# **Evaluation of Alabama's CAPCO Credit and Historic Rehabilitation Tax Credit**

Matthew N. Murray, Ph.D.

Donald J. Bruce, Ph.D.

January 2017

This report was prepared under a contract with the Alabama Department of Revenue. The views expressed herein are those of the authors alone, and do not necessarily represent the views of the Alabama Department of Revenue or any other state agencies or officials.

#### **Executive Summary**

In this report, we take an in-depth look at two components of Alabama's broader economic development strategy: the Alabama CAPCO Program, which is intended to provide a source of venture capital for start-up enterprises, and the Historic Rehabilitation Tax Credit Program (HRTC), which provides valuable tax breaks to support the rehabilitation of a variety of historic structures across the state. For each program, we begin with a brief history and comparison to programs in other states. We then discuss and evaluate the available estimates of the economic and revenue impacts of each program. Next, we turn to a point-by-point evaluation of the strengths and weaknesses of each program, using the features of good tax incentive programs that we laid out in our initial report for the Alabama Department of Revenue. Finally, we consider several available policy options and provide suggestions for improving the state's economic development efforts in these important areas.

#### **CAPCO**

Alabama's CAPCO program provides insurance premium tax credits to insurance companies that invest in so-called "Certified Capital Companies," or CAPCOs. These companies are typically venture capital firms that operate in several states but also have local knowledge, connections with in-state venture capitalists and entrepreneurs, and industry expertise. CAPCO programs originated in Louisiana in 1983, and despite activity in several states over time, only seven states plus the District of Columbia had active CAPCO programs in early 2016. An initial \$100 million in premium tax credits were made available when Alabama's program began in 2002, and a second \$100 million were made available when the program was modified in 2007.

There are a number of targeting parameters. Qualified recipient companies must be based in Alabama, have less than 100 employees, and cannot be in retail sales, real estate, insurance, banking, or provide professional services such as attorneys, accountants, or physicians. The program is focused on job creation, such that qualified companies must have a reasonable expectation of creating *new* permanent jobs in Alabama. A defining feature of Alabama's CAPCO program is that the state retains little to none of the value of the investment that is supported by state-sponsored tax credits.

Given their significant financial size along with the amount of political activity surrounding CAPCO programs, it should come as no surprise that the literature is full of studies citing the very large or very small impact of the programs on state revenues and state economies. Our comprehensive review of this literature found several industry-funded studies that attribute every dollar and job associated with an assisted firm to CAPCO and estimate rather large gross economic impacts in an attempt to sell or defend a particular program. However, we also identified several state-funded studies that take a more careful approach to estimate net impacts that account only for new economic activity, and unsurprisingly find smaller impacts on investment and jobs and large negative impacts on state revenues. We discuss the importance of focusing on net rather than gross impacts, and also consider the broader impacts on state budgets, specifically in the form of induced demand for services such as infrastructure and education.

Our in-depth analysis of the confidential project-level data provided by the Alabama Department of Commerce showed that 94 companies received CAPCO investments totaling \$175.3 million from 2004 through 2015. Interestingly, at least 75 of those companies are still in business, which does not indicate a strong focus on risky start-ups that would presumably have a higher failure rate. The program's incentive structure encourages the CAPCOs to supplement a typically-riskier venture capital portfolio with a large number of less-risky investments. The data certainly suggest that the resulting portfolio is

less risky and less targeted than would be the case in a typical venture capital portfolio. Contributing factors are the large percentage of the companies that were in business before the CAPCO program began (often for many years), and the broad distribution of recipient firms across industrial groups.

Our evaluation concludes that Alabama's CAPCO program provides an important boost to in-state venture capital markets and provides several important advantages over alternative economic development incentives, but it falls short in terms of economic impact, efficiency, and accountability. The program entails relatively high costs and provides little market or fiscal return to the state. Given that most states have turned away from CAPCO-style arrangements, the state is almost certainly better served to consider an entirely different approach to venture capital support.

#### Historic Rehabilitation Tax Credit

The Alabama HRTC program is overseen by the Alabama Historical Commission and provided \$20 million in tax credits per year for 2013, 2014, and 2015. The credits amount to 25 percent of qualified rehabilitation expenditures for certified historic buildings used for income-producing or residential purposes, or 10 percent for pre-1936 non-historic structures. Credits are not refundable, but unused credits may be carried forward for up to 10 years. Similar programs are currently operating in 34 states which signals that states generally embrace this approach to historic rehabilitation.

Eligible projects must involve structures that are either listed individually in the National Register of Historic Places (NRHP), listed as a contributing resource in a NRHP district, or eligible for NRHP listing. Eligible applicants include taxpayers filing Alabama state tax returns, or federally-exempt entities who own buildings or hold leases for a term of 39 years or more. Credits are distributed on a first-come, first-served basis until they are exhausted. A total of 39 projects have received reserved tax credits, and another 13 have been approved but are on a waiting list (Novogradac & Company, 2016).

It is reasonable to think of this type of credit simply as a means to reduce the cost of historic rehabilitation for the purposes of preserving valuable structures. Indeed, the actual preservation of historic structures is meaningful and desirable in and of itself to many residents, and these programs make the effort less costly to the private sector. The programs also serve an important economic development purpose. The common thread through both of these arguments is that historic rehabilitation provides spillover benefits that accrue to many individuals beyond the actual owners or occupants of the historic structure (including future generations). The owners themselves might not fully appreciate those spillovers, however, and might thus invest an inefficiently low (by society's standards) amount of resources into maintaining them or alternatively simply abandon them. Public assistance in the form of HRTC tax credits or other programs can be helpful in generating the socially-desirable level of historic rehabilitation activity.

It must be recognized that some of the HRTC-related activity may displace other economic activity, both in the areas around historically-preserved facilities and elsewhere. The literature is replete with studies of state historic tax credits that document large economic impacts, but those studies (including the recent study of Alabama's HRTC) focus on gross impacts. The extent to which the credit actually induced the rehabilitation activity is difficult to determine. It is also more difficult to assess less tangible impacts such as environmentally-beneficial positive spillovers or neighborhood ("halo") effects that are good for quality of life, economic development and the fiscal health of local governments.

We conclude that the Alabama HRTC program provides important benefits to local, regional, and state economies. It fosters rehabilitation of historic structures while providing important and meaningful (but difficult to measure) spillovers. And while the state does not retain an ownership stake in supported projects (not unlike the CAPCO program), it is able to enjoy an ongoing stream of induced economic activity that emanates from visible fixed capital investments. Importantly, those investments—the rehabilitated historic structures—cannot be moved out of state, unlike companies that receive start-up capital or other inducements. Of course, the question remains as to whether those spillovers are worth the revenue cost to state government.

#### **Conclusion and Overall Evaluation**

Alabama's CAPCO program and Historical Rehabilitation Tax Credit program are both designed to foster local economic development. Both involve the use of tax credits—representing foregone state revenues—to encourage a particular type of activity that will hopefully generate tangible economic activity in the form of jobs, earnings, and tax collections. Both involve state investments without the retention of ownership stakes in recipient projects, whether those are new or existing businesses or rehabilitated historic structures. Despite these similarities, our evaluation comes to starkly different conclusions regarding the overall value of these programs to the state of Alabama.

In our final evaluation, we recommend the replacement of the CAPCO program with an alternative approach to venture capital support, and we recommend several refinements to an already-successful HRTC program. The following table provides a concise summary of our evaluation of both programs.

Component	CAPCO	HRTC
	Grade	Grade
<b>Efficiency</b> : a well-defined <i>return on investment</i> to the state of Alabama.	D	С
<b>Transparency</b> : clear benefits to taxpayers and costs to the state.	D	Α
Certainty: defined impact on state budget and program beneficiaries.	С	В
<b>Prospective</b> : encourage future activity rather than reward previous decisions.	D	В
Simplicity: easy to administer and easy to comply with.	В	В
<b>Targeted</b> : focused and provided on a <i>discretionary</i> basis to promote new activity.	С	В
<b>Protection of Public Funds</b> : through caps or time limits on the use of credits.	С	Α
Leverage: to encourage additional public or private resources.	В	Α
Accountability: performance-based incentives should be built into the program.		В
<b>Evaluation</b> : to identify the extent to which incentives induced new activity.	F	С
Ownership: to ensure proper administration and to support a thorough evaluation.	D	Α
OVERALL	D	В

#### Introduction

Alabama pursues economic development through a variety of ongoing budget programs, including infrastructure finance and education, as well as incentives. This report takes an in-depth look at two of the state's tax incentive programs. First, we explore the Alabama CAPCO Program, which is intended to provide a source of venture capital for start-up enterprises. Second, we examine the Historic Rehabilitation Tax Credit Program (HRTC), which provides valuable tax breaks to support the rehabilitation of a variety of historic structures across the state.

For each program, we begin with a brief history and comparison to programs in other states. We then discuss and evaluate the available estimates of the economic and revenue impacts of each program. Next, we turn to a point-by-point evaluation of the strengths and weaknesses of each program, using the features of good tax incentive programs that we laid out in our initial report for the Alabama Department of Revenue. Finally, we consider several available policy options and provide suggestions for improving the state's economic development efforts in these important areas.

Our evaluation considers the following general characteristics of good incentive programs:

- EFFICIENT. A good incentive will provide a well-defined return on investment to the state of Alabama.
- TRANSPARENT. Incentives should be transparent so that benefits to taxpayers and costs to the state are clear.
- **CERTAIN**. Policy *certainty* is important in terms of the magnitude and timing of tax relief for business taxpayers and the realization of tax losses that impact the state budget.
- **PROSPECTIVE**. The state should avoid *retroactive policy changes* that may penalize firms for previous investment decisions.
- **SIMPLE**. Incentives should be easy to administer and easy to comply with.
- **TARGETED**. Incentives should be *targeted* and provided on a *discretionary* basis in order to promote economic activity that might not otherwise take place.
- **PROTECT PUBLIC FUNDS**. *Fiscal exposure* to the state should be minimized through such constraints as annual financial caps or time limits on the use of credits.

<sup>&</sup>lt;sup>1</sup> "Best Practices for the Design and Evaluation of State Tax Incentive Programs for Economic Development," January 2017.

- **LEVERAGE**. Some incentives produce a *leveraging* effect, drawing in additional resources from local government resources, private sector resources, or federal resources.
- ACCOUNTABILITY. Performance-based incentives should be built into the program.
- EVALUATION. Incentives should include a built-in framework for evaluation, which should seek to
  identify the extent to which incentives induced new economic activity rather than rewarding
  existing economic activity.
- **OWNERSHIP**. A state agency or agency partnership must *own* the incentive program to ensure proper administration and to conduct or support a thorough program evaluation.

These factors capture the essential elements of incentive programs and can be applied to incentive programs broadly, not just tax credit incentives.

# **Alabama's CAPCO Program**

# **Background**

Like similar programs in several other states, Alabama's CAPCO program provides insurance premium tax credits to insurance companies that invest in so-called "Certified Capital Companies," or CAPCOs. These companies are typically venture capital firms that operate in several states but also have local knowledge, connections with in-state venture capitalists and entrepreneurs, and industry expertise. Seven CAPCOs have participated in one or both waves of Alabama's program. An initial \$100 million in premium tax credits were made available when the program began in 2002, and a second \$100 million were made available when the program was modified in 2007. The program is administered by the Alabama Department of Commerce (formerly the Development Office).

As in most other CAPCO programