



**ECONOMIC IMPACTS OF THE
ARKANSAS DEVELOPMENT FINANCE AUTHORITY
VENTURE CAPITAL INVESTMENT TRUST**

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1.0 INTRODUCTION

Applied Economics has been retained on behalf of the Arkansas Development Finance Authority (ADFA) to prepare an economic impact analysis of their risk capital financing programs on the State of Arkansas from 2004 through 2013. This analysis is intended to quantify the contributions of the companies assisted by ADFA to the Arkansas economy. The impacts included here stem from the four programs that are part of the Arkansas Venture Capital Investment Trust – the Arkansas Institutional Fund, the Risk Capital Matching Fund, the ADFA Co-Investment Fund and the Seed and Angel Capital Network. **While these companies contributed to the Arkansas economy as a result of their participation in the program by creating jobs, payroll and output, it is important to note that most of them are start-up companies and the nature of the ADFA programs is to make a longer term investment in companies with potential for future growth in hopes that they will remain in Arkansas and continue to expand.**

The Arkansas Institutional Fund (AIF), which was launched in 2003, is focused on increasing access to venture capital for innovative Arkansas businesses. It is professionally managed by Cimarron Capital Partners and is based on a “fund of funds” investment model. Over time, the AIF is dedicating approximately \$70 million to professional private equity and venture capital funds that commit to include Arkansas in active deal prospecting.

The Risk Capital Matching Fund (RCMF) targets technology-based enterprises that are in the early stages of development and are not yet able to attract adequate private sources of traditional financing or venture capital. The RCMF is supported by state funding and State Small Business Credit Initiative (SSBCI) funding and is managed by the ADFA. The Trust holds these SSBCI funds for investment and subsequent recycling.

In 2011, ADFA launched the Seed and Angel Capital Network (SACN) to invest in Arkansas-based seed and angel funds. These funds attract capital from private investors to consider projects in the state, and to provide guidance to entrepreneurs seeking capital. The funding for this program comes from the State Small Business Credit Initiative. The Trust holds these SSBCI funds for investment and subsequent recycling.

The ADFA Co-Investment Fund (ACIF) was also started in 2011 and made its first investment in 2012. It provides direct co-investments in Arkansas companies that have received commitments for an institutional venture capital investment from qualified venture capital entities.

Since 2004, ADFA has assisted 67 Arkansas companies through the Venture Capital Investment Trust programs. Data was submitted by 40 companies for inclusion in this impact analysis. Approximately twenty-five small start-up companies have received support through the ARK Challenge Accelerator Program. Many of these companies were not included in the analysis since most do not yet have paid employees during this phase of their development.

The companies that are included in the analysis range in size from 1 employee to over 200 employees, although most are smaller firms. These companies also represent a broad spectrum of different industries. Startup companies, like many of the firms that have benefited from ADFA, are the nation's most promising source of new jobs. According to the Kauffman Foundation, startups are responsible for the majority of the net new job growth in the U.S. economy, and even during recessionary years, job creation at startups remains stable, while net job losses at existing firms tend to increase.¹

The impacts represented here show a year-by-year snapshot of the companies assisted in each year. Most companies reported payroll and employment numbers for multiple years and are therefore included in

¹ Kauffman Foundation, “The Importance of Startups in Job Creation and Job Destruction,” September 2010.

totals for each of the reported years. However, once a company was no longer active in Arkansas, they were no longer included in the impacts.

The AIF program includes impacts from venture fund investments in 10 Arkansas based companies between 2004 and 2013.² Over the 10 year period these 10 companies as a group received close to \$12.1 million in venture capital funding through the work of the AIF. This enabled the participating companies to attract an additional \$17.8 million in co-investments over this time period.

The Risk Capital Matching Fund impacts include 17 companies that were active between 2010 and 2013. These companies received a total of \$3.5 million in funds from the program, which enabled them to attract \$24.6 million in co-investments during this time period. A total of 21 companies have received support from the Risk Capital Matching Fund.

The Seed and Angel Capital Network impacts include 13 companies over the past two years. These companies were able to obtain \$400,000 in funding through the SACN, which was supplemented by \$1.8 million in co-investment resources. The companies in this fund are generally early stage start-ups with less than 10 employees. Additionally, 5 funds have received investment from the Seed and Angel Capital Network. These funds have invested in over 30 companies, many of which participated in the ARK Challenge Accelerator Program.

