilhelm



Lynn Gellerman

David Wilhelm and Lynn Gellerman of Wilhelm & Conlon Public Strategies provided a perspective on developing new investment funds. Wilhelm and Conlon is setting up two new investment funds to provide equity to underserved rural markets. The Appalachian Ohio Development Fund, created in partnership with Ohio

University, is capitalized at \$10 million and will invest in a 29-county area in southeastern Ohio. The Southern Illinois Development Fund (capitalized at \$25 million), created in partnership with Southern Illinois University, will serve southern Illinois, eastern Missouri, and western Kentucky.

In his remarks, David Wilhelm described the rationale for these funds. He noted that Appalachian Ohio boasts 7,000 companies with an entrepreneurial spirit equal to that in any major metropolitan area. Yet there was no venture capital invested in southeastern Ohio in 1999. A similar story can be told around the country: very little venture capital is invested in rural America.

Wilhelm noted that the flip side of this capital gap is a market opportunity, and these new funds are designed to exploit this opportunity. But, Wilhelm cautioned, this effort is not charity work. As he noted, "There is charity, and there is business. And, there is no such thing as a charitable business. Businesses are there to make profit. Businesses in Appalachia that seek venture capital need to meet the same standards that business anywhere would be asked to meet."

Three factors will determine the ultimate success of these funds:

- **DEAL FLOW:** Does the region have sufficient scale of small business investment opportunities to make the funds profitable?
- **MANAGEMENT TEAM:** Does the fund have a professional manager or management team with a track record of experience in the day to day management of investment fund?
- **TECHNICAL ASSISTANCE:** Does the fund have resources to provide technical assistance? These funds are addressing technical assistance needs by forming linkages with local universities that will provide and pay for these business development services.

Lynn Gellerman commented on the ability of these funds to attract investors. He noted that they have succeeded in attracting investments from banks, foundations, and universities, but they have been less successful with pension funds and private corporations. In order to raise funds, they have removed all references to the "double bottom line" from their promotional materials. Gellerman, formerly with BankOne, argued that investors are only concerned about the financial viability of the funds. While these investments will provide societal benefits, their primary focus must be on the bottom line: making smart investments in high-quality companies.

Other regions seeking to create development venture capital funds can learn much from this experience.

Moncrief noted that his firm, like most DVC funds, does not expect to invest in the high-technology high-growth firms that interest traditional venture capitalists. Instead, most of their portfolio companies are in manufacturing sectors, such as stainless steel fabrication and electro-mechanical assembly. The deals are small or generally have incomplete business plans and incomplete management. As a result, significant amounts of time and resources must be expended on technical assistance to help these entrepreneurs.

Concluding, Moncrief argued that investing in rural markets requires a specialized approach and expertise, and he underscored that these equity investments are essential to fueling entrepreneurship in Appalachia and in rural communities across the United States

Small Business Investment Corporations (SBICs)

Christopher D. Brown of Capital Across America (CXA) of Nashville, Tennessee, discussed the importance of the federal SBIC program first started by the Small Business Administration (SBA) in 1958. SBICs are privately managed and financed, with significant credit enhancement provided by SBA. SBA provides 2:1 leverage through participating securities for funds meeting the \$10 million threshold of private capital commitments. Therefore, a fund raising \$10 million in private commitments will have \$30 million to invest. SBICs provide critical investments in small companies who need financing in the \$250,000 to \$5 million range.

The SBIC program has an impressive track record, funding some of today's Fortune 100 like Intel, Federal Express, and Sun Microsystems. Today, the SBIC industry is quite large; there are 356 SBICs operating in 42 states, with more than \$12.5 billion under management.

CXA is a relatively new SBIC. It has existed for three years, investing approximately \$18 million in 17 deals in a range of industries. Unlike most SBICs, CXA does not make equity investments. Instead, it is a debenture fund, which means that it offers debt financing that takes the form of warrants to purchase stock. Because of this structure, CXA does not invest in early stage start-ups. It typically invests in established companies, with a heavy focus on women-owned firms seeking growth.

Brown was quite clear about CXA's criteria for investment. As he put it, "We look for management, management, management." Brown's firm heavily emphasizes this people-based approach. It is difficult for entrepreneurs to find investors without a high-quality, experienced management team. This means that having a great CEO is not enough; successful firms need a broad team with skills in technology, human resources, operations, and so on. Similarly, the presence of a high-quality, independent board of directors/advisors is a real plus.

Brown also stressed the importance of a clear and concise business plan. The details of plan may be modified, but the process of creating a plan forces business owners to seriously review the company's prospects and vision. As he noted, "It is very difficult to arrive at your destination if you have no plan on how to get there."

He concluded with some guidance for community leaders, "Young, growing companies need a positive business environment with a support system that provides assistance in the areas of training, networking and other business areas." Community leaders must educate entrepreneurs

about where they can get help, and they must ensure that quality support programs exist. "Simply stating that you are pro-business is not enough."

Bank Investments

Moving up the financial ladder leads us to the nation's largest funder of small businesses: banks. Jeff Pasquale, Vice President of Cincinnati's Fifth Third Bank, spoke to the conference about his firm's efforts to invest in new ventures. Pasquale described how Fifth Third combines two trends: capitalism and entrepreneurship. While the bank seeks to make a profit, it also tries to empower both its employees and its customers.

In addition to traditional commercial banking, Fifth Third also invests in venture capital funds. Thirty percent of this money is focused on investments in small business or in women or minority-owned businesses. The bank has also announced a new project, the \$9 billion Fifth Third Blitz, a three-year effort to reinvest in local communities in and around Cincinnati. More than \$2.7 billion in loans to low- and moderate-income consumers and small firms have been made in the project's first 12 months.

New Partnership to Strengthen Ties with Local Financial Institutions



Left to Right: Jerry Ricketts, CEO, Kentucky Highlands; Jesse White, Federal Co-Chariman, Appalachian Regional Commission; Charles Thiemann, President, Federal Home Loan Bank of Cincinnati; Thomas Rogers, President and CEO, Technology 2020; David Wilhelm, President, Wilhelm and Conlon Public Strategies.

At the conference, a new public-private partnership was announced which promises to provide more technical assistance with, and funding for, small business creation and economic development in three Appalachian states — Kentucky, Ohio, and Tennessee.

The Federal Home Loan Bank of Cincinnati, which serves 770 member financial institutions in the three states, signed partnership agreements with ARC and three development organizations based in Appalachia. Charles L. Thiemann, the bank's president, said he would work with ARC and the three organizations to strengthen ties with the bank and its member institutions, whose combined assets total more than \$375 billion.

The three locally based organizations—the Appalachian Ohio Development Fund, the Kentucky Highlands Investment Corporation, and Technology 2020—operate development venture capital (DVC) funds that seek to attract more private capital investment into under-served areas.

"Experience has taught us that the partnership approach of combining public and private dollars and technical assistance to create housing and economic development opportunities is the best way—and in some cases, the only way—to get the job done," said Thiemann.

Nurturing New Businesses

Dinah Adkins, Executive Director, National Business Incubation Association; **Jay Kayne**, Director of Public Sector and Community Initiatives, Ewing Marion Kauffman Foundation; **Erik R. Pages**, Policy Director, National Commission on Entrepreneurship; **Sheilah Rodgers**, West Company, Mendocino, California

The conference discussions on access to capital covered a wide range of issues, but one important unifying theme emerged; financing will do little if it is not accompanied by technical assistance and training for entrepreneurs. ARC's entrepreneurship Initiative has recognized the need for this linkage and has invested much time and effort into improving technical assistance resources in the region. Many leading experts in this area from both Appalachia and across the nation addressed this issue at the conference.

Nurturing new business requires both macro and micro approaches to regional development. At the macro level, local leaders should work to create a culture that embraces entrepreneurs and teaches people that entrepreneurship is a viable and respected career option. At the micro level, local entrepreneurs need support from business incubators and other service providers in learning how to start new businesses and to grow these new firms into thriving companies.

Jay Kayne, Director of Public Sector and Community Initiatives at the Ewing Marion Kauffman Foundation, framed these issues by offering lessons learned from the Kauffman Foundation's major investments in entrepreneurship programs in Kansas City, Missouri, and throughout the United States. Kayne noted that rural America faces many challenges in fostering entrepreneurship that stem from the basic fact of geographical distance: distance to markets, distance to suppliers, and distance to partners. Kauffman Foundation research shows that the probability of an entrepreneur succeeding is directly proportional to its interaction with other successful entrepreneurs. But because rural areas often lack a sufficient number of local entrepreneurs, creating these critical support networks is

difficult. Without enough local businesses to invest and create demand for support services, rural regions often lack basic business services such as Small Business Development Centers.

To assess a community's performance in nurturing entrepreneurs, the Kauffman Foundation has created the following framework:

- **Are local people interested in becoming entrepreneurs?** If not, community leaders should examine local educational programs, and the local business culture. For example, does the business community respect small businesses and entrepreneurs?
- **Are people becoming entrepreneurs?** If people have interest in entrepreneurship, but are not seeking to start new businesses, leaders should examine the quality and range of technical assistance being provided to nascent entrepreneurs.
- **Are new entrepreneurs succeeding?** If lots of new businesses are failing, leaders should review their traditional economic development programs, such as trade support, loan programs, and other initiatives.

This framework provides another lesson: there is no "one-size-fits-all" strategy for rural entrepreneurship. Each community must build on its own strengths to nurture and grow new businesses.

Erik R. Pages, Policy Director for the National Commission on Entrepreneurship, expanded on Kayne's experiences. He offered a summary of the Commission's recent work and a series of focus groups held with entrepreneurs around the United States. These focus groups highlighted the type of services and programs that entrepreneurs consider extremely important to their firm's success.

Various programs, such as technology support or capital access initiatives, were often cited as important. But even more important was the presence of an enabling culture. In entrepreneurial hotspots, company founders could all point to a shared history of the region and vision for where the region is going.

A key individual or “anchor” company often serves as a linchpin for the region’s development. In Northern Virginia, Mario Morino of Legent is regularly cited as a primary figure in developing a vision for the region. In Austin, George Kozmetsky of the IC2 Institute originally filled this role, and many of Austin’s first tech companies were originally linked to Tracor. In Silicon Valley, leaders at Hewlett-Packard and Fairchild played the same role. The leadership of these individuals, and the celebration of entrepreneurs and of risk-taking by community leaders and the local media, helped to create an entrepreneurial culture that fostered continued growth and prosperity.

But these efforts to foster an “entrepreneur-friendly” business culture cannot be stand-alone efforts; programs that provide technical assistance to new firms are also required. Business incubators are one of the more common and effective strategies for supporting start-up companies. Business incubation has a long history in the United States. The first incubator was opened in 1958, and today, there are more than 900 incubators across the country. Originally operated mainly by nonprofits and government agencies, incubators are now owned and operated by a mix of private firms, public agencies, and joint partnerships. Even the Internet has affected this field, spawning a boom (and bust) in new private incubators.

Dinah Adkins, Executive Director of the National Business Incubation Association, offered some guidelines about how state and local development professionals can best nurture and grow firms. She presented a case study of the Northeast Mississippi Business Incubation System and used “lessons learned” from this experience as a guide for other forms of business services.

The Northeast Mississippi Business Incubation System seeks to generate growth in the economically distressed region of Alcorn, Tippah, and Tishomingo Counties. Since 1995, the system of three incubators has served 41 different companies. These firms have created as many as 250 new jobs and enjoy annual revenues that exceeded \$3 million in

1999. This is an impressive achievement in a region where only 100 new businesses are incorporated each year.

Adkins highlighted a number of important lessons from this experience. First, the incubators were created through a unique mix of grants and bonds, from the ARC and other federal, state, and local sources. Thus, the facilities were opened debt-free and could plow future revenues back into the incubator’s core services.

Second, the facilities were developed and are managed with extensive cooperation between governmental jurisdictions. Internecine squabbling often dooms regional cooperation, and the absence of such fights eased the development of these incubators. This cooperation has persisted, and one board now serves the three separate incubators. These facilities also reduce operating costs by sharing staff, accounting systems, purchasing, and training. Moreover, they cooperate by supporting a regional marketing plan. Thanks to this cooperation, a powerful regional network has emerged.

Finally, the incubator system provides a comprehensive suite of services for new firms that lack the time and resources to shop for business basics. A range of support activities, from copying services to financial management are available from one source at a reasonable cost. The incubators also provide value-added services, such as regular contacts with an outside advisory board of entrepreneurs who help review business plan and provide strategic management advice. And the incubators have been instrumental in creating a local angel investor’s group to help fund tenants and other local companies. These activities provide significant comparative advantage to firms using the incubators.

These lessons are not only restricted to incubators; they apply equally well to other support services for new and growing businesses. Sheilah Rodgers of West Company in Mendocino, California, emphasized similar issues in highlighting her firm’s work. Like Dinah Adkins, Rodgers believes that effective service providers need to offer a complete range of services to entrepreneurs. In the case of West Company, the firm provides support for everything from early-stage feasibility assessments to aid with business

Principals for Effective Business Incubation

The incubator aspires to have a positive impact on its community's economic health by maximizing the success of emerging companies. The incubator itself is a dynamic model of a sustainable, efficient business operation. Model business incubation programs are distinguished by a commitment to incorporate industry best practices. Management and boards of incubators should strive to:

- Commit to the two core principles of business incubation.
 - Obtain consensus on a mission that defines its role in the community and develop a strategic plan containing quantifiable objectives to achieve the program mission.
 - Structure for financial sustainability by developing and implementing a realistic business plan.
- 

Dinah Adkins

- Recruit and appropriately compensate management capable of achieving the mission of the incubator and having the ability to help companies grow.
 - Build an effective board of directors committed to the incubator's mission and to maximizing management's role in developing successful companies.
 - Prioritize management time to place the greatest emphasis on client assistance, including proactive advising and guidance that results in company success and wealth creation.
- Develop an incubator facility, resources, methods, and tools that contribute to the effective delivery of business assistance to client firms and that address the developmental needs of each company.
 - Seek to integrate the incubator program and activities into the fabric of the community and its broader economic development goals and strategies.
 - Develop stakeholder support, including a resource network, that helps the incubation program's client companies and supports the incubator's mission and operations.
 - Maintain a management information system and collect statistics and other information necessary for ongoing program evaluation, thus improving a program's effectiveness and allowing it to evolve with the needs of the clients.

expansion. More specifically, West Company splits its operations into two categories: core services designed to write business plans and achieve start-up, and follow-up services for established firms seeking stabilization or expansion.

West Company has special expertise in working with microenterprise, as these firms provide more than 60 percent of the jobs in their local region of Mendocino County, California. The firm has recently unveiled a fascinating new program called the Commerce Cafe. This effort is designed to help meet one of the more important demands heard from entrepreneurs at all levels: opportunities to network with peers and mentors, and to share ideas on the challenges and joys of entrepreneurship.

Doss, Kayne, and Pages note that these networks are essential because they are the links to potential sources of capital, customers, suppliers, new employees, strategic alliance partners, and service providers such as lawyers, accountants, and consultants. They also allow entrepreneurs to share information and assessments of markets and technology as well as lessons learned from their own entrepreneurial experiences. The Commerce Cafe seeks to use these powerful networks in the microenterprise field. As Rodgers stated, it will provide a "belonging place" to these budding entrepreneurs who often face a tough and lonely road as they start their businesses.

Developed by National Business Incubation Association, with credit to the book, *Growing New Ventures, Creating New Jobs: Principles and Practices of Successful Business Incubation*, Rice M. and Matthews J., 1995.

E-Commerce

Thomas V. Thornton, Managing Partner, divine interVentures; **Thomas C. Rogers**, President and CEO, Technology 2020; **Robert T. Joyce**, President and Founder, Salvage Direct.

The boom in the information technology industry has generated a great deal of excitement in rural communities. With technological innovation driving the most remarkable revolution in business in a century—and diminishing the relevance of geography—there has never been a better moment for Appalachia to participate fully in the nation's economic mainstream. It is also clear that this is a double-edged sword. This new infrastructure will separate, more keenly than any other of the past, those citizens with the access, skills, and motivation to use it from those without. Telecommunications infrastructure cannot be allowed to bypass the mountains as did the interstate highway system in the 1950s and 1960s.

Some of America's leading e-commerce innovators participated in our discussions, and, while their comments were wide-ranging, one common theme emerged: any business that does not leverage the advantages of the Internet will not be in business for much longer. The old distinction between new economy technology companies and old economy firms no longer makes sense. All companies must understand and actively utilize new information technologies. But moving from traditional business into the digital age will require a broad array of technical assistance and advocacy. Both existing businesses and aspiring entrepreneurs need guidance in how to expand traditional face-to-face activities to an Internet environment, craft strategies for marketing products over the Web, and meet production and shipping requirements by leveraging the Internet.

Many tools used in the e-commerce sector are similar to traditional forms of technical assistance, but they often contain some interesting twists. Thomas Thornton, Managing Partner of divine interVentures, a private Chicago-

based Internet incubator, presented an interesting perspective on e-commerce. Divine interVentures was based on the premise that technology growth requires new business models, and divine represents a truly unique model. While the firm is often referred to as a venture capital fund, it acts more like an operating company.

Divine interVentures uses several techniques to help launch new companies. First, it provides equity investment, and, more importantly, a host of other services. Echoing the remarks of other speakers, Thornton noted that money is not enough. Second, divine's investments are focused on a few key Internet-related sectors: infrastructure, business services, and business-to-business e-commerce. Overall, divine has funded 52 different companies working in these sectors, making divine interVentures the world's largest for-profit incubator. Third, divine provides a unique set of business services to its portfolio companies, ranging from Web design to real estate management, to accounting and other office services. In fact, many of these service organizations are divine-funded start-ups themselves. Finally, firms supported by divine can tap into strategic corporate partnerships with firms like Dell, HP, and Compaq, enabling the start-ups to serve as both customers and suppliers to these larger corporate partners.

While e-commerce businesses are driven by technology, this does not mean that business opportunities are limited to Silicon Valley and other high-technology centers. In fact, Thornton contended that regions across the country can prosper from this technological revolution. As more traditional industries embrace e-commerce, opportunities for firms based in rural America will grow. He pointed to farms.com as a prototypical example. Set up in 1995 outside of Memphis, Tennessee, farms.com is the nation's leading online provider of information on agricultural markets.

Salvage Direct based in Titusville, Pennsylvania, offers a similar success story. Robert T. Joyce, Salvage Direct's president and founder, told the story of his firm's creation and success. Salvage Direct is a true exemplar of the benefits of public-private partnerships. Its initial investment was provided by angel investors who were introduced to the firm through Pennsylvania's Ben Franklin Technology

Centers. Its most recent move to York, Pennsylvania, was also hastened through support from the Ben Franklin program and the Pennsylvania Technology Investment Authority.

Joyce extolled the benefits of headquartering his firm in rural Pennsylvania and argued that e-commerce business opportunities would continue to grow in rural America.



Robert Joyce

Technology workers have a strong interest in quality of life and affordability—attributes available in many rural communities.

Rural areas can exploit these natural advantages, but they must also overcome some obstacles to

succeed in nurturing e-businesses. Rural regions often lack the scale to create a local technology network, where firms and employees can interact and share ideas. They also often lack a large base of technology-trained workers. Thus, expanding training and educational efforts and investing in infrastructure can pay big dividends in the fight to attract technology firms to rural America.

Similar issues are affecting high-tech entrepreneurs in Tennessee, according to Thomas Rogers, President and CEO of Tennessee's Technology 2020. Rogers highlighted some of the unique services provided by his organization, which seeks to leverage Tennessee's technology resources from Oak Ridge National Laboratory (ORNL) and the University of Tennessee to create new companies and new jobs.

One Tech 2020 program, the Center for Entrepreneurial Growth, was founded through a partnership between Tech 2020, the University of Tennessee, and Battelle Labs. It seeks to speed the commercialization of technologies first developed at ORNL, and to create new companies around these technologies. It has set an ambitious goal of creating ten new companies per year. These commercialization efforts are supported by a number of different investment vehicles from the Tech 2020 Finance Corporation. A special Commercialization Fund can provide up to \$100,000 per year, and other financing is available through a larger business development loan fund. In addition, Tech 2020 has

just completed TennesSeed Fund1 (announced in 2001), a new \$42-million SBIC fund investing in Tennessee-based technology companies.

A third initiative of Tech 2020 is Knoxville's Digital Crossing, a state-of-the-art IT incubator that seeks to tap the power of networks to nurture entrepreneurs. Digital Crossing hosts multiple telephone companies and Internet service providers (ISPs) to provide fast and low-cost Internet access, and serves as a center for business services so that building tenants can access needed support tools. Most importantly, the Digital Crossing provides a physical venue where new firms can network and share ideas. While this facility just opened its doors, it is nearly full, and it will likely play an important role as a seedbed for innovation and entrepreneurship throughout East Tennessee.

Building On Our Strengths

Tamar Datan, CEO, Center for Compatible Economic Development, The Nature Conservancy; **Anthony Flaccavento**, Executive Director, Appalachian Sustainable Development; **June Holley**, President, Appalachian Center for Economic Networks; **Karen Jacobson**, Vice President of Finance, Appalachian by Design; **Mark D. Kaser**, Executive Director, Kentucky Wood Products Competitiveness Corporation

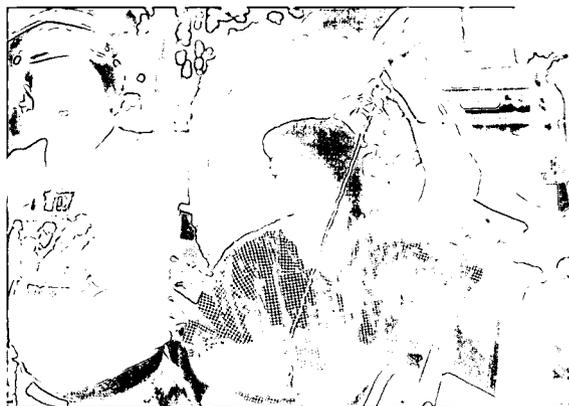
Although many parts of Rural America have lagged in economic growth, rural communities also possess powerful and unique strengths that provide them with economic comparative advantage. Just as private firms thrive when they successfully identify and employ their distinctive competences in the marketplace, regions also tend to grow and prosper in direct relation to their unique competitive advantages.

