

**An Evaluation of the Appalachian Regional Commission's
Entrepreneurship Initiative**

**Submitted by
Regional Technology Strategies**

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Stuart Rosenfeld, Project Director
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Executive Summary

I. Introduction

In 1997 the Appalachian Regional Commission (ARC) launched an \$17.6 million effort to bolster the entrepreneurial infrastructure of Appalachia. The primary goal of this Entrepreneurship Initiative is to promote the creation and development of locally owned, high value-added firms that will increase local wealth and provide employment opportunities for local residents. It focuses on five areas:

- ⇒ Entrepreneurial education and training
- ⇒ Entrepreneurial networks and clusters
- ⇒ Technology transfer
- ⇒ Access to capital and financial assistance
- ⇒ Technical and managerial assistance

The importance of an entrepreneurial approach to economic development in the Appalachian region cannot be overstated. Such an approach helps strengthen and diversify the region's economic base through a strategy of "building from within" and stimulating growth of indigenous industries. It builds upon Appalachia's unique strengths by nurturing homegrown firms, encouraging innovation and risk-taking, and fostering an environment conducive to new business formation. While there is evidence of notable entrepreneurial activity in the region, the phenomenon is neither widespread enough nor at a sufficient scale to have substantial and sustainable regional impacts.

II. Research Approach

The Appalachian Regional Commission commissioned an external evaluation of the Entrepreneurship Initiative grants to (a) examine its funded projects and their respective impacts in sufficient depth to verify results, (b) identify outcomes and impacts not captured by standardized data, (c) develop other category-specific performance criteria, and (d) recommend actions to improve the effectiveness of continuing and future initiatives. The ARC awarded Regional Technology Strategies, Inc. (RTS) the contract to undertake the assessment and analysis based on a sample of 23 - 25 projects.

To collect the necessary data, the research team (1) conducted a careful review of information and documentation supplied to the ARC by grant recipients, (2) conducted a survey of the sample of projects supplemented by selected telephone interviews with project staff, (3) conducted telephone interviews with randomly selected clients and partner organizations from among names submitted by projects, and (4) visited two project sites for a more in-depth perspective.

III. Key Early Stage Findings

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It is very important to note that this was an initial evaluation effort based on an early set of projects. Most of the projects were short term and, when the evaluation was conducted, had been in operation for an average of just 18 to 21 months, and entrepreneurial outcomes generally require time for gestation and development. Further, the sample of projects evaluated was biased toward an early program stage mix of activities that favored education and training and networks. Later stage projects included a higher proportion of projects such as capital access and technical assistance, which are more likely to produce quicker results. Thus, one might expect increasing evidence of economic outcomes for the Initiative over time. The challenge will be to shift projects towards activities such as capital access and technology transfer that are more often associated with growth plans while continuing to develop the self-employment potential of the underemployed and unemployed.

These caveats should be kept in mind when interpreting results, given the long term-nature of entrepreneurial outcomes and impacts. However, the findings in this report provide an indication of preliminary program performance and outcomes that generally validate the ARC target outcomes and it provides meaningful insights that might aid in improving future implementation and outcomes of the ARC Entrepreneurship Initiative.

A. Characteristics of Projects:

- ⇒ The awards were relatively small. The median ARC grant in the sample was under \$60,000. Half of the project teams had staffs of fewer than three people, even during their peak period of effort, and only two reported five or more at peak.
- The grant recipient organizations also tended to be small. Thirteen of the organizations reported annual organizational budgets of less than \$1 million. About half of the grants were made to non-profit economic development agencies, and the other half were divided among government agencies, regional planning agencies, community organizations, universities, and community colleges.
- ⇒ Forty percent of the evaluated programs specifically targeted disadvantaged populations, while 35 percent targeted youth. The majority of sampled projects (57 percent) were located in counties designated as distressed by ARC.
- The internal evaluation and monitoring systems used by the projects tend to lack specific outcome measures. Although many grantees claimed to have conducted internal assessments, few could document tangible and measurable economic results. While only seven of 18 business assistance projects and three of 20 education and training projects lacked any formal evaluation, 43 percent of all projects cited “monitoring outcomes” as a problem.
- All grantee organizations used ARC funding to leverage or match other funds. ARC funds were half the total budgets of the projects in aggregate. Of the remaining funds, nearly a quarter were “other,” a fifth were state or county, and only one tenth of one percent were from fees for services.

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- Most projects were multi-purpose. Only two had a single purpose as defined by ARC. This reflects project developers' sensitivity to clients' preference for "one stop shops," and intermediaries able to provide a range of real and brokered services.

B. Project Activities

- The most common major activities of the projects are: (1) one-on-one assistance to new firms (74 percent); (2) education and training of adults (65 percent); (3) one-on-one assistance for existing firms (48 percent); (4) business networks among new firms (48 percent); (5) custom software development (48 percent); and (6) business seminars (44 percent).
- Half of client firms interviewed received assistance with gaining access to capital and 47 percent received managerial and technical assistance. Forty-two percent reported having received entrepreneurial training.
- Among programs that made loans, reported amounts were quite small. More than half were less than \$25,000. Although many of the loans went to micro-enterprises in which small amounts can have a large impact, these amounts are quite small for the technology-based businesses likely to generate growth and impact an economy.

C. Project Outcomes and Impacts

The evaluation uses a variety of measures to assess outcomes and impacts on individuals and the local economy. The first set of measures assesses relative degrees of satisfaction of clients with the intervention. The second important set evaluates the economic results of the intervention on the client such as new enterprises started, new markets, or new products lines. The third captures the more general impacts on the economy in terms of jobs created by the new enterprises, growth potential of the enterprises, and potential sustainability of the program.

Many of these outcomes were reported to the ARC in the grantees final report. Results reported in this evaluation may differ—in some instances, substantially—because a different time frame has been used for evaluation (i.e., not limited by the grant closing date), the measure is defined slightly differently, or programs that have been ended are integrated with other related programs that makes it impossible to attribute outcomes a specific grant. Taking these caveats into account, some of the following outcomes were reported.

Clients of the programs generally expressed high levels of satisfaction with the support they received. Of those interviewed, 70 percent expressed high satisfaction with services they received, 17 percent said they were satisfied, and only two were dissatisfied. Forty- three percent said the assistance or advice they received exceeded their expectations, 47 percent said it met them, while 10 percent still had unmet needs.

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Three-quarters of projects reported businesses developed new products, 55 percent indicated that firms upgraded technologies or management methods, and half reported starting new businesses.

About 52 percent of the sample projects reported creating jobs in existing firms and 39 percent reported saving jobs that would have otherwise been lost. Adults created 214 new firms—33 new firms with¹ and 181 without employees. Based on those projects that were able to report hard numbers in the survey, 356 new jobs were created—54 in new firms, 121 in existing firms, and 181 jobs through self-employment. Another 85 jobs were saved from extinction in existing firms. In addition, surveyed projects reported 46 new businesses created by youth or students as class projects, some of which could become self-sustaining businesses after graduation.

It is too early to determine impacts on the economy, and thus they can only be deduced from the aspirations of the clients. The objective of the majority of the entrepreneurs was to generate a livable income for an individual or family but the objective of a large minority was growth. It is clear that a significant number of the assisted businesses in fact have the potential and desire to grow and have an impact on the economy. Of the clients interviewed with businesses, 36 percent expected to “grow,” 55 percent wanted stable “lifestyle” businesses, and 4 percent were attempting to reverse a decline.

D. Obstacles and Problems

- Difficulty in attracting business customers was noted by many of the grantees. Getting existing businesses to use the available services was most often mentioned as a problem, with ten projects citing it—nine as minor and one as major problem. Students were more readily attracted to programs.
- Monitoring and evaluation was also an issue, with five projects designating it a major problem and five a minor problem. The difficulty that the evaluation project staff experienced in obtaining data about project outcomes supports the perception that this is a major problem.

IV. Summary Observations

The ARC Entrepreneurship Initiative supported programs that produced numerous individual successes (people who have improved income and opportunity) but fewer that could demonstrate significant impacts on their local economies in the short time frame. Most funded programs supported very small businesses and start-ups—predominantly in low-growth sectors and serving local markets.

The ARC grant itself clearly matters to the grantees' communities. Responses to the project survey indicate that ARC funding was essential. Half of the projects reported that they would not have gone forward without it and it was important to the timing of

¹ Not all projects reporting the creation of firms with employees specified the actual number of employees.

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most others. Only two would have secured other funding and moved ahead without delay.

Sustainability is crucial to the success of the initiatives. The majority (14) of the grants analyzed funded new programs, and all but one of the existing programs had previously received some form of government or foundation support. In this context, sustainability—or the lack of it—becomes an important outcome. The entrepreneurial initiatives are more likely to have lasting impacts if they continue beyond the ARC grant period. While some projects are short-term and designed to address an immediate issue, sustainability builds local capacity for entrepreneurial support.

Diversification of the funding base supporting these projects is the key to sustainability. The 18 programs that continued beyond the end of their ARC support did so by drawing upon multiple funding sources. The largest number—almost three-fourths—reported receiving state funds. The large state role in follow-up funding suggests that states may be using ARC grants as start-up funds or to give promising ideas a test run. Only seven of the continuing programs included fee income from clients among sources of continuation funding. Client fees provided less than one percent of program budgets during the ARC grant period. The small role played by client funding is reinforced by the results of the client survey. Those who reported paying for services were predominantly students paying tuition. Only a few paid nominal fees for services. Thus, it appears that very few entrepreneurial support programs are self-sustaining based on fees for services, and thus require continuing support after the initial grant.

The size of the organizations awarded grants is important. It affects staff support capacity and long-term sustainability and has implications for the ability to manage not only project activities but also federal grant funds and reporting requirements. The capacity of small organizations to manage federal grants is critical to success, yet often limited.

The size of awards may have some influence on outcomes. Larger grants are associated with slightly higher outcomes, as measured by new businesses started, although the differences are too small for statistical significance.

The inability to attract business customers is a common problem. It may reflect lack of sufficient attention to, or analysis of, market demand in the design and proposal stage. Proposals for projects that deliver services ought to be able to demonstrate core demand or the projects may be solutions in search of problems.

Use of specific, outcome-based indicators is lacking in internal monitoring and assessment systems. Overall, the projects do not appear to be effectively tracking performance as a management tool to provide feedback to local staff so they can make adjustments, solve problems, and work toward continuous improvement.

Projects have useful community impacts. About one-half of projects reported improved entrepreneurship education and training opportunities and business assistance services in the community after the ARC project ended (Table 8). Seventeen percent of the projects report an increase in the availability of funding for new business start-ups even

though only a small number of projects give capital access a priority among their objectives.

V. Recommendations

Based on the above findings and observations the research team recommends the following.

1. Move the Entrepreneurship Initiative to Scale

The current ARC Entrepreneurship Initiative has established useful project models and assisted individual entrepreneurs and businesses. It would be worthwhile to continue the effort at the current scale. Reducing or eliminating a program that has begun to achieve some degree of success and demonstrate potential, and which depends on patience and long-term support to realize its value, would send the wrong message to communities that may have few other options. However, to have a substantial impact on the region's economy, the program needs to be expanded to a more significant scale. Any expanded investment needs to be made with a multi-year time horizon (since these efforts require sustained commitment) and with consideration to the changes and improvements suggested in our subsequent recommendations.

2. Provide more technical assistance

Funded programs must build local capacity if they are to be sustainable. ARC is a wholesaler, but for the system to work, ARC must build the capacity of the retailers that deliver the services. Many grantees would benefit greatly from additional external support. Small organizations in rural areas—especially those trying new and innovative activities—have few places to turn to for advice and counsel. Three possible ways to introduce support and supplement local resources are:

- ⇒ to build a technical assistance budget into all grants and designate either a cohort of consultants or lead (existing) agency/institutions for all new projects.
- ⇒ to form learning networks comprised of grantees with similar or complementary goals to help share experiences and learn from each other.
- ⇒ conduct more staff training for project directors, requiring all its principal investigators to assemble at least annually for budget and management workshops, a project fair, and presentations.

3. Take a market-oriented approach

The limited resources available and the nature of the ARC Entrepreneurship Initiative—an intervention to address market failures—suggest that its operation should be as market-oriented as possible. One of the problems reported by projects was difficulty in attracting clients to their services. While grant applicants are required to demonstrate a general need for proposed services a more thorough analysis of the target population and the willingness of potential clients to use services will ensure better utilization. ARC

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could provide a small grant to finance the market research and commit to a larger project grant only when and if the market research reveals sufficient demand.

4. Structure and support evaluation systems

The performance measurement process for the Entrepreneurship Initiative should offer ARC an opportunity not only to respond to its GRPA responsibilities but also help its grantees improve project management. For ARC to guide grantees in this process, it must have its own activity and outcome measures aligned into a meaningful system. Thus, the first step is for ARC to assess and revise its performance measures for the Entrepreneurship Initiative so that they can effectively serve as the organizing context for funded projects' performance measurement. The research undertaken in this project provides only a starting point for this endeavor. Grantees need standard guidelines, technical assistance and additional support to conduct valid evaluations of outcomes that are related to proposed goals. Nine of the projects noted monitoring progress and outcomes as a problem—five as a major problem. Few project staffs have the necessary resources or competencies to follow the progress of their clients or students and adequately measure the outcomes. ARC could encourage more effective management and reporting by allocating resources to cover additional costs of a performance measurement system. Additional resources needed would vary with the type and scale of the evaluation, but in general this would only require about three to five percent of grant funds. To help grantees meet performance measurement needs, ARC could provide more specific guidelines and require that proposals specify how data will be collected and used to measure project outcomes.

5. Build regional technical assistance capabilities

These capabilities would each be targeted at some aspect of the market for entrepreneurial efforts (e.g., micro-enterprises, youth entrepreneurship, cooperatives, and technology or market development) or an industry cluster if a critical mass of a particular sector exists. These capabilities would not have to be developed at new organizations (although they could be) but more likely would operate in existing stable, high quality organizations or institutions. Each would be funded to further develop its expertise, provide technical assistance, store knowledge and information, provide contacts and broker relationships, conduct training sessions, and perhaps be responsible for conducting evaluations. Organizations in the ARC region with greater levels of capacity could be designated as mentors to provide technical assistance to less experienced groups. Those places that implemented REAL, for example, have access to a national support center and network that allows them to access information and get advice.

I. Introduction

Economic transition, exacerbated by the increased pace of globalization and technological advance, has continued to result in job losses in much of the Appalachian region. New sources of business activity are needed to diversify a regional economy that has been overly dependent on footloose manufacturing plants and vulnerable industries like mining and tobacco.

One way to strengthen and diversify the region's economic base is to pursue a strategy of "building from within" and bolstering the growth of indigenous companies. Such an approach promises a more stable Appalachian economy by nurturing homegrown firms, encouraging innovation and risk-taking, and fostering an environment conducive to new business formation. However, while there is evidence of entrepreneurial activity in Appalachia, the phenomenon is neither widespread enough nor at a sufficient scale to have substantial and sustainable regional impacts. In addition, research has found deficiencies in the region's entrepreneurial support infrastructure.

In response to these challenges the Appalachian Regional Commission (ARC), in 1997, launched a \$17.6 million effort aimed at bolstering the entrepreneurial infrastructure of Appalachia. The ARC recognizes that Appalachia's future economic growth and prosperity will be enhanced by a population that is better equipped with skills to start and manage new businesses and by structures that can support businesses in their start-up and early development stages.

Entrepreneurship has many definitions. It can be distinguished from the concepts of small business creation or self-employment. According to one definition, entrepreneurs are "individuals who blend innovation with sound business practices to commercialize new products and services that result in high-growth firms."² From this perspective, entrepreneurial firms are innovators with high-growth potential. Entrepreneurial companies generally start out very small. But not all small businesses are necessarily entrepreneurial, if one accepts that growth must be a goal of entrepreneurship. In rural, distressed areas this distinction may not be quite as critical. In these Appalachian regions, small businesses of all types are needed—those with high-growth potential and also those formed for life-style purposes or self-sufficiency that primarily serve local needs. The ARC Entrepreneurial Initiative takes a broad view of entrepreneurship by promoting the creation of both life-style and growth-oriented firms.

The primary goal of the ARC Entrepreneurship Initiative is to promote the creation and development of locally owned, value-added firms that will increase local wealth and provide employment opportunities for local residents. The ARC focuses its entrepreneurial development efforts in five general areas:

- Entrepreneurial education and training
- Entrepreneurial networks and clusters
- Technology transfer
- Access to capital and financial assistance

² Jay Kayne, *State Entrepreneurship Policies and Programs*, Kauffman Center for Entrepreneurial Leadership, Kansas City, MO, November 1999.

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- Technical and managerial assistance

Through November 2000, ARC had invested over \$17.6 million in the Entrepreneurship Initiative, funding 169 educational, business assistance and capacity-building projects. Organizations that received grants reported leveraging \$13.9 million from other funding sources. The 169 projects funded were distributed across all thirteen ARC member states. Of these projects, 83 supported the provision of entrepreneurial education and training; 86 provided technical and managerial assistance to firms; 48 assisted with enhancing access to capital and financial assistance; 53 were intended to support the formation of networks; and 14 focused on technology transfer.³

The first 50 projects that were completed reported the creation of 249 new businesses and the creation or retention of 587 jobs. The 119 on-going programs are projected to create or retain 3,586 jobs in the region.

Even though each grantee is required to measure and report on one or more of a set of standard “hard” outcome measures, the types of projects were quite disparate. They range from capital financing to new business formation to introducing an entrepreneurial culture through the public schools. Thus, the Appalachian Regional Commission asked an external evaluator to (a) examine its funded projects and their respective impacts in sufficient depth to verify the results; (b) identify outcomes that may not be captured by the standardized data collected; (c) compare project results to national and regional outcomes for comparable projects; (d) suggest performance criteria and measures that might better assess project and program success; and (e) recommend actions that may improve other entrepreneurial activities in the ARC region and influence the direction of future ARC initiatives.

In Fall 2000, ARC awarded Regional Technology Strategies, Inc. (RTS) a contract to assess the achieved and potential impacts of the Entrepreneurship Initiative grants based on a sample of 23-25 projects and to suggest strategies that might improve their success rate and increase the value they add to their economies.

The Initiative awarded grants to projects in the five areas mentioned: (1) entrepreneurial education and training, (2) entrepreneurial networks and clusters, (3) technology transfer, (4) business and management assistance, and (5) access to capital and financial assistance. Most projects, however, included services in more than one category. Recognizing the wide scope of programs funded under the Initiative, the research team paid considerable attention to identifying the appropriate selection criteria for the sample of projects to be evaluated. These criteria capture individual project results while at the same time provide appropriate information for cross-case analysis so that summative results may be obtained.

The methodology, described below, was designed to accomplish three objectives:

- establish, benchmark, and verify evaluation criteria appropriate for the range of entrepreneurship projects sponsored by ARC.
- develop an assessment of performance and results of selected projects, using the evaluation criteria

³ Total exceeds 169 because most projects have multiple objectives.

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- draw conclusions and provide information to guide policy, programmatic, and reporting procedures for ongoing and future ARC entrepreneurial initiatives

II. Methodology

The evaluation is based on the following information and intelligence:

- analyses of existing national, international, regional, state, and local evaluations;
- information submitted by grantees to and compiled by the ARC and selection of sample of projects to be evaluated;
- information submitted by project managers in response to surveys, requests for documentation, and lists of clients, customers, and/or stakeholders;
- surveys of selected clients, customers, and/or stakeholders; and
- visits to two project sites.

The nature and timing of the grants influenced the evaluation methodology and the results. First, the projects funded vary not only by project types but also by approaches and by targeted client/customer populations. For example, some projects are aimed at expanding or sustaining existing entrepreneurial micro-enterprises, some target youth in an attempt to influence their attitudes and future aspirations—but not necessarily their immediate actions. Some attempt to disseminate information or alter a community’s “culture,” while others work to create new companies. Thus, it is evident that these very diverse project goals require different evaluation perspectives and measures. Second, projects also vary in their geographic and demographic emphasis, i.e., regional versus local economic impacts, serving broad population groups versus targeting specific segments of the population. Third, the sample of projects evaluated was in fact biased toward an early program stage mix of activities that favored education and training and networks. Subsequent projects funded have included a higher proportion of projects such as capital access and technical assistance, which are more likely to produce quicker outcomes. As a result, one might expect increasing evidence of economic outcomes for the program over time. Fourth, the projects evaluated vary in their time to fruition; some are multi-year and, in some instances, multi-phase and some are single events. Entrepreneurial outcomes generally require considerable time and patience to allow for gestation and development. Finally, some of the projects (generally the newer ones) altered their work plans during the course of the projects, which could affect their outcomes.

The research team addressed these evaluation design issues by (a) considering different stakeholder objectives in the survey instrument design and interview protocol and (b) relating project assessments back to the initial and subsequent iterations of ARC objectives. RTS identified findings related to performance and outcomes appropriate for particular project types and, through cross-case analysis, identified areas of commonality and variation.

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Using a cross-case analysis, the research team attempted to discern elements of similarity and difference, compare evaluation metrics and outcomes between and across project types, and, where appropriate, compare outcomes and results from ARC projects to those reported in similar national, state, and local program evaluations. Because of the absence of any control group of communities and limited sample size, the statistical tools used to analyze the cross-case results are straightforward. Nonetheless, we believe we have gathered useful information concerning the types of outcomes most often achieved and the types of programs most often successful in meeting their objectives.

A. Review of Literature

The assessment began with a review of other project evaluations at the international, national, state, and local levels that were similar or comparable to those sponsored by the ARC. These were classified according to the same five categories used in the ARC initiative—access to capital and financial assistance, business and management assistance, entrepreneurial education and training, entrepreneurial networks and clusters, and technology transfer. The review produced the results summarized in Table 1 and described in more detail in Appendix D. It became the starting point for developing the methodology.

The literature revealed several appropriate metrics useful in evaluating entrepreneurship programs. For example, the metrics used to evaluate seed and venture capital programs typically are a mixture of activity and accomplishment measures. Internal activity measures include deal flow, debt/equity ratio, number of deals exited, leveraging of private funds, and internal rate of return. Meanwhile, accomplishment measures include tax revenue generated, success of funded businesses, and whether the target population or area was served. With the exception of tax revenue, the metrics mostly focus on microeconomic, programmatic impacts rather than macroeconomic changes, highlighting the difficulty of detecting large-scale impacts even of high-investment programs.

As one would expect, the procedure for evaluating micro-finance programs is substantially different. The most common metrics used to evaluate such programs include participant income, rates of entry into self-employment, length of self-employment spells, length of unemployment spells, the degree to which the program reaches its target population, and a variety of qualitative variables that fall under the category of “empowerment.” Like those used to assess the performance of venture capital programs, these metrics are largely micro- rather than macro-level. As the name indicates, the relatively small scale of micro-finance programs suggests that it is difficult to connect them with macroeconomic change.

The literature review examined assessments of diverse programs providing management and technical assistance to entrepreneurs. These programs range from micro-enterprise programs, such as those who participated in the Aspen Institute Self-Employment Learning Project, to a national network of Small Business Development Centers, which is a partnership between the Small Business Administration and local institutions of higher education.

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Micro-enterprise programs target potential or existing entrepreneurs and focus performance measurement on indicators such as the number of new business start-ups, survival rates, and expansions. Small business assistance programs measure their success in the number of new jobs created and the wages paid new workers at assisted firms. The examples of performance indicators are not mutually exclusive; rather the difference is a matter of emphasis. Both micro-enterprise and small business assistance programs consider customer satisfaction, which can be measured with a customer survey and/or indicated by a willingness to pay for services. All programs face resource constraints, and thus performance indicators include efficiency measures. Funding agencies and program administrators track not only the number of jobs created but also the cost per job created.

Business incubators are often the vehicles through which assistance is delivered to start-up companies. An incubator can take the form of a multi-tenant building that provides affordable office space for new firms. Incubator firms typically share critical office services and equipment in order to reduce overhead costs. In addition to office services, incubator programs may provide affordable rent, managerial and technical assistance, financial assistance, and increased opportunities for interaction with firms both inside the incubator and within the larger local economy. A recent national study of 50 incubator programs used measures such as sales growth, firm survival rates among incubator graduates, number of new technologies, patents/trademarks developed, and jobs created in the community to evaluate incubator outcomes.⁴

The benefits resulting from management and technical assistance to small businesses are commonly defined at three levels: (a) the individual assisted, (b) the firm (if there is one) assisted, and (c) the community. While the program goal is to help an individual start and grow a business, that is not the only potential positive outcome. There are benefits derived from a person learning that he/she lacks an entrepreneurial aptitude, personality, or skills and/or has a weak business idea and thus avoids a debacle. For some, entrepreneurial training may convey entrepreneurial skills that help them obtain better jobs or advance in their current jobs. A comprehensive performance measurement system goes well beyond counting business start-ups. It tracks the economic situation of program clients (or a sample of clients) for a period after they have received services.

Desired outcomes at the firm level include increased profitability and growth as measured by sales and employment. Desired outcomes at the community level also are measured in terms of job growth. Additional community benefits might include a more diverse economic base, greater wealth, and increased corporate involvement in non-profit, volunteer activities.

Entrepreneurship education provides skills that are not ordinarily taught in general curricula, while also giving students an opportunity to experience the practical effects of the skills being acquired. While there is a long tradition of business concepts being

⁴ Hugh Sherman and David Chappell, Methodological challenges in evaluating business incubator outcomes, *Economic Development Quarterly*, Vol. 12, No. 4, Nov. 1998, pp. 313-321.

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taught in *higher* education, entrepreneurial programs are now expanding into primary and secondary school as well. Studies of these programs demonstrate that entrepreneurship is a topic of interest among students of all ages.

There are numerous issues that make it challenging to evaluate the effectiveness of entrepreneurial education.⁵ These include (1) lack of consensus on a definition of entrepreneurship and what should be included in entrepreneurial education, (2) rapid change in programs over time, (3) many entrepreneurship education programs are in their infancy, and (4) lack of consensus on how to measure success. Moreover, there are multiple factors, in addition to education, that might motivate someone to start a business. Previous studies of entrepreneurial education programs have examined a variety of performance measures including number of business start-ups, firm survival rates, satisfaction levels among graduates and their contributions to the local economy.⁶

Most evaluations of networks include qualitative factors. Among the most often used metrics are firms' perceptions of the usefulness and impact of network membership, changing attitudes about inter-firm collaboration, firms' level of trust and cooperation with other firms, level of commitment to the network, and the competitive environment of member firms. Evaluations focus on these characteristics because they are some of the most significant for determining a company's willingness to participate in and commit to joining a network. Other qualitative characteristics include impact on supply chain relationships, firms' assessment of services offered by the network sponsor, and firms' opinions of the hindrance and success factors of business networks.

Evaluations of networks also include quantitative characteristics, especially those evaluations that seek to construct a typology. Quantitative variables most commonly measured include differences in employment levels, revenues, and profitability; number of shared activities undertaken by member firms; and characteristics of member firms such as size, sales, and markets. There does not, however, appear to be a set of benchmarks determining a standard for the level of quantitative change that would mark success or failure of a network. Most evaluators, therefore, include qualitative as well as quantitative measures.

Some of the intermediate outcome measures for technology transfer programs include adoption of new technologies, level of new investments, development of new products, and increased productivity and value-added. Longer-term economic outcomes may be measured in terms of increased profitability and size of firms, greater degree of innovation among firms, and increased firm-level employment.

⁵ Nancy Upton, et al., *Have we made a difference? An examination of career activity of entrepreneurship majors since 1981*, Baylor University, <http://hsb.baylor.edu/html/cel/ifb/research/babpap.htm>.

⁶ Z. Block and S. Stump, Entrepreneurship education research: Experience and challenge, 1992. In D.L. Sexton and J. Kasarda (eds.), *The State of the Art in Entrepreneurship*, Boston: PWS-Kent Publishing.

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Table 1
Sample Performance Metrics for Assessing Entrepreneurial Programs

Benefits To:	Process Outputs	Intermediate Outputs	Economic Outcomes
INDIVIDUALS Education & Training	Attendance at classes, seminars, and meetings Retention rates	“Graduations” Information and skills acquired Improved productivity of individual Customer satisfaction	Employment/self employment Increased income Increased no. of business starts
FIRMS Management & Technical Assistance	Number/hours of one-on-one counseling sessions Market information provided Business plans completed Loan applications completed Access to office space and equip.	Loans obtained Expanded sales/revenues Business procedures modified Increased productivity and/or value added Customer satisfaction Reduction in overhead costs	More profitable and/or larger firms More competitive firms Increased employment at firms
FIRMS Technology Transfer	Number/hours of one-on-one counseling sessions Information provided about applicable technologies Classes and seminars Introductions and contacts	Adoption of new technology New investment Development of new product Increased productivity, value added Customer satisfaction	More profitable and/or larger firms More competitive firms Increased employment at firms Expanded sales/revenue Increased market share
FIRMS Access to Capital	Loan applications prepared and received Amount of funds dispersed in loans/number of loans	New investment in firms Increased productivity, value added Payback rate Customer satisfaction Increased access to venture/equity capital	More profitable and/or larger firms More competitive firms Increased employment at firms Faster regional growth
INDUSTRY Networks and Clusters	Attendance at network events Association membership	Multi-firm partnerships Increased productivity and/or value added for industry	More profitable and/or larger industry, More competitive industry Increased employment in the industry
COMMUNITIES	Community meetings Local press coverage on successful local entrepreneurs Attention from local leadership	Increased employment Reduced under and unemployment Community satisfaction	Increased tax revenues Changes in local bank assets lending (proxy for wealth and access to capital) Increased household and per capita incomes Changes in participation rates in free and reduced school lunch program More diverse economic base

Source: RTS literature review (see Appendix D)

B. Information from Project Files

The evaluation team catalogued and organized the information about the entrepreneurship projects that was available in ARC's files. This included the original proposals, staff summaries of projects, correspondence between projects and ARC, and interim and final reports. Some core data about the project, such as location, grantee organizations, project managers, project budgets, time lines, and reported outcomes, were entered into a database. With respect to outcomes, the ARC has a set of process and economic measures by which it holds projects accountable. These include—on the process side—numbers of students, trainees, participants, and businesses served and new telecommunications sites and—on the outcome side—numbers of jobs retained and created and of new businesses created. This information was used to (a) select the sample of projects to be evaluated and (b) establish baseline conditions against which to measure outcomes.

C. Sample Selection

The intent of the evaluation was to select a sample of between 23 and 25 grants stratified roughly (a) in proportion to the numbers of grants in which each of the five categories of activities is included in projects, (b) by concentrations by state, and (c) by size of grant. The ultimate selection process, however, was limited by the length of time since or to completion of the project. Since economic outcomes of most development initiatives—particularly those that rely on business startups and expansions—take considerable time to demonstrate measurable results, projects that had not been operating long enough had to be eliminated. The original intent was to include projects that are either closed or beyond a milestone that was expected to produce results. The process also eliminated grants that were considered too small in scale to have measurable impacts—generally a single event, such as a conference.

When the evaluation began, 133 projects had been funded⁷. The grants that had been completed or were near completion (i.e., two or more years of operational experience) totaled 48, which was the “potential” sample base of projects. Of the 48, 25 were already closed, and 23 were nearly closed. After screening out those projects undertaking one-time events such as conferences or which were very small, the actual sample was 24 projects. These 24 grants did in fact roughly match the proportional mix of types (Table 2). Thus, the sample includes the largest number of projects focusing on entrepreneurial education and training and the next largest on technical and managerial assistance and fewer on technology transfer. But 16 of the 24 targeted more than one category. The six grants with a single focus were all entrepreneurial education and training.

⁷ The number of funded projects increased to 169 during the period from the start of the evaluation to the completion of the final report.

Table 2
Number and percentage of projects by category

Category	All Grants		Sample	
	Number	Percent	Number	Percent
Entrepreneurial education and training	83	58%	21	88%
Entrepreneurial networks	53	37%	9	38%
Technology transfer	14	10%	3	13%
Technology and management assistance	86	61%	15	63%
Access to capital and financial assistance	48	34%	7	29%

The assessment also roughly matched the mix of grants that had been made to date (Table 2), which resulted in sampling all ARC states except North and South Carolina, which together received only seven grants.

Table 3
Number and percentages of grants by state, as of September 2000

State	All Grants		Sample	
	Number	Percent	Number	Percent
Alabama	14	9.9%	1	4.2%
Georgia	5	3.5%	1	4.2%
Kentucky	12	8.5%	3	12.5%
Maryland	8	5.6%	1	4.2%
Mississippi	6	4.2%	2	8.3%
New York	14	9.9%	4	16.7%
North Carolina	3	2.1%	0	0%
Ohio	27	19.0%	3	12.5%
Pennsylvania	7	4.9%	2	8.3%
South Carolina	4	2.8%	0	0%
Tennessee	6	4.2%	1	4.2%
Virginia	20	14.1%	3	12.5%
West Virginia	16	11.3%	3	12.5%

D. Survey Design

The next step was to design a survey instrument for project managers that would supplement the existing reported economic outcome data with fields that reflected the outcomes and evaluation metrics and methods in the project proposals. Although the goal was to identify and measure economic outcomes, some of the projects in the portfolio emphasized other outcomes—particularly those that sponsored education activities at grade school level and therefore have only very long-term consequences.

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Informed by the reviews of project documentation, the literature review, and discussions with ARC staff, the questionnaire in Appendix C was mailed to all project managers. It included a cover letter from ARC's executive director to lend legitimacy to the endeavor and increase the likelihood of response. The survey instrument requested names of at least six clients served and/or stakeholders plus additional information describing outcomes of the project (e.g., progress reports, survey results, newsletters, and case studies).

This survey protocol included the following elements:

- confirmation of project activities, timing, and status;
- funding, staff time, and other inputs invested in the project that supplemented ARC resources;
- intermediate steps undertaken by the project, e.g. workshops held, number of technical assistance visits made, number of companies assisted in an incubator;
- methods and metrics used to monitor project activities; availability of written progress and final reports; methods used to obtain information, e.g. surveys, follow-up meetings, case studies, focus group or advisory group feedback; outside evaluations;
- outcomes and results from the project, as tracked through formal evaluative procedures and also understood through informal feedback and experience;
- comparison of achieved outcomes after project activities with anticipated outcomes at proposal stage before project was undertaken;
- reporting (i.e., how are results from project activities communicated to stakeholders, in addition to ARC, and feedback obtained from this); and
- learning (i.e., what has been learned as a result of the project and its outcomes, how has this fed back into ongoing or future project activities, and what metrics might be more appropriate or realistic in future activities of this kind).

E. Client Survey

Two clients were selected at random from those submitted for a telephone interview. In some instances all of the clients/participants were underage students so individuals from partner organizations were interviewed instead. These interviews were used to further probe participants' experiences with the programs, resources invested, and outcomes achieved. This process was designed not only to verify what the program managers reported but also to surface results and outcomes that programs may not have been fully appreciated. The protocol for the client survey is included in Appendix C.

F. Site Visits

After the information and interviewing process was completed, two projects were selected for site visits to collect more in-depth information. The first site was the North Georgia Technical Institute Entrepreneurship Demonstration Project serving a six-county mountainous, scenic, and essentially rural part of northern Georgia. The host institution was North Georgia Technical College (NGTC). The catalyst for this project was the college president, who believed there was an unmet need for entrepreneurship that could help grow the travel and tourism industry. A study by the Georgia Department of Technical and Adult Education that found 23 percent of the individuals graduating from a technical institute between 1987 and 1997 started their own business helped document the need. The project goal was for at least 15 students to complete three elective entrepreneurial education courses (all offered at three sites) that could be merged into a certificate program and to create a Small Business Resource Center on the college's Clarkesville campus that provides no-cost technical and managerial assistance. In year two, the project would also work with local high schools to provide entrepreneurial education to their students, and expand the local network of education and development agencies supporting entrepreneurship.

When the grant expired, 35 students were enrolled in entrepreneurship courses, and therefore the State funded it through June 2000 to allow them to complete the program. Another full year of state funding will support the entrepreneurial course offerings through June 2001. Currently, 70 students are taking entrepreneurial education courses with five enrolled in the certificate program. Course enrollments did not meet initial targets, new business creation exceeded projections. Enrollment in year one totaled 60 students in 5 offerings, and the number of participating individuals was 43, close to the projected number. Three new businesses were started by program clients. In year two, total enrollment reached 88 (projected to be 110)—primarily students taking an entrepreneurial course as an elective within another course of study and not seeking certification. Ten new businesses were started, almost 50 percent over the projection. Staff turnover, insufficient partner involvement, and lack of management capabilities have proved barriers to meeting all of the project's goals, such as offering courses at local high schools and increasing enrollments in the certificate program (which may have been an unrealistic aim). Yet the project appears to have helped institutionalize entrepreneurial courses throughout the state's college system.

The second site was the Levi Strauss Employees Entrepreneurial Training in Knoxville, Tennessee. This project was funded to help ease the impact on the community after Levi-Strauss announced plans to close its Knoxville plant in 1998. After discovering that a large number of workers about to be laid off—most of whom were African-American, female, and heads of households—already had a small business on the side or were interested in starting one, the Council for Adult and Experiential Learning started a support program. ARC awarded a grant to Economic Ventures, Inc. (a non-profit subsidiary of the Knoxville Community Development Corporation) and the Pellissippi State Small Business Development Center to further assist these displaced workers who were interested in entrepreneurship. EVI organized peer lending groups and training classes, and helped package loans. But the separation package from the Levi Strauss Foundation included \$6,000 grants to displaced workers who completed a

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business plan, which reduced interest in a peer lending program that began with a loan of only \$500. The project augmented existing activities already underway, such as seminars on how to complete the Business Start-Up worksheets. The program established an office on-site at the Levi plant where workers received technical assistance both one-on-one and in group settings. The SBDC staffed the office with one specialist for 20 hours a week during the initial nine months. EVI offered seminars and individual counseling in credit education.

The results of this initiative are well documented and quite impressive. Overall, service delivery reached over 90 percent of those displaced Levi Strauss workers who were interested in entrepreneurship. Of the 2,300 workers displaced by the plant closing, 945 indicated interest in entrepreneurial assistance, and 880 received assistance from the project. The 17 peer lending groups formed involved a total of 85 new companies. Of the 880 individuals receiving services, 102 are full-time entrepreneurs, and all these businesses are still in operation. The other 778 participants have chosen to work full-time and run a small business on the side to supplement their income and perhaps to develop a second career after retirement. The major limitation on regional outcomes is that almost all businesses created serve a local market and are not likely to make a large contribution to the economic base of the community. But they do provide a living to their owners, and the enhanced availability of services improves the quality of life for residents.

III. Findings and Analysis

The projects evaluated represent about one-fourth of the awards that were made in the initial stages of the Initiative. However, because the grants had to have been closed or near closed for the evaluation to be meaningful, the eligible projects (on the basis of time since inception) totaled only 48 projects. Of that 48, only 24 projects were selected for the study after further screening to ensure a representative sample that was fairly proportional to the universe of grants made. Three-fourths of the surveyed projects were closed, and the remaining fourth were near closure. Of the projects visited, one was closed and one in the process of closure. The characteristics of the projects evaluated appear to be approximately representative of all the awards made to date in terms of the distribution of aims, scale, location, and sector. (See Tables 2 and 3). Of the 24 projects selected for assessment, 23 responded to the survey questionnaire. Further details of the survey results are contained in Appendix B.

A. Caveats

This analysis must begin with several caveats. First, there may be a bias toward positive results. Much of the data collected was self-reported and thus may be subject to some level of subconscious embellishment. Further, because the clients interviewed were selected from among a larger number provided by the grantees, there may be a bias towards satisfied and/or successful clients.

Many of the grants were made to existing organizations with business support missions, and the ARC grant funded activities that either continue or supplement much more

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substantial related activities. As a result, it may have been difficult for the grantee to assign specific outcomes to activities carried out with the ARC grant funds. Some of the seemingly larger-than-life outcomes may have been due to aggregation of outcomes with those from other related programs or grants.

Two other factors complicate the assessment. The first is that nearly half of the programs surveyed reported altered goals between the award and our assessment. The second is that most of the projects were relatively young and when the evaluation was conducted had been in operation for only 18 to 21 months. Too little time has elapsed from inception to evaluation to measure ultimate outcomes. With the evaluation occurring close to project completion, it is likely that costs are under-emphasized and benefits overemphasized (Shapira and Youtie, 1998). For example, many small firms will require additional support, and many are likely to go out of business within a year or two of establishment. On the other hand, there will also be a few significant successes, but these will not be apparent until more time has elapsed.

B. Characteristics of Projects

Scale and Capacity: The awards made under the ARC Entrepreneurial Initiative have been on average relatively small. For the group of surveyed projects, the median grant was just under \$60,000. In aggregate, the ARC grants provided just over half the funding for the evaluated projects. Clearly this effort is concentrating on relatively small-scale efforts. Half of the project teams had staffs of fewer than three people, even during their peak period of effort. Only two projects reported a staff of five or more people at peak.

About half of the grants were made to non-profit economic development agencies, and the other half were divided (no category with more than two awards) among government agencies, regional planning agencies, community organizations, universities, and colleges. The grant recipient organizations also tended to be small. Thirteen of the organizations reported total organizational budgets of less than \$1 million.

The size of the organizations that were awarded the grants is of interest because it may be associated with staff support capacity and long-term sustainability and has implications for the ability to manage not only project activities but also federal grant funds and reporting requirements. The capacity of small organizations to manage federal grants is critical to success, yet often limited. The project visits suggest that prior experience with federal grants is more important than the size of the organization.

Figure 1
Distribution of Size of Overall Organizational Budgets

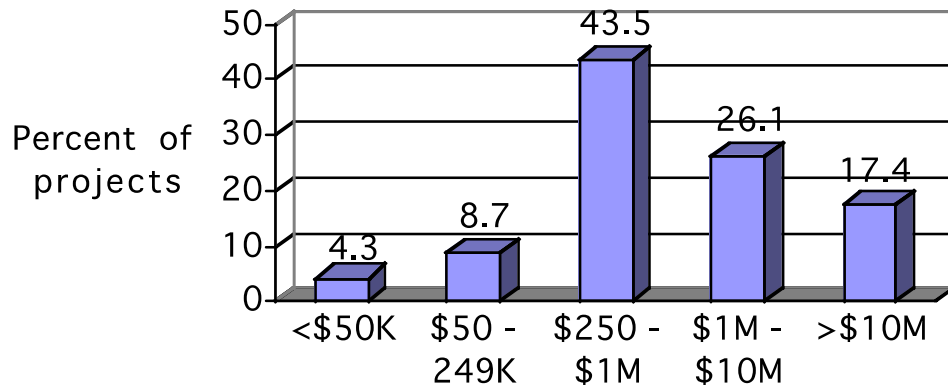


Figure 2
Distribution of ARC Project Budgets

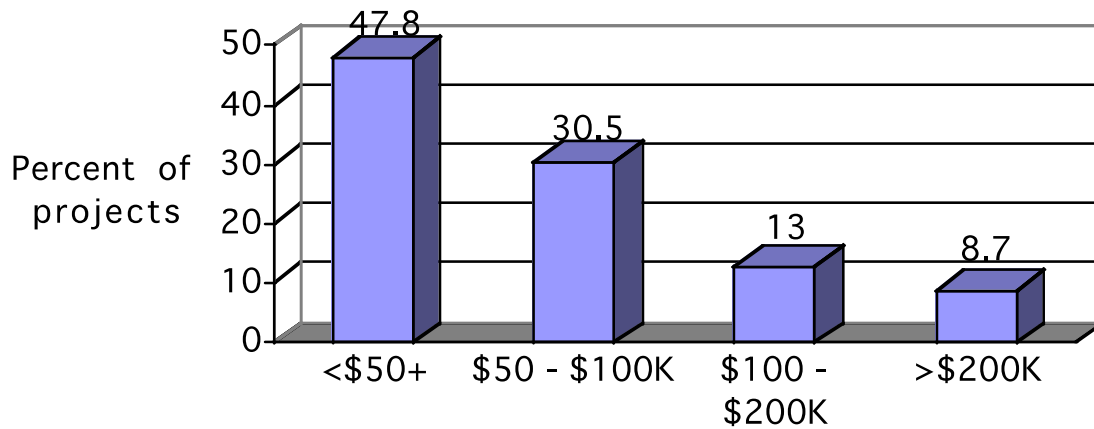
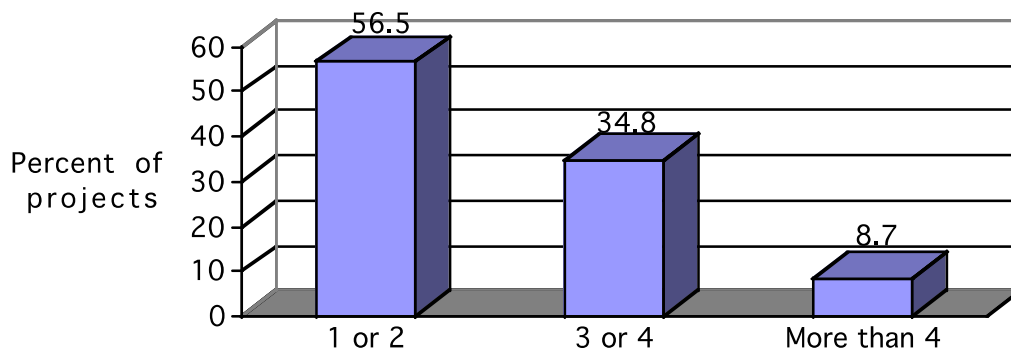


Figure 3
Distribution of Peak Project Staff Size



Source: Survey of ARC Entrepreneurship Projects, 2000. (N=23.)

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Target areas/populations: Most surveyed projects (70 percent) targeted multi-county regions, but only three spanned more than one local development district and only one crossed a state border. The small target areas are consistent with the small project size and generally represent either the grantee organization’s service area or the portion of that service area that lies within the ARC region. Forty percent of the evaluated programs specifically targeted disadvantaged populations, while 35 percent targeted youth. The most specific program targeted workers displaced by the closing of the Levi-Strauss plant in Knoxville.

The majority of sampled projects (57 percent) were located in counties designated as distressed by ARC (Table 4). Thirty-five percent of projects surveyed were in counties designated as non-metropolitan by ARC and 61 percent were in both metro and non-metro counties.

Table 4
Distribution of Projects by ARC Area Designation

ARC County Designation	ARC Score	Surveyed Projects	Area Designation	Number of Projects	Percent of Projects
Distressed	1.00	2	Distressed (all or in part)	13	57%
	1.50	7			
	1.75	4			
Transitional	2.00	9	Transitional	10	43%
	2.50	1			
Competitive	3.00	-	-	-	-
Attainment	4.00	-	-	-	-
Total	-	23		23	100%

Note: ARC score values between the ARC county designations are multi-county estimates provided by ARC staff. Area designations to either “distressed” or “transitional” are made by RTS.

Internal evaluations: The internal evaluation and monitoring systems used by the projects tend to lack specific outcome measures. Although many grantees claimed to have conducted internal assessments, few could document any tangible and measurable economic results. *This weakness was confirmed in the survey by the large number of grantees (43 percent) that named “monitoring outcomes” as a problem.* The most common types of assessments used were based on degrees of learner or customer satisfaction at the conclusion of an intervention (or program) as measured by survey instruments. Only two education and training projects and three technical assistance project conducted evaluations at some period of time after completion. This is consistent with large-scale evaluations of programs such as Small Business Development Centers, which have been found to have difficulty with self-assessment due to imprecise performance metrics and inconsistent data collection.⁸

⁸ Johnson, S.L. and Holly M. Mudd. *Performance Measurement in the SBDC Program, Inspection Report No. 98-09-01*. Washington, D.C.: U.S. Small Business Administration Office of Inspector General, 1998.

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Resources: ARC funds comprised half the total budgets of the projects, in aggregate. Of the remaining funds, nearly a quarter were “other,” a fifth were state or county, and only one tenth of one percent were from fees for services. The distribution of leveraging was:

Table 5
Relationship of Percent Match to Scale

Grantees		Percent Match
Percent	Number	
42%	8	25% or less
26%	5	26% to 100%
32%	6	More than 100%

Source: Survey of ARC Entrepreneurship Projects, 2000. (N=23.)

Somewhat surprisingly, the largest matches were from the smaller organizations. Of those reporting more than a 100 percent match, two-thirds had organizational budgets of less than \$1 million. All grantee organizations used ARC funding to leverage or match other funds.

Range of goals: The ARC Entrepreneurship Initiative was designed to ensure that Appalachian communities have the means to start, manage, and expand local businesses. These include access to capital and financial assistance; entrepreneurial skills and knowledge (education and training); networking and sector development (social capital); technology transfer; and technical and managerial assistance. All funded projects embraced at least one of these categories.

Most projects are multi-purpose. Only two projects in the sample had only a single purpose as defined by ARC. Both were education providers. This reflects project developers’ sensitivity to the clients’ preference for “one stop shops,” and intermediaries that are able to provide a range of real and brokered services. Most needs of small businesses are multi-dimensional. For example, acquiring new technology requires new skills and often capital and new management systems. Still, a common complaint of a client was the inability to acquire a necessary but related service from the grantee, such as access to capital or technical materials.

There was *significant emphasis among grantees on using networks*. But most actual activities worked with existing networks and introduced new members, and did not form new networks (only 5 percent). It is evident, however, that the value of collective action and cooperative efforts is becoming widely accepted and embedded in the conventional wisdom of regional economic development. This finding is reinforced in current network literature.⁹

⁹ Cf. Kingsley, Gordon. *Establishing the Building Blocks: A Follow-up Evaluation of USNet’s Foundation Forum on Inter-Firm Collaboration*. USNet Evaluation Working Paper No. 9504. Chapel Hill, N.C.: Regional Technology Strategies, Inc., 1995, and Fulop, Liz, and Jo Kelly. *Survey of Industry Network Initiatives in New South Wales*. Final Report prepared for the Strengthening Local Economic Capacity Project, an initiative of the Commonwealth Department of Housing and Development. Kingswood, N.S.W., Australia: University of Western Sydney Nepean, 1995.

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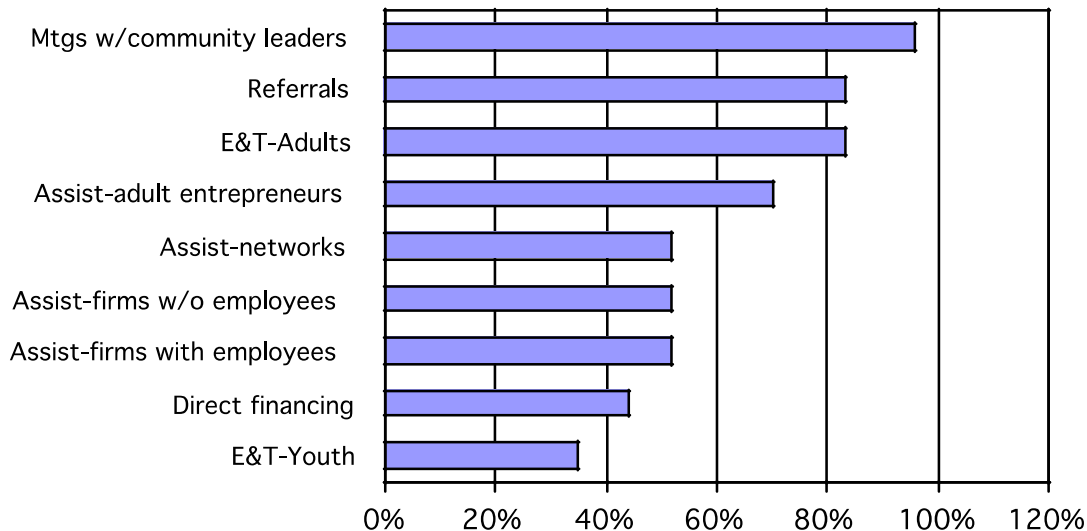
Frequency of categories of activity: The most common major activities of the projects are: (a) one-on-one assistance for new firms (74 percent); (b) education and training of adults (65 percent); (c) one-on-one assistance for existing firms (48 percent); (d) business networks of new firms (48 percent); (e) custom software development (48 percent); and (f) business seminars (44 percent). (See Table 6.) Technology related activities, such as technology transfer or technology opportunities research, were quite infrequent and in fact were cited as a major emphasis by only four of the 23 projects surveyed.

Table 6
Frequency of Major and Minor Activities Reported
by ARC Entrepreneurship Projects

ACTIVITY	Major Emphasis	Minor Emphasis	Percent Major	% Major or Minor
One-on-one assistance- <i>new start-ups</i>	17	3	74	87
Education and training of adults	15	2	65	74
One-on-one assistance- <i>existing</i> firms	11	8	48	83
Business networks- <i>new start-ups</i>	11	9	48	87
Custom software development	11	1	48	52
Business seminars	10	3	44	56
Curriculum development	8	4	39	52
Business opportunities research & marketing	9	7	39	70
Business networks- <i>existing</i> businesses	9	8	39	74
Training of staff and other trainers	8	9	35	74
Local and regional needs assessment	8	7	35	65
Loan or equity fund	8	3	35	48
Referral systems to other service providers	7	8	30	65
Community conferences, meetings	6	10	26	70
Education and training of students	5	4	22	39
Technology opportunities research	4	10	17	61
New physical facilities developed	4	4	17	35
New economic development strategies	4	11	17	65
Government procurement assistance	2	6	9	35
Distance learning	2	1	9	13
Web site	2	8	9	44
Business internships	1	5	4	26

The ARC funded projects appear to be well connected to their communities and to broader economic development efforts. Nearly all (96 percent) of the project managers surveyed reported that they met with other community leaders to discuss and plan the project. Eighty-three percent referred clients to other sources of assistance, which clients recognized and appreciated. The most common services delivered were adult education (83 percent), individual assistance to adults starting new business (70 percent), assistance to networks (52 percent), and assistance to existing firms both with and without employees (52 percent).

Figure 4
Percent Frequency of Services Provided to Participants
Reported by ARC Entrepreneurship Projects



Many services were free, and where clients did pay a fee for their service it was nominal—less than \$100 and often as low as \$10. Therefore, it is highly unlikely that these programs will become self-sustainable based on income.

Scale of intervention: The intervention or services received by a client can range from a simple one-time response to a question to intensive support extending over a period of months. Although impacts are not necessarily related to time spent together, the duration of the interaction is one indicator of the importance of the intervention to the outcome.

The reported intensity of interaction was greatest for youth education (where the project usually had a captive audience) and for assistance to entrepreneurs with no employees starting a new business. It appears that total class time was included in time for youth entrepreneurship programs, whereas the intensity of interaction was much lower for adult education, where more than half reported less than eight hours of contact, and for assistance to firms with employees.

The data on intensity of the interventions, as indicated by hours of contact, is quite skewed. For example, one project at the University of Alabama is responsible for 89 percent of the businesses with employees receiving more than 30 hours of assistance and 71 percent of adults receiving more than 309 hours of assistance in starting new businesses and one in New York is responsible for 55 percent of the mid-range assistance (8 to 30 hours) in the latter category.

In the programs that make loans, the reported amounts are quite small. More than half of those loans made were less than \$25,000. Although many of the loans went to micro-enterprises in which small amounts can have a significant impact, these amounts

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generally are too small for the kind of technology-based businesses that are likely to generate growth and impact an economy.

The distribution of both activities and outcomes are highly skewed and, with respect to most, one or two programs produce a very large proportion of the total outcome. This is not surprising since the scale and regional scope of the projects are quite varied, but it does distort many of the aggregated statistics¹⁰. For example:

- Two projects account for 79 percent of all adults trained, one under Team Pennsylvania and one the Lighthouse Program in West Virginia, both covering large geographic multi-county areas.
- Two projects account for 86 percent of all youth educated, one in Kentucky (Forward in the Fifth) and one under Team Pennsylvania (REAL), again both responsible for large multi-county regions.
- Two projects, the Levi Strauss project and the ACCORD project, account for 78 percent of all new firms started without employees.

C. Degrees of Satisfaction

Clients served generally expressed high levels of satisfaction with the funded projects. Of those interviewed, 70 percent expressed high satisfaction with the services they received, 17 percent said they were satisfied, and only two were dissatisfied. Forty-three percent said the assistance or advice they received exceeded their expectations, 47 percent said it met them, while 10 percent still had unmet needs. While these responses are overwhelmingly favorable, it is important to emphasize that the lists of clients from which those surveyed were drawn were provided by the projects themselves.

Another dimension of satisfaction is that of the grantees with ARC's technical support. Two-thirds of the project managers surveyed found ARC technical support moderately or very useful, but seven responded that they did not receive any. All but three said ARC provided opportunities to learn about the experiences of other similar programs.

D. Economic Outcomes and Impacts

The conclusions about outcomes and impacts were synthesized from four sources of information: (1) surveys from project managers; (2) personal conversations with project managers; (3) surveys from clients of programs; and (4) data submitted to the ARC in progress and final reports. Additional and more detailed information was obtained from the two site visits. While it is not possible to strictly compare the outcomes reported to the study with those reported as ARC targets because the time frames were different, i.e., some projects were not yet closed and some well beyond their closing date, the aggregate results are sufficiently close to validate the ARC data.

¹⁰ Where appropriate, we report median results, which are more typical for most projects, rather than the average, which can be skewed by a small number of outliers.

1. Documented outcomes

The Entrepreneurship Initiative supported programs that produced numerous individual successes (people who have improved income and opportunity) but few projects were able to demonstrate significant impacts on their local economies. About one-half of the surveyed projects reported that they had assisted business start-ups by adults, while one-half reported business start-ups by youth. Similarly, just over half (52 percent) of the surveyed projects reported that they had helped to create jobs in existing businesses and 39 percent reported saving jobs that would have otherwise been lost. Adults created 214 new firms—33 new with employees¹¹ and 181 without employees. Based on projects that were able to report hard numbers in the survey, 356 new jobs were created—54 in new firms, 121 in existing firms, 181 jobs through self-employment. Another 85 jobs were saved from extinction in existing firms. In addition, surveyed projects reported 46 new businesses created by youth or students as class projects, some of which could become self-sustaining businesses after graduation.

Although such activities helped many individuals, the relatively small scale of the projects and the nature of the businesses assisted limit broader impacts. Most of the funded programs supported very small enterprises and start-ups, predominantly in non-traded sectors¹² and serving local markets, or youth business projects. Those programs that produced enterprises with the greatest capacity to expand the economy are highly leveraged operations, with ARC funds an important—but not sole—component.

These results are not unusual or unexpected. Other studies have found that, while micro-enterprises have economic development potential, the difficulties of self-employment limit their impacts.¹³ Moreover, it is apparent that an increasing proportion of services are becoming part of the traded sector. This is particularly true of information and knowledge based firms. Service firms generally require a smaller initial capital investment than manufacturing industries, which traditionally have dominated the traded sectors. Service firms also have the potential to export and create a local multiplier that increases the impact of the revenue they directly bring into the local economy. However, the evaluation team found that most of the service businesses assisted by surveyed projects were locally serving.

Furthermore, only a subset of assisted businesses had an orientation towards growth. Of the clients with businesses interviewed:

- 36 percent planned to “grow” larger,
- 55 percent wanted a stable “lifestyle” business, and
- 4 percent were attempting to reverse a decline.

¹¹ Not all projects reporting the creation of firms with employees specified the actual number of employees.

¹² Non-traded industries produce goods and services that are consumed locally. Since these sectors serve the local economy, they do not bring in “new money,” rather they re-circulate existing dollars. Thus, there is no net addition to local income.

¹³ Schreiner, Mark. *Lessons for Microenterprise Programs from the Unemployment Insurance Self-Employment Demonstration*. St. Louis, Mo.: Washington University in St. Louis Center for Social Development, 1999.

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While most businesses started by high school students show some income, they are not true sustainable enterprises. Instead, they are more akin to the “supervised occupational experience” in secondary agricultural education, in which students are expected to carry out business activities that demonstrate profit and measure their productivity. For example, the 29 “businesses started” through ACENet’s project are still school based projects and not independent and sustainable enterprises and, in fact, many of the student entrepreneurs will very likely go on to higher education after graduation. The ultimate success of the project will be determined by the number of students that return to the region to start businesses.

Many of the projects that reported specific activities or outcomes were unable to quantify or estimate the numbers to support them. Those that offered education were usually able to provide enrollment data, but quantitative measures of technical assistance were less frequently kept. For example, 12 projects stated that they provided assistance to businesses with employees but only nine were able to estimate even the number of firms served; 12 projects provided assistance to businesses without employees, but only eight were able to estimate the number of companies. North Georgia Technical College, for example, reported new business start-ups but due to staff turnover and poor or non-existent records could not document them.

Although the value of the intervention is not related only to time together, one might suspect that learning is related to the time-based intensity of the experience. The data show the following.

- Time spent on the education of youth—an in-school and thus captive audience—was greater than time educating adults. Slightly more than 95 percent of youth received more than 30 hours of education, while only 17.9 percent of adults received more than 30 hours. More than half the adults had less than eight hours of learning.
- Less time was spent assisting adult entrepreneurs or existing businesses *with* employees than in assisting entrepreneurs *without* employees. Almost 39 percent of the businesses with employees and 31 percent of adults received less than eight hours of help, but only eight percent of businesses with no employees received less than eight hours. It is possible that the assistance to the micro-enterprises is more critical to survival and thus they request more support.

2. Views from Clients of Programs

Information about the people served by the various projects comes from telephone interviews and project surveys. The client firms interviewed varied significantly in terms of the goods and services they provide. Table 7 shows the variety of firm types included in this analysis. They range from high-tech manufacturing and computer services to home-based day care.

More than half (55 percent) of the business owners started their firms for stability and to support their current lifestyle while only 36 percent were interested in growing. Most spent a great deal of time with the program—which may be why their names were submitted to RTS by program staff. Eight percent of clients reported having greater than 20 interactions with program staff.

The highest percentage of firms interviewed—50 percent—received assistance with gaining access to capital followed by 47 percent that received managerial and technical assistance. Forty-two percent reported having received entrepreneurial training.

**Table 7
Client Survey Respondents by Type of Firm**

Manufacturing	Business Services	Personal Services	Retail/Wholesale
Analog switches	Gene cloning	Child day care (2)	Bed and breakfast
Metal fabrication	Computer services and repair (3)	Hair salon (2)	Building products
Industrial equipment	E-commerce, web design	Embroidery	Fly fishing shop
Electronics	Glass installation and repair		Natural personal care products
Fine grain, high purity ceramics	Carpet installation		Restaurant (2)
Hand-painted ceramics	Insulation services		Book store
Furniture parts	Door repair		Vitamins and herbs
Nanostructure optical devices	Medical case mgmt.		

Source: RTS survey of ARC Project clients

Additional information about the people served by the projects can be gleaned from the “successes” cited in the survey responses. Each project was asked to provide examples of particularly successful results, and all but a few complied. Twenty-eight businesses were identified as potential clients for the survey. Based on the somewhat sketchy information about successful entrepreneurs or companies contained in the content of the brief description, we know that *at least*:

- 18 percent (5) were disadvantaged entrepreneurs and 18 percent (5) were youth
- 32 percent (9) were new enterprises, and a third of those (3) were value added firms and the rest local services
- 21 percent (6) were expansions of existing small firms through new markets or products, 11 percent (3) were youth operating small but income generating “projects,” and 11 percent (3) resulted in better jobs in existing firms
- 21 percent (6) received loans and seven percent (2) received grants¹⁴

This small sample supports the findings of other entrepreneurial support programs; that is, most new businesses are local service providers. For example, the Economic Ventures Incorporated effort to help workers in Knoxville displaced by the closing of the Levi-Strauss plant reported that its clients started 102 new businesses. Almost all of those new businesses provide services to a local market. One in five provides child care, one in six produces crafts for sale, and one in eight provides sewing services.

¹⁴ Percentages need not total 100 due to multiple responses.

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While a more diverse client base may provide a more diverse mix of new businesses, the Levi Strauss experience illustrates the preponderance of “non-traded” products from new businesses resulting from entrepreneurial programs targeting disadvantaged individuals—in this case, low-skill females.

Some aspects of the program’s impact from the client’s perspective were not readily quantifiable. For example, a few clients stated that they had become more self-reliant. In the words of one client: “the program was great. Without it we wouldn’t have anything—we would still be on welfare.” There were other instances where starting a business enabled an individual to purchase needed medication and care for an elderly relatively at home.

E. Program Outcomes: What Really Matters?

The grant itself clearly matters. Responses to the project survey indicate that ARC funding was essential to carrying out the initiative. Half of the projects reported they would not have gone forward at all without the ARC grant, and it was important to the timing of nearly all others. Only two grantees believe they could have secured other funding and moved their projects ahead without any delay.

The size of the project may have some influence on outcomes. Larger ARC grants are associated with slightly higher outcomes, as measured by numbers of new businesses started, although the numbers are too small for statistical significance.

Sustainability is crucial to the success of entrepreneurial initiatives. The majority (14) of the grants analyzed funded new programs, and all but one of the existing programs had previously received some form of government or foundation support. In this context, sustainability—or lack of it—becomes an important outcome. The ARC Entrepreneurial Initiative is more likely to have a lasting impact if the funded activity continues beyond the grant period. While some projects are short-term and designed to address an immediate issue, sustainability builds local capacity for entrepreneurial support.

Diversification of the funding base supporting these projects is the key to sustainability. The 18 programs that continued beyond the end of their ARC grant did so by drawing upon multiple funding sources. The largest number of respondents—almost three-fourths—reported that they received additional funding from state agencies. The large state role in follow-up funding suggests that states may be using ARC grants as start-up funds or to pilot test promising ideas. This was the case with one of the programs to visited—the Entrepreneurial Education Program at North Georgia Technical College.

Non-ARC federal support was a distant second as a source of continuation funding. Eight of the 18 continuing programs received federal funds from other agencies. This group included the other project site visited, Knoxville (TN) Economic Ventures Incorporated (EVI). It has partnered with an Empowerment Zone to support a continuing and expanding program. EVI also received local government funding before and during the ARC grant and continues to be funded by the city. ACENet, with the help of ARC funds, was able to secure a direct congressional appropriation about 20

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times the size of its ARC grant. This will allow the project to complete its complex and high cost entrepreneurial curriculum development process.

Fees for services are negligible sources of revenue. Only seven of the continuing programs included fee income from clients among their sources of continuation funding. As noted previously, client fees provided less than one percent of program budgets during the ARC grant period. The small role played by client funding is reinforced further by the client surveys. Clients who reported paying for services were predominantly students who paid school tuition or to enroll in a workshop, and only a few others paid very nominal fees for services. This finding is consistent with nearly all government programs that provide technical assistance or offer training to very small firms and entrepreneurs, particularly in poor regions. Very few entrepreneurial support programs become self-sustaining. Therefore, an issue for ARC to consider as it initiates new programs is how they will be sustained and what entity might step up to assume responsibility for supporting it after ARC funding ends.

The experiences gained from ARC-funded projects expanded the capabilities and capacities of grantee organizations. Over half of the organizations reported a greater willingness to seek outside funding for project support, and almost half reported a greater willingness to invest their own resources in entrepreneurial assistance projects. About half reported significant increases in entrepreneurial education training opportunities (52 percent) and businesses assistance services (48 percent) available in their community. Table 8 shows the broad range of positive impacts.

Transitional versus distressed location only modestly influences outcomes. An analysis that tested for differences between projects based on their ARC area designation (distressed versus transitional county status) revealed only a few modest differences.¹⁵ More than expected, sampled distressed area projects built on earlier funded projects, while sampled projects in transitional areas tended to be new. Sampled projects in distressed areas were *more likely* to have been started in 1998 or later. The typical (median) project duration was shorter in distressed areas than in transitional areas. Sampled projects in distressed areas typically had a *larger* peak staff than those in transitional areas. Comparing the median values for sampled projects reporting detailed budgets, projects in distressed areas tended to have *larger* total budgets than those in transitional areas, although the typical ARC contribution was the same in both types of areas. Sampled projects in distressed areas were *less likely* than expected to undertake curriculum development and loan or equity funding. Finally, projects in distressed areas were *as likely* as those in transitional areas to report new businesses started by adults and youth, but less likely to report jobs created or saved in existing firms.

Projects have useful community impacts. About one-half of projects reported improved entrepreneurship education and training opportunities and business assistance services in the community after the ARC project ended (Table 8). Seventeen percent of the projects report an increase in the availability of funding for new business start-ups even

¹⁵ Care in interpretation is needed due to small sample sizes.

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though only a small number of projects give capital access a priority among their objectives.

Table 8
Project Impacts

For the following factors, please compare the position before the start of the ARC project with the position after the end of the project.	Percent of projects reporting	
	Significant increase	No change
Host organization's willingness to seek outside state and federal funding for entrepreneurial assistance projects after the completion of the ARC project	56.5	4.3
Entrepreneurship education and training opportunities available in the community after the completion of the ARC project	52.2	8.7
Business assistance services available in the community after the completion of the ARC project	47.8	21.7
Host organization's willingness to invest its own resources in entrepreneurial assistance projects after the completion of the ARC project	47.8	8.7
Host organization's willingness to seek local community funding for entrepreneurial assistance projects after the completion of the ARC project	43.5	8.7
Your knowledge of the capabilities of other organizations within the community who provide entrepreneurial training or business assistance	39.1	8.7
Your knowledge of the capabilities of other organizations outside your local community who provide entrepreneurial training or business assistance	34.8	91.3
Amount of funding available for new business start-ups after the completion of the ARC project	17.4	43.5
Number of business network groups in operation in the community after the completion of the ARC project	8.7	47.8

Source: RTS Survey of ARC Entrepreneurship Projects (N=23)

F. Obstacles and problems

The inability to attract clients for business assistance services was one of the most frequently noted problems among grantees. While only one project cited difficulty in attracting existing client firms as a major problem, nine others indicated that it was a minor problem. This may reflect lack of sufficient attention to, or inadequate analysis of, market demand in the design and proposal stage. Proposals for projects that deliver services must include some evidence a reasonable base of demand. Otherwise the project may be a solution in search of a problem. The scale of the problem cited, however, suggests that either the initial projections are optimistic or marketing efforts are inadequate. Most clients interviewed reported that they learned of the program informally through person-to-person rather than any media-based channels. Of the clients interviewed, half learned about the program through referrals, 17 percent by word of mouth, and 27 percent through advertisements.

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The other most commonly named problem was monitoring and evaluation. Five grantees named this a major problem and five a minor problem. The difficulty that the evaluation project staff experienced in obtaining data about project outcomes supports the perception that this is a major problem. As noted previously, rigorous internal assessments were rare.

The problems with monitoring and assessment have broad implications. Overall, the program does not appear to be taking advantage of the fact that tracking performance is more than a means for funding agencies and others to judge the success of a project or program. Tracking performance is also a management tool to provide feedback to managers so that they can make adjustments to correct problem areas and work for continuous improvement. While there were many problems with monitoring and evaluation, there was at least one notable exception. Economic Ventures Inc. (EVI), one of two sites visited, has harnessed the power of performance management to build program quality. The EVI intake process gathers relevant information about clients' situations, compiles it into a database and updates it annually. As a result, EVI knows which clients are improving or not improving their businesses. Analysis of these data combined with survey results of client satisfaction guides program modifications. The result is a successful program that is responsive to clients' needs. Not coincidentally, it also is market oriented and offers services for which there is demonstrated demand.

Difficulties with monitoring and assessment at the individual project level are pervasive enough to suggest that it is systemic. For ARC and other federal agencies, the Government Performance Reporting Act (GPRA) drives the outcome evaluation process, and to respond to GPRA reporting requirements ARC must gather and compile relevant performance information from its funded projects. This system is both new and complex, and thus must be viewed as a work in progress.

The current organization of projects within the Entrepreneurship Initiative does not support a comprehensive performance measurement system. Research into evaluation of other projects with similar goals produced a range of metrics and methodologies, described in the methodology section. The lowest level of metrics focuses on activity counts, and feeds into intermediate outcomes, which assess the success of different strategies and finally into outcome measures, which indicate whether or not the programs are achieving their goals. It was difficult to align any but the lowest level metrics, the activity counts, with the current system of organizing ARC projects, which focuses on functions such as technical assistance, and capital access rather than outcomes.

The ability to attract capable staff (two respondents named it a major problem and three, a minor problem) and develop or get access to technical materials also were problems cited in multiple sites (one named it a major problem and six, minor). Some projects noted problems finding and keeping staff. One responded to a survey with the comment that "finding quality staff often takes time in rural communities." Both evaluation and attracting and retaining staff were problems in the North Georgia Technical College project. The two problems exacerbated each other as staff turnover erased any institutional memory that might have countered the lack of written information about clients at the business assistance center.

IV. Recommendations

The Entrepreneurship Initiative to date represents a modest but potentially significant success. It is unlikely that the program alone will transform localities, but it clearly provides useful services and has tangible benefits for many parts of the Appalachian region. It is premature to detect any significant regional economic impacts. Most of the projects were short term and, when the evaluation was conducted, had been in operation for an average of only 18 to 21 months. However, these early findings provide an indication of preliminary program performance and outcomes as well as meaningful insights that can aid in improving implementation of ARC's Entrepreneurship Initiative.

It is clear that the ARC grant funds are needed to support the local enterprise development efforts in the grantees' communities. Responses to the project survey indicate that ARC funding was essential to half of the projects that reported they would not have gone forward without it and important to the timing of most others.

A synthesis of the findings from this evaluation reveals a few core themes with regard to the implementation and performance of the Entrepreneurship Initiative. There is a need to make the projects more sustainable at the local level. An entrepreneurial development program must be at a sufficient scale in terms of dollars and time invested in order to have lasting impacts. The local entrepreneurial initiatives are more likely to bring about the desired changes in the regional economy if they continue beyond the ARC grant period. While some projects are short-term and designed to address an immediate problem, sustainability builds capacity at the local level for ongoing entrepreneurial support.

Another major theme is the need for a better performance measurement system in order to assess more consistently the outcomes of the Entrepreneurship Initiative. This will be critical as the program continues over time and its actual affects on the region's economy become more readily measurable.

Finally, with regard to the underlying rationale of the Initiative, it is apparent that entrepreneurship is conceived of in the broadest sense. The funded projects cover a wide range of activities including everything from education and training of youth to technical assistance for existing firms. The types of businesses served include some with high-growth potential, but many small enterprises or sole proprietors in business for lifestyle reasons. Such an approach can be justified but it must be realized that the outcomes and impacts will vary depending on the nature of the activity and type of client served. This has very real implications for program design, implementation, and performance measurement. With these core themes in mind, drawn from the evaluation findings, the research team recommends the following.

1. Move the entrepreneurship initiative to scale

The current ARC Entrepreneurship Initiative has established useful project models and assisted individual entrepreneurs and businesses. It would be worthwhile to continue the effort at the current scale. Reducing or eliminating a program that has begun to

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achieve some degree of success and demonstrate potential, and which depends on patience and long-term support to realize its value, would send the wrong message to communities that may have few other options. However, to have a substantial impact on the region's economy, the program needs to be expanded to a more significant scale. Any expanded investment needs to be made with a multi-year time horizon (since these efforts require sustained commitment) and with consideration to the changes and improvements suggested in our subsequent recommendations.

2. Provide more technical assistance

Funded programs must be able to develop greater local capacity if they are to be sustainable. ARC's primary role is as a wholesaler of services, but for the system to work ARC should help build greater capacity among the retailers who deliver the services. Many organizations that were awarded grants would benefit greatly from additional external support and assistance to maximize their chances for success. Small organizations in rural areas—especially those attempting new and innovative activities—have few places to turn for advice and counsel. The two sites visited emphasized that need. Assistance is particularly important when a key member of an already small project team is replaced. Three ways to introduce technical assistance and supplement local resources are as follows.

- Build a technical assistance budget into all grants and have either a cohort of consultants or lead (existing) agency/institutions for all new projects. ARC has provided some of this, and in fact half of the grantees found it very helpful. But ARC is not in a position to provide on-going advice and support from its staff for all of its grantees.
- Organize grantees with similar or complementary goals into learning networks during the process, with facilitators, so that they can share experiences and learn from each other. The networks would meet several times a year and have their own web sites for on-going dialogue.
- Conduct more training for project directors and their staff, as the National Science Foundation (NSF) does in its Advanced Technological Education (ATE) Program. NSF requires that all of its ATE program principal investigators assemble once a year for budget and management workshops, a project fair, and presentations.

3. Take a market-oriented approach

The limited resources available and nature of the ARC Entrepreneurship Initiative—which is an intervention to address market failures—suggest that its operation should be as market oriented as possible. One of the most common problems reported in the surveys was difficulty in attracting clients to use project services. Currently, proposals for funding are required to present information demonstrating a general extant demand for the proposed service. However, a more detailed analysis of the target population and the willingness of potential clients to use services as well as identification of potential strategies to generate demand will lead to greater utilization. If no such information is available, ARC could provide a small grant to finance the needed market

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research and commit to a larger project grant only if and when the market research reveals such a demand. The availability of a small research grant is important to keeping this requirement from stifling innovative solutions. The market research also provides an opportunity for gathering information about potential clients' preferences for mode of service delivery; i.e. on-line, in class, in a one-on-one consultation.

Similarly, if implementation of a project or program requires participation by other entities than the grant applicant, the proposal should include letters from representatives of those organizations documenting interest and support. A second aspect of market-oriented operation is the increased use of performance information, addressed in the next recommendation.

4. Structure and support evaluation systems

The performance measurement process for the Entrepreneurship Initiative should offer ARC an opportunity not only to respond to GRPA responsibilities but also to help grantees improve project management. For ARC to guide its grantees in this process, the agency must have its own set of activity and outcomes measures that is aligned in a meaningful system. Thus, the first step is for ARC to assess and revise its performance measures to effectively serve as the organizing context for funded projects' performance measurement.

Grantees should be given standard guidelines, technical assistance and the support to conduct valid evaluations of outcomes that are related to their proposed goals. Nine of the projects noted monitoring progress and outcomes as a problem, and five cited it as a major problem. This is not surprising since the outcomes specified are difficult and expensive to ascertain because they require gathering information at some interval after the intervention and, in some instances, are not directly related to goals or activities. Some of the benchmark evaluations reported this as a finding.¹⁶ The outcomes that the ARC suggests do indeed reflect desired impacts, however, it is very difficult to accurately capture the incremental impact of a small-scale intervention (perhaps only a few hours per contact) on an outcome.

Few project staffs have the *necessary resources or competencies* to follow the progress of their clients or students after they end their formal connection to the project and adequately measure outcomes. ARC could encourage more effective program management and reporting by allocating resources to cover the additional costs of implementing a performance measurement system that may be based on sampling or other evidence about outcomes. The additional resources that are required vary with the type and scale of the evaluation, but it may be appropriate to allocate about three to five percent of grant funds to sustain monitoring and evaluation efforts.

Grantees are likely to need more than funding to implement performance measurement effectively. ARC should provide *more specific guidelines* and require that proposals specify data to be collected and used to measure outcomes. Requiring performance

¹⁶ David Barkley, Deborah Markley, and Julia Sass Rubin. *Public Involvement in Venture Capital Funds: Lessons from Three Program Alternatives*. Columbia, Mo.: Rural Policy Research Institute, November, 1999. <www.rupri.org/pubs/archive/reports/p99-9/index.html>.

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measures at the start can avoid subsequent assessment problems, and project managers can use the performance data to guide mid-course adjustments where results are not meeting expectations. In addition to better ongoing program measurement and tracking, the ARC should also sponsor independent evaluations and technical assistance from outside organizations.

Another issue is aggregating projects with very different goals. For example, the Initiative treats education as a single category but education of adults and of youth are quite different, have different delivery systems, and require special outcome measures. The former ought to show hard outcomes sought, the latter produces soft outcomes, such as entrepreneurial aspirations, which are difficult to convert to jobs or wealth in the short term. The research undertaken in this project provides a starting point for the design of improved measures. Once accomplished, ARC will be better positioned to provide needed support to its grantees in this arena.

5. Build regional technical assistance capabilities

Resource and technical assistance centers for programs can help to solve many of the implementation problems and fortify staff expertise and experience. For example, seven projects noted lack of ability to develop or obtain technical materials as a major problem. Support capabilities could be targeted at some aspect of the market for entrepreneurial efforts (e.g., micro-enterprises, youth entrepreneurship, cooperatives, and technology or market development). Perhaps an industry cluster could be a focus where a critical mass of initiatives in a particular sector exists, e.g., wood products, apparel, or information technologies. The National Science Foundation, for example, has created Centers that focus on clusters and technologies at many universities and community colleges. The capabilities would not necessarily have to be developed at new organizations (although they could be), but more likely would operate in existing stable, high quality organizations or institutions. Each would be funded to further develop its expertise, provide technical assistance, store knowledge and information, provide contacts and broker relationships, conduct training sessions, and perhaps be responsible for conducting evaluations.

Organizations in the ARC region with high levels of expertise could be designated as mentor organizations to provide technical assistance to less experienced groups. Organizations such as REAL serve these purposes for certain kinds of projects that can be a repository of information and expertise, help with evaluations, etc. Those places that implemented REAL, for example, have access to a national support center and network that allows them to access information and get advice.

6. Organize projects among dimensions other than function

The functions that are currently used overlap in most projects—as well they should, because small businesses' needs are invariably interrelated—and few programs are “pure” in the sense that they have a single purpose. Therefore the existing taxonomy or grants is less useful than it might be. Perhaps segregating programs according to those that (a) build capabilities in organizations, (b) aim to build capacities or change cultures

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in communities, and (c) support program operations is a more useful classification scheme for understanding outcomes and successes.

7. Make fewer small and short-term grants

Many of the grants are too small and for too short a period of time to produce a significant economic impact. Making perhaps fewer of the longer and larger grants now being awarded would give grantees sufficient resources and time to recruit and retain good staff, build greater internal capacity, and buy needed technical assistance. A longer grant period would also allow more time to overcome unforeseen obstacles and perhaps to produce outcomes at a scale that can make a difference in a local economy.

The Entrepreneurial Program at North Georgia Technical college, for example, suffered from high staff turnover and an inability to offer more than temporary employment limited by the term of the grant. One project manager noted that “Funding entrepreneurship programs for one year is unrealistic...The curriculum has taken several years to complete and is still being improved.” Reducing uncertainty about year two funding would help address the issue of staff instability that impedes local capacity building. A longer grant period would give new programs time to get up to speed.

8. Seek opportunities to highly leverage grants

Leveraging will result in greater scale of impacts of ARC funds and increase chances for success. However, the more ARC funds are leveraged, the more fungible the monies become, and the more difficult it is to distinguish their effects from those of complementary or supplementary funds. Examples are Ohio’s ACENet, New York’s Ceramics Corridor project and the West Virginia’s Revolving Micro-Loan and Rural Outreach Program, where it is very difficult, if not impossible, to separate the outcomes associated with the ARC dollars from those associated with other dollars. Higher leveraging may mean accepting contributory rather than exclusive outcomes.

9. Set realistic goals for sustainability

Government funding agencies often view grants that support proprietary initiatives and private businesses as temporary and assume that once the value of the service is realized and accepted, the firms or individuals ought to pay market price and the service should ultimately be self-sufficient. Experience of the projects and throughout the world has proven that self-sufficiency is rarely achieved in any program that either has catalyzing change as its goal or that operates in a weak economy and targets low income and marginal businesses. Only seven of the projects recorded any fee income. Among the clients interviewed a sizable number paid a nominal fee, but much less than the true cost of the program. Instead, the expectation of sustainability after a relatively short period of funding turns grantees’ attention to raising funds to meet continuation expenses. Short grant periods also make it more difficult to attract good project staff. To the credit of the grantees, most have been able to acquire funding to continue, but mostly from other government agencies, as described above.

10. Acknowledge the risks inherent in making entrepreneurial investments in distressed regions

Most of the projects are operating with marginal budgets and under difficult conditions, i.e., targeting low income and low education populations and depressed areas. Finding innovative and successful approaches under these circumstances requires patience and acceptance of the potentially higher risk of failure involved. Projects that fail to meet their goals can provide valuable lessons for more successful efforts in the future.

The population served also may demand greater risk taking. There is tension between goals to help disadvantaged individuals support themselves through entrepreneurship and an emphasis on new business creation to add jobs. The former goal speaks generally to low-skill and less-educated individuals whose businesses are “non-traded” service providers and likely will never have large payrolls. The latter shifts the focus to manufacturing and high technology industries that may ultimately employ large numbers of workers and that usually sell their product outside the local economic region. Desire for quick and large results that show job growth in traded sectors directs activity to larger employers, which may not be an appropriate target for an entrepreneurship program. Clearly, entrepreneurship support does not comprise an economic development program. Rather it is one strategy in what should be a broader effort.

11. Replicate successful initiatives

Now that the ARC region has a history of innovations and a good sense of what has proven successful, it may be fruitful to begin to replicate good practices. Many of the surveyed projects have proven their value and are replicable models—and provide considerable opportunities for adaptation to other circumstances that may lead to further improvements and innovations and new lessons.

The Commission could build on what works or shows promise at other sites in addition to additional phases or program expansions at the same places. Some of the grants to introduce REAL Enterprises are a good example of this occurring in some places. Dissemination of information about best practices or good examples should not discourage innovation but rather encourage innovative improvements or adopting practices to different circumstances. This could be done through mentoring grants in which both the adopter and model program were given funds. The U.S. Department of Education’s Fund for the Improvement of Post-Secondary Education (FIPSE) has such a program in place.

12. Conduct a follow-up, later stage evaluation

Given the limitations of early stage evaluations, we urge the ARC to conduct another evaluation of mature open (i.e., in late stages of funding) and closed projects in order to learn more about findings in this report that were tentative due to the timing of the evaluation and to expand the data base and improve the reliability of the findings.

Appendix A Entrepreneurship Project Profiles (Evaluation Sample)

AL-12931: ASBDC Entrepreneurial Education and Training Program

The University of Alabama’s Small Business Development Consortium (ASBDC), which includes universities in eleven states, created a new entrepreneurial training program to target both minority and women small business owners in 37 counties throughout the state.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$43,000	\$76,760	\$1-10 Million	2.5	21	+6

Project goals are quite general: to build institutional capacity for entrepreneurial training and development and support initiatives to assist entrepreneurs.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	130	Grant not completed	193
# of jobs created*	Grant not completed	13	Grant not completed

Measurable Achievements

- New businesses started, sales increased, jobs saved and created; however, no relevant numbers are currently available, and no exceptional success stories were mentioned.
- As result of this program, more entrepreneurial education is available in the community.

Clients’ Reactions: The first client, a small businessman (door repair) wanted to shift into cattle management. He took fifteen weeks of classes with nine others (paid \$75). He is very enthusiastic about the value of the program – he reports that he learned how to prepare a business plan, do cash flow analysis, manage risk, giving him increased confidence in his entrepreneurial abilities. As a result of going through the program, he has decided to delay his business startup.

The second client received technical assistance and technology transfer. Through the program, he learned how to prepare a business plan, and is working on building and licensing casting and extruding equipment. He plans to open his company soon. He has customers and four patents already, and attributes his accelerated progress to his participation in the program.

Since this program is relatively small in scale and part of a very large SBA-funded program with education and training part of its mission, it is difficult to pinpoint the value added by ARC funds.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

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GA-12788: Entrepreneurial Education Program

This project funded the creation of an entrepreneurial training certification program at North Georgia Technical College, which serves six counties in Northeast Georgia. The project operated with ARC support for two years and is ongoing, using state funds.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$96,019	\$132,719	Unspecified	1.5	28	+8

Project Goals are to (1) develop a curriculum for an entrepreneurial education certificate program, (2) deliver entrepreneurial education courses to about 50 students, (3) establish a small business resource center on campus, (4) offer courses via Internet, and (5) provide entrepreneurial education to high school students. The first two goals were for year one, increasing the number of students served in year two. The third and fourth goals were added for year two. The fifth goal of serving high school students was for both years.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	158	148	150
# of new businesses created	7	10	Not reported

Measurable Achievements

- A three-course curriculum was developed and offered on campus and via the Internet
- A total of about 150 individuals took at least one course
- Courses are also being offered statewide through the on-line Georgia Virtual University

Notes: The project proposal included follow-up and assessment, but the only evaluation done was an end-of-course survey, and those surveys were not saved nor was a summary of the information preserved. Project reports stated that clients and students started new businesses. However, the current manager was not able to document this due to changes in project staff and failure by previous staff to maintain records of clients assisted at the entrepreneurial assistance center. Thus it is difficult to specify measurable achievements. The impression gained by the on-site researcher is that there are positive outcomes, but no documentation to substantiate them.

Clients' Reactions: Project staff provided the name of one student and no business center clients. That student, who took the course via Internet, reported satisfaction with the entrepreneurial training he received. In June, he leased a server and started a computer repair business with sales between \$1,000 – \$2,000 per month. He plans to begin selling web sites as well.

Evaluation of the ARC Entrepreneurship Initiative

KY-12110: Women's Entrepreneurial Training Network & Mentoring Program (WINGS)

This project serves two of the nation's poorest Congressional districts, Kentucky's Fifth and Sixth. Both have high rates of poverty and few job opportunities. WINGS, a non-profit economic development organization that has received ARC funding since 1995, targets poor, Appalachian women through mobile training units.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$50,000	\$180,000	\$50-250,000	3	10	+11

Project Goals are to (1) improve business practices, (2) create networking opportunities, (3) support leadership development, and (4) share lessons. One original goal, youth outreach, was deferred for a year. These goals varied slightly from proposed goals, which highlighted new women-owned startups and increased sales.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	90	105	241
# of new businesses created	25	6	6

Measurable Achievements

- 6 new single employee businesses formed (catering, Montessori school, greenhouse, bookstore, B&B, and nursery)
- 8 businesses upgraded
- 5 developed new products
- 12 companies increased sales as a result of assistance

Notes: The project reached its goals of providing entrepreneurial training, including to the first class of African Americans and to women starting new businesses. Among its accomplishments are the start of the area's first Internet-based business and a scholarship fund that allows entrepreneurs to attend trade shows. The latter resulted in two members identifying and marketing new products. The program's internal assessment was confined to student evaluations.

Clients' Reactions: One female entrepreneur, on disability, operates an embroidery business with two part time employees. As a result of the program, she has invested \$30,000 in her business, expanded into new products and markets, and increased sales from \$2,000 in the past year to \$15,000 in the current year. She was satisfied with the program with the training and networking opportunities she received, though disappointed that she did not receive a loan. She pointed out lack of capital access as a weakness of the program.

The other client co-owns a health food store, and was very satisfied with the business training she received. As a result of the program, she started the business with a \$50,000 investment, and is now generating sales of \$50,000 per year. She affirmed the value of an entrepreneurship program aimed at women.

Evaluation of the ARC Entrepreneurship Initiative

CO-13027 (KY): Kentucky Wood Products Training Program

This project provided training for new employees of Kentucky Wood Manufacturing, Inc in Harlan County, which is in the highly distressed southern Kentucky coal region. The county had 13 percent unemployment and almost one-third of residents with incomes below the poverty line. The Kentucky Wood Products Competitiveness Corporation is a non-profit, quasi-governmental organization established by legislation to promote the wood products industry and economic development in Kentucky.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$70,000	\$630,650	\$250,000-\$999,000	12	12	+4

Project Goals are to: (1) train 54 new employees and provide marketing support for a new company—Kentucky Wood Manufacturing, Inc.; (2) improve the competitiveness of the upholstered furniture industry in the Harlan County region through technology transfer, entrepreneurial development, and job creation; and (3) establish a program resulting in 100 additional people employed at a living wage within two years and at least one new start-up subsidiary company.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	54	22	28
# of jobs created*	54	16	16
# of new businesses created	1	1	1

Measurable Achievements

- 24 adults and one youth received training
- One new business with employees
- One existing business has developed new products and upgraded technologies
- Four or five business have increased out-of-state sales
- Leveraged project funds with Welfare-to-Work dollars, giving 20 people new careers

Note: While exploring alternative sales outlets for products, participants offered a solution to a chair company, using their product, which eliminated processes and resulted in savings. Project efforts to change framestock processes are being adopted by industry and will result in savings and higher efficiency. The grantee measures its success in terms of improved productivity of assisted firms.

Clients' Reactions: The two owners were very satisfied with the production and management training they received, but did not provide details about their businesses.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

KY-13280: Forward in the Fifth Student Entrepreneurship Center

This project provides services to schools and communities in 31 Kentucky counties to help prepare students for successful careers. Through the development of student-run lending and credit union groups, it teaches youth entrepreneurship and workforce skills that will enhance their employability after graduation.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$50,000	\$300,000	\$250K-\$1M	3	12	+11

Project Goals are (1) enhanced skills training for participating youth, (2) professional development for teachers and affiliate organizers, (3) introduction of entrepreneurial culture into region's middle and high schools, and (4) community involvement through mentoring, instruction, and fairs. Specific objectives are that (1) 450 students participate in the Student Leadership Initiative Program (SLIP) with 80% (360 students) continuing in SLIP; (2) 210 students participating in Educational Designs Generating Excellence (EDGE) Program—108 upon entering high school; and (3) 126 EDGE students starting a business, 105 entering the workforce after graduation, and 63 pursuing post-secondary education.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	660	250	750
# of new businesses created	126	12	20 (by youth)

Measurable Achievements

- 170 eighth grade students from nine schools participated in SLIP
- 18 students attended a summer leadership program designed for rising ninth graders
- 3 schools participated in a high school entrepreneurship education program (EDGE).
- 80 students participated in EDGE
- 20 student businesses were formed, including businesses selling gifts, make-up, jewelry, and candles

Notes: ARC funding has ended, but the project is continuing, reflected in the increased outcomes reported.

Client/Partner Reactions: Because this program's clients were under eighteen years old, no client surveys were conducted. However, two partner organizations were contacted for their perspectives on the project. Both of the partner organizations were educational institutions. Both expect to continue working with the program over the next year and indicated very positive impacts on their organization as a result of their involvement with the project. Both partner groups had very positive overall opinion of the project.

Evaluation of the ARC Entrepreneurship Initiative

MD-13005: Garrett County Micro Business Partnership

This project supports micro-businesses in Garret County and targets individuals with limited business and management experience. The grantee is a non-profit community action agency.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$50,000	\$285,000	\$1M - \$10M	1	12	+20

Project Goal was to enhance the micro-business climate through education and with public relations aimed at more traditional community and economic development efforts. Specific objectives include creating a program that would (1) assist 10 entrepreneurs in the first year, and 30 per year thereafter, (2) provide 5 loans up to \$15,000 each to entrepreneurs, (3) train 20 participants in a 100 hour program, (4) provide at least 20 hours of individual counseling to 30 participants, and (5) create 30 new jobs through start-up or expansion.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	30	45	40
# of new businesses created	5	8	10
# of jobs created*	30	14	3
# of jobs retained	Not reported	4	16

Measurable Achievements

- Created 8 new businesses and created or saved 14 jobs in existing businesses
- Added to sustainability of 19 other businesses
- 3 businesses have developed new products and 6 have upgraded technologies
- 45 participants received assistance in finding new markets
- 30 micro-business owners participated in training

Notes: Internal evaluations are conducted using end-of-course student evaluations for education and training, and using end of project evaluations (some well after project completion) for other activities. Program staff believes it is still too soon to assess outcome for many of the projects. ARC funding was a small part of the overall program, but enabled leveraging of other funds, making it difficult to separate out impacts. The project has continued beyond the ARC funding and expanded. The loan fund was re-capitalized with a \$120,000 loan from a financial institution and USDA award.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

Clients' Reactions: Two owners used the program to upgrade their managerial and technical skills. One client, the owner of a fly fishing and guide services shop, was able to build up his inventory to nearly double the size of his business. His yearly sales have increased from \$37,000 to \$70,000.

The other client, who owns a stable and horse boarding service, relocated and renovated her business to improve its chances for success. As a result of the program, she made a \$35,000 investment in her business. Both clients were seeking a stable, lifestyle-supporting business rather than rapid growth, and both clients were satisfied (one very satisfied) with the services they received.

Evaluation of the ARC Entrepreneurship Initiative

MS-12908: Lee County Youth Entrepreneurial Program

This project serves youth in Tupelo and Lee County Mississippi. The City of Tupelo was the grant recipient and formed a partnership with the Boys and Girls Club of Tupelo/Lee County, Big Brothers/Big Sisters of Lee County, and Junior Achievement to implement the project.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$70,577	\$88,192	>\$10 M	3	15	+13

Project Goals were to (1) provide entrepreneurial education and training to 100 at-risk youth aged 10 to 18 in Lee County; (2) assist youth entrepreneurs in starting businesses; (3) build local capacity for an entrepreneurial economy; and (4) reduce crime and drop-out rates and increase math and writing skills and build self-esteem among at-risk youth. The goals did not change during the project operation.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	100	70	120
# of new businesses created	Not reported	16*	18 (by youth)
# of jobs created*	3	0	0

* Businesses reported to ARC were mostly temporary youth projects and not sustainable income-generating businesses, and thus they were not reported as jobs created.

Measurable Achievements

- 120 at-risk youth learned entrepreneurial skills; 48 completed a business plan
- Participants' school grades and self-esteem improved; drop-out rates were lower than would have been expected
- 18 new single (and part-time) employee businesses were formed by youth participants (animal balloons, lawn services, baseball card selling, auto detailing, nail and beauty supply, concession sales)

Notes: An outcome evaluation conducted by Boys & Girls Club and Big Brother/Big Sisters found slightly more new businesses (21) than the survey form reported. It also noted that parents reported (a) that participating young people's attitudes improved and (b) a significant difference in confidence levels and vocabulary. The project is continuing at an expanded level with a new partnership that includes the local SBDC but no longer includes the Big Brothers/Big Sisters program.

Client/Partner Reactions: Since all participants in this program were under eighteen years of age, no client surveys were conducted. Two partner organizations, however, were contacted for their perspectives on the project. One of the partner organizations was an educational institution and the other was a human services agency. Both expect to continue working with the program over the next year and indicated that their own organizations' services had been improved by their involvement with the project.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

MS 12909: MSU Extension Service Entrepreneurial Education Training Center

This project provided support to entrepreneurs and small businesses—including farmers and youth – in Calhoun, Chickasaw, Itawamba, Layayette, Lee, Monroe, Pontotoc, and Union counties. The state university delivers on-going entrepreneurial training that integrates computer application of technology-based business skills and tools.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$100,000	\$125,000	>\$10 M	1.5	19	+11

Project Goals were to: (1) establish an Entrepreneurial Education Training Center for counties in the Three Rivers Planning and Development District; (2) develop educational materials and provide training; (3) develop and maintain an entrepreneurial service provider resource network; and (5) evaluate outcomes and possible expansion to other counties. Specific objectives for the Training Center were to train (1) 40 home-based/micro businesses in marketing and record keeping within the first year, (2) 40 youth in entrepreneurial start-up and job preparedness, and (3) 40 small farmers in farm business management.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	120	580	560

Measurable Achievements

- Total of 580 people received services
- 41 people (11 of which were business owners) participated in the short course.
- 319 participated in an antiques short course, 19 in Bed & Breakfast course, 53 in Clowning as a Business, 32 in Pottery as a Business, and 36 in Technology as a Tool
- 80 attended a financial investment fair
- New businesses were started by adult and youth participants but the number is not known.
- Businesses have developed new products and upgraded technologies, but number not known.

Notes: For achievements, this project survey reports activities but no quantified outcomes beyond one youth who got a job and one woman who bought and is using a computer in her business. Evaluations of responses to each event are included in the report to ARC, however, and indicate high satisfaction rates. The youth program appears to have been successful in giving students hands-on experience in business management.

Clients' Reactions: A teacher who owns a two-bedroom bed and breakfast participated in a videoconference for B&B owners about health, handicapped access, and other relevant issues. The most important outcome for her was networking—connections to other B&B owners and university resources—and an increase in customer referrals.

Because the program's other referred clients were under eighteen years old, only one client survey was conducted for this program.

Evaluation of the ARC Entrepreneurship Initiative

NY-12784: Ithaca Business Innovation Center

The project was initiated by Cornell University and the State and local government. It was designed to provide management and technical assistance to leverage Cornell's research resources into job growth in high growth industries and firms.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$43,000	\$400,000	\$250K - \$1M	2	12	+25

Project Goal was to create new, quality jobs by delivering intensive business management assistance to a small number of businesses with significant growth potential. Specific objectives for the first three years were to (1) provide technical assistance to 45 firms, including intensive technical assistance to 15 (2) create 275 jobs, and (3) raise \$350,000 for the Ithaca Business Innovation Center.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of jobs created*	286	Not reported	25
# of new businesses created	-	Not reported	9
# of jobs retained	-	Not reported	40

Measurable Achievements

- 9 new businesses providing a total of 19 jobs
- Net gain of 40 jobs among clients - 10 created in new businesses, 40 created in existing businesses, and 10 lost at existing businesses
- Five businesses have developed new products and five have updated technologies
- Businesses have increased out-of-state sales, but the amount is not known.

Notes: The project is an ongoing project that received ARC funding for year one. It has no formal internal evaluation. The 10 jobs created plus the 19 in new companies are well below the original goal of 286 jobs created; the 40 companies assisted is near the goal of 45, but the 8 receiving intensive assistance is below the target of 15. While helping local firms, the grantee did not achieve the intended scale of activity or impact. Problems noted were in marketing (attracting entrepreneurs), attracting staff, and monitoring outcomes. The respondent implied that the original demand for services was overly optimistic by suggesting a better analysis of demand. The partner organization also proved difficult to work with.

Clients' Reactions: The two companies surveyed were both small high tech firms with rapid growth aspirations. The owner of a biotechnology company reported that he was satisfied with the financial management services he received, which helped him to develop a modified management system. In the past two years, his company has expanded from four to six employees. Ninety percent of the company's sales are non-local.

The other client, who owns an information technology consulting firm, was very satisfied with the program. Because of the capital assistance he received, he was able to invest \$500,000 in his firm, which has grown from 16 to 20 employees in 2 years. All of the firm's sales are non-local.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

NY-12971: Worker Ownership Resource Center (WORC) Entrepreneurial Partnership

The project is a tri-county partnership between WORC, the Corning Community College SBDC, and the Hornell Business Assistance Center. WORC provided advanced “second stage” training to established small business owners in Chemung County, most of whom had previously accessed WORC’s entrepreneurial training.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$60,000	\$81,898	\$50K - \$249K	2	22	9

Project Goal was to provide training and mentoring to assist entrepreneurs and microenterprises at all stages of growth, through the provision of training seminars, one-on-one technical assistance and a comprehensive package of services and supports.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of new businesses created	40	15	15
# of jobs created*	Not reported	52	52
# of jobs retained		11	11

Measurable Achievements

- 15 new business start-ups
- 10 business expansions based on increased sales, new employees, and new product lines
- 52 new jobs created; 11 retained
- Provided assistance with securing over \$500,000 in financing for both business start-up and expansion

Clients’ Reactions: The two companies surveyed were both in retail and primarily interested in operating a business for stability and lifestyle reasons. Each was assisted through more than 20 interactions over a period of several weeks, and each was able, due to the program, to create a new business plan, make new investments, and enter new markets with new products and services. One client, a natural products retailer, received entrepreneurial training and management and technical assistance. She made a \$90,000 investment to start her business due to the program, and has seen sales grow to \$3,000 per month. Another client, a book store owner, received entrepreneurial training and has also increased investments in her business due to the program.

Both firms were very satisfied with the program and felt that the services exceeded their expectations. Both respondents expressed concern about the cancellation of the program in their particular area. Other locations in the state are too inconvenient for them to access services.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

NY-12972: Ceramics Corridor Cluster Project

This project supports the continued development of a ceramics industry cluster organization in the southern tier counties of New York by creating an entity to function as the center of a Ceramics Corridor. The entity is charged with promoting closer relationships among firms and increased rate of growth for the industry.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$120,000	\$150,000	\$250K - \$1M	0.33	24	+1

Project Goal was to “develop and galvanize the Ceramics Corridor so that it has an atmosphere that nurtures entrepreneurship, innovation, and the attraction/retention/expansion of ceramics firms.” Specific objectives were to (1) survey interest and then develop a participatory industry trade association, (2) assist Alfred Technology Resource, Inc. in efforts to market its incubator, (3) start a venture development corporation, and (4) support the Alfred University internship program. During the project, goals were broadened to include prospective firms.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	29	13	26
# of jobs created*	10	0	Not reported
# of jobs retained	10	0	Not reported

Measurable Achievements

- Documented business interest and established an organization
- Jobs created by participating firms but numbers not provided
- Five businesses have upgraded technologies
- Businesses have increased out-of-state sales but numbers were not provided
- Created web site for the organization (www.ceramicscorridor.org)

Note: This project is part of a very large-scale undertaking that claims responsibility for almost 5,000 new jobs. It has other sizable sources of revenue and thus continues beyond the end of ARC funding.

Clients' Reactions: The two clients are managers of companies that are part of the cluster and generally participate in cluster functions. Both appreciate the cluster and value its tangible and intangible services, including access to students and employees. Both have received management and technical assistance, and both appreciate the opportunity to be part of a network. One company, an electrical systems and design firm, attributes its recent success in obtaining new patents to its participation in the project. It is questionable, however, whether the participating firms understand what part of the regional effort is supported by ARC.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

NY-13215: Entrepreneurial Assistance Program (ACCORD)

This award went to the Allegheny County Community Opportunities and Rural Development Corporation (ACCORD) to shift its entrepreneurial emphasis to the second stage of business development.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$39,424	\$73,924	\$1 - \$10 M	1	24	+7

Project Goals are to increase entrepreneurship through (1) awareness campaigns, (2) developing relationships between businesses and counselors, and (3) “second stage” (small businesses ready for expansion) by training of adults.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	20	8	178
# of new businesses created	3	1	12
# of jobs created*	18	14	14
# of jobs retained			9

Measurable Achievements

- Made 16 loans totaling \$400,000
- Held 12 local meetings
- Started 99 businesses without employees and 18 with employees
- Created 11 jobs and saved 9 in existing firms
- Helped 2 firms develop new products and 12 upgrade technologies
- The project is continuing beyond the funding period

Notes: The outcomes appear high given the resources, a staff of one FTE, and the goals—which do not, for example, include making loans. It is possible (probable) that some of the outcomes are organizational outcomes and indistinguishable from those funded by the grant. The outcomes, while impressive, appear slanted toward first stage, not second stage entrepreneurs. No major or minor obstacles were cited.

Clients’ Reactions: Both clients surveyed received technical assistance and training through the program. One, the owner of a machining company with 8 employees whose goal is rapid growth, received technical assistance over three years. Due to this assistance, he has made a \$70,000 investment in new equipment and has expanded into new markets. He has seen 100% sales growth over two years (from \$50,000 to \$100,000).

The other surveyed client is a self-employed hairdresser whose goal is a stable, lifestyle-supporting business. She received technical assistance and training over four months, which helped her to develop a new business plan. Both clients were very satisfied with services received.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

OH-13158: Byesville Area Entrepreneurial Development Partners

The grantee is a non-profit community development corporation that is targeting the town of Byesville and the county of Guernsey.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$48,940	\$61,175	> \$50,000	2	12	+13

Project Goals were to (1) make micro-loans to twelve entrepreneurs, (2) assess the operations of forty enterprises, (3) award three scholarships to youth, (4) conduct twelve workshops, and (5) mail 200 newsletters per month. Goals also included the recruitment and training of a twelve-member entrepreneurship development council, and recruiting and assisting forty entrepreneurs.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	100	53	138
# of new businesses created	12	5	11
# of jobs created*	12	9	12

Measurable Achievements

- 3 new micro-businesses started by youth
- 8 new micro-businesses started by adults
- 12 jobs created
- 6 scholarships awarded to area high school students, totaling \$3,750
- Provides only wireless Internet service to Southeastern Ohio

Notes: The grantee noted a high failure rate that must be tolerated in high-risk situations. Key, according to grantee, are a committed entrepreneur and continual follow-up support.

Clients Reactions: The owners of two “lifestyle” service micro-enterprises (each with two employees) were each very satisfied with the assistance they received. Both were helped with the paperwork needed to start or upgrade their businesses. The owner of an insulation services company received a loan to upgrade his business, to which he attributes his recent growth in sales to \$200,000 per year.

The other surveyed client was able to start a seafood retailing business as a result of the technical and capital assistance she received through the program, and generated \$60,000 in sales in the past year. Each said they would have started the business without the help, but it would have taken longer and probably not been as successful.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

OH-13166: Jackson County Entrepreneurial Assistance

This project's target population is the welfare recipients in a county with high poverty and unemployment rates.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$38,850	\$68,350	\$50K - \$250 K	1	12	+12

Project Goals were to provide technical assistance to 60 potential entrepreneurs and assist five companies in acquiring capital.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	60	40	108
# of new businesses created	15	12	16
# of jobs created*	15	43	23
# of jobs retained			9

The program also provided technical assistance to 15 existing businesses and education for 6 youth, not minor targets.

Measurable Achievements

- 1 new business started by student
- 7 new businesses with no employees started by adults
- 9 new businesses with employees started by adults (20 employees)
- 3 jobs created in and 9 jobs saved in existing businesses
- 2 upgraded technologies, 1 developed new products

Clients' Reactions: Only one client contact was provided by the program. This client's business, a building and construction company, was in decline when he bought it in January 1997. Through the program, he was able to invest \$150,000 in new facilities, product development and market expansion. As a result, the company's sales (which are 98% non-local) have more than doubled – from \$200,000 two years ago to \$425,000 this year. Employee compensation has increased by \$2.00/hour, and salaries will increase by another \$1.50/hour as new equipment is added. The owner also attributes improvements in personnel management to his participation in this program. Of the several economic development programs he has worked with, he says that this is the best.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

OH-13401: ACENet “Building Entrepreneurial Networks”

This project in Southeast Ohio, an area that has had very high poverty rates and out-migration of youth, is managed by a well-established community based economic development agency that has fostered entrepreneurial activity and networking for 14 years. The grant is to expand the pilot Computer Opportunities Program, which prepares youth to start computer consulting businesses, to five high schools in the area.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$50,000	\$62,500	\$250K-\$1M	1	14	+3

Project Goals were to (1) provide at least 45 high school students with entrepreneurial education and training that will lead them to start their own computer consulting business, get a job in an existing firm, or go on to higher education; (2) set up three new computer technology and entrepreneurship centers in high schools; and (3) involve at least 100 teachers, students board members, principals and 50 service providers in one of three workshops. A broader goal is to increase entrepreneurial community by the infusion of students. The project helped to expand the program from two to seven schools.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	45	30	32
# of new businesses created	3	0	0
# of jobs created*	14	0	0

Measurable Achievements

- 29 school-based businesses were started by youth
- Documented curriculum modules with objectives, lesson plans, etc.
- Leveraged more than \$1 M in additional support

Notes: This grant supplements and expands a much larger program that began the previous year. Of 26 graduates in the pilot program at 2 schools, 2 students began new businesses, 8 are employed in IT sector, and 14 went on to higher education. The prepared program materials are impressive and the program has had considerable media coverage. A large part of the curriculum is on line and therefore easily expanded and replicated in other places. Monitoring economic project outcomes has proven difficult although it has a detailed student evaluation instrument. The internal tracking and evaluation system is being revamped. Although the ARC funding has ended, the project is on-going with a \$1 M federal line item appropriation.

Client/Partner Reactions: Because this program’s participants were all under eighteen years old, no client surveys were conducted. However, two partner organizations were contacted for their perspectives on the project. One of the partner organizations was a farm and the other was a non-profit service provider. Both expect to continue working with the program over the next year and indicated positive impacts on their organization as a result of their involvement with the project.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

PA-12786: Team Pennsylvania Entrepreneurial Education Initiative

This grant was made to a state agency to implement a variety of existing approaches of targeting youth with entrepreneurial education in the elementary schools, middle schools, high schools and community colleges and assisting entrepreneurs in six rural counties. It utilizes established and proven models developed, implemented, and supported by REAL Enterprises.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$333,368	\$530,000	\$250K - \$1 M	2	36	+2

Project Goals were to develop entrepreneurial skills and foster new businesses by raising awareness, building infrastructure of school/business partnerships, and nurturing entrepreneurial environments in depressed or rural areas. This would be accomplished by implementing REAL in ten high schools and community colleges, and in ten primary schools in six Pennsylvania counties.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	184	151	240
# of students	Not reported	6,489	1,620
# of new businesses created	10	3	4 (by youth)

Measurable Achievements

- Few measurable outcomes, which is not surprising since the project primarily targeted youth and changing a culture.
- The three success stories cited appear to describe potential growth businesses.
- The survey cited 4 new businesses started by youth and 60 businesses increased sales.

Note: It is difficult to find evidence of cultural shifts without intensive in-site interviews and project resources to track participants. Much of the success of this type of long term project must be taken on faith. Intermediate outcomes, however, suggest potential impacts. The web site is current and describes activities. Support from a national organization such as REAL is a factor in the success. The grantee is applying for funds from the state to continue the program.

Clients' Reactions: Two former adult students have started their own businesses. One owns a replacement glass installation service, and wants to maintain a stable, lifestyle-supporting business. He credits the program with his success in obtaining capital for a \$25,000 start-up investment, and with giving him the technical assistance and management skills to run his own business. His sales have grown in two years from \$75,000 to \$129,000.

The other surveyed client is a former accountant who wants rapid growth for her business making viscose hair wraps. One installing replacement glass (his former job) as a lifestyle business and one, a former accountant, making viscose hair wraps (to reduce blow dry time) and wants to grow the business. Like the client described above, she credits the skills she learned in this program with her success in obtaining \$2,300 in start-up funds. Both clients were satisfied with the experience; one ranked it excellent, one good.

Evaluation of the ARC Entrepreneurship Initiative

PA 12904: Team PA Entrepreneurial Network Initiative (Phase I)

The purpose of this project is to provide managerial and technical assistance to entrepreneurs and support collaborative efforts to coordinate improved assistance for entrepreneurs.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$550,600	\$688,250	Over \$10M	4	17	

Project Goal was to develop entrepreneurial networks throughout the 52 ARC counties in Pennsylvania. Specific objectives in the first phase of this project were to: (1) implement 7 regional plans to support entrepreneurship; (2) deliver 12 financial management seminars targeting 360 firms; (3) conduct 15 focus groups targeting potential and existing entrepreneurs; (4) conduct outreach to encourage cooperation among approximately 55-60 public/private service providers; and (5) increase awareness of entrepreneurial resources among the general public.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	960	900	750

Measurable Achievements

- Completed 7 regional plans to support entrepreneurship
- Conducted 15 financial management seminars involving 300+ people
- Conducted 20 workshops with over 600 private participants

Notes: Phase I of the project has been completed. Initial objectives were met or exceeded. Additional ARC funds were received for Phase II which is now underway. The first phase was essentially to build the organizational infrastructure for the initiative. Direct services to businesses will occur in the second phase. To date, the success of this program lies in the development of entrepreneurial networks that did not previously exist. Measurable business outcomes are expected to occur in year 3 of the project.

Clients' Reactions: Because this project was funded for its developmental phases, actual business clients have not yet been served. The participants indicated above were mostly service providers who participated in the "Train the Trainer" program. Reactions from firms served will be useful in evaluating Phase II of the project.

Evaluation of the ARC Entrepreneurship Initiative

CO-12988 (TN): Levi Strauss Employees Entrepreneurial Training

The purpose of the project was to help displaced Levi Strauss employees make a successful transition to new work opportunities following the closing of the Levi Strauss plant in Knoxville, Tennessee.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$80,000	\$170,000	\$250-\$999K	4	17	14

Project Goal was to provide start-up, small business management, and business development training, including courses on business plans, marketing, financial planning, taxes, licensing, and legal forms of organization. In addition, the project proposed to (1) establish an on-site resource center; (2) form community micro-loan peer lending groups; (3) conduct leadership development and financial management training; and (4) provide individual credit counseling.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	750	880	1,202
# of new businesses created	750	102	102

Measurable Achievements:

- Of the 880 former Levi Strauss workers who received training, 102 started their own full-time businesses.
- 778 trainees decided to seek full-time employment and use their training to start-up a part-time micro-business for supplemental income.
- 90% of the full-time business start-ups were by female heads of households.

Clients' Reactions: Both clients surveyed started their business for stability and lifestyle reasons. One, a restaurant owner, was assisted through 6-10 interactions over a period of 4 weeks. Through the program, she developed a business plan and invested \$15,000 to open her business; however, the restaurant is now closed due to problems with a building landlord.

The other surveyed client had 3-5 interactions with program staff over a period of three weeks. Through the program, she created a business plan and invested \$20,000 to open a child care center in her home. Over the past two years, her sales have grown 25%. Both clients were very satisfied with the services received and felt their expectations were met.

Evaluation of the ARC Entrepreneurship Initiative

VA-12923: Clinch Powell Value Added Agriculture Marketing Project¹

The Clinch Powell Sustainable Development Initiative, in partnership with community-based organizations and Virginia Cooperative Extension, proposed to support efforts to develop value-added agricultural businesses in Southwest Virginia and Northeast Tennessee.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$36,000	\$71,875	Unspecified	Unspecified	18	12

Project Goal was to identify and develop markets for high value agricultural products produced in the region. Specific objectives were to: (1) gather additional market information about high value opportunities; (2) develop links to commercial and institutional buyers interested in sustainable raised products; (3) identify value-added processing needs and purchase needed equipment; and (4) educate and train entrepreneurs in equipment and regulatory issues related to value-added food production.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	30	108	No survey returned

Measurable Achievements

- Identified 300 individuals with an expressed interest in producing value-added food products
- Identified a more focused group of 60 entrepreneurs with high potential for developing commercial food products
- A commercial kitchen was established in Sneedville, TN—the Jubilee Project Incubator
- A survey of 10,000 households in the region was completed, with results indicating significant interest in locally produced organic and sustainable products
- An Appalachian Harvest label and marketing program was initiated
- Locally produced products were distributed in 7 grocery stores
- A \$25,000 contract for organic pepper products was negotiated with a major catalogue retailer
- 17 farmers obtained organic certification for their land
- 108 persons attended 4 workshops on sustainable production and marketing

¹ No survey was received for this project. All information collected from ARC project files. No clients/participants were contacted.

Evaluation of the ARC Entrepreneurship Initiative

VA 13302: Appalachian Partnership Project

This grant, which matches other foundation funding, was awarded to People, Incorporated, an existing community action agency. The purpose of the grant was to form a network of faith-based communities in Virginia and Tennessee, and of home-based businesses whose products are traditional Appalachian crafts. The network managing the operations is an existing cooperative called “Applamade.”

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$40,500	\$121,034	\$1M - \$10 M	4	12	+10

Project Goals include reaching a broader market outside the Appalachian region, increasing income for producers (especially women), and providing an outlet for those people interested in assisting rural Appalachians. Specific program goals include (1) the creation of 40 designs for production and promotion, (2) training new craft producers, (3) submitting and marketing crafts for sale in a church-based project, and (4) assisting 40 low-income craft-skilled producers to expand their markets (triple aggregate sales) and increase their incomes by at least \$1,000 each, working with churches to market products.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	50	60	37
# of new businesses created	20	30	10
# of jobs created*	50	30	0

Measurable Achievements

- 10 new home-based businesses started
- 35 new products developed
- 45 businesses increased sales by total of \$30,000 (target of \$40,000)

Notes: Grantee noted difficulty in attracting customers to the services offered and getting church participation. Though it is not clear exactly what church participation means, it appears that the churches are the intermediaries for selling goods as part of fund raising events, keeping a percentage of the sale. Although total sales increased by \$30,000, one person cited as success story apparently accounted for one third of the total. The grantee also noted that the training and marketing is very time consuming.

Clients: This project is currently being evaluated by the Aspen Institute, which will be surveying and interviewing clients. So as not to interfere with this evaluation process, we did not survey clients from the program.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

VA-13349: Wise Skills Center

Wise is located in the western part of Virginia's Appalachian region. The public school system is the grantee, and intends to build the capacity for the region (including parts of eastern Tennessee) to become part of the digital economy by creating a self-sustaining skill center that targets unemployed and underemployed residents.

ARC \$	Total \$	Organizational Budget	FTE Staff	Length in Months	Months since Completion
\$50,000	\$58,110	\$250K – \$1M	1	12	+11

Project Goals are (1) to build a self-sustaining local economy by training a work force to help the region become part of the digital economy, (2) to create enterprises to train computer technicians, and (3) to prevent out-migration of youth by providing better job opportunities.

The project expected to give computer technician training to students selected from among the unemployed, underemployed, or laid-off workers, to establish a retail outlet for computer assembly and repair staffed by five students, place seven students in area businesses, and extend training of three students to further raise skill levels.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	15	21	24
# of new businesses created	1	1	1
# of jobs created*	6	7	8

Measurable Achievements:

- One new business started (Lighthouse Computer Systems); 300 computers built or upgraded, resulting in a gross profit of \$17,418
- Six jobs added to existing businesses
- 22 students enrolled in training program; 10 dropped out, 1 completed, 9 enrolled, 2 took jobs

Notes: Classes have continued past the expiration date, and students' job search progress is supported and monitored for 13 weeks.

Clients' Reactions: One woman took the training because she wanted specific skills and the college required too many other courses. She remained in program for 18 months, assisted the instructor, and repaired about 100 computers. Through the program, she received technical assistance, networking opportunities, and developed a business plan. She was very enthusiastic about the program and is about to start her own business.

The second client had an opposite reaction—he felt that he learned very little. What technical assistance he did get was from the book, not the class, for which he blames the instructor. The two very opposite reactions to the same intervention may reflect different aptitudes and interests.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

WV-12917: West Virginia Micro Loan and Rural Outreach

This grant went to an existing small business development center to improve the quality of services offered to rural entrepreneurs and the quality of micro lending programs throughout the state. The funds were intended to support a micro loan program liaison to offer technical assistance to micro loan seed fund recipients.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$68,680	\$85,850	\$1M - \$10M	1.5	26	+9

Project Goals were to provide on-site technical assistance to micro lenders, train in all aspects of lending and entrepreneurial support, and to promote leveraging and networking among members, regional SBDCs, and community organizations.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	Not reported	24	14
# of jobs created*	1	1	Not reported

The project apparently did much of the assistance to and training of lenders that it proposed, although that was not reflected in the survey returned.

Measurable Achievements (attributable to entire program, not solely ARC portion)

- 354 jobs created
- 204 jobs saved
- 85 firms without employees started, 148 firms with employees started
- 10 businesses developed new products
- 25 upgraded technologies

Note: Two interventions of successful micro loans to companies, one to a welfare client to start a business and one to expand a business by opening satellite offices, were cited to illustrate success of the program. There was no formal evaluation used. The “job” outcomes cited are clearly associated with the overall program, not the grant. Obstacles cited were low attendance at the workshops, too little experience managing a loan fund among lenders, and insufficient staff support. It is unlikely that this program will be sustainable.

Clients’ Reactions: Both clients surveyed seek rapid growth for their businesses, and both report that they are very satisfied with their participation in the program. The client who opened the day care center credits the program with giving her management assistance and the start-up funding she needed to open the business, which now generates \$15,000 in sales per year.

The other client, who owns a vocational rehabilitation center, says that the program helped him to grow his business by providing the management assistance and expansion capital that he needed to open new locations. In two years, his yearly sales have grown from \$460,000 to \$700,000.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

Evaluation of the ARC Entrepreneurship Initiative

WV-12929: Small Business Innovation Research-Phase Zero

This project was designed to enhance the number of Small Business Innovation Research (SBIR) proposals being submitted from West Virginia firms. The SBIR Phase Zero program will enable eligible small businesses to develop proposals in response to actual SBIR Phase I solicitations from the various participating federal agencies. The grantee, the West Virginia High Technology Consortium Foundation, is a non-profit organization supporting research, development, and education.

ARC \$	Total \$	Organizational Budget (s)	Project FTE Staff	Length in Months	Months since Completion
\$96,518	\$120,648	\$1M-\$10M	3	28	+2

Project Goals were to (1) increase awareness of the SBIR program, (2) increase the number of West Virginia firms submitting SBIR phase I proposals to the federal government and improve the quality of the proposals by providing 20 firms with \$3,000 bid and proposal money, and (3) foster a better working relationship between small businesses and the academic community. A non-operational goal was to create a model program that could be replicated elsewhere in Appalachia. During the project goals were modified by revising the target market.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	20	17	25

Measurable Achievements

- 23 firms received Phase Zero awards (out of 55 proposals received)
- Two West Virginia firms were awarded SBIR Phase I grants
- The number of West Virginia firms submitting SBIR proposals increased
- Businesses have developed new products and upgraded technologies, but the number of firms is not known.

Note: It does not appear that the program has continued beyond the ARC funding period.

Clients' Reactions: Both clients surveyed are the owners of high-technology start-ups, for which they seek rapid growth. Both received grants through the program for start-up capital; while neither gave specific information about sales and payroll, both businesses seem to be performing well. One client, the owner of an information research firm that provides e-commerce and web-based services, said that the program helped him to develop new products. Another client, whose firm designs and produces optical devices, said that the grant helped the firm to solidify its technical approach and also facilitated certain aspects of commercialization.

Evaluation of the ARC Entrepreneurship Initiative

WV-13271: Sustainable Community Enterprise Project (Lightstone CDC)

The purpose of the project was to strengthen the entrepreneurial infrastructure by enhancing access to capital and technical assistance, and to provide low-income individuals with viable options as part of an effective welfare-to-work strategy.

ARC \$	Total \$	Organizational Budget	Project FTE Staff	Length in Months	Months since Completion
\$107,620	\$134,620	\$250-\$999K	5	16	<1

Project Goal was to promote social, economic, and community capital development by: (1) building the capacity of two existing micro-loan funds; (2) providing loans and business start-up assistance to support self-employment for low-income individuals; (3) co-sponsoring regional workshops to create market opportunities for micro-enterprise; and (4) supporting welfare-to-work through micro-enterprise.

ARC Metrics	Target	Actual (ARC Final Report)	Actual (RTS Survey)
# of participants	48	630	650
# of jobs created*	41	43	22
# of new businesses created			21

Measurable Achievements

- Provided support to 159 individuals seeking micro-enterprise assistance
- Provided 111 referrals for business technical training
- Made 10 loans to individuals
- Made 11 loans and equity investments to support new and existing businesses
- 43 jobs created
- Generated total community wealth of \$2,959,000

Clients' Reactions: The three companies surveyed are very small (1-2 employees) and primarily in business for stability and lifestyle reasons, although one expressed a desire to grow rapidly. None of them have experienced any growth over the past two years. One client, whose firm is engaged in windshield and glass repair, reported receiving technical assistance and access to capital, enabling him to invest between \$10,000 and \$15,000 in the business. Another client surveyed installs carpet, vinyl, and tile, and also reported receiving technical assistance and access to capital. Though her business has not grown, this client credited the program with her success in leaving welfare and buying a home.

These two business owners were very satisfied with the services received and felt that their expectations were exceeded. The third client surveyed, who makes and sells hand-painted ceramics, was dissatisfied with the services and felt that support was not provided as promised (she reported access to capital as the only service received.) That same business owner indicated that there were administrative problems and delays in processing loan, and blames the program for her worsened debt status.

* Job creation numbers do not include jobs generated through self-employment. Self-employment is captured in the business creation data.

**Appendix B
Summary of Results from Project Survey**

What kind of organization is the host organization for this project?	Frequency	Percent
Non-profit economic development organization	12	52.2
Other (explain):	4	17.4
Multi-county or regional planning agency	2	8.7
University	2	8.7
Local or county government agency	1	4.3
Community organization	1	4.3
Community college or 2-year institution	1	4.3
Total	23	100.0

N=23.

What is the approximate annual budget of the host organization?	Frequency	Percent
Under \$50,000	1	4.3
\$50,000 - \$249,000	2	8.7
\$250,000 - \$999,000	10	43.5
\$1 million - \$10 million	6	26.1
Over \$10 million	4	17.4
Total	23	100

N=23.

The project that ARC funded was	Frequency	Percent
A new program	14	60.9
A program that built on earlier funded projects	9	39.1
Total	19	100.0

N=23.

If the program built on earlier funded projects, how were those projects sponsored?	Frequency	Percent of projects
Previous ARC funds	2	22.2
Other federal funds	2	22.2
State funds	2	22.2
Organization's own resources	1	11.1
Foundation	2	22.2

N=9. Note: Multiple responses for a single project possible.

ARC project status at time of survey (Sep-Oct 2000)	Frequency	Percent
Closed	15	75.0
Open	5	25.0
Total	20	100.0

N=20.

Months ARC project in operation through to September 2000	Months
Mean	21.5
Median	18.0
Shortest	10.0
Longest	48.0

Evaluation of the ARC Entrepreneurship Initiative

N=21.

How were the goals established for the project?	Frequency	Percent of projects
Formal planning study or needs assessment	8	34.8
Discussion and experience within the host organization	15	65.2
Discussion involving other members of the local community	17	73.9
Other	2	8.7

N=23. Note: Multiple responses for a single project possible.

Did you change or add new goals during the period of the project?	Frequency	Percent of projects
Yes	10	43.5
No	13	56.5

N=23.

Principal activities undertaken by the ARC project.	Major emphasis	Percent of projects
One-on-one assistance for <i>new start-up</i> businesses	17	73.9
Education and training of adults	15	65.2
Business network groups for <i>new start-up</i> businesses	11	47.8
One-on-one assistance for <i>existing</i> businesses	11	47.8
Business opportunities research and marketing	10	43.5
Business seminars	10	43.5
Business network groups for <i>existing</i> businesses	9	39.1
Curriculum development	8	34.8
Loan or equity fund	8	34.8
Local and regional needs assessment	8	34.8
Training of staff and other trainers	8	34.8
Referral systems to other service providers	7	30.4
Community conferences, organizational meetings	6	26.1
Education and training of students (high school, vocational school)	5	21.7
New local economic development strategies	4	17.4
New physical facilities developed	4	17.4
Technology opportunities research	4	17.4
Distance learning	2	8.7
Government procurement assistance	2	8.7
Web site	2	8.7
Business internships	1	4.3
Custom software development	1	4.3
Other	1	4.3

N=23. Note: Multiple responses for a single project possible.

Evaluation of the ARC Entrepreneurship Initiative

Participants served by activities during period of ARC funding	Projects reporting this activity	Percent of projects	Participants reported served	
			Total	Median
Education and training of youth, high school students, or vocational students	8	34.8	1,509	53
Education and training of adults	19	82.6	3,050	68
Individual assistance to <i>existing</i> businesses which already have employees	12	52.2	132	10
Individual assistance to <i>existing</i> businesses which do not have employees (e.g. self-employed or micro-business)	12	52.2	150	15
Individual assistance to adults seeking to start <i>new businesses</i>	16	69.6	854	42
Assistance to network groups (*Businesses **Groups)	12	52.2	275* 102**	26* 5**
Direct financial assistance, loans, or loan guarantees (*Businesses **Thousands)	10	43.5	78* \$1,164.6**	8* \$179.8**
Referrals to other sources of assistance	19	82.6	800	29
Meetings with community leaders, business representatives, and other local organizations to discuss projects or plans (*Meetings; **People participating, without duplication)	22	95.7	313* 1,063**	12* 60**

N=23

Education and training of youth, high school students, or vocational students	Under 8 hours	8 to 30 hours	More than 30 hours
Projects reporting	1	2	4
Number of participants by training contact hours category	1	38	770
Percent of participants by training contact hours category	0.1	4.7	95.2

N=6 projects reporting

Education and training of adults	Under 8 hours	8 to 30 hours	More than 30 hours
Projects reporting	9	6	12
Number of participants by training contact hours category	1,432	884	504
Percent of participants by training contact hours category	50.8	31.3	17.9

N=17 projects reporting

Evaluation of the ARC Entrepreneurship Initiative

Individual assistance to <i>existing</i> businesses which already have employees	Under 8 hours	8 to 30 hours	More than 30 hours
Projects reporting	6	5	2
Number of business assists by service time categories	51	35	46
Percent of business assists by service time categories	38.6	26.5	34.8

N=9 projects reporting

Individual assistance to <i>existing</i> businesses which do not have employees (e.g. self-employed or micro-business)	Under 8 hours	8 to 30 hours	More than 30 hours
Projects reporting	2	6	4
Number of business assists by service time categories	12	79	56
Percent of business assists by service time categories	8.2	53.7	38.1

N=8 projects reporting

Individual assistance to adults seeking to start <i>new</i> businesses	Under 8 hours	8 to 30 hours	More than 30 hours
Projects reporting	4	4	8
Number of business assists by service time categories	104	127	107
Percent of business assists by service time categories	30.8	37.6	31.7

N=11 projects reporting

Direct financial assistance, loans, or loan guarantees	Under \$5,000	\$5,000-\$25,000	Over \$25,000
Projects reporting	4	3	4
Number of business assists by service time categories	23	17	16
Percent of business assists by service time categories	41.1	30.4	28.6

N=7 projects reporting

Referrals to other sources of assistance	Financial assistance	Technological assistance	Other business assistance
Projects reporting	9	7	5
Number of business assists by service time categories	167	113	532
Percent of business assists by service time categories	20.6	13.9	65.5

N=10 projects reporting

Evaluation of the ARC Entrepreneurship Initiative

Activities during period of ARC funding	Projects reporting this activity	Able to report total participants served		Able to provide service details ⁺	
		No of projects	Percent of projects	No of projects	Percent of projects
Education and training of adults	19	18	94.7	17	89.5
Education and training of youth, high school students, or vocational students	8	7	87.5	6	75.0
Assistance to network groups	12	10	83.3	7	58.3
Direct financial assistance, loans, or loan guarantees	10	8	80.0	7	70.0
Individual assistance to existing businesses which already have employees	12	9	75.0	9	75.0
Individual assistance to adults seeking to start new businesses	16	11	68.8	11	68.8
Individual assistance to existing businesses which do not have employees (e.g. self-employed or micro-business)	12	8	66.7	8	66.7
Referrals to other sources of assistance	19	10	52.6	10	52.6
Total - all reported activities	108	81	75.0	75	69.4

N=23. ⁺Number of participants by different categories of service, e.g. by length of training, size of loans, or types of referral.

What was the primary geographical area served by the project?	Frequency	Percent
Single county	7	30.4
Multi-county, within one state	13	56.5
State	2	8.7
Multi-county, two or more states	1	4.3
Total	23	100

N=23.

Budget for the total period of the project	Projects reporting	Percent of projects	Total X 1,000	Share of program budget by source	Per project median X 1,000
ARC	20	100%	\$2,605.5	52.0%	\$59.3
Other federal	4	20%	\$466.6	9.3%	\$108.3
State	9	45%	\$484.6	9.7%	\$43.0
County or local	8	40%	\$371.9	7.4%	\$35.0
Fee income	1	5%	\$5.0	0.1%	\$5.0
Other	11	55%	\$1,072.7	21.4%	\$60.0

N=20. Budget data as reported by respondents to the survey. Per project median is only for those projects receiving funds from line source.

Evaluation of the ARC Entrepreneurship Initiative

What was the staffing level for the project at peak staffing?	Projects reporting	Percent of projects	Total	Median
Full-time equivalent staff	23	100.0	62.5	2.0
- 2 or fewer staff	13	56.5	-	-
- 3-4 staff	8	34.8	-	-
- 5 or more staff	2	8.7	-	-

N=23.

If you offered education and training courses as part of the ARC project, how did you track participant satisfaction and outcomes?	Projects reporting	Percent of projects
No formal evaluation used	3	15.0
End-of-course student evaluations	13	65.0
Time-elapsd students evaluations, at a time well after training has been completed	2	10.0
Other	5	25.0

N=20. Note: Multiple responses for a single project possible.

If you offered business assistance as part of the ARC project, how did you track participant satisfaction and outcomes?	Projects reporting	Percent of projects
No formal evaluation used	7	38.9
End-of-course student evaluations	3	16.7
Time-elapsd project evaluations, at a time well after projects are completed	3	16.7
Other	4	22.2

N=18. Note: Multiple responses for a single project possible. Two projects assisting businesses did not indicate the evaluation methods they used.

Summary of project reported business and employment impacts, as a direct result of project assistance over the total period of the ARC project	Projects reporting YES	Percent of projects
New businesses started by youth or students without employees	8	34.8
New businesses started by youth or students with employees	0	0.0
Number of new businesses started by adult participants w/o employees	12	52.2
Number of new businesses started by adult participants with employees	13	56.5
Jobs created in existing businesses	12	52.2
Jobs saved in existing businesses	9	39.1
Jobs lost in existing businesses	2	8.7
Businesses that have developed new products	18	78.3
Businesses that have upgraded technologies or management methods	13	56.5
Businesses that have increased sales outside of the state	12	52.2
Businesses that have increased export sales outside the United States	3	13.0

N=23.

Evaluation of the ARC Entrepreneurship Initiative

New businesses started by youth or students, as a direct result of ARC project assistance	Without employees
Projects reporting YES	8
Projects able to provide data on businesses started	5
Percent of projects able to provide data	63%
Reported number of youth businesses started	46
Median, by project	4
Minimum, by project	1
Maximum, by project	20

N=23. No project reported starting of youth businesses with employees.

New businesses started by adult participants, as a direct result of ARC project assistance	Without employees	With employees
Projects reporting YES	12	13
Projects able to provide data on businesses started	9	7
Percent of projects able to provide data	75%	54%
Reported number of adult businesses started	181	33
Median, by project	10	7
Minimum, by project	4	1
Maximum, by project	102	18
Projects able to provide data on employment in businesses started	-	4
Percent of projects reporting employment impacts	-	31%
Reported number of employees		54
Median, by project	-	15
Minimum, by project	-	2
Maximum, by project	-	20

Employment impacts on existing businesses as a direct result of ARC project assistance	Jobs created	Jobs saved	Jobs lost
Projects reporting YES	12	9	2
Projects able to provide data on employment impacts	7	4	1
Percent of projects able to provide data	58%	44%	50%
Reported number of jobs	121	85	10
Median, by project	6		10
Minimum, by project	3	9	10
Maximum, by project	12	40	10

Business impacts, as a direct result of ARC project assistance	Businesses that have developed new products	Businesses that have upgraded technologies or management methods
Projects reporting YES	18	13
Projects able to provide data on impacts	12	8
Percent of projects able to provide data	67%	62%
Reported number of businesses with impact	83	64
Median, by project	2.5	5.5
Minimum, by project	1	1
Maximum, by project	35	25

Evaluation of the ARC Entrepreneurship Initiative

Business sales impacts, as a direct result of ARC project assistance	Businesses that have increased sales outside of the state	Businesses that have increased export sales outside the United States
Projects reporting YES	12	3
Projects able to provide data on impacts	5	2
Percent of projects able to provide data	42%	67%
Reported number of businesses with impact	63	2
Median, by project	4	1
Minimum, by project	1	1
Maximum, by project	45	1

To what extent did the project result in new partnerships with other public and private entities	Percent of projects		
	Increased consultation or information exchange	Increased co-operation in tangible service delivery activities	No change in relationship
Colleges or universities	39.1	34.8	21.7
Non-profit economic dev. organizations	52.2	30.4	17.4
High schools or vocational schools	30.4	30.4	39.1
Community organizations	47.8	26.1	21.7
Small business development centers	26.1	26.1	47.8
Industrial extension or technology centers	21.7	26.1	26.1
Chambers /other local business groups	43.5	21.7	34.8
Private companies	39.1	21.7	30.4
Local or county government agencies	39.1	21.7	39.1
State agencies	56.5	17.4	26.1
Econ. dev, planning, policy consultants	39.1	17.4	39.1
Banks or other private lending institutions	39.1	17.4	43.5
Business consultants	30.4	13.0	47.8
Federal agencies	34.8	4.3	52.2
Multi-county or regional planning agencies	52.2	-	47.8

N=23.

Evaluation of the ARC Entrepreneurship Initiative

For the following factors, please compare the position before the start of the ARC project with the position after the end of the project.	Percent of projects reporting	
	Significant increase	No change
Host organization's willingness to seek outside state and federal funding for entrepreneurial assistance projects after the completion of the ARC project	56.5	4.3
Entrepreneurship education and training opportunities available in the community after the completion of the ARC project	52.2	8.7
Business assistance services available in the community after the completion of the ARC project	47.8	21.7
Host organization's willingness to invest its own resources in entrepreneurial assistance projects after the completion of the ARC project	47.8	8.7
Host organization's willingness to seek local community funding for entrepreneurial assistance projects after the completion of the ARC project	43.5	8.7
Your knowledge of the capabilities of other organizations within the community who provide entrepreneurial training or business assistance	39.1	8.7
Your knowledge of the capabilities of other organizations outside your local community who provide entrepreneurial training or business assistance	34.8	91.3
Amount of funding available for new business start-ups after the completion of the ARC project	17.4	43.5
Number of business network groups in operation in the community after the completion of the ARC project	8.7	47.8

N=23.

To what extent did you face any of the following problems in implementing the ARC project	Number of projects reporting a problem	
	MAJOR	MINOR
Attracting existing businesses to use your services	1	9
Monitoring client and project outcomes	5	5
Attracting new start-up entrepreneurs to use your services	1	7
Attracting competent staff to implement the program	2	3
Developing your own technical materials	1	4
Obtaining or using technical materials from other organizations	0	5
Obtaining support from other organizations in the community	0	5
Recruiting target youth or student population to participate in education and training programs	1	3
Securing exposure in local media to provide information about your program to others	0	4
Recruiting target adult population to participate in education and training programs	1	2
Obtaining support from your host organization	1	1

N=23. Projects reporting problem either as major or minor.

Evaluation of the ARC Entrepreneurship Initiative

How would you characterize the financial support provided by ARC	Frequency	Percent of projects
Provided a match to other funds that were available	7	30%
Led to the leveraging of other funds that would not have been available	16	70%
Other	1	4%

N=23. Multiple responses received in one case.

What would have happened if you had not received ARC funding?	Frequency	Percent of projects
Would have secured other funding so as not to delay the project	2	9%
Would have delayed the project to revise project plan	9	39%
Would not have continued with the project	11	48%
Other	1	4%

N=23.

How would you characterize the technical support provided by ARC	Frequency	Percent of projects
ARC's technical support was very useful	11	48%
ARC's technical support was moderately useful	4	17%
ARC's technical support was not useful	1	4%
ARC did not provide any technical support	7	30%

N=23.

Did the ARC provide opportunities for you to learn about the experience of similar projects elsewhere in the ARC region	Frequency	Percent of projects
Yes	20	87%
No	3	13%

N=23.