The impacts for the ACIF include data for 2012 and 2013 since this fund is also new. Data was included for four companies that were funded over the past year. In total, they received \$3.5 million in capital through the program and \$7.2 million in co-investment funds. A total of 7 companies have received support from the Risk Capital Matching Fund.

Economic impacts are a way to quantify not only the direct impacts of new jobs, payroll and sales generated by the companies in the program, but also the consequential effects on the state's economy overall. This provides a more robust approach to understanding the return on investment from financing programs that stimulate economic growth. Economic impacts utilize input-output analysis as a means of examining relationships within an economy, both between businesses and between businesses and final consumers. The resulting mathematical formulae allow for examination of the effects of a change in one or more individual businesses on the entire economy. In order to make these mathematical calculations, the IMPLAN model is used in this analysis. IMPLAN, which is a simple, yet robust tool to model economic impacts, is currently used by a large number of state and federal government agencies, colleges and universities, non-profit organizations, corporations, and business development and community planning organizations and is the most widely employed and accepted regional economic analysis software for predicting economic impacts.

The information and observations contained in this report are based on our present knowledge of the components of development, and of the current physical, socio-economic and fiscal conditions of the affected areas. All company-specific data was provided to Applied Economics directly by the participating companies. This analysis is based on the best available information and is intended to aid policy makers in evaluating the impact to the state of the Arkansas Development Finance Authority programs. In no way will Applied Economics be held responsible or have any liability or be subject to damages as a result of this analysis. This report may be used only for the purposes for which it was intended.

² Companies are included beginning in the first year they received funding as well as each subsequent year through 2013, unless they were no longer operating in Arkansas. Not all companies participated over the entire 10 year period.

2.0 SUMMARY OF RESULTS

The Arkansas Venture Capital Investment Trust provides access to a unique set of financial resources for companies looking to startup or expand in Arkansas. These companies, in turn, provide on-going economic benefits to the state as they mature and create new jobs and payroll. The economic impacts generated by the companies participating in these funding programs are described below.

Economic Impacts

- The total economic impact on the Arkansas economy over the last ten (10) years generated by the companies receiving investment from ADFA venture capital programs is equal to \$503.7 million. These results reflect the operations of 40 companies during this time period, including four companies that participated in multiple ADFA programs.
- All total, the 40 companies that participated in the four funds associated with the Arkansas Investment Trust and provided data for this study accounted for about **710 jobs and \$33.7 million in annual payroll**, counting each company only once at their maximum job level.
- The economic impacts created by the **participating companies resulted in a total of nearly 2,800 jobs and \$128.3 million personal income spread over ten years**. These include the direct impacts created by the companies themselves as well as additional jobs at local businesses that sell to these companies and their employees.
- While these impacts are significant based on an investment in venture capital of \$20.4 million, it is important to keep in mind that they are mainly early stage companies and that the true benefit of their operations in Arkansas has not been fully realized. Investments in venture capital represent long term investments in the future economy of the state.

Revenue Impacts

- In addition to supporting jobs and economic activity, the companies in the venture investment programs also generated a sizeable amount of state and local tax revenues over the past 10 years. **All total, direct and indirect employees of the companies receiving investment from ADFA venture capital programs have generated an estimated \$9.6 million in state and local revenues since 2004**. This is in addition to revenues generated by the participating companies themselves including sales taxes, property taxes and corporate income taxes in Arkansas that are not quantified in this analysis.

Future Prospects

- Most companies benefitting from these programs are still at the early stages of development, thus larger impacts are expected in the future.
- All funding provided through the programs outlined above are in the form of an investment. Thus, it is intended for future returns to be used to make additional investments in the future.

SUMMARY OF RESULTS

ARKANSAS INSTITUTIONAL FUND	
Total Investment	\$12,069,075
Number of Participating Companies included in Impacts	10
Payroll (2004 - 2013)	\$51,423,488
Participating Company Employment*	452
Average Wage per Job	\$42,180
Economic Impacts (2004 - 2013)	
Total Output	\$401,074,099
Total Payroll	\$87,384,324
Total Jobs	2,049
Total Revenue Impacts (2004 - 2013)	\$6,337,331
RISK CAPITAL MATCHING FUND	
Total Investment	\$4,405,494
Number of Participating Companies included in Impacts	17
Estimated Payroll (2010 - 2013)	\$24,634,808
Participating Company Employment*	142
Average Wage per Job	\$78,372
Economic Impacts (2010 - 2013)	
Total Output	\$69,513,596
Total Payroll	\$31,404,268
Total Jobs	512
Total Revenue Impacts (2010 - 2013)	\$2,490,018
SEED AND ANGEL CAPITAL NETWORK	
Total Investment	\$399,669
Number of Participating Companies included in Impacts	13
Estimated Payroll (2012 - 2013)	\$980,073
Participating Company Employment*	28
Average Wage per Job	\$34,615
Economic Impacts (2012 - 2013)	
Total Output	\$8,366,789
Total Payroll	\$2,068,526
Total Jobs	60
Total Revenue Impacts (2012 - 2013)	\$140,677
AFDA CO-INVESTMENT FUND	
Total Investment	\$3,531,188
Number of Participating Companies included in Impacts	5
Estimated Payroll (2012-2013)	\$4,783,446
Participating Company Employment*	89
Average Wage per Job	\$47,245
Economic Impacts (2012 - 2013)	
Total Output	\$24,743,322
Total Payroll	\$7,409,871
Total Jobs	176
Total Revenue Impacts (2012 - 2013)	\$643,421

*Total jobs represent maximum number of jobs at each participating company, whereas the total jobs shown in the economic impacts are summed over multiple years. Impacts for companies that received funding from more than one program are split between programs.

3.0 ECONOMIC IMPACTS

The economic benefits resulting from ADFA's Venture Capital Investment Trust programs include combined impacts of all companies assisted since 2004. Economic impacts measure the effects of economic stimuli or expenditures in the local economy. These impacts include direct and indirect jobs, personal income, and economic activity or output that are generated by these companies. Indirect impacts are the result of the multiplier effect and capture supported supplier and consumer businesses and their employees in Arkansas that benefit from local purchases made by these companies and their employees.

Arkansas Institutional Fund

The Arkansas Institutional Fund was initiated in 2004. Data was available for 10 companies that have received funding since that time, although AIF has provided funding to over 25 companies. All total, AIF has provided these companies with access to over \$30 million in venture capital funding over the past 10 years, including \$12.1 million from the AIF and \$17.8 million in additional co-investment. The companies range in size from 1 employee to over 200 employees.

On average, companies receiving AIF support through its venture investment program have been active in Arkansas for about four years, but there are several that date back up to nine years. The data represented here shows a snapshot of the combined economic impact of all companies beginning in the first year they received funding through 2013, unless they were no longer in business in Arkansas.

The economic impact results presented here are grouped into direct impacts and total impacts. Direct output represents the value of production or revenues at participating companies. Direct jobs and payroll were provided by the individual companies and represent the number of jobs and amount of payroll at the companies participating in the program in a given year.

The impacts of these companies stem from two sources. First, companies purchase a variety of goods and services from vendors within the state creating additional demand, jobs and payroll. The amount and type of local purchases depends on the industry type of the participating company. Second, company employees, as well as supported vendor employees, make local purchases of consumer goods. This creates additional demand and supports additional employment and payroll, primarily at retail and personal services establishments. The total impact includes both the direct impacts and the secondary, or indirect and induced impacts created at other local businesses and their employees.

The secondary impacts described above are called multiplier effects. Multiplier effects are a way of representing the larger economic effects on the local economy. The multiplier effects translate an increase in output (loosely defined for service industries as sales, less profits) into a corresponding increase in jobs and personal income or payroll. In essence, the multiplier effect represents the recycling of local spending. This recycling process creates new business opportunities.

The multipliers used in this analysis are from IMPLAN, a national vendor of economic impact software, and are specific to the State of Arkansas. Industry specific multipliers were used for each type of participating company. The variation in multipliers between the specific industry types is due to the different mix of secondary industries that are affected since multipliers are industry-specific.

The magnitude of the impact is proportional to the number of companies participating in any given year, the size of those companies, and the types of industries. Some industries generate a much greater multiplier effect than others, depending on the amount of local purchases they are able to make. All total, the AIF created an economic impact of \$401.1 million in Arkansas from 2004 to 2013 (Figure 2).

FIGURE 2
ECONOMIC IMPACTS OF ARKANSAS INSTITUTIONAL FUND
ON THE STATE OF ARKANSAS
Current Dollars

Year	AIF		Number of Participating Companies	Direct Impacts			Total Impacts		
	Investment	Co-Investment		Output	Jobs*	Payroll	Output	Jobs	Payroll
2004	\$800,000	\$0	1	\$831,000	7	\$342,310	\$1,218,180	11	\$474,704
2005	\$136,842	\$63,159	1	\$292,084	3	\$207,012	\$404,402	4	\$243,817
2006	\$0	\$0	1	\$430,275	5	\$319,079	\$595,733	6	\$373,297
2007	\$400,000	\$900,000	2	\$835,572	10	\$424,171	\$1,219,045	13	\$547,089
2008	\$300,000	\$350,080	3	\$2,306,646	15	\$1,011,817	\$3,598,413	25	\$1,392,954
2009	\$1,465,000	\$2,461,500	3	\$15,446,249	115	\$5,620,645	\$25,263,843	192	\$8,779,434
2010	\$3,399,996	\$861,176	5	\$19,279,611	124	\$6,678,913	\$30,410,365	224	\$10,681,737
2011	\$282,052	\$130,000	6	\$23,537,652	168	\$7,905,126	\$36,462,283	275	\$12,129,060
2012	\$3,592,471	\$12,058,125	8	\$80,224,271	250	\$10,563,325	\$119,088,396	480	\$19,582,556
2013	\$1,692,714	\$710,514	8	\$124,672,727	435	\$18,351,090	\$182,813,439	818	\$33,179,677
Total*	\$12,069,075	\$17,534,555	10	\$267,856,087	1,131	\$51,423,488	\$401,074,099	2,049	\$87,384,324

*Total jobs at the bottom of the table represent the sum of jobs at each of the participating companies over the ten year period. Results for individual years represent current year employment for participating companies in each year. Individual companies are represented in multiple years.

The companies assisted through this program created an increase in demand of \$267.9 million over 10 years that supported \$36.0 million in payroll and about 920 jobs *at other local businesses* through their supplier purchases and purchases made by employees. These economic impacts are in addition to the cumulative impacts of jobs and payroll that were supported by the companies directly. Counting each company once based on their maximum employment during the period, companies funded by AIF have created 452 new jobs in Arkansas.³ Alternatively, these companies accounted for a cumulative total of 1,131 jobs-years over the ten year period, counting the jobs at each company in each year of participation.

Arkansas Risk Capital Matching Fund

The Risk Capital Matching Fund was initiated in 2010. The data included here is for 17 companies that were active between 2010 and 2013. These companies received a total of \$4.4 million in funds from the program, which enabled them to attract \$27.0 million in co-investments during this time period. The companies participating in this fund tend to be smaller and range in size from 1 employee to about 25 employees.

All total, the RCMF created an economic impact of \$69.5 million in Arkansas from 2010 to 2013 (Figure 3). The companies assisted through this program created an increase in demand of \$48.7 million over four years that supported \$6.7 million in payroll and about 180 jobs *at other local businesses* through their supplier purchases and purchases made by employees. These economic impacts are in addition to the 142 jobs and \$24.6 million in payroll that were supported by the companies directly. Note that this figure represents the maximum number of jobs at each participating company over the four year period.⁴ Alternatively, these companies accounted for a cumulative total of 333 jobs-years over the four year period, counting the jobs at each company in each year of participation.

³ This maximum employment figure is slightly higher than the 2013 total direct jobs because 3 participating companies hit peak employment prior to 2013 and then declined slightly. Additionally, one company dropped out after 2004, and another dropped out in 2008.

⁴ The maximum employment figure is higher than the 2013 total direct jobs because 6 participating companies hit peak employment prior to 2013 and then declined.

FIGURE 3
ECONOMIC IMPACTS OF RISK CAPITAL MATCHING FUND
ON THE STATE OF ARKANSAS
Current Dollars

Year	RCMF		Number of Participating Companies	Direct Impacts			Total Impacts		
	Investment	Co-Investment		Output	Jobs*	Payroll	Output	Jobs	Payroll
2010	\$930,000	\$2,425,324	4	\$3,180,651	38	\$2,723,169	\$4,278,896	47	\$3,065,732
2011	\$1,845,000	\$5,568,157	9	\$11,802,157	85	\$6,128,465	\$15,944,462	120	\$7,444,972
2012	\$900,000	\$10,792,446	14	\$17,453,876	115	\$8,321,732	\$25,134,606	181	\$10,823,762
2013	\$730,494	\$8,167,841	17	\$16,280,276	95	\$7,461,442	\$24,155,631	164	\$10,069,802
Total*	\$4,405,494	\$26,953,767	17	\$48,716,960	333	\$24,634,808	\$69,513,596	512	\$31,404,268

*Total jobs at the bottom of the table represents the sum of jobs at each of the participating companies over the four year period. Results for individual years represent current year employment for participating companies in each year. Individual companies are represented in multiple years.

Seed and Angel Capital Network

The Seed and Angel Capital Network was created in 2011. There were three companies that participated in 2012 and provided data for this study, increasing to 13 companies by 2013. The companies in this fund are generally early stage start-ups with less than 10 employees. These companies were able to obtain \$400,000 in funding through the SACN, which was supplemented by \$1.8 million in co-investment resources.

All total, the SACN created an economic impact of \$8.4 million in Arkansas from 2012 to 2013 (Figure 4). The companies assisted through this program created an increase in demand of \$5.2 million over two years that supported about \$1.1 million in payroll and about 30 jobs *at other local businesses* through their supplier purchases and purchases made by employees. These economic impacts are in addition to the 28 jobs and \$980,000 in payroll that were supported by the companies directly. Note that this figure represents the maximum number of jobs at each participating company over the two year period. These companies accounted for a cumulative total of 31 jobs-years over the two year period, counting the jobs at each company in each year of participation.

FIGURE 4
ECONOMIC IMPACTS OF SEED AND ANGEL CAPITAL NETWORK
ON THE STATE OF ARKANSAS
Current Dollars

Year	SACN		Number of Participating Companies	Direct Impacts			Total Impacts		
	Investment	Co-Investment		Output	Jobs*	Payroll	Output	Jobs	Payroll
2012	\$55,715	\$254,285	3	\$669,477	3	\$0	\$1,023,512	6	\$113,437
2013	\$343,954	\$1,543,033	13	\$4,488,997	28	\$980,073	\$7,343,277	54	\$1,955,089
Total*	\$399,669	\$1,797,318	13	\$5,158,474	31	\$980,073	\$8,366,789	60	\$2,068,526

*Total jobs at the bottom of the table represents the sum of jobs at each of the participating companies over the two year period. Results for individual years represent current year employment for participating companies in each year. Individual companies are represented in multiple years.

ADFA Co-Investment Fund

The ADFA Co-Investment Fund (ACIF), which is the newest fund, assisted one company in its first year and five companies in its second year that were able to provide data for this study. These companies range in size from 5 to 30 employees. These companies were able to obtain \$3.5 million in funding through the ACIF, which was supplemented by \$7.2 million in co-investment resources.

All total, the ACIF created an economic impact of \$24.7 million in Arkansas in 2012 and 2013 (Figure 5). The companies assisted through this program created an increase in demand of \$16.6 million over two years that supported about \$2.6 million in payroll and about 80 jobs *at other local businesses* through their supplier purchases and purchases made by employees. These economic impacts are in addition to the 89 jobs and \$4.8 million in payroll that were supported by the participating companies directly. Note that this figure represents the maximum number of jobs at each participating company over the two year period. These companies accounted for a cumulative total of 101 jobs-years over the two year period, counting the jobs at each company in each year of participation.

FIGURE 5
ECONOMIC IMPACTS OF ADFA CO-INVESTMENT FUND
ON THE STATE OF ARKANSAS
Current Dollars

Year	ACIF		Number of Participating Companies	Direct Impacts			Total Impacts		
	Investment	Co-Investment		Output	Jobs*	Payroll	Output	Jobs	Payroll
2012	\$500,000	\$682,065	1	\$3,628,984	13	\$426,523	\$5,031,248	24	\$875,985
2013	\$3,031,188	\$6,517,974	5	\$12,922,547	89	\$4,356,923	\$19,712,075	152	\$6,533,885
Total	\$3,531,188	\$7,200,039	5	\$16,551,531	101	\$4,783,446	\$24,743,322	176	\$7,409,871

*Total jobs at the bottom of the table represents the sum of jobs at each of the participating companies over the two year period. Results for individual years represent current year employment for participating companies in each year. Individual companies are represented in multiple years.

Combined Total Impacts

All total, the 40 companies that participated in the four funds associated with the Arkansas Investment Trust and provided data for this study accounted for 710 jobs and \$81.8 million in total payroll, counting each company only once at their maximum job level.⁵ If jobs are cumulated over time for each year a company participated in the program, the companies participating in these programs accounted for 1,597 job-years from 2004 to 2013 (Figure 6).

The funding provided by the Arkansas Investment Trust resulted in a total economic impact of \$503.7 million over the past 10 years, supporting close to 2,800 direct and indirect jobs and \$128.3 million in payroll including the participating companies. While these impacts are significant based on an investment in venture capital of \$20.4 million, it is important to keep in mind that they are mainly early stage companies and that the true benefit of their operations in Arkansas has not yet been fully realized.

The output multiplier for the combined impacts is 1.49. This means that for every \$1 million of production by the participating companies, an additional \$490,000 in additional economic activity is generated in the state's economy, along with 4 jobs at related businesses. On average, the income from these indirect jobs is about \$38,700 per employee.

⁵ There were four participating companies that were not active through 2013. Additionally, 9 companies reached peak employment prior to 2013 so this figure is more than the 2013 direct jobs total.

FIGURE 6
ECONOMIC IMPACTS OF ARKANSAS DEVELOPMENT FINANCE AUTHORITY
ON THE STATE OF ARKANSAS
Current Dollars

Year	Total Investment	Co-Investment	Number of Participating Companies	Direct Impacts			Total Impacts		
				Output	Jobs*	Payroll	Output	Jobs	Payroll
2004	\$800,000	\$0	1	\$831,000	7	\$342,310	\$1,218,180	11	\$474,704
2005	\$136,842	\$63,159	1	\$292,084	3	\$207,012	\$404,402	4	\$243,817
2006	\$0	\$0	1	\$430,275	5	\$319,079	\$595,733	6	\$373,297
2007	\$400,000	\$900,000	2	\$835,572	10	\$424,171	\$1,219,045	13	\$547,089
2008	\$300,000	\$350,080	3	\$2,306,646	15	\$1,011,817	\$3,598,413	25	\$1,392,954
2009	\$1,465,000	\$2,461,500	3	\$15,446,249	115	\$5,620,645	\$25,263,843	192	\$8,779,434
2010	\$4,329,996	\$3,286,500	8	\$22,460,262	163	\$9,402,082	\$34,689,261	272	\$13,747,469
2011	\$2,127,052	\$5,698,157	14	\$35,339,809	253	\$14,033,591	\$52,406,745	394	\$19,574,032
2012	\$5,048,186	\$23,786,921	25	\$101,976,608	380	\$19,311,580	\$150,277,761	691	\$31,395,741
2013	\$5,798,350	\$16,939,361	39	\$158,364,547	647	\$31,149,527	\$234,024,422	1,189	\$51,738,453
Total*	\$20,405,426	\$53,485,678	40	\$338,283,052	1,597	\$81,821,814	\$503,697,806	2,797	\$128,266,990

*Total jobs at the bottom of the table represents the sum of jobs at each of the participating companies over the ten year period. Results for individual years represent current year employment for participating companies in each year. Individual companies are represented in multiple years and may be represented in multiple programs. This table counts each participating company only once.

4.0 REVENUE IMPACTS

In addition to creating a substantial impact on the state's economy, the new jobs generated by ADFA programs also result in additional tax revenues. This analysis quantifies the revenue impacts created by employees through state sales and personal income taxes.

Employees at participating companies, and other local employees that are supported by the additional economic activity, pay state personal income taxes on their earnings, as well as state and local sales taxes on a portion of their local purchases. Using the results from the economic impact analysis, it is possible to estimate the revenue impacts. The direct impacts reflect taxes paid by the employees at participating companies. The total revenue impacts include taxes generated by indirect and induced employees at other local businesses supported by supplier purchases and employee spending.

All total, direct and indirect employees supported by Arkansas Investment Trust funds have generated an estimated \$9.6 million in state and local revenues since 2004, including \$6.3 million generated by the employees of participating firms (Figures 7 and 8). *This impact does not include additional sales and corporate income taxes paid by the companies directly to the State of Arkansas. This information was not reported by the participating firms.*

FIGURE 7
DIRECT REVENUE IMPACTS OF ARKANSAS DEVELOPMENT FINANCE AUTHORITY PROGRAMS

Year	Direct Revenue Impacts									Total Direct Revenues	
	AIF		RCMF		AICF		SACN		Personal Income Tax		
	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax			
2004	\$8,622	\$16,985	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,622	\$16,985
2005	\$5,455	\$5,098	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,455	\$5,098
2006	\$8,408	\$17,452	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,408	\$17,452
2007	\$10,863	\$19,925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,863	\$19,925
2008	\$24,701	\$56,076	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,701	\$56,076
2009	\$146,054	\$279,027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$146,054	\$279,027
2010	\$173,205	\$343,763	\$60,545	\$152,323	\$0	\$0	\$0	\$0	\$0	\$233,750	\$496,086
2011	\$205,611	\$385,797	\$158,491	\$344,246	\$0	\$0	\$0	\$0	\$0	\$364,102	\$730,043
2012	\$275,245	\$490,165	\$215,932	\$468,335	\$11,239	\$124,302	\$0	\$0	\$0	\$502,416	\$1,082,802
2013	\$474,051	\$850,956	\$192,327	\$427,412	\$113,865	\$216,565	\$25,098	\$40,386	\$0	\$805,342	\$1,535,319
Total	\$1,332,215	\$2,465,244	\$627,295	\$1,392,316	\$125,104	\$340,867	\$25,098	\$40,386	\$0	\$2,109,712	\$4,238,813

Note: Total revenue impacts include direct plus indirect revenues.

FIGURE 8
TOTAL REVENUE IMPACTS OF ARKANSAS DEVELOPMENT FINANCE AUTHORITY PROGRAMS

Year	Total Revenue Impacts									Total Revenues	
	AIF		RCMF		AICF		SACN		Personal Income Tax		
	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax	Sales Tax	Personal Income Tax			
2004	\$11,957	\$22,724	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,957	\$22,724
2005	\$6,425	\$6,663	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,425	\$6,663
2006	\$9,836	\$19,758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,836	\$19,758
2007	\$13,976	\$25,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,976	\$25,120
2008	\$33,920	\$72,339	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,920	\$72,339
2009	\$228,466	\$422,998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$228,466	\$422,998
2010	\$277,495	\$524,332	\$68,631	\$167,326	\$0	\$0	\$0	\$0	\$0	\$346,126	\$691,658
2011	\$315,567	\$575,277	\$192,482	\$402,010	\$0	\$0	\$0	\$0	\$0	\$508,050	\$977,287
2012	\$511,298	\$891,950	\$280,902	\$577,528	\$23,082	\$143,639	\$2,989	\$5,330	\$0	\$818,271	\$1,618,448
2013	\$860,293	\$1,506,935	\$260,073	\$541,066	\$169,973	\$306,727	\$49,794	\$82,563	\$0	\$1,340,133	\$2,437,291
Total	\$2,269,234	\$4,068,096	\$802,088	\$1,687,930	\$193,055	\$450,366	\$52,783	\$87,893	\$0	\$3,317,161	\$6,294,286

Note: Total revenue impacts include direct plus indirect revenues.

Supported direct and indirect employees associated with Arkansas Venture Capital Investment Trust programs generated about \$3.3 million in state and local sales tax revenues. Annual impacts increased significantly over time as the number of participating companies increased. This figure includes sales taxes generated by direct employees at participating companies and employees at supported local businesses. Taxable employee expenditures are calculated by multiplying total personal income from the economic impact results times 31 percent, times the state sales tax rate of 6.5 percent plus the local sales tax rate in the community where each company is located.⁶

Employees at participating companies and at supported local businesses also pay personal income taxes in Arkansas estimated at \$6.3 million since 2004. State income tax revenues are calculated using the average personal income per employee for direct and indirect employees, adjusted for a standard deduction, times the graduated state income tax rate schedule times the number of employees.

Summary

The venture capital programs administered under the Arkansas Venture Capital Investment Trust create significant annual impacts on the Arkansas economy. There have been notable increases in the magnitude of annual impacts over the past several years as the number of funds and the number of participating companies increase and as startup companies begin to expand. The Arkansas Development Finance Authority not only helps seed and expand local companies, but also supports job growth at other local supplier businesses. In addition, these new jobs generate increased payroll, spending and tax revenues that support the state's economy now and into the future.

⁶ According to the Census Bureau Consumer Expenditure Survey, persons in the average income range of supported employees spend about 31 percent of their income on taxable goods.