We all can think of examples of industries—automotive, computer chip manufacture, medical products, and software—that tend to cluster for reasons such as access to skilled employees, proximity to customers or suppliers, partnerships with research institutions, or financial systems that understand the specific needs of an industry. Similarly, successful development outcomes can be enhanced by focusing on strategic industries or service sectors in our rural communities. By identifying regional strengths and weaknesses, sectors which have particular advantages can be highlighted. Development efforts can then be targeted toward overcoming the barriers to growth that our most important industries face. Effective entrepreneurship strategies should exploit these strengths. Simply copying Silicon Valley will not work, but tapping the unique resources and people in our rural communities will succeed.

A number of national leaders in the effort to build on such homegrown strengths participated in the ARC conference. Tamar Datan provided a national perspective on trends in the field of sustainable development. The Nature Conservancy's Center for Compatible Economic Development has funded programs across the United States with the purpose of protecting biological diversity by aligning local development strategies with conservation goals. Pilot projects, such as

Virginia's Eastern Shore Select food products and The Forest Bank (located in both Virginia and Indiana), are proving successful.

Anthony Flaccavento, Executive Director of Appalachian Sustainable Development (ASD), contended that sustainable development is locally rooted, builds on local assets and tradition, and seeks to foster regional self-reliance and respect for the local environment. ASD has initiated two programs that embody these values. The Sustainable Agriculture Program works with farmers to provide training in organic farming and to create new market opportunities for high-value food products that can be sold to cooperatives or directly to consumers. This program has proved especially helpful in localities where farmers have traditionally relied on tobacco as a cash crop. Another project, the Sustainable Forestry and Wood Products Program, works with loggers in Southwestern Virginia. It provides training in ecologically sound timber harvesting, and also supports two kilns and processing centers for drying lumber.



Entrepreneurs supported by: Appalachian Sustainable Development, Appalachian by Design, and Appalachian Center for Economic Networks

These programs have now been in place for five years, and the ASD leadership has absorbed some important lessons. Flaccavento emphasized that sustainable development efforts must be both market-driven and market shaping. Finding markets is important, but it is often more important to help shape markets—that is, to change people's values and preferences. For instance, ASD has been instrumental in helping to create new markets and consumer demand for sustainably sourced wood products.

Flaccavento also stressed some bottom-line lessons about what is needed to convince consumers to buy sustainably based products. These include: consistency of supply, customer convenience and ease of purchase, price competitiveness, close relationships between consumers and producers, and the effective use of cooperatives to improve purchasing power and increase consistency of supply.

Echoing a theme of the conference, Flaccavento pointed to the importance of networks and partnerships in successful sustainable development programs. These efforts will not succeed by simply creating "green" businesses. Communities must build an infrastructure for sustainability that integrates education, training, technical assistance, market development, and the building of value-added facilities.

June Holley of the Appalachian Center for Economic Networks (ACEnet) next described the southeastern Ohio Food Ventures Center, which serves as a sectoral incubator for local food processing businesses. It provides technical assistance and other services, and also includes a facility with specialized food processing equipment, such as stoves, an automated bottling line, and packaging equipment. Among the center's other innovations is a Web site that contains a searchable database on topics such as product development, marketing, and distribution for the food industry.

The Food Ventures Center has proved quite successful since opening in 1996, with more than seventy firms using the facility to process food products. In an effort to expand financing sources for these firms, ACEnet has also recently created ACEnet Ventures which will help provide patient capital to local food and technology companies.

Another fascinating model for sectoral development comes from Appalachian by Design (ABD), which works with home-based knitters in West Virginia and Western Maryland. ABD's Karen Jacobson explained that ABD set up shop in 1994 in response to a clear market opportunity: Esprit Corporation had been seeking knitters in the local area, and, as a result, a network of machine (handloom) knitters developed. Working with ABD, rural women receive training in product design, production coordination and marketing. Overall, more than 155 knitters have been trained through ABD, and more than half of these women remain in business today.

ABD's sectoral approach has proved powerful because it provides a source of employment for workers who seek home-based opportunities that are both flexible and fairly well-paid. This service is especially important for those who have been displaced by the decline in local mining and manufacturing industries. This model can serve as an important supplement to other local development initiatives.

Jacobson argued that developing market access has been the key to ABD's success. Because ABD produces a high-end product in a region isolated from major markets, the product must be of extremely high-quality and excellent design. There is strong demand for handmade products, but only the best of the best can survive in this niche market.

Financing for the program comes from revenues and grants. Grants still represent the bulk (67 percent) of ABD's budget, but this portion should decline as sales increase and new production technology gains widespread usage. Jacobson remains optimistic about ABD's future, and has set an audacious goal for the program: that Appalachia become as well-known as the Fair Isles of Scotland for producing beautifully designed and crafted handloom knits.

Hand-made crafts are an important existing business niche in rural America; forestry represents another competitive sector. The Kentucky Wood Products Competitiveness Corporation (KWPPCC), set up in 1995, seeks to capitalize on this forestry tradition. These efforts are succeeding as

Kentucky's wood products industry has grown by more than 50 percent in the past five years, producing cabinetry, furniture, flooring, and a host of other products. Thanks to KWPC's role as a local catalyst, more than 7,250 new jobs have been created and more than \$286 million in new investment has come to the local wood products industry.

KWPC has placed the bulk of its resources into two efforts: embracing technology in the forestry business and seeking overseas customers. Both of these efforts are paying big dividends. New technology such as bar coding and computer-based design are reducing costs throughout the industry. At the same time, global customers have come to recognize Kentucky as a high-quality producer, and new business is developing at a rapid clip. KWPC is also moving online to take advantage of e-commerce as another means to bring rural companies into the world marketplace.

III. Future Challenges and Recommendations

Aida Alvarez, Administrator, U.S. Small Business Administration; **Douglas K. Mellinger**, Chairman, National Commission on Entrepreneurship; **Brian Dabson**, President, Corporation for Enterprise Development; **Alan D. Barkema**, Vice President and Economist, Center for the Study of Rural America, Federal Reserve Bank of Kansas City; **Kris W. Kimel**, President, Kentucky Science and Technology Corporation.

The Appalachian Regional Commission's Tools for Entrepreneurship conference united some of rural America's best minds to share best practices. But, sharing best practices was not the sole purpose of this event. Setting a path for the future was our primary objective. After three years of sustained effort and investment, ARC and its partners have put the idea of entrepreneurship on the map of leaders in Appalachia and throughout rural America. The next step involves solidifying and expanding upon this base so that communities embrace entrepreneurship as a tool for increasing self-reliance, diversifying their economies, and creating wealth.

Our review of the path ahead included both good news and bad news. On the positive side, conference participants embraced several new government initiatives designed to address pressing concerns. Aida Alvarez, Administrator of the Small Business Administration, shared her vision for transforming rural America through the New Markets Initiative. This effort is part of a major push to ensure that rural communities are also part of America's thriving venture capital sector. She lauded local programs, such as the Kentucky Highlands Investment Corporation, which shows that smart investment programs can ensure that "we do well in Appalachia by doing good."



Aida Alvarez



Douglas K. Mellinger



Brian Dabson



Alan D. Barkema



Kris W. Kimel

The conference heard both challenges and suggestions for next steps from our four closing speakers:

Doug Mellinger, chairman of the National Commission on Entrepreneurship, began his remarks by noting that the concept of entrepreneurship is still not well understood in Rural America, and, as a result, state and local governments have not embraced entrepreneurship as an economic development strategy. In fact, a recent survey of various “State of the State” addresses found only a handful of references to entrepreneurship.

Mellinger pointed to ARC’s programs as part of a turning of the tide, where the power of entrepreneurship was becoming better understood. Mellinger offered an apt definition of an entrepreneur: “someone who will do anything to keep from getting a job.” This tongue-in-cheek definition contains a kernel of truth, because it captures the passion and dreams that drive entrepreneurs. As Mellinger argued, most entrepreneurs have an “ever-ready battery” that keeps them going. Mellinger concluded by imploring conferees to be entrepreneurs themselves: act now to build your community and nurture new companies. Risk comes not from failing, but from failing to act when opportunity is present.

In response to Mellinger’s remarks, Brian Dabson, president of the Corporation for Enterprise Development, praised conference participants for their positive vision of the prospects for entrepreneurship in Appalachia. But, he also offered several cautionary notes. Dabson was particularly troubled by an often-voiced distinction between business and charity. Certainly, business must focus on the bottom line. Yet such focus must not distract from the primary objective of a rural development strategy focusing on entrepreneurship: to provide opportunity to the poorest regions of rural America. Poor Americans are often more entrepreneurial than the rest of society, and any successful strategy must emphasize their needs and interests.

Dabson highlighted the importance of Individual Development Accounts (IDAs) as one means to foster entrepreneurship in rural America. IDAs are matched savings accounts, akin to Individual Retirement Accounts (IRAs) that provide incentives for saving among low-income families.

The savings generated through IDAs can help provide the necessary capital for these families to enter the entrepreneurship game and create their own microenterprises. And Dabson concluded by encouraging conference participants to stay the course. Investments in entrepreneurship take time to pay off, and they need to become part of the long-term development strategy of our rural communities.

Alan Barkema, vice-president of the Federal Reserve Bank of Kansas City, echoed earlier concerns regarding a shortage of equity capital in rural America. He also pointed to some important human capital challenges for rural communities. Because of an absence of homegrown job opportunities, rural America suffers from a “brain drain” as its best and brightest flock to cities and suburban areas. Without these talented youth, the energy and innovation needed to start new companies and attract investment is often lacking in rural communities.

This challenge is most pronounced in the most isolated rural regions. Contrary to popular discussion, one cannot refer to a monolithic rural America. Instead, rural America has pockets of both prosperity and economic distress. Much of rural America is growing along with the rest of the economy, but this growth is concentrated in only 4 out of every 10 rural counties. These prospering regions enjoy proximity to major metropolitan areas, transportation hubs, or scenic amenities, like national parks or lakes and rivers. Regions lacking these resources face major challenges in fostering entrepreneurship.

Kris Kimel, president of the Kentucky Science and Technology Council, provided the conference with a simple but powerful message: Innovate! Rural America cannot prosper unless it embraces change and seeks a unique niche for its economic growth and prosperity. Much like a corporation constantly develops new products and new marketing techniques, rural communities must create innovations of their own that provide homegrown jobs and companies.

Recommendations

Thanks to the investments of ARC and others, the seeds for an entrepreneurial flowering have been planted. But nurturing these seedlings presents a formidable undertaking. How can Appalachia and rural America continue to create jobs, build local wealth, and contribute broadly to economic and community development?

Based on the insights from conference speakers, discussions among conferees, and lessons learned from investments in entrepreneurship, several recommendations clearly emerge. Promoting entrepreneurship in rural communities requires a range of interventions in the economic and social landscape to be successful. Some of these interventions are programmatic, focusing on developing the infrastructure required to support entrepreneurs. Some of these interventions are cultural, building the character and consciousness required for communities to sustain successful efforts. But all of these activities require the support of a broad range of actors: state and local political leaders, educators, financial institutions, and the business community. Only in this way can efforts to develop rural entrepreneurial economies have long-term sustained impact in rural America. Conference recommendations include:

Develop the infrastructure that underpins an entrepreneurial economy by supporting entrepreneurship education, fostering the formation of business networks, and improving access to investment capital.

I. Support Entrepreneurship Education

- **Focus on Youth:** Today's youth have great interest in starting a business. Tapping this interest through entrepreneurship education—and stopping the exodus of our best and brightest—should be the centerpiece of any long-term strategy to support development in rural America. Important and effective national programs for training youth have emerged, and these programs should

be leveraged to bring best practice to rural communities. Zack McDougall, a high school junior from Topeka, Kansas who operates a thriving computer support business, states entrepreneurship is “not actually a class you take, it’s a way of life.”

- **Build Sustainable Institutions:** One challenge facing entrepreneurship education is the institutionalization of these programs. Though a number of model programs are being implemented in rural jurisdictions, local school districts—their boards, superintendents, and principals—must be convinced of the importance of entrepreneurship education and include this programming as a sustained part of local curricula. Linking outcomes achieved through entrepreneurship programming to required educational goals on state proficiency tests could be an important step in building institutional support.
- **Support Ongoing Adult Programming:** Entrepreneurship education is not just for youth; it also requires a commitment to ongoing education and training of the workforce. In a time of rapid change because of globalization and the emergence of new technologies, both workers and company owners must initiate new approaches to workforce development. As Sam Leiken, vice president of the Council for Adult and Experiential Learning (CAEL), noted, “Lifelong learning is no longer a choice. It is a necessity for working adults.”

II. Foster Formation of Business Networks

- **Create Networks of Entrepreneurs:** Rural communities must seek to create communities of interest for local entrepreneurs. As Monica Doss from the Council for Entrepreneurial Development stated, networks are essential because they are the links to potential sources of capital, new employees, strategic alliance partners, and service providers—such as lawyers, accountants, and consultants. They also allow entrepreneurs to share information and assessments of markets and technology as well as lessons learned from their own entrepreneurial experiences. Steps to jump-start such networks can be very important. Rural economic development

organizations should consider creating local entrepreneur support groups or other peer networks through business incubators, universities, or other institutions such as Chambers of Commerce.

- **Target the Information Technology sector:** Rural businesses must cultivate the many opportunities that arise from the information technology (IT) sector, or watch others seize these opportunities. Some of these opportunities involve the development of new IT products and services, including supplying the Region’s hardware needs, fostering indigenous software and network design companies, capitalizing on the maintenance activities of the IT sector, and developing the content to be delivered by broadband. Other opportunities relate to the use of these new tools by firms in more traditional industries such as manufacturing or distribution. As noted by Tom Rogers of Technology 2020, seizing these opportunities will require additional emphasis on skills development and training, improved access to equity capital, sector-based regional economic development planning, and fast and reasonably priced access to high speed links to the new infrastructure—the Internet.
- **Build on Existing Strengths:** Just as private firms thrive when they successfully identify and employ their distinctive competences in the marketplace, regions also tend to grow and prosper in direct relation to their unique competitive advantages. Effective entrepreneurship strategies can exploit these strengths, by collectively addressing industry training needs, providing marketing assistance to groups of firms, creating specialized business incubators, building support for needed research, and product development facilities, or meeting industry-specific financing needs. Mark Kaser of the Kentucky Wood Products Competitiveness Corporation notes that creating a culture of cooperation among rural entrepreneurs can help service providers reach scale in addressing the pressing needs of a targeted group of entrepreneurs, while ensuring that the entrepreneurs themselves identify the most pressing challenges they face.

III. Improve Capital Access

- **Build Pools of Equity Capital:** Equity capital continues to be a scarce resource in rural America, and entrepreneurs will not be able to expand without access to such financing. As David Wilhelm of Wilhem & Conlon Public Strategies noted, “If I needed \$30 million in equity capital, somebody from Wall Street would provide that. But if I need a half million dollars or less in equity capital, who does that in rural America?” Strategies that leverage new federal programs like the New Markets Initiative, help form new Development Venture Capital funds, and foster the formation of Angel Investor Networks are all essential to the strengthening of the financial infrastructure of a region. Tapping the wealth within a region and building strategic relationships with private and institutional investors from without are critical to the success of these strategies. Many other important lessons for the formation and operation of these capital pools can be gained through discussion with existing successful funds.
- **Provide Credit to Micenterprises:** Another significant capital gap in rural communities is the provision of small amounts of debt to new or struggling entrepreneurs. Many rural residents do not have access to traditional bank credit because they lack personal assets or credit histories. Microcredit programs that provide small, unsecured loans can often get these entrepreneurs on their feet. As Bill Edwards from the Association for Enterprise Opportunity noted, leveraging the lessons from successful domestic and international microcredit programs can help new programs quickly achieve the desired outcomes.
- **Partner Capital with Technical Support:** An exclusive focus on forming financing vehicles could create a supply of investment capital, with only marginal opportunities to consider for investment. A large part of rural America’s development challenge is to create companies that are investment-ready; firms that have qualified management teams and effective business plans. Ray Moncrief of Kentucky Highland Investment Corporation states, “Marrying the provision of capital with technical support is essential to the success of these strategies.”

Build the culture and vision to provide ongoing support to entrepreneurs by engaging state and local political leaders, the business community, and by forging links with institutional partners

I. State and local political leaders can provide critical vision and support for entrepreneurial efforts.

Political leaders can champion the visibility of entrepreneurs in many ways, supporting entrepreneurs and celebrating their successes. They can attend grand opening events, visit entrepreneurs with local service providers, or invite entrepreneurs to address community events. Political leaders can focus long-term institutional support on entrepreneurs by creating new publicly funded programs, or encouraging existing services to tailor support to meet the needs of entrepreneurs. And political leaders can help form the institutional partnerships, described below, that are so important to the long-term success of these efforts.

II. Business leaders can help build a culture and vision supportive of entrepreneurship by welcoming entrepreneurs into the business community.

Entrepreneurs often feel they don't fit in at the local Chamber, don't mingle well at the golf club, and are uncomfortable at a business dinner with their bankers. A local business community that reaches out and invites entrepreneurs into the network of support and services can help bridge the significant gaps that exist, creating a stronger business network to foster a vibrant local economy. As the National Commission on Entrepreneurship notes, many successful entrepreneurial communities like Austin, Texas, Research Triangle, North Carolina, and Northern Virginia often have a successful entrepreneur who has championed support of new entrepreneurs to create a culture that fostering growth and prosperity.

III. Forging links with institutional partners is essential to building sustained support for entrepreneurs.

No single entity can successfully address the gaps in the infrastructure that supports entrepreneurs. New equity financing programs need to tap banks for investment capital, deal flow, and the loans that growing firms need. Relationships with institutions like FDIC, the Federal Reserve Banks, and the Federal Home Loan Banks can provide credibility and help encourage the involvement of local banks. Educational partnerships involving local community colleges and universities and youth programming that cuts across multiple school districts and involves state Departments of Education anchor local programs to broad support for these efforts. Industry-focused programming can involve regional or national trade associations in specific industries such as plastics or wood products, or in general business sectors such as manufacturing, retail, or services. Because of the credibility of these institutional partners and their role in shaping practice in their industries, these partnerships are essential to the work of building a shared and sustained vision and culture.

Work for the long haul

Keep in mind that all of this work—with political leaders, with the business community, and with institutional partners—requires time. As Brian Dabson of the Corporation for Enterprise Development notes, shifting the framework of development for rural communities takes many years, and requires the ongoing support of many actors. Make sure that your strategic partners and funders understand that significant impact will not be immediately forthcoming, and that success is seen only with long-term commitment. Engage partners for the long-term success of your efforts, but be sure there are measurable short-term gains to sustain their commitment, and yours.

Conference Steering Committee

M. CATHERINE ASHMORE, EXECUTIVE DIRECTOR

Consortium for Entrepreneurship Education
Columbus, Ohio

EWELL BALLTRIP, EXECUTIVE DIRECTOR

Kentucky Appalachian Commission
Hazard, Kentucky

JERRY DAVIS, EXECUTIVE DIRECTOR

Shoals Entrepreneurial Center
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JEFF DUKES, ASSOCIATE DIRECTOR, EXISTING INDUSTRY AND BUSINESS

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RICHARD S. LARSON, NATIONAL DIRECTOR

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WILLIAM STEINER, EXECUTIVE DIRECTOR

Northwest Pennsylvania Regional Planning and Development Commission
Oil City, Pennsylvania

Conference Speakers and Moderators

DINAH ADKINS

Executive Director, National Business Incubation Association

Dinah Adkins manages all activities of the 1,000-member National Business Incubation Association. Since she became executive director in 1988, the organization has greatly expanded its customer base, membership, and revenues.

AIDA ALVAREZ

Administrator, U.S. Small Business Administration, 1997-2000

Appointed administrator of the U.S. Small Business Administration by President Clinton in 1997, Alvarez has led the administration's effort to expand opportunities for America's 25.5 million small business entrepreneurs. Previously Clinton appointed Alvarez as the first director of the Office of Federal Housing Enterprise Oversight.

M. CATHERINE ASHMORE

Executive Director, Consortium for Entrepreneurship Education (CEE)

Cathy Ashmore leads CEE, a national membership group that supports the development of entrepreneurship education programs for youth and adults throughout America and the world. For the past 20 years, Ashmore has provided a foundation for the development of entrepreneurship education programs and has written extensively on entrepreneurship.

ALAN D. BARKEMA

Vice President and Economist, Center for the Study of Rural America, Federal Reserve Bank of Kansas City

Alan Barkema helped found the new Center for the Study of Rural America at the Federal Reserve Bank of Kansas City, which provides analysis of the agricultural and rural economies for the Federal Reserve System. Barkema joined the bank's Economic Research Department as an economist in 1986.

GREG BISCHAK

Senior Economist, Appalachian Regional Commission (ARC)

As senior economist for ARC, Greg Bischak conducts and directs economic research for the organization, acts as liaison with federal and state agencies, and assists in preparing testimony to Congress on the economic development needs and progress in the Appalachian Region.

JESSICA BLACK

President, Creative Images

Jessica Black is founder and president of Creative Images, an embroidery company in Swainsboro, Georgia. Black, a high school senior, founded the company after completing a REAL Enterprises entrepreneurship course at Swainsboro High School during her junior year.

PHIL BLACK

Director, Community Economic Development, People Incorporated of Southwest Virginia

Phil Black has more than 16 years of experience in economic and small-business development. As director of People Incorporated, he promotes small-business lending and investment initiatives. Previously he served as director of capital access at the North Carolina Rural Economic Development Center.

ALAN P. BRANSON

Vice President for Business Development, Enterprise Corporation of the Delta

Since 1994, Alan Branson has served as vice president for business development at the Enterprise Corporation of the Delta. He is also president of ECD Investments, LLC. Both groups are private business-development organizations that provide financial and technical assistance to firms and entrepreneurs in the Mississippi Delta.

CHRIS BRAZELL

Program Manager, Appalachian Regional Commission (ARC)

Chris Brazell joined ARC in 1999 to work on the Commission's Entrepreneurship Initiative. He is an MBA graduate of the Stern School of Business at New York University, where his academic focus was finance, entrepreneurship, and international business.

CHRISTOPHER D. BROWN

President, Capital Across America

Christopher Brown is co-founder and part owner of Capital Across America and serves as its president and chief investment officer. Brown has nearly 20 years of experience in the commercial banking industry; before joining Capital Across America, he served as senior vice president and senior credit officer of First Tennessee Bank.

BRIAN DABSON

President, Corporation for Enterprise Development (CFED)

In addition to his overall management responsibilities as CFED president, a position he has held since 1992, Brian Dabson also focuses on the policy and practice of sustainable economic development. He is an experienced facilitator of community and organizational strategic planning processes, and a frequent speaker and writer on economic development issues.

RAY DAFFNER

Manager-Entrepreneurship Initiative, Appalachian Regional Commission (ARC)

Ray Daffner manages ARC's multi-year, \$17.6 million Entrepreneurship Initiative, which seeks to promote locally owned, high-value-added sustainable ventures that increase local wealth, foster human and social capital, and reduce the need for subsidies.

TAMAR DATAN

Director and CEO, Center for Compatible Economic Development, The Nature Conservancy

As director and CEO of the Nature Conservancy's Center for Compatible Economic Development, Tamar Datan works with the conservancy's staff, business and civic leaders, investors, and others to design and implement innovative, compatible development programs.

MONICA DOSS

Executive Director, Council for Entrepreneurial Development

Since 1986, Monica Doss has served as executive director of the Council for Entrepreneurial Development (CED), a nonprofit organization founded in 1984 to stimulate the creation and expansion of high-growth entrepreneurial businesses in the Research Triangle region of North Carolina.

BILL EDWARDS

Executive Director, Association for Enterprise Opportunity (AEO)

Before joining AEO as executive director in 1999, Bill Edwards worked as director of training and development for the National Association of Community Action Agencies. Edwards has also worked for the Peace Corps in and as executive director of Community Service Programs of West Alabama, Inc.

ANTHONY FLACCAVENTO

Executive Director, Appalachian Sustainable Development (ASD)

Anthony Flaccavento helped found Appalachian Sustainable Development in 1995; since that time he has served as its executive director. Under his leadership the organization has worked to create an infrastructure of sustainability in both agriculture and forestry in southwestern Virginia and northeastern Tennessee.

LYNN GELLMANN

Managing Director of Development Funds, Wilhelm and Conlon Public Strategies

At Wilhelm and Conlon Public Strategies, Lynn Gellermann's responsibilities include establishing, organizing, and capitalizing developmental venture capital funds in rural regions historically underserved by traditional capital markets. Gellermann was a general partner in the first two funds founded by Wilhelm and Conlon.

JUNE HOLLEY

President, Appalachian Center for Economic Networks (ACEnet)

As president of ACEnet, a community-based economic development organization in rural, southeastern Ohio, June Holley oversees the group's research, regional and national outreach, and development of new programs. She is also a member of the board of directors of the North Central Regional Center for Rural Development.

RENATA HRON

Senior Program Officer, The Hitachi Foundation

Renata Hron works with the Hitachi Foundation's general grant program and manages the Matching Funds Program and the Yoshiyama Award for Exemplary Service to the Community. She has been involved in all of the foundation's grant initiatives and corresponding learning activities.

MARY M. HUNT

Program Officer, Claude Worthington Benedum Foundation

As a program officer in community and economic development with the Benedum Foundation, Mary Hunt works with nonprofits and local, state, and federal governments, as well as with educational institutions. Before joining the foundation, Hunt held various positions in local and state government in West Virginia.

KAREN JACOBSON

Vice President of Finance and Development, Appalachian By Design

Karen Jacobson has served as vice president of finance and development at Appalachian By Design since 1994. She also operates Seneca Consulting, which provides management and financial consulting services to national and regional nonprofit organizations.

ROBERT T. JOYCE

President and Founder, Salvage Direct

In 1998, after working in auto claims at an insurance company for six years, Robert Joyce started Salvage Direct, to enable insurance companies and financial institutions to market salvage vehicles through online auctions. Salvage Direct now works with top insurance carriers and has sold more than \$1 million worth of vehicles.

MARK D. KASER

Executive Director, Kentucky Wood Products Competitiveness Corporation

Since 1995, Mark Kaser has directed the Kentucky Wood Products Competitiveness Corporation, which promotes, enhances, and develops the state's wood products industry. Previously he was president of Profiled Materials, Inc., a Lexington restoration molding and millwork fabrication company.

JOSEPH A. KAYNE

Director of Public Sector and Community Initiatives, Kauffman Center for Entrepreneurial Leadership

For the last year Joseph Kayne has been director of public sector and community initiatives for the Kauffman Center for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation. He was previously director of economic development and commerce policy studies at the National Governors' Association.

KRIS W. KIMEL

President, Kentucky Science and Technology Corporation (KSTC)

As a founder of the Kentucky Science and Technology Corporation and its president since 1987, Kris Kimel has been responsible for the development and implementation of a variety of innovative projects in entrepreneurship, manufacturing modernization, research and development, and education.

RICHARD S. LARSON

National Director, REAL Enterprises

For more than a decade Richard Larson has been involved in developing the Rural Entrepreneurship through Action Learning (REAL) Enterprises program—which provides experiential entrepreneurship education in schools nationwide—and its curriculum and professional development program for entrepreneurship educators.

SAMUEL LEIKEN

Vice President for Public Policy and Government Relations, Council for Adult and Experiential Learning (CAEL)

Samuel Leiken established the public policy department at CAEL in 1995. Currently he oversees a variety of policy initiatives, including the Leadership for Change in Workforce Development project in Chicago and a four-year evaluation of Indiana's first major incumbent-worker training program.

LESLIE LILLY

President and CEO, Foundation for Appalachian Ohio

Leslie Lilly is president and CEO of the Foundation for Appalachian Ohio, a regional community foundation that addresses needs and opportunities in the 29 Appalachian counties of Ohio. She is past executive vice president of the Foundation for the Mid South, a three-state community foundation serving the Mississippi Delta.

JEAN MAHONEY

Director of BizTech Field Marketing, National Foundation for Teaching Entrepreneurship (NFTE)

Jean Mahoney is the director of field marketing for the NFTE's BizTech online entrepreneurship learning system. Before joining the NFTE, she was the director of the Solomon Youth Entrepreneurial Program for the New York Institute for Entrepreneurship, where the cornerstone youth program is BizTech.

LENORE MASON

Placement Specialist, Ohio Valley Goodwill Industries

Lenore Mason has worked at Portsmouth Rehabilitation Services, a rural southeastern Ohio satellite of Cincinnati's Ohio Valley Goodwill Industries, for more than eight years. There she provides job-search skills training and assistance in seeking and procuring permanent employment to clients with disabilities.

ZACK MCDUGALL

Youth Entrepreneur

Zack McDougall, a senior at Topeka High School, graduated from the National Foundation for Teaching Entrepreneurship/Youth Entrepreneurs of Kansas program two years ago and has since run his own computer business, Today's Computer Solutions.

JOANNE MCGONAGLE

Founder, Pasta Fresca/The Risers Corporation

Joanne McGonagle is the founder of the Risers Corporation, which produces the Pasta Fresca line of foods. She incorporated the company in 1986 in Appalachian Perry County, Ohio. Pasta Fresca currently markets a line of Italian pasta and appetizers to supermarkets and specialty stores.

DOUGLAS K. MELLINGER

Chairman, National Commission on Entrepreneurship

Douglas K. Mellinger is chairman of the Washington, D.C.-based National Commission on Entrepreneurship, which works to focus public policy on the role of entrepreneurship in the economy. He is also chairman of Zeno Ventures, a Connecticut firm that assists the start-up and growth of Internet and e-commerce companies.

STEVE MERCIL

President and CEO, Minnesota Investment Network Corporation (MIN-Corp.)

Steve Mercil has more than 14 years of experience in small-business finance, including his former service as equity fund manager at Minnesota Technology, Inc. In that role, Mercil was responsible for building the current MIN-Corp. investment portfolio. Mercil now oversees all aspects of MIN-Corp.

KAREN A. MOCKER

Senior Advisor—Community Affairs, Federal Reserve Bank of Cleveland

Karen Mocker has over 20 years of experience in nonprofit and small-business management. As senior advisor in community affairs at the Federal Reserve Bank of Cleveland, her role is to provide training, technical assistance, and outreach to community-based organizations and banks.

L. RAY MONCRIEF

Executive Vice President and COO, Kentucky Highlands Investment Corporation

Ray Moncrief has been with Kentucky Highlands Investment Corporation since 1984 and is currently its executive vice president and COO. Moncrief is responsible for all investing activities of both Kentucky Highlands and its wholly owned subsidiary, Mountain Ventures, Inc., where he serves as president and CEO.

JOHN D. MORRIS

President and CEO, NetLearning

As president and CEO of NetLearning, John Morris has been the catalyst for the development and marketing of the NetLearning System, a learning software system that empowers employees to become responsible for their own continuing education.

JOY PADGETT

Director, Governor's Office of Appalachia, State of Ohio

As director of Ohio Governor Bob Taft's Office of Appalachia, Joy Padgett supervises state-funded, locally funded, and federally funded projects in the state's 29 Appalachian counties. She also serves as an advocate for the region in state government and as a liaison between the region, state agencies, and the General Assembly.

ERIK R. PAGES

Policy Director, National Commission on Entrepreneurship (NCE)

As policy director for the NCE, Erik Pages sets the direction for this new organization dedicated to promoting entrepreneurship in the 21st century. Earlier in his career, Pages was vice president for policy and programs at Business Executives for National Security, where he oversaw policy planning and research activities.

J. JEFFREY PASQUALE

Vice President, Fifth Third Bank

J. Jeffrey Pasquale manages Fifth Third Bank's Corporate Finance Department. He joined the bank in 1996 after working for 15 years in New York and Tokyo for major commercial banks, including Manufacturers Hanover Trust Company and Nippon Credit Bank.

ROBERT L. PROUD

President, Clermont County Board of Commissioners

Robert Proud has served on the Clermont County Board of Commissioners since 1989 and is currently its president. Under his leadership, the board prepares and administers the county budget, develops and adopts policies for the administration of county services, and implements laws and rules put forth by state agencies.

LOUISA MITTELGLUCK QUITTMAN

Program Advisor, Community Development Financial Institutions Fund (CDFIF), U.S. Treasury

In her current position, Louisa Mittelgluck Quittman's responsibilities include coordinating the certification of community organizations as Community Development Financial Institutions, as well as reviewing applications for funding. Previously she was a reviewer of the CDFIF's Bank Enterprise Award Program.

SHEILAH ROGERS

Executive Director, West Company

Sheilah Rogers is the program director and executive director of West Company, a microenterprise development organization in Mendocino County, California. Rogers has also worked with community development projects as a Peace Corps volunteer in Ecuador, Chicago, and rural Mendocino County.

THOMAS C. ROGERS

President and CEO, Technology 2020

Thomas Rogers heads Technology 2020, a public-private partnership focusing on creating new information technology businesses and jobs in eastern Tennessee. Under Rogers's direction, Technology 2020 manages a network of business incubators, is developing several loan and equity funding vehicles, and operates Jobs21.net.

STUART A. ROSENFELD

President, Regional Technology Strategies (RTS)

Stuart Rosenfeld is founder and president of the nonprofit Regional Technology Strategies, which helps organizations create and implement innovative regional economic development strategies. He was previously deputy director of the Southern Growth Policies Board and director of the Southern Technology Council.

MEGHAN SPENSKY

Youth Entrepreneur

Meghan Spensky is a former intern with EntrePrep in Huntington, West Virginia, a program supported by the Kauffman Center for Entrepreneurial Leadership. During her senior year in high school, she interned in a law firm and a warehousing company and learned how to develop business plans.

KERWIN TESDELL

President, Community Development Venture Capital Alliance (CDVCA)

Kerwin Tesdell is president of the CDVCA, an organization that promotes the use of venture capital to create jobs, entrepreneurial capacity, and wealth in distressed communities. He is also an adjunct professor at the New York University School of Law. Previously, Tesdell was a program officer at the Ford Foundation.

SAKINA B. THOMPSON

Senior Policy Advisor to the Federal Co-Chairman, Appalachian Regional Commission (ARC)

Since 1994, Sakina Thompson has served as the senior advisor on policy and program issues to the federal co-chairman of the Appalachian Regional Commission. She is also responsible for the management of grants. Prior to joining ARC, Thompson was the director of the state of Maryland's multi-agency foster care reform effort.

CHARLES L. THIEMANN

President, Federal Home Loan Bank of Cincinnati

Charles L. Thiemann is president and CEO of the Federal Home Loan Bank of Cincinnati, a regional wholesale bank serving over 750 member financial institutions in Kentucky, Ohio, and Tennessee. He oversees the operations of the \$50 billion Cincinnati Bank, including its multimillion-dollar Affordable Housing Program.

THOMAS V. THORNTON

Managing Partner, divine InterVentures

Thomas Thornton is managing partner of divine InterVentures, a Chicago-based Internet company that works with entrepreneurs and brick-and-mortar businesses to build market leaders for the new economy. Thornton manages Skyscraper Ventures, a \$100 million early-stage investment fund, for the company.

CECIL H. UNDERWOOD

Governor of West Virginia, 1997-2000

Since taking office in 1997, Underwood has aggressively sought to improve and diversify West Virginia's economy. He was chosen by his fellow Appalachian governors to serve as the states' co-chairman of the Appalachian Regional Commission for 1999 and again in 2000. Underwood served six terms in the West Virginia House of Delegates from 1945 to 1957, as well as Governor from 1957 through 1961.

JESSE L. WHITE, JR.

Federal Co-Chairman, Appalachian Regional Commission

Jesse L. White, Jr., was appointed by President Clinton as federal co-chairman of the Appalachian Regional Commission in February 1994. From 1982 to 1990 White served as executive director of the Southern Growth Policies Board, an economic development think tank serving the 14 governors of the southern states and located in Research Triangle Park, North Carolina.

DAVID C. WILHELM

President, Wilhelm and Conlon Public Strategies

Through his company, David Wilhelm is developing financial vehicles designed to bring investment capital to underserved areas. These efforts build on Wilhelm's work with EVEREN Securities, where he served as a senior managing director from 1995 to 1997. He served as national manager of the Clinton/Gore campaign in 1992.

ARC Entrepreneurship Initiative

Program Development and Design

Begun in 1997, ARC's \$17.6 million Entrepreneurship Initiative seeks to change the fundamentals of economic development in the 13-state Region by fostering a new culture of entrepreneurship. This approach calls for nothing less than developing a new paradigm of economic development, moving rural and small town Appalachia away from a reliance on branch plant recruitment and towards a more internal model of development. The Initiative has demonstrated immediate local economic impact and achieved scale by using a replicable local implementation framework and by affecting state policy at the highest levels.

To assist in creating more homegrown businesses, the Commission has adopted a comprehensive approach that encourages communities to look broadly at their development needs. What is unique about this initiative is its holistic nature. Forging alliances with major financial institutions, national foundations, community colleges and local development organizations, ARC has created a new tool to build self-sufficient local economies that focuses on four key areas that underpin an entrepreneurial economy:

- Educating current and future entrepreneurs, both youth and adults;
- Improving access to investment capital for local businesses;
- Strengthening local economies by capitalizing on strategic sectors; and
- Nurturing new businesses by creating and supporting rural business incubators.

The Commission believes this five-year program is the first of its kind to attempt to integrate these key areas into one initiative. The program's early successes demonstrate scale, reach, and policy impact, and they suggest that this model has strong potential to foster entrepreneurship and create more homegrown businesses in other rural communities.

Beneficiaries of this Initiative include a broad sweep of Appalachian constituents, from state policy makers to local leaders to the 9.8 million persons engaged in the Region's workforce. State leaders and policy makers benefit by adding economic development tools to their tool belt, enabling them to grow more diversified local economies. Local governments benefit by having a broader array of responses to cope with local economic challenges. Grantees benefit by building organizational capacity and competence, and by achieving programmatic success. Youth can benefit by opening their eyes to a dream, or avoiding missteps that might otherwise have occurred.

But most importantly, citizens of Appalachia's communities benefit by the creation of new businesses and the expansion of existing businesses. Some citizens will become the owners of these businesses. Other businesses will create quality jobs for community residents, strengthening local businesses by buying goods and services locally. This growth increases local wealth and the tax base, allowing for increased reinvestment in the community, including better funding for schools and other services. And this increased economic opportunity allows the Region's best and brightest to remain, rather than leaving for the promise of the cities.

Evidence of Change

The Commission has invested in developing the four key areas that underpin an entrepreneurial economy and has engaged a range of partners to ensure long-term sustainable change in the economic landscape. This broad range of partners—including state and local government, private financial institutions, philanthropies, and service providers—is required to effectively address the many challenges faced by rural entrepreneurs. And these partners are needed to help create a climate and culture supportive of entrepreneurship—an ingredient of the entrepreneurial infrastructure essential to success.

From the beginning of the Initiative in FY97 through FY 2000, the Commission has provided \$13.9 million in support to 169 projects that have leveraged an additional \$13.2 million from partner institutions. Sixty-eight completed projects report the creation of 264 new businesses and creation or retention of 639 jobs in the region. The 101 ongoing programs project

the creation of 389 new businesses and 2,500 jobs. More information on program outcomes, including a listing of all ARC-funded Entrepreneurship projects, can be obtained at: www.arc.gov/programs/reginit/entrep.htm

Evidence of change in the development landscape includes:

- Entrepreneurship Education and Training.** Schools and training institutions throughout the Appalachian Region are now including entrepreneurship as part of their basic curriculum. ARC has invested \$6.9 million in 83 projects to introduce entrepreneurship education and training best practices to schools and training facilities. Through these activities, the Commission supported youth-based entrepreneurship education programs in 12 states, resulting in the use of entrepreneurship curriculum by a significant number of high schools and colleges in Alabama and Pennsylvania. In Pennsylvania, ARC enabled 32 schools to utilize the REAL Enterprise curriculum, a nationwide provider of youth entrepreneurship programming, and involve 1,600 high school students in the program. And in Alabama, ARC support led the state to purchase and train instructors in the nationally acclaimed NxLevel adult entrepreneurship curriculum, a program which involved 117 businesses in the first year of classes.
- Access to Capital.** Only an abstract idea five years ago, development venture capital funds are now being financed and beginning to invest in local firms in the Appalachian Region. To expand the availability of outside capital investment, the Commission has engaged a range of partners, including the Federal Reserve, the Federal Housing Finance Board, the Federal Deposit Insurance Corporation, and a number of private financial institutions. So far the Commission has invested \$6 million to support 48 projects to seed business financing programs in the Region. Of this investment \$2 million has gone toward the creation of six new development capital funds. One of these new funds, the TennesSeed Fund, has successfully raised \$42 million in equity and has begun operations, and a second, Adena Ventures in Ohio, has raised over \$9 million and will begin financing activities shortly. The Commission also supported the creation of six new microcredit programs, including support for

Maryland-based Microworks. Microworks leveraged a \$50,000 ARC grant into a \$500,000 loan program and helped create a state microenterprise association that is invigorating the development finance conversation with Maryland financial institutions and in the state Capitol.

- Formation of Entrepreneurial and Sector-Based Networks.** The initiative has succeeded in helping communities throughout the Appalachian Region identify their economic strengths and build on them. The initiative has invested \$4.2 million in 53 projects to grow entrepreneurial and sector-based networks in a dozen regional industries, including aquaculture, wood products, plastics, and value-added agriculture. These efforts have demonstrated that local economies will grow and prosper in direct relation to their unique competitive advantages.
- Technical and Managerial Assistance:** The Commission provided \$8.6 million in support to 86 projects that provide technical and managerial support to businesses, including support for the formation and operation of business incubators and incubator networks in eight states.
- State and Local Policy Impact:** The Commission has developed strong supporters of entrepreneurship-based development strategies at the state and local level. Not only have these partners served on Initiative advisory committees, ensuring buy-in among state and local actors, but they have incorporated significant elements of the Initiative into state and local programming. For example, Virginia is expanding the scope of its CDBG program to support entrepreneurial activities, and Pennsylvania has used Initiative support to develop multi-year systemic responses to address gaps in entrepreneurial capacity through all of the development districts in the state. Mississippi is participating in a National Governors Association Entrepreneurship Academy, and West Virginia is participating in a Kauffman Foundation-sponsored Rural Entrepreneurship Academy. At the local level, development districts in Ohio and New York that formerly focused on industrial recruitment are now working closely with local partners to craft entrepreneurship strategies to address local gaps and

seek project funding for them. And in Virginia, Kentucky, Pennsylvania, North Carolina, Ohio, and Tennessee, state efforts are underway to support the formation of new development venture capital funds. For these advocates, entrepreneurship represents a diversification of their development strategies; the ability to add a tool to the toolkit of rural economic development.

Program Development

The Federal Co-Chairman of the ARC, Dr. Jesse L. White, Jr., a long-time advocate of a more internal, entrepreneurial model of development, was the prime mover in this Initiative. He first challenged the Commission to develop the Initiative in a speech delivered at the Development Districts Association of Appalachia annual meeting in 1996. Subsequently, the full Commission authorized the formation of the Initiative at the Governor's Quorum meeting in the spring of 1996. The Commission had just adopted a strategic plan focusing on five goal areas required for Appalachia to fully participate in the national economy (see www.arc.gov for a listing of the goal areas). The new Entrepreneurship Initiative would directly address the implementation of Goal Area Four—building dynamic local economies.

ARC's Policy Development Committee (PDC) directly oversaw the development of the Initiative. The PDC is composed of the ARC Federal Co-Chairman and the Governors' designated representatives to the Commission, key economic development policy makers in their respective states. In addition, each State's ARC program manager and representatives of the Region's local development districts participated in all major policy discussions. This unique collaboration between the region's 13 state governments, the federal government, and local officials in the formation of the Initiative ensured that the resulting program addressed a range of the Region's development concerns and had broad support among state and local leaders.

To assist the PDC in shaping the Initiative, Commission staff, ARC Federal Office staff and Governors' representatives conducted extensive planning and development activities over a 15-month period, including such activities as convening a consultation with regional and national leaders in the field of rural economic development, conducting

targeted regional research; and holding regional focus groups to gain insight and support from local communities. Input from these sources led to spirited policy debates and contributed to the development of a thoughtful and effective program.

To mine the field of rural entrepreneurship, ARC brought together economic development experts, and state, local, and nonprofit practitioners for a rich discussion focused on building a stronger entrepreneurial base in the Region. The discussion helped identify the critical elements of an entrepreneurial economy, describe the current landscape of entrepreneurial activity in the Region, and articulate the most effective and appropriate roles for ARC and other federal, state, and local partners.

Next, ARC commissioned several original research studies to inform policy and program development and provide baseline data. The four major research projects include: Capital and Credit Needs in the Appalachian Region; An Inventory and Analysis of Appalachia's Entrepreneurial Capacity; An Assessment of Entrepreneurship in Local Appalachian Economies 1989–1994; and Business Start-Up Data in Appalachia.

Finally, ARC held four state-level focus groups in representative areas of the region to gather input from a broad range of state and local practitioners, policy makers, and businesspersons. The focus groups yielded valuable information on available resources, current practices, and gaps in the region's entrepreneurial infrastructure. The sessions informed ARC about variations in the availability of the financial and technical resources throughout the region, and local capacity and demand for these resources. ARC was well-served by input from a variety of perspectives about the most appropriate role to play in increasing entrepreneurial activity in the Region.

In an April 1997 meeting, the PDC recommended, and the Commission adopted, the reconfigured Entrepreneurship Initiative. The Initiative was launched in June 1997.

Program Design and Implementation

Engaging institutional partners and national best practice organizations has been critical to the success of the Initiative. On its own, ARC could invest \$17.6 million in grant monies to assist specific communities, but long-term sustainable impact would not be assured. To build these partnerships, the Commission invited institutional partners to sit on four Advisory Committees in the areas of education, technical assistance, capital access, and sectorally targeted efforts. These committees assisted in planning for educational conferences, jointly producing publications, and collaboratively funding local programs. Over the last three years, the Commission has hosted 10 conferences and workshops attracting more than 1,300 persons to discuss best practice in the four programmatic areas that support entrepreneurship. The Commission has provided more than three dozen scholarships to local leaders to attend important training events outside of Appalachia. And the Commission has produced publications and online resources to inform local leaders about options and opportunities in the field.

I. Entrepreneurship Education and Training. The

Entrepreneurial Education and Training Advisory Committee is composed of regional practitioners (including representatives from the Appalachian College Association and the Community Colleges of Appalachia), ARC Governor's alternates, and state program managers. The Committee has met several times to help shape activities to promote and support entrepreneurial education and training efforts in the region.

At the Committee's recommendation, ARC contracted with the Corporation for Enterprise Development (CfED) to provide 38 scholarships to regional applicants to attend the 16th Annual Entrepreneurship Education Forum, held November 1, 1998, in Nashville, Tennessee. Each scholarship recipient was required to hold a local informational meeting to share the information gathered at the ICEE event with potential partners in their community. Scholarship recipients have submitted to CfED and ARC both an agenda and participant list that document the local sessions. Some of the outcomes of these sessions include a local college creating a special

entrepreneurship unit, a high school turning over a local store to run as a student enterprise, and the hosting of a 120 student five-county conference on entrepreneurship. (A summary of these scholarship activities is available at: www.arc.gov/programs/reginit/scholar.htm)

In order to address the strong interest in entrepreneurial education and training programming, the committee recommended that ARC provide \$60,000 to support three sub-regional conferences. The target audiences for these conferences include teachers, principals, superintendents, school board members, county commissioners, state education department officials and college professors, deans, and presidents.

A request for proposals (RFP) was issued in the spring of 1999 to a broad range of potential applicants to undertake these conferences. ARC received six proposals from six states in response to the RFP. Three members of the Entrepreneurship Education Advisory Committee volunteered to be members of a selection team. After review, three sites were selected for these events. More than 340 persons attended the following regional conferences:

- **Broom Community College**
Owego, New York
October 21–22, 1999
- **Southern Rural Development Center**
Birmingham, Alabama
November 18–19, 1999
- **NC REAL Enterprises/Haywood Community College**
Clyde, North Carolina
April 10–11, 2000

In addition, ARC contracted with the Consortium of Entrepreneurial Education (CEE) to develop an Entrepreneurship Education Resource Guide that was distributed at the regional conferences. This guide provides one-page summaries of more than 250 regional and national entrepreneurship education products and training programs and is available upon request and on line at <http://www.arc.gov/programs/reginit/entever/entrepix.htm>.

ARC, acting with several foundations, has also provided support for the efforts of the Corporation for Enterprise Development (CfED) to convene a series of sessions of national leaders in the field of youth entrepreneurship education. This group held several meetings over a two-year time period and has developed Criteria for Youth Entrepreneurship Education, which seeks to present a common approach to developing quality youth entrepreneurship programming. These Criteria are available at the Resource Guide web site, noted above.

ARC extends a special thank-you to the advisory committee for all the time and hard work spent in reviewing proposals and crafting program, and to Brian Dabson, CfED President, who has provided substantial support for these activities.

II. Sectorally Targeted Development. The Sectorally Targeted Development Advisory Committee is made up of regional practitioners, ARC State program managers, and local development district representatives. The Committee has met several times to develop a variety of activities to support target industries with unique competitive advantage to the region. As an introductory event, ARC hosted a conference on sector based development, Building on Our Strengths, in Lexington, Kentucky on January 12–13, 1999. More than 220 persons from all 13 Appalachian states attended this sold-out conference.

At the conference, ARC announced an RFP to fund projects that encourage strategic sectoral interventions in regional economies. The three main objectives of this RFP were 1) to develop innovative approaches that strengthen competitive, potentially competitive, or strategically important sectors; 2) to support entrepreneurs to create jobs in, or add to the wealth of, distressed counties and the regions in which they are located; and 3) to involve the private sector in meaningful and sustainable ways. At the recommendation of the committee, ARC earmarked \$238,000 from the Entrepreneurship Initiatives for these awards.

ARC received 24 proposals from 10 states in response to the RFP, which closed on April 1, 1999. Four members of

the Advisory Committee volunteered to serve as members of the RFP selection team and a well-defined review and scoring process was developed to rank proposals. In June, the selection committee met with six RFP finalists to review responses to questions that the committee had developed in earlier review sessions. The six finalists proposed to work in three sectors—value-added food products, furniture, and house boat manufacture—and finalists were encouraged to partner with each other, if appropriate, to undertake project activities. After a thorough review, the selection committee made recommendations to fund four projects:

Projects Recommended for Funding

	Award	Sector
Framestock Products Inc., KWPC, Kentucky	\$70,000	furniture
Specialty Food Cluster, ACEnet, Ohio	\$50,000	value-added ag.
Value-Added Agricultural Products, Appalachian Sustainable Development, Virginia	\$51,000	value-added ag.
Southeast Kentucky Wood Products, Center for Rural Development, Kentucky	\$65,500	houseboats
	\$236,500	

Twelve proposals that were not selected for support as part of this RFP were recommended for consideration to other funding sources, and six proposals were evaluated as not recommended for funding. ARC state program managers were forwarded proposals from their state that were recommended for consideration, and several states have provided subsequent support for these proposals. Additionally, several foundations were forwarded copies of selected proposals for consideration.

ARC is pleased that the RFP process and the Building on Our Strengths conference generated such interest in sector-based development strategies. More importantly, however, ARC States are now considering implementing sector based strategies as part of their economic

development approach, and more than 24 sector-based projects have now been funded through the Entrepreneurship Initiative.

ARC extends a special thank-you to the selection committee members for all the time and hard work spent in reviewing these proposals and a special thank-you to Dr. Stuart Rosenfeld, principal of Regional Technology Strategies, who has provided substantial support for these activities.

III. Innovations in Development Finance. Capital and credit gaps for rural businesses have been identified as a significant regional problem in research conducted by the Federal Reserve Board, ARC, and the Economic Research Service of the U.S. Department of Agriculture. These studies reveal that while the availability of capital for fixed-asset financing appears to be readily available, significant gaps exist in the availability of equity capital for start-up firms and for certain types of working capital financing. ARC convened an Innovations in Development Finance Advisory Committee to help shape activities in this area. Members of the committee include a range of regional practitioners, including microenterprise lenders, revolving loan fund representatives, state development finance authorities, bankers, and others.

The committee has underscored that gaps in the provision of equity capital for growing firms is the most significant capital barrier in the region, and it has developed a series of recommended interventions to address these gaps. The goal of these interventions is to create 4 to five non-venture capital investment funds in the region, each capitalized at \$10 million–\$20 million. The committee's specific recommendations focus on four activities to promote the development of community development venture capital funds in the region:

- Build partnerships with foundations and financial institutions to assess interest in investing in equity funds.
- Improve management capacity in the field.
- Expand existing institutions or support new institutions to develop these funds.
- Support capitalization of these funds.

These recommendations build on the interest expressed by the region's governors at the February 1999 ARC Quorum meeting and on discussions held at the April 1999 ARC White House meeting on the New Markets Initiatives. ARC believes the implementation of these committee recommendations will help to ensure that entities in our region will be well-positioned to take full advantage of the New Markets Initiative.

In support of these activities, ARC co-sponsored an introductory workshop on Community Development Venture Capital (CDVC), hosted by the national trade association, the CDVC Alliance. This program was held on June 23, 1999, in Pittsburgh, Pennsylvania.

To initiate partnership-building activities, ARC held a series of workshops entitled, Equity Capital for Rural Communities, October 25–27, 1999, in Pittsburgh and Charlotte, North Carolina. These workshops were held in partnership with the Federal Deposit Insurance Corporation, the Federal Housing Finance Board, the Federal Reserve Bank of Cleveland, and the Federal Reserve Bank of Richmond. More than 130 persons from financial institutions, philanthropies, and economic development entities attended the three programs. ARC views these three sessions as a good starting point for creating partnerships to support new development finance institutions in the region.

In order to improve management capacity in the region, ARC has invested in a regional co-investment fund and is considering creating a fellowship-management internship program. The new co-investment fund enables new investment funds to partner with a seasoned management team while making an initial group of investments, helping new fund managers gain valuable hands-on expertise. The fellowship program would enable potential fund managers to intern for six months to two years in both traditional venture capital funds and community development funds, thereby gaining valuable expertise through apprenticeship.

To support new and existing institutions interested in this field, ARC has invested in six rural equity programs—in Kentucky, Maryland, North Carolina, Tennessee, Virginia, and West Virginia—and several other states are

considering similar investments or have programs under development. Additionally, a new publication, *Capitalizing on Rural Communities—Emerging Development Venture Capital Funds in Appalachia*, has been produced with the support of publication partners—the Federal Housing Finance Board, the Federal Reserve Bank of Cleveland, and the Federal Reserve Bank of Richmond. This publication outlines the need for development venture capital funds in rural and distressed communities, explores how these funds differ from traditional venture capital funds, and presents several specific investment opportunities within Appalachia. The publication can be ordered from ARC or obtained online at www.arc.gov/programs/reginit/entrep.htm.

And finally, ARC has approved Application and Operating Guidelines to guide future investments in development venture capital funds in the region.

ARC extends a special thank-you to the members of the advisory committee who have been very active in planning these activities, and to Julia Rubin, Harvard University Business School, who provided substantial support for the three partnership sessions held in October 1999.

IV. Strategic Support for Business Incubators. The Business Incubation Advisory Committee, which is composed of business incubator managers and ARC state program managers, has begun to develop its scope of work. Business Incubators can provide crucial technical assistance to growing firms, and several states are interested in developing or expanding networks of business incubators. This advisory committee is looking at ways to identify and bring “best practices” from business incubators around the nation to the ARC region, facilitate the creation of a regional business incubation network, and implement regionwide technical assistance workshops. Sub-regional networks of incubators could be developed to share experiences, avoid duplication, maximize partnership opportunities, and provide technical assistance as needed.

The Committee recommended that ARC compile a comprehensive survey of business incubators in the region and host a regionwide best-practices conference targeted at rural incubator managers, local economic developers, and other important decision makers. The best-practice workshop, *Business Incubation for Rural Communities*, co-sponsored by the National Business Incubation Association, was held July 17–19, 2000, in Bristol, Virginia, and was attended by more than 200 persons. ARC has developed and distributed a comprehensive survey of business incubators in the region, and published the survey, *Business Incubation at Work*, in January 2001. The document is available at: www.arc.gov/programs/reginit/incsurv/bitoc.htm

ARC extends a special thank-you to the members of the advisory committee, who have been very active in planning these activities.

V. Project Approval Process. The Commission works through local communities and governors’ offices to identify projects for funding. Projects are developed locally by nonprofits, educational institutions, and other entities, often in conjunction with local Development Districts. Grantees are required to provide matching funds to support activities, ensuring local commitment now and enhancing local ownership in the future.

Each state uses a selection process that best fits its local infrastructure. Alabama, Ohio, Virginia, and West Virginia use a competitive RFP process to select Entrepreneurship proposals. New York and Pennsylvania require approval by local development districts for project submission, while North Carolina and Tennessee prefer to identify large regional projects for multi-year support. Entrepreneurship projects are then vetted through a state review process that includes approval by that state’s governor. Finally, the project is forwarded to the Commission for technical evaluation and approval by the Federal Co-Chairman.

Obstacles Encountered

The most significant obstacles encountered by the Initiative are the need to build institutional capacity in the region to credibly support entrepreneurs, and the ability to overcome local commitment to the traditional development strategies of recruitment and attraction.

Building institutional capacity—Institutions in remote rural communities often do not have the capacity to help entrepreneurs successfully grow enterprises. Training programs, private sector partnerships, and mentoring relationships with successful organizations from other communities can help bridge this gap. Through the Initiative, the Commission undertook a range of activities to enable community leaders to bring best practice into the Region, and to build partnerships with leading associations, consultants, and mentors to assist in developing local entrepreneurship efforts. Although these efforts to create important institutional linkages are ongoing and have positively affected local programs, they require sustained effort to overcome the skill deficit the region faces among its local leadership.

Commitment to traditional development strategies—The training and education activities noted above have encouraged state and local policy makers to view entrepreneurship strategies as additive, and not replacing traditional industrial recruitment strategies. Many states and localities have incorporated entrepreneurial approaches into their development toolkit. However, this stage of the Initiative lacks the scale to ensure that local communities maintain the commitment to entrepreneurship strategies that can lead to a permanent change in the economic landscape.

Critics of the Initiative note that significant gaps remain in Appalachia's basic physical infrastructure – the water, sewer, and roads needed to stimulate and support commerce. These critics argue that we cannot effectively develop and retain entrepreneurs if homes straight-pipe their waste into streams, if businesses cannot obtain clean water, and if transportation barriers increase the cost of commerce and make our firms uncompetitive. Further, some believe that investment in fixed assets represents long-term tangible

benefits to rural communities, as opposed to support for programs that dissipate when funding shrinks.

Other criticisms of the Initiative question the ability of entrepreneurship strategies to have a significant impact on rural economies. Some perceive that the significant job creation benefits of recruitment and attraction outweigh the risks of small business failure associated with entrepreneurial strategies.

Program Shortcomings

Though this initiative has laid the groundwork for achieving significant scale, it shares the shortcomings of other demonstration programs. It is unable to ensure that a successful start will lead to permanent change. First, without assured continued funding, there is uncertainty about the degree to which local communities will retain entrepreneurship strategies, along with traditional strategies of recruitment and attraction, in their development toolkit. Secondly, community development issues outside the scope of the Initiative pose significant challenges to achieving lasting change in the Region's entrepreneurial infrastructure.

Significantly affecting rural economies with a new approach to economic development requires long-term sustained effort. The Commission has taken several steps to address this challenge. The Commission has invested in extensive outreach to educate state and local policy makers to view entrepreneurship strategies as additive, and not replacing traditional industrial recruitment strategies. Additionally, the creation of this multi-year special grants program to support entrepreneurship has encouraged local developers to take risks and test innovative new approaches. The absence of continued targeted resources, however, raises the real possibility that local economic development officials and state funders will prioritize traditional infrastructure projects as the development of industrial and retail sites, extension of water and sewer lines, and new highways at the expense of newer entrepreneurial approaches. A continuation and expansion of funding for the Entrepreneurship Initiative

would allow these strategies to both mature and demonstrate impact, and thus become better integrated in the economic mainstream of the region.

The Commission has employed a flexible implementation framework that allows states to use diverse project development and selection strategies. Some states have supported numerous community-based programs, which have strong local leadership but are often less strategic. Other states have invested in large multi-year strategic initiatives that could have benefited from stronger linkages to local partners.

Lastly, there are challenges that lie outside the scope of the Initiative that can limit the effectiveness of these interventions. ARC, state, and local leaders must ensure that our rural communities provide quality schools, clean environments, and the other amenities needed to make rural communities attractive and competitive. Otherwise, our investments in entrepreneurship could result in the same exodus of successful firms seen with the Region's best and brightest high school graduates. Leveraging other strategic community development activities can help keep successful entrepreneurs in the communities that supported their birth.

Replicability

ARC believes the Entrepreneurship Initiative can be replicated in rural communities throughout the nation. Two critical elements for replication are 1) the program design—a partnership-based approach that builds local commitment, and 2) the implementation strategy—the education of state and local policy makers to foster strategic partnerships.

Program Design: The Commission works through local communities and Governors' offices to develop partnerships to ensure the implementation and continuation of effective programming. Projects are developed locally by nonprofits, educational institutions, and other entities, often in conjunction with local Development Districts. Grantees are required to provide matching funds to support activities, ensuring local commitment now and enhancing local

ownership in the future. Entrepreneurship projects are then vetted through a state review process that includes approval by that state's governor. Finally, the project is forwarded to the Commission for technical evaluation and approval by the Federal Co-Chairman. This bottom-up development process ensures that local leadership leverages strategic partnerships to result in long-lasting projects of sustained impact.

Implementation Strategy: As the Entrepreneurship Initiative was implemented, the Commission presented a range of information through workshops, publications, and high-level meetings to inform both policy makers and potential grantees. These activities helped to build a climate and culture supportive of entrepreneurship—an ingredient of the entrepreneurial infrastructure essential to success. In addition, these resources helped ensure that local communities leveraged best practice as they developed programming. Grantees were encouraged to purchase seasoned entrepreneurial education curriculum, leverage the resources of private financial institutions to create new credit vehicles, involve industry leaders to address challenges facing strategic sectors, and use the skills of experienced incubator managers to support new facilities. These partnerships with national leaders in the field and key institutional investors helped improve the chance for the long-term sustainable success of local activities. In addition, through each year of the Initiative, the Commission raised the bar for project funding, expecting states and communities to better understand what constitutes an effective program.

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Resources for Entrepreneurship

Appalachian Regional Commission

(www.arc.gov/programs/reginit/entrep.htm)

-Regional development organization

Association for Enterprise Opportunity

(www.microenterpriseworks.org)

-Trade association for microenterprise program providers.

Center for the Study of Rural America

(www.kc.frb.org/RuralCenter/RuralMain.htm)

-Research center based at the Federal Reserve Bank of Kansas City.

Community Development Financial Institutions Fund

(www.treas.gov/cdfi/)

-Leading supporter of development finance institutions.

Community Development Venture Capital Association

(www.cdvea.org)

-Trade association for community development VC funds.

Consortium for Entrepreneurship Education (www.entre-ed.org)

-National consortium of entrepreneurship education providers.

Corporation for Enterprise Development (www.cfed.org)

-Nonprofit devoted to linking economic development, community development, and asset-building initiatives.

Council for Adult and Experiential Learning (CAEL) (www.cael.org)

-Operator and researcher of best-practice adult learning programs.

Ewing Marlon Kauffman Foundation (www.wmkf.org)

-National supporter of entrepreneurship programming.

FastTrac (www.fasttrac.org)

-Leading entrepreneurship education provider for adults.

Junior Achievement (www.ja.org)

-Leading entrepreneurship education provider for youth.

Kauffman Center for Entrepreneurial Leadership

(www.entreworld.org)

-Leading supporter of local entrepreneurship initiatives.

KidsWay (www.kidsway.com)

-Leading entrepreneurship education provider for youth.

Lowe Foundation (www.lowe.org)

-Foundation that supports local entrepreneurship programs.

National Association of Small Business Investment Companies

(www.nasbic.org)

-Trade association for SBIC funds.

National Association of State Venture Funds (www.nasvf.org)

-Trade association for state and local venture funds.

National Business Incubation Association (www.nbia.org)

-Trade association for business incubation.

National Commission on Entrepreneurship (www.ncoe.org)

-Nonprofit devoted to educating policy makers about the benefits of entrepreneurship.

National Foundation for Teaching Entrepreneurship (www.nfte.com)

-Leading entrepreneurship education provider for youth aged 7-19.

National Venture Capital Association (www.nvca.org)

-America's leading resource for information on the venture capital industry.

National Women's Business Council (www.nwbc.gov)

-Good information on women and business.

NxLevel Training Network (www.nxlevel.org/)

-Leading entrepreneurship education provider for adults.

REAL Enterprises (www.realenterprises.org)

-America's leading provider of entrepreneurship education to rural youth.

RISEbusiness (www.riseb.org)

-Source for research on small and emerging businesses.

Rural Policy Research Institute (www.rupri.org)

-Source for research on rural development.

State Science and Technology Institute (www.ssti.org)

-Excellent resource on state and local technology development programs.

U.S. Small Business Administration (www.sba.gov)

-Manages SBIC program and other programs to support entrepreneurs

Young Entrepreneurs Organization (www.yeo.org)

-A global, nonprofit educational organization for young entrepreneurs.

ARC's Mission

Created by Congress in 1965, when Appalachia was considered "a region apart" from the rest of the nation, the Appalachian Regional Commission (ARC) is a unique federal-state partnership working to bring all of Appalachia's 22 million people into America's economic mainstream. ARC's mission is to be an advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life.



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The Appalachian Region includes all of West Virginia and counties in 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia. The Region contains 406 counties, with a combined area of nearly 200,000 square miles.

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