Did the project have follow-on goals, which you aimed to undertake after ARC funding was completed?	Frequency	Percent of projects
No	4	17%
Yes	18	78%
If yes, are you pursuing these goals?		Percent of projects with follow-on goals
Yes, without change	7	39%
Yes, with some change	10	56%
No, not pursuing	1	6%

N=23.

Evaluation of the ARC Entrepreneurship Initiative

What are the sources of funding for follow-on project(s)	Frequency	Percent of projects
State funds	13	72%
Federal funds	8	44%
Fee income from clients	7	39%
Municipal or county government	7	39%
Host organization from its own resources	5	28%
Foundations	3	17%
Local business organizations	2	11%
Other	1	6%

N=18.

**Appendix C
Survey Instruments**

ARC PROJECT SURVEY

Project name:	Project reference number:
Your name:	Telephone number:

A. PROGRAM DEVELOPMENT	
1. What best describes your organization?	<input type="checkbox"/> Local or county government agency <input type="checkbox"/> Multi-county or regional planning agency <input type="checkbox"/> Non-profit economic development organization <input type="checkbox"/> Community organization <input type="checkbox"/> High school or vocational school <input type="checkbox"/> Community college or 2-year institution <input type="checkbox"/> University <input type="checkbox"/> Consultancy group <input type="checkbox"/> Other (explain):
2. What is the approximate annual budget of your organization?	<input type="checkbox"/> Under \$50,000 <input type="checkbox"/> \$50,000 - \$249,000 <input type="checkbox"/> \$250,000 - \$999,000 <input type="checkbox"/> \$1 million - \$10 million <input type="checkbox"/> Over \$10 million <input type="checkbox"/> Don't know
3. The project that ARC funded was:	<input type="checkbox"/> A new program <input type="checkbox"/> A program that built on earlier funded projects <input type="checkbox"/> Other (explain):
4. If the program built on earlier funded projects, how were those projects sponsored?	<input type="checkbox"/> Previous ARC funds <input type="checkbox"/> Other federal funds <input type="checkbox"/> State funds <input type="checkbox"/> Local or county gov't funds <input type="checkbox"/> Organization's own resources <input type="checkbox"/> Foundation <input type="checkbox"/> Other (explain):
5. When did the ARC funded project begin?	Month: Year:
6. When did the ARC funded project end? <i>(If ongoing, indicate when the ARC project will end)</i>	Month: Year:

Evaluation of the ARC Entrepreneurship Initiative

7. What were the major goals of this ARC project?	
<i>Goal</i>	<i>Describe goal</i>
#1	
#2	
#3	
#4	
#5	

8. How were the goals established for the project derived?	<input type="checkbox"/> Formal planning study or needs assessment <input type="checkbox"/> Discussion and experience within your organization <input type="checkbox"/> Discussion involving other members of the local community <input type="checkbox"/> Other
9. Did you change or add new goals during the period of the project? If yes, please describe	<input type="checkbox"/> Yes <input type="checkbox"/> No

Evaluation of the ARC Entrepreneurship Initiative

B. PROGRAM ACTIVITIES			
10. We would like to understand the principal activities undertaken by the ARC project. For each possible activity, please indicate whether it was a major or minor activity emphasis, or not an emphasis:	Major activity emphasis	Minor activity emphasis	Not an emphasis
Curriculum development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education and training of students (high school, vocational school)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education and training of adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training of staff and other trainers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local and regional needs assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business opportunities research and marketing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technology opportunities research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
One-on-one assistance for <i>existing</i> businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
One-on-one assistance for <i>new start-up</i> businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business network groups for <i>existing</i> businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business network groups for <i>new start-up</i> businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business seminars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business internships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Referral systems to other service providers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government procurement assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loan or equity fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New physical facilities developed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distance learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Web site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Custom software development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community conferences, organizational meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New local economic development strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. During the period of ARC project funding,	Activity undertaken	If YES, how many participants by these categories:
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Evaluation of the ARC Entrepreneurship Initiative

how many participants did you serve by these activities?	as part of the project?	
Education and training of youth, high school students, or vocational students	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER Number of participants by the following categories: _____ # under 8 hours _____ # 8 to 30 hours _____ # more than 30 hours <input type="checkbox"/> Unable to say
Education and training of adults	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER Number of participants by the following categories: _____ # under 8 hours _____ # 8 to 30 hours _____ # more than 30 hours <input type="checkbox"/> Unable to say
Individual assistance to <i>existing</i> businesses that already have employees	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER Number of business assists by service time categories: _____ # under 8 hours _____ # 8 to 30 hours _____ # more than 30 hours <input type="checkbox"/> Unable to say
Individual assistance to <i>existing</i> businesses that do not have employees (e.g. self-employed or micro-business)	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER Number of business assists by service time categories: _____ # under 8 hours _____ # 8 to 30 hours _____ # more than 30 hours <input type="checkbox"/> Unable to say
Individual assistance to adults seeking to start <i>new businesses</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER Number of business assists by service time categories: _____ # under 8 hours _____ # 8 to 30 hours _____ # more than 30 hours <input type="checkbox"/> Unable to say
Assistance to network groups	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER OF GROUPS _____ TOTAL NUMBER OF BUSINESSES
Direct financial assistance, loans, or loan guarantees	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER OF DIRECT LOANS OR OTHER FINANCIAL PACKAGES Number of loans or financial packages: _____ under \$5,000 _____ \$5,000 - \$25,000 _____ over \$25,000 \$_____ Total value of all loans/packages <input type="checkbox"/> Unable to say
Referrals to other sources of assistance	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ TOTAL NUMBER OF REFERRALS Number by categories:

Evaluation of the ARC Entrepreneurship Initiative

		<input type="checkbox"/> Financial assistance <input type="checkbox"/> Technological assistance <input type="checkbox"/> Other business assistance <input type="checkbox"/> Unable to say
Meetings with community leaders, business representatives, and other local organizations to discuss projects or plans	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> TOTAL NUMBER OF MEETINGS <input type="checkbox"/> TOTAL NUMBER OF PEOPLE PARTICIPATING (without duplication)

12. What was the primary geographical area served by the project?	<input type="checkbox"/> Single county <input type="checkbox"/> Multi-county, within one state <input type="checkbox"/> Entire state <input type="checkbox"/> Multi-county, two or more states
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C. PROJECT INPUTS

13. Please confirm the total budget for the project. Include direct cash receipts only.	Total budget	\$
	ARC	\$
	Other federal sources	\$
	State gov't	\$
	County or local gov't	\$
	Fee income	\$
	Other	\$
14. What was the staffing level for the project at peak staffing?	_____ Full-time equivalent staff	

D. TRACKING AND ASSESSMENT

15. If you offered education and training courses as part of the ARC project, how did you track participant satisfaction and outcomes?	<input type="checkbox"/> Not applicable – skip to next question <input type="checkbox"/> No formal evaluation used <input type="checkbox"/> End-of-course student evaluations <input type="checkbox"/> Time-elapsed student evaluations, at a time well after training had been completed <input type="checkbox"/> Other (describe):
16. If you offered business assistance as part of the ARC project, how did you track participant satisfaction and outcomes?	<input type="checkbox"/> Not applicable – skip to next question <input type="checkbox"/> No formal evaluation used <input type="checkbox"/> End-of-project evaluations <input type="checkbox"/> Time-elapsed project evaluations, at a time well after the project was completed <input type="checkbox"/> Other (describe):

E. PROJECT OUTCOMES

17. As a <i>direct result</i> of project assistance		Number of	Number of
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Evaluation of the ARC Entrepreneurship Initiative

over the total period of the ARC project, have there been:		businesses	employees
<ul style="list-style-type: none"> New businesses started by youth or students <i>without</i> employees 	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	
<ul style="list-style-type: none"> New businesses started by youth or students <i>with</i> employees 	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	_____ # <input type="checkbox"/> Unable to say
<ul style="list-style-type: none"> Number of new businesses started by adult participants <i>without</i> employees 	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	
<ul style="list-style-type: none"> Number of new businesses started by adult participants <i>with</i> employees 	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	_____ # <input type="checkbox"/> Unable to say
18. As a <i>direct result</i> of project assistance through the ARC project, have there been:			
<ul style="list-style-type: none"> Jobs <i>created</i> in <i>existing</i> businesses 	<input type="checkbox"/> Yes <input type="checkbox"/> No	Jobs created _____ # <input type="checkbox"/> Unable to say	
<ul style="list-style-type: none"> Jobs <i>saved</i> in <i>existing</i> businesses 	<input type="checkbox"/> Yes <input type="checkbox"/> No	Jobs saved _____ # <input type="checkbox"/> Unable to say	
<ul style="list-style-type: none"> Jobs <i>lost</i> in <i>existing</i> businesses 	<input type="checkbox"/> Yes <input type="checkbox"/> No	Jobs lost _____ # <input type="checkbox"/> Unable to say	

Evaluation of the ARC Entrepreneurship Initiative

19. As a <i>direct result</i> of project assistance through the ARC project, have there been:		Number of businesses	
• Businesses that have developed new products	<input type="checkbox"/> Yes <input type="checkbox"/> No		
• Businesses that have upgraded technologies or management methods	<input type="checkbox"/> Yes <input type="checkbox"/> No		
20. As a <i>direct result</i> of project assistance over the total period of the ARC project, have there been:		Number of businesses	Total added annual sales
• Businesses that have increased sales outside of the state	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	\$_____ <input type="checkbox"/> Unable to say
• Businesses that have increased export sales outside the United States	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____ # <input type="checkbox"/> Unable to say	\$_____ <input type="checkbox"/> Unable to say

21. Has the project resulted in any remarkable “success stories” where participants achieved unexpectedly good results as a result of project assistance?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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If yes, please briefly describe up to three of your success stories, including project’s intervention:

#1

#2

#3

Evaluation of the ARC Entrepreneurship Initiative

22. To what extent did the project <i>result</i> in new partnerships with other public and private entities?	Increased consultation or information exchange	Increased cooperation in tangible service delivery activities	No change in relationship
Local or county government agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-county or regional planning agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High schools or vocational schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Colleges or universities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-profit economic development organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chambers of commerce / other local business groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small business development centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Banks or other private lending institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic development, planning, policy consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial extension or technology centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluation of the ARC Entrepreneurship Initiative

<p>23. For the following factors, please compare the position <i>before</i> the start of the ARC project with the position <i>after</i> the end of the project.</p> <p>Comparing before with after, to what extent has the project produced sustained changes in:</p>	<p>Signifi- cant increase</p>	<p>Moderate increase</p>	<p>No change</p>	<p>Moderate decrease</p>	<p>Signifi- cant decrease</p>
<p>Your organization's willingness to invest its own resources in entrepreneurial assistance projects <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Your organization's willingness to seek local community funding for entrepreneurial assistance projects <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Your organization's willingness to seek outside state and federal funding for entrepreneurial assistance projects <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Entrepreneurship education and training opportunities available in the community <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Business assistance services available in the community <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Number of business network groups operating in the community <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Amount of funding available for new business start-ups <i>after</i> the completion of the ARC project</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Your knowledge of the capabilities of other organizations <i>within</i> the community that provide entrepreneurial training or business assistance</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>Your knowledge of the capabilities of other organizations <i>outside</i> your local community that provide entrepreneurial training or business assistance</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>

Evaluation of the ARC Entrepreneurship Initiative

F. PROBLEMS				
24. To what extent did you face any of the following problems in implementing the ARC project?	Major problem	Minor problem	Not a problem	Not applicable
Obtaining support from your parent organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtaining support from other organizations in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Securing exposure in local media to provide information about your program to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing your own technical materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtaining or using technical materials from other organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recruiting target youth or student population to participate in education and training programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recruiting target adult population to participate in education and training programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attracting existing businesses to use your services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attracting new entrepreneurs to use your services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring client and project outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attracting competent staff to implement the program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other problems (describe):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G. ARC ROLE AND FOLLOW-ON ACTIVITIES	
25. How would you characterize the financial support provided by ARC?	<input type="checkbox"/> Provided a match to other funds that were available <input type="checkbox"/> Led to the leveraging of other funds that would not otherwise have been available <input type="checkbox"/> Other
26. What would have happened if you had not received ARC funding?	<input type="checkbox"/> Would have secured other funding so as not to delay the project <input type="checkbox"/> Would have delayed the project to revise project plan <input type="checkbox"/> Would not have continued with the project <input type="checkbox"/> Other

Evaluation of the ARC Entrepreneurship Initiative

<p>27. How would you characterize the technical support provided by ARC?</p>	<p><input type="checkbox"/> ARC's technical support was very useful <input type="checkbox"/> ARC's technical support was moderately useful <input type="checkbox"/> ARC's technical support was not useful <input type="checkbox"/> Not Applicable – ARC did not provide technical support</p>
<p>28. Did the ARC provide opportunities for you to learn about the experiences of similar projects elsewhere in the ARC's service region?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>29. Did the project have follow-on goals, which you aimed to undertake after ARC funding was completed? If yes, please describe:</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>30. Are you now pursuing these follow-on goals?</p>	<p><input type="checkbox"/> Yes, without change <input type="checkbox"/> Yes, with some changes <input type="checkbox"/> No</p>
<p>31. What are the sources of funding for this follow-on project</p>	<p><input type="checkbox"/> Federal funds <input type="checkbox"/> State funds <input type="checkbox"/> Local or county government <input type="checkbox"/> Foundations <input type="checkbox"/> Local business organizations <input type="checkbox"/> Fee income from clients <input type="checkbox"/> Your organization from its own resources <input type="checkbox"/> Other: _____</p>

Evaluation of the ARC Entrepreneurship Initiative

32. What have you learned from this project that will influence how you plan future entrepreneurship activities in your community?

33. Any additional comments?

34. If there are additional reports about the project, including outside assessments, or news media articles, we would like to see them. If possible, send such reports to:

**Regional Technology Strategies, Inc.
P.O. Box 9005
Chapel Hill, NC 27515**

35. If your organization has an Internet address, what is the URL link? HTTP://

36. Finally, could you please provide contact information for the three success stories you mentioned earlier? We would like to follow-up.

#1 Name/organization	Tel:
#2 Name/organization	Tel:
#3 Name/organization	Tel:

THANK YOU FOR YOUR PARTICIPATION! Should you have any questions, please give us a call at Regional Technology Strategies, at (919) 933-6699.

ARC CLIENT SURVEY

ARC PROGRAM:
Name of person interviewed:
Telephone number:
Name of company (<i>if applicable</i>):

1. Status of interviewee	<input type="checkbox"/> Owner (of company) <input type="checkbox"/> Employee <input type="checkbox"/> Manager (of company owned by another) <input type="checkbox"/> Not currently employed <input type="checkbox"/> Other: <input type="checkbox"/> Are you considering starting a new business?
2. Could you briefly describe your prior work experience or occupation?	
3. How many employees work in this establishment?	
4. What products or services does your company produce?	
5. What percentage of your sales go to customers:	Local (under 50 _____% mi.) _____% Non-Local _____% To foreign countries
6. Which best describes your main business objective?	<input type="checkbox"/> To operate a business that will grow rapidly in sales over the next three years <input type="checkbox"/> To operate a business that is stable and supports my lifestyle and/or current employees <input type="checkbox"/> To reverse the decline of my current business <input type="checkbox"/> Other:

SERVICES PROVIDED

7. Over what period of time were you involved in this program?	
8. What services did you receive from the program? (Have client describe, and later fill in boxes)	<input type="checkbox"/> Management / technical assistance <input type="checkbox"/> Access to capital <input type="checkbox"/> Technology transfer <input type="checkbox"/> Network creation / enhancement <input type="checkbox"/> Entrepreneurial training / education

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<p>9. How did you first learn of the services offered by the program? <i>(Have client describe, and later fill in boxes)</i></p>	<p><input type="checkbox"/> Other: <input type="checkbox"/> Contacted by program staff <input type="checkbox"/> Referral from another program <input type="checkbox"/> Flyer or advertisement <input type="checkbox"/> Word of mouth <input type="checkbox"/> E-mail or web site <input type="checkbox"/> Other:</p>
<p>10. Why did you decide to use the services of this program rather than use another public or private provider? <i>(Have client describe, and later fill in boxes)</i></p>	<p><input type="checkbox"/> Program offered higher quality services <input type="checkbox"/> Program offered lower cost services <input type="checkbox"/> Program offered services at the time I needed them <input type="checkbox"/> No other local provider offers these services <input type="checkbox"/> Other:</p>
<p>11. Can you give a rough estimate of how many interactions you had with the program's staff during this period? <i>(An interaction includes face-to-face contact, telephone contact, or an exchange by e-mail)</i></p>	<p><input type="checkbox"/> 1-2 interactions <input type="checkbox"/> 3-5 interactions <input type="checkbox"/> 6-10 interactions <input type="checkbox"/> 11-20 interactions <input type="checkbox"/> more than 20 interactions</p>
<p>12. About how much time did you and/or your staff spend interacting with the program staff?</p>	<p>_____ hrs./month</p>
<p>13. How satisfied were you with the services provided by the program?</p>	<p><input type="checkbox"/> Very satisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> Neutral <input type="checkbox"/> Dissatisfied <input type="checkbox"/> Very dissatisfied</p>
<p>14. Did you receive the services you expected to receive? If no, please explain:</p>	<p><input type="checkbox"/> Yes – exceeded my expectation <input type="checkbox"/> Yes – met my expectation <input type="checkbox"/> No</p>
<p>15. Did you pay for any of the services you received from the program?</p>	<p><input type="checkbox"/> Yes → If Yes, how much: \$ _____ <input type="checkbox"/> No</p>
<p>16. Do you expect to obtain additional services from the program over the next year?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe</p>

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IMPACTS OF SERVICES	
<p>17. As a result of the services provided by the program, did you receive any of the following?</p>	<p><input type="checkbox"/> Improved personal or business skills <input type="checkbox"/> Specific recommendations for business improvement <input type="checkbox"/> Assistance with new or improved technology <input type="checkbox"/> Improved contacts with other businesses <input type="checkbox"/> Better knowledge of local business resources and services <input type="checkbox"/> A grant or loan from the program <input type="checkbox"/> Referral to other source of financial aid <input type="checkbox"/> Referral to other source of management assistance <input type="checkbox"/> Other services received:</p>
<p>18. As a result of this program, have your attitudes and perspectives changed in any of these areas:</p>	<p><input type="checkbox"/> Improved knowledge of opportunities for developing or expanding business <input type="checkbox"/> Greater willingness to take risk in developing or expanding my business <input type="checkbox"/> Improved confidence in local sources of business assistance</p>
<p>19. As a result of this program, what changes have occurred with you or your business? <i>(Have client describe, and later fill in boxes)</i></p>	<p><input type="checkbox"/> New business plan <input type="checkbox"/> Started a new business <input type="checkbox"/> Invested in facilities, equipment, major software <input type="checkbox"/> New production or management methods <input type="checkbox"/> Developed or improved products <input type="checkbox"/> Developed new services <input type="checkbox"/> Entered new markets <input type="checkbox"/> Other:</p>
<p>20. If you made investments as a result of the services provided by the program, please estimate the total amount.</p>	<p>\$ _____</p>
<p>21. If you have employees, did you make any of the following changes:</p>	<p><input type="checkbox"/> Don't have employees <input type="checkbox"/> Improved human resource management <input type="checkbox"/> New training programs established <input type="checkbox"/> Improved quality control systems</p>

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PERSONAL INFORMATION

22. Please provide information about past and current sales and employment. In the last column, please estimate what the value would be now <i>if you had not received services</i> from the program.				
	Current 12-month period	Two years ago	Estimate for current period if you had not received services.	
				<i>If higher or lower, please estimate value</i>
Total employees			<input type="checkbox"/> Higher <input type="checkbox"/> Same <input type="checkbox"/> Lower <input type="checkbox"/> Can't say	#
Total sales			<input type="checkbox"/> Higher <input type="checkbox"/> Same <input type="checkbox"/> Lower <input type="checkbox"/> Can't say	\$
Total payroll			<input type="checkbox"/> Higher <input type="checkbox"/> Same <input type="checkbox"/> Lower <input type="checkbox"/> Can't say	\$
Total cost of materials you bought to run your business			<input type="checkbox"/> Higher <input type="checkbox"/> Same <input type="checkbox"/> Lower <input type="checkbox"/> Can't say	\$

23. Is there anything else you would like add?	
--	--

CONTACT INFORMATION	
24. Address	

INTERVIEW INFORMATION	
Date of interview	
Interviewer	

Appendix D

Detailed Literature Review and Bibliography

1. Access to Capital

Programs that provide entrepreneurs with access to capital fall into two very different categories: seed/venture capital programs and microfinance programs. Seed and venture capital programs generally target businesses in fast-growing sectors with high capital needs. Seed or venture capital investments can be in the hundreds of thousands or millions of dollars, giving investors a share in the profits or ownership of the start-up firm. In contrast, microfinance programs focus on very small businesses or on self-employed individuals, and make much smaller investments—sometimes as small as hundreds of dollars. Microfinance can take the form of credit, loans, or grants, but rarely gives the lender an equity share in the new business. These two types of programs often have different missions; seed and venture capital is generally an economic development measure, whereas microfinance programs often serve social development as well as economic development goals.

In evaluating access to capital programs, some of the same issues arise for both types of program. For instance, both are subject to the debate over the use of accomplishment versus activity performance measures. However, the differences between the programs' goals mean that each type of program requires its own evaluation approach and its own performance metrics.

a. Evaluating Seed and Venture Capital Programs

The metrics used to evaluate seed and venture capital programs are a mixture of activity and accomplishment measures. Internal activity measures include deal flow, debt/equity ratio, number of deals exited, leveraging of private funds, and internal rate of return. Meanwhile, accomplishment measures include tax revenue generated, success of funded businesses, and whether the target population or area was served. With the exception of tax revenue, the metrics mostly focus on micro-level program impacts rather than macroeconomic changes, highlighting the difficulty of detecting large-scale impacts even of high-investment programs.

The more significant characteristic of these metrics, however, is that (again with the exception of tax revenue) measurements used to evaluate publicly funded capital programs, which exist to promote industrial and economic growth, are the same performance measures that would be used to evaluate private venture capital companies that operate with the goals of private growth and profit. This choice of metrics is related to the most common finding in evaluations of public venture capital programs: that they perform best when they behave, not like public programs, but like private venture capital companies.

Different evaluations state this finding with varying degrees of vehemence. A USAID (Agency for International Development) evaluation of venture capital in developing countries found that focusing on public goals causes venture financing funds to fail, and that venture capital should be left to private companies. The National Governors'

Association (NGA) stated that economic development and job creation are best served by a healthy business climate, not by programs that seek to benefit a targeted population or geographic area. While public leaders (and public funding) can launch venture financing programs, the NGA says fund management should be left to venture capital professionals who are “not afraid to make money.” The Rural Policy Research Institute supports this stance, noting that too little attention to internal rate of return and too much public involvement can hinder a capital fund’s ability to serve economic development goals. RUPRI’s analysis also states, however, that a public venture capital fund’s performance should be assessed according to its particular public mission, because a fund that focuses on economic development or job creation cannot be expected to maximize profit. The convergence of these findings suggests that the public mission orientation of some publicly funded venture capital programs may pose conflicts with a program’s need to compete for deals and profits.

b. Evaluating Microfinance Programs

As one would expect, the procedure for evaluating microfinance programs differs substantially from the above. The most common metrics used to evaluate such programs include participant income, rates of entry into self-employment, length of self-employment spells, length of unemployment spells, the degree to which the program reaches its target population, and a variety of qualitative variables that fall under the category of “empowerment.” Like those used to assess the performance of venture capital programs, these metrics are largely micro-level rather than macro-level. As the name indicates, the relatively small scale of microfinance programs means that it is difficult to connect them with macroeconomic change.

The evaluation procedures and methodologies of microfinance programs have received a great deal of scholarly attention over the past few years, the most notable example being the Aspen Institute’s Performance Counts initiative. This project is working to establish a set of rigorously tested and applied output and outcome performance measures for microfinance programs. Its recommendations to date include the outcome measures listed above; the recommended output metrics include measures of program services performance, institutional capacity, efficiency, and sustainability. Other scholars have focused on the conflicts many programs encounter between economic and social goals. Lisa Servon of the University of Texas has conducted a number of studies showing that microfinance programs do not serve the neediest populations; the difficulty of self-employment, she argues, limits the economic development impact of microenterprise¹⁷. Mark Schreiner of Washington University’s Center for Social Development proposes that difficulties in reconciling social with economic goals be addressed by conducting cost-effectiveness evaluations, rather than simply performance evaluations. In this way, he argues, we can assess whether the costs associated with microenterprise programs’ different goals meet our sense of the goals’ importance¹⁸.

¹⁷ Servon, Lisa J. “Microenterprise Programs in U.S. Inner Cities: Economic Development or Social Welfare?” *Economic Development Quarterly*, May 1997 v11 n2 p166(15).

¹⁸ Schreiner, Mark. “A Review of Evaluations of Microenterprise Programs in the United States.” <http://gwbweb.wustl.edu/Users/csd/workingpapers>. March 1999.

2. Networks

The field of network evaluation is still relatively young. Evaluators continue to debate appropriate methodologies, metrics, and performance indicators for networks. Two primary issues emerge from recent network evaluations. First, there is no uniform definition of a business network. This makes it difficult to establish evaluation measures, because different conceptions of the network point to different measures of success. Second—and perhaps more important—evaluators, network managers, and firms all want hard data relating to networks' usefulness and success. Many of the most significant characteristics of networks, however, are qualitative (i.e., level of trust among firms, degree of knowledge growth), and it is difficult to examine them using quantitative methods. Some evaluators have gathered qualitative data and analyzed them using quantitative methods, but the data themselves are still qualitative.

Many evaluators have sought to construct a typology of networks prior to evaluating them, to understand the significant characteristics of networks and the firms within them, and to answer questions such as what motivates firms to join and stay within networks. Evaluation can then grow out of these typologies as evaluators determine whether network membership has fulfilled firms' needs and expectations.

a. Evaluating Networks

As noted above, most evaluations of networks include qualitative characteristics. Among the most often used metrics are firms' perceptions of the usefulness and impact of network membership, changing attitudes about inter-firm collaboration, firms' level of trust and cooperation with other firms, level of commitment to the network, and the competitive environment of member firms. Evaluations focus on these characteristics because they are some of the most significant for determining a company's willingness to participate in and commit to a network. Other qualitative characteristics include impact on supply chain relationships, firms' assessment of services offered by the network sponsor, and firms' opinions of the hindrance and success factors of business networks.

Evaluations also include quantitative characteristics, especially those evaluations that seek to construct a typology. Quantitative variables most commonly measured include differences in employment levels, revenues, and profitability; number of shared activities undertaken by member firms; and characteristics of members firms such as size, sales, and markets. There does not, however, appear to be a set of benchmarks determining a standard for the level of quantitative change that would mark success or failure of a network. Most evaluators, therefore, include qualitative as well as quantitative measures.

b. Commonly Used Methodologies

Because many of the metrics examined by evaluators are qualitative, many of the methods employed are qualitative as well. Most evaluations of networks gather information through questionnaires, key informant interviews, case studies, and review of program documents. Some of the evaluations combined qualitative and quantitative methods; one, for example, used program documents and interviews to gather

quantitative data as well as qualitative. Another asked executives of network member firms to estimate the dollar value of the benefits and costs of participating in the network; the resulting variable thus had both qualitative characteristics, in that it reflected individuals' opinion, and quantitative characteristics, in that it could be analyzed numerically. A study undertaken by USNet and RTS examined several network case studies, codified the case study variables, and used qualitative statistical analysis to glean overall results from the individual case studies.

c. Common Findings

One of the most common findings of network evaluations was that success depended upon the level of commitment from the individual firms. Outside sponsorship, such as funding for training or for the initial establishment of the network, was often helpful in getting networks off the ground, but public agencies cannot be the sole initiator, nor can they be the driving force behind the long-term functioning of the network. Most firms, it was found, had a positive assessment of the benefits of network membership, though many still had concerns about other firms' commitment and the risks posed by cooperating with potential competitors. Studies also found that where significant quantitative firm-level impacts were found, such as increases in revenues, they were likely to be concentrated among a few members firms rather than spread among all the members. More commonly found were qualitative firm-level impacts such as attitudes toward collaboration and policy awareness of networks. Macro-level economic impacts were difficult to detect.

Evaluators continue to develop new ways of studying networks, both to understand their functioning and to determine predictors of success. Particularly, they seek to reconcile the need for hard data with the significance of "soft" variables in network formation and growth.

3. Entrepreneurial Education

Entrepreneurial education provides skills that are not ordinarily taught in general curricula, while also giving students an opportunity to experience the practical effects of the skills being acquired. While there is a long tradition of business concepts being taught in *higher* education, entrepreneurial programs are now expanding into primary and secondary school as well. Studies of these programs demonstrate that entrepreneurship is a topic of interest by students of all ages.

Many studies of entrepreneurial education have highlighted specific components of successful programs, and to what extent such components can be replicated in various academic environments. Factors that are both successful and reproducible are of the greatest interest to an analysis such as this, and will receive especial attention in this section.

Entrepreneurial programs can be divided into two types: Primary/Secondary and Post-secondary. Each targets a different type of student, having different goals and capabilities. The different programs also exhibit different resources and commitments to the community that must be recognized.

a. Primary/Secondary Programs

Many primary/secondary programs specifically target disadvantaged or “at risk” students, as an attempt to keep these youths in school and invested in education. Other entrepreneurial education courses are directed at “interested” students, or as a student activity, in order to expand students’ skills and post-school options.

Secondary programs rely upon the support of the host school system, and of outside partnerships, to ensure resources. Examples of resources utilized by secondary programs are:

- Outside businesses serving as mentors and as sources of apprenticeships or business experiences for students.
- Outside organizations and community groups becoming involved in a partnership with the schools.
- ⇒ Outside interests donating computers and technical resources. While perhaps not essential, these resources are important for successful training, and often cannot be provided solely by the school system.

b. Post-secondary Programs

In contrast to the youth-oriented practices described above, post-secondary entrepreneurial programs target those involved in higher or continuing education. Often, these students have innovative ideas but require assistance in putting these ideas into practice. Studies reveal that entrepreneurial students, while requiring many of the same skills as traditional MBA business students, exhibit different behaviors and attitudes. Successful programs are those that cater to these behaviors and attitudes and can be distinguished from traditional business courses in the following ways:

- Courses contain ambiguous circumstances and risk, as with real-life entrepreneurial ventures. Stress and frustration are expected to develop during the course.
- Simulated ventures that can give students “real-life” references for later entrepreneurial experiences.
- Connections to successful alumni are important in giving programs prestige and credibility.
- Innovation and community involvement.

Two-year colleges have traditionally not provided entrepreneurial programs. However, this is an area receiving increasing interest, as many community and technical colleges have the capacity to deliver entrepreneurial programs as part of a continuing education program. The National Center for Research in Vocational Education conducted a 1996 study entitled *Fostering Entrepreneurship through Business Incubation*; a handbook for two-year colleges was released as part of this study and contains information on how two-year colleges can become more fully invested in entrepreneurial programs. Among its recommendations are to:

1. Establish a business incubator

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2. Provide education and training opportunities
3. Support the local business community, and
4. Facilitate school-to-work-to-business ownership transition

Among four-year colleges, those that consistently rank highest in polls of business schools all offer at least three entrepreneurial courses as a requirement for the MBA. What stands out is that to be a top business school, there must be at least an acknowledgement of entrepreneurship, as different from traditional business classes. In addition, the faculty, curriculum and resources are large influences on how successful the program will be.

Entrepreneurial education can be imbedded in an educational program as a core curricular component. Doing so emphasizes the importance of entrepreneurial principles and ensures that students receive business training as a normal part of the educational process. This in turn could have a marked change on how students and adults view the risks and rewards of entrepreneurship.

Descriptions of entrepreneurship and the characteristics that contribute to entrepreneurial success vary. Jeffrey Timmons of Babson University has developed a useful definition that emphasizes the special set of skills needed by entrepreneurs:

Entrepreneurship is the ability to create and build something from practically nothing. It is initiating, doing, achieving and building an enterprise or organization, rather than just watching, analyzing, or describing one. It is the knack for sensing an opportunity where others see chaos, contradiction and confusion. It is the ability to build a “founding team” to complement your own skills and talents. It is the know-how to find, marshal and control resources and to make sure you don’t run out of money when you need it most. Finally, it is the willingness to take calculated risks, both personal and financial, and then do everything possible to get the odds in your favor.

Entrepreneurial programs have been very successful in fostering the transition from idea to product or service. The continued diversification in program nature and student body will not only contribute to skills development but also to increased investment in fundamental local economies.

4. Assessing Technical and Managerial Assistance

The methodology for assessing performance of programs that provide managerial and technical assistance to entrepreneurs is a work in progress, but there is an emerging consensus on which indicators best measure achievement. Performance measurement starts with the program goals that define the desired outcomes. Entrepreneurial programs typically have multiple goals. For example:

- to help economically disadvantaged individuals start a business;
- to increase the number of jobs in micro-enterprises—especially well-paying jobs;
- to create/build wealth in the community;

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- to enhance the success of existing firms

A potential for conflict among these goals contributes to the difficulty in assessing program performance. It is important to recognize that in the short term, creating new businesses is not synonymous with creating jobs and wealth. Few new businesses – even those that ultimately succeed – provide many jobs or generate large profits in their early years. Moreover, the different goals suggest different target populations. Are targeted clients potential entrepreneurs? Are there existing small businesses that could be helped to move to the next level? Is the program trying to serve both – perhaps with different service delivery mechanisms?

The review of program benchmarks examined assessments of diverse programs providing management and technical assistance to entrepreneurs. These programs range from micro-enterprise programs such as those participating in the Aspen Institute Self-Employment Learning Project to the national network of Small Business Development Centers, a partnership between the Small Business Administration and local institutions of higher education.

Micro-enterprise programs target potential or existing entrepreneurs and focus performance measurement on indicators such as the number of new business start-ups, survival rates, and expansions. Small business assistance programs measure their success in the number of new jobs created and the wages paid new workers at assisted firms. The examples of performance indicators are not mutually exclusive; rather the difference is a matter of emphasis.

Both micro-enterprise and small business assistance programs consider customer satisfaction, which can be measured with a customer survey and/or indicated by a willingness to pay for services. All programs face resource constraints, and so performance indicators include efficiency measures. Funders and program administrators track not just the number of jobs created but also the cost per job created.

Business incubators are often the vehicles through which assistance is delivered to start-up companies. An incubator can take the form of a multi-tenant building that provides affordable office space for new firms. Incubator firms typically share critical office services and equipment in order to reduce overhead costs. In addition to office services, incubator programs may provide affordable rent, managerial and technical assistance, financial assistance, and increased opportunities for interaction with firms both inside the incubator and within the larger local economy.

The benefits resulting from management and technical assistance to small businesses are defined at three levels – the individual assisted, the firm (if there is one) assisted, and the community. While the program goal is to help the individual start and grow a business, that is not the only potential positive outcome. There is a benefit from someone learning that they lack an entrepreneurial aptitude, personality, or skills and/or have a weak business idea and thus avoid a debacle. For some, entrepreneurial training may convey entrepreneurial skills that help them obtain better jobs or advance in their current jobs. A comprehensive performance measurement system goes beyond

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counting business start-ups. It tracks the economic situation of program clients (or a sample of clients) for a period after they have received services.

Desired outcomes at the firm level include increased profitability and growth in size as indicated by sales and employment. Desired outcomes at the community level also are measured in job growth. Additional community-level benefits might be a more diverse economic base, greater wealth, and more examples of good corporate citizenship. The North Central Regional Center for Rural Development used the time and money that assisted firms donated to non-profit activities in the community as a performance indicator in its assessment of community benefits from business incubators.

The key for any effort is that the selected performance indicators (1) reflect program goals and (2) measure changes in the status of clients. For example, the Office of Minority Enterprise is charged with helping minority firms grow and one strategy is accessing government contracts. Among performance indicators for that program are firm revenues and the amount of federal procurement dollars awarded to client minority-owned firms.

Another characteristic of good programs is performance indicators that are credible. This means that they use data that are readily available, easily understood, and can be verified. The minority business program requires clients to submit their year-end financial statements, which provide the data needed for its performance indicators. This illustrates an important precept. Programs should build in procedures to collect data for performance measurement *from the beginning*.

It is not always easy to link program activities with the desired outcomes described in goal statements. A tiered performance measurement system helps make the connection. Typically, the lowest level of performance indicator counts program activities. The second level consists of intermediate outcomes, changes in behavior or status that lead to the third level, the desired outcomes. For programs providing management and technical assistance to entrepreneurs, the number of clients assisted is an activity count; the number of assisted clients who complete a plausible business plan and/or access capital is an intermediate outcome. Final outcomes include measures such as the number and percent of assisted clients who improve their economic status and documented increases in employment and profitability at assisted firms.

Program managers are usually most comfortable measuring performance with activity counts, which are the indicators most susceptible to the managers' control. However, activity counts are not sufficient to measure program performance, and should be used in concert with the higher level indicators.

5. Technology Transfer

Technology transfer is in practice a fairly broad concept that covers a wide variety of efforts designed to aid the innovation process in firms. Since most basic research is conducted in university settings, many technology transfer programs are intended to improve the linkages between universities and industry. Such initiatives may consist of

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formal, long-term collaborations between universities and firms like research consortia or joint research ventures. Or they might take the form of research centers or industrial extension/modernization programs where technical assistance or short-term research is provided to firms on an as needed basis. Technology transfer also includes efforts to speed up the patenting and commercialization of both university and industrial research.

For the purpose of evaluating the ARC Entrepreneurship Initiative, the research team primarily concentrated on previous assessments of industrial modernization and extension initiatives. The major national program in this area is the Manufacturing Extension Partnership (MEP), managed by the National Institute of Standards and Technology (NIST) in collaboration with the states. The MEP provides technology and business assistance services, targeted towards small and medium-sized manufacturers. National surveys sponsored by NIST emphasize a series of quantitative measures of program performance, including sales, cost savings, jobs, capital investment, and productivity improvements. Since many firms have difficulty in placing an absolute dollar value on program impacts, one recent change has been to ask assisted firms whether particular impacts are present or not. If yes, the customer is then asked to estimate impacts. In one local survey, a series of impact ranges is offered, although the national survey continues to probe for a single dollar figure.

In addition to the post-project surveys, the MEP and local programs have supported a series of other evaluation studies. Logic-based case studies have been conducted to better understand high impact projects and the transformation of firms through MEP intervention. Controlled studies have been undertaken which compare similar assisted and non-assisted firms. NIST has also supported several state-of-the art workshops on the evaluation of industrial modernization and organizes an evaluation working-group to bring together those working on evaluation. Finally, there are regular external reviews of program performance by outside reviewers. NIST has established a performance review system based on the Baldrige quality criteria. Centers are reviewed under seven groups of criteria: 1) leadership, 2) planning, 3) customer knowledge and relationships, 4) performance information and analysis, 5) internal workforce practices and workforce environment, 6) process management, and 7) performance results.

Individual centers have established their own procedures to evaluate customer satisfaction and program impact. The methods used vary greatly in terms of sophistication, metrics, and robustness. Some centers do very little, leaning instead on NIST's national evaluations. A few centers sponsor extensive efforts. For example, the Georgia MEP has a distinct evaluation element that has conducted a series of evaluative studies including controlled surveys, cost-benefit analyses, and other special studies. The Michigan MEP has used a comprehensive benchmarking protocol, known as the Performance Benchmarking Service, to undertake controlled studies of program impact.

Access to Capital

- C-1 U.S. General Accounting Office. *CDFI Fund Can Improve Its Systems to Measure, Monitor, and Evaluate Awardees' Performance*. Washington, D.C.: General Accounting Office, GAO/RCED-98-225, July 1998.
- C-2 Barkley, David, Deborah Markley, and Julia Sass Rubin. *Public Involvement in Venture Capital Funds: Lessons from Three Program Alternatives*. Columbia, Mo.: Rural Policy Research Institute, November, 1999.
<www.rupri.org/pubs/archive/reports/p99-9/index.html>.
- C-3 Heard, Robert and John Sibert. *Growing New Business with Seed and Venture Capital: State Experiences and Options*. Washington, D.C.: National Governors' Association Center for Best Practices, 2000.
- C-4 Fox, James W. *The Venture Capital Mirage: Assessing USAID Experience with Equity Investment*. USAID Program and Operations Assessment Report No. 17. Washington, D.C.: U.S. Agency for International Development Center for Development Information and Evaluation. 1996.
- C-5 Schreiner, Mark. *Lessons for Microenterprise Programs from the Unemployment Insurance Self-Employment Demonstration*. St. Louis, Mo.: Washington University in St. Louis Center for Social Development, 1999.
<<http://gwbweb.wustl.edu/Users/csd/workingpapers/workingpapers.html>>.
- C-6 Barnes, Carolyn, Gayle Morris and Gary Gaile. *An Assessment of the Impact of Microfinance Services in Uganda: Baseline Findings*. Washington, D.C.: Management Systems International, 1998.
<www.mip.org/componen/AIMS/Pubs/English/Impact1.htm>.
- C-7 Postlethwaite & Netterville. *CAPCO Study*. Baton Rouge, La.: Louisiana Department of Economic Development, 1999.
- C-8 Doyle, Karen. *Performance Measures for Microenterprise in the U.S.* Draft paper presented at the International Labour Office program "Enterprise Creation by the Unemployed: The Role of Microfinance in Industrialized Countries," November, 1999.
- C-9 *Microcredit in Transitional Economies*. Paris: Organization for Economic Co-operation and Development, 1996.

Entrepreneurial Education

- E-1 Callan, K. and M. Warshaw. "Choosing the Best," in *Success* Sept. 1996, pg. 40.
- E-2 Vesper, K. and W.B. Gartner. "Measuring Progress in Entrepreneurship Education," in *Journal of Business Venturing* 12: 403-421, 1997.

Evaluation of the ARC Entrepreneurship Initiative

- E-3 Sexton, D.L. and N.B. Upton. "Evaluation of an Innovative Approach to Teaching Entrepreneurship," in *Journal of Small Business Management*, Jan. 1987: 35-43.
- E-4 Clouse, V.G.H. "A Controlled Experiment Relating Entrepreneurial Education to Students' Start-up Decisions," in *Journal of Small Business Management*, April 1990; 45-53.
- E-5-7 Hernandez-Gantes, V.M. *Fostering Entrepreneurship through Business Incubation: A 3-part Series*. Berkeley, Calif.: National Center for Research in Vocational Education (NCRVE), 1996.

Other References:

Benson, G.L. "Teaching Entrepreneurship through the Classics," in *Journal of Applied Business Research* 8 (4): 135-144, 1992.

Emshwiller, J.R. "Students Take Entrepreneurship Out of the Classroom: Many Small Business Schools Add Programs Offering Hands-on Experience." *The Wall Street Journal* 11/1/90, B2.

Fleming, P. "Entrepreneurship education in Ireland: A longitudinal study," in *The Academy of Entrepreneurship Journal*, 1996.

Gorman, G., D. Hanlon, and W. King. "Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-year Literature Review." *International Small Business Journal* 15 (3): 56-77, 1997.

Management and Technical Assistance

- M-1 U.S. Small Business Administration. *A Report to the U.S. Congress on Minority Small Business and Capital Ownership Development for Fiscal Year 1996*. Washington, D.C.: U.S. Small Business Administration Office of Minority Enterprise Development, 1997.
- M-2 U.S. Small Business Administration. *Opportunities for Success, Small Business Administration FY99 Performance Report*. Washington, D.C.: U.S. Small Business Administration, 2000.
- M-3 Johnson, S.L. and Holly M. Mudd. *Performance Measurement in the SBDC Program, Inspection Report No. 98-09-01*. Washington, D.C.: U.S. Small Business Administration Office of Inspector General, 1998.
- M-4 *Field Forum*, Issue 1. The Aspen Institute, Washington, D.C. October, 1999.
NOTE: Additional information from telephone interview with Elaine Edgecomb, Aspen Institute consultant.
- M-5 "Funding for the Future: The Young Entrepreneur Program." *Association for Enterprise Opportunity Newsletter*, September/October 1999. Arlington, Va.: Association for Enterprise Opportunity.

Evaluation of the ARC Entrepreneurship Initiative

NOTE: *PYEP Evaluation Outcomes* outline, QED Group, and other information provided by Jim Weglarz, AEO.

- M-6 "Measuring the Success of Economic Development Tools." *Rural Development News*, Fall 1998. Ames, Iowa: North Central Regional Center for Rural Development.

Networks

- N-1 Shapira, Philip, Mary Ann Alabanza Akers, and Eric Oldsman. *Collaborative Networking Projects Evaluation Study: An Evaluation of Flexible Manufacturing Networking Projects*. Final Report sponsored by the Appalachian Center for Economic Networks and the University of Toledo Urban Affairs Center. Chicago: Joyce Foundation, 1996.
- N-2 Kingsley, Gordon. *Establishing the Building Blocks: A Follow-up Evaluation of USNet's Foundation Forum on Inter-Firm Collaboration*. USNet Evaluation Working Paper No. 9504. Chapel Hill, N.C.: Regional Technology Strategies, Inc., 1995.
- N-3 Kingsley, Gordon and Hans Klein. *Lessons Learned from Inter-Firm Collaborations: A Survey of Case Studies*. USNet Evaluation Working Paper No. 9703. Gordon Kingsley and Hans Klein. Chapel Hill, N.C.: Regional Technology Strategies, Inc., 1997.
- N-4 Welch, Doug, Eric Oldsman, Philip Shapira, Jan Youtie, Julie Lee. *Net Benefits: An Assessment of a Set of Manufacturing Business Networks and Their Impacts on Member Companies*. Chapel Hill, N.C.: Regional Technology Strategies, Inc., 1997.
- N-5 Fulop, Liz, and Jo Kelly. *Survey of Industry Network Initiatives in New South Wales*. Final Report prepared for the Strengthening Local Economic Capacity Project, an initiative of the Commonwealth Department of Housing and Development. Kingswood, N.S.W., Australia: University of Western Sydney Nepean, 1995.

Technology Transfer

- T-1 Ellis, S. "Evaluation of Massachusetts Manufacturing Partnership: Selected Findings," in *Manufacturing Modernization: Implications of Evaluation Results for Program Improvement and Policy Development: Proceedings of Fourth Workshop on the Evaluation of Industrial Modernization Programs* (P. Shapira and J. Youtie, eds.). Atlanta: Georgia Institute of Technology, 1998.
- T-2 Glasmeier, A., K. Fuellhart, I. Feller, and M. Mark. "The Relevance of Firm-Learning Theories to the Design and Evaluation of Manufacturing Modernization Programs," *Economic Development Quarterly* 12 (2): 107-124, 1998.

Evaluation of the ARC Entrepreneurship Initiative

- T-3 Jarmin, R. "Evaluating the Impact of Manufacturing Extension on Productivity Growth," *Journal of Policy Analysis and Management* 18 (1): 99-119, 1999.
- T-4 Luria, D. "Toward Lean or Rich? What Performance Benchmarking Tells Us About SME Performance, and Some Implications for Extension Center Services and Mission," *Journal of Technology Transfer* 23 (1): Spring 1997.
- T-5 Mt. Auburn Associates. *Evaluation of New York State's Technical Assistance and Financing Programs*. Somerville, Mass.: Mt. Auburn Associates, 1997.
- T-6 Shapira, P. and J. Youtie. "Evaluation Industrial Modernization: Methods, Results, and Insights from the Georgia Manufacturing Extension Alliance," in *The Journal of Technology Transfer* 23 (1): 17-28, Spring 1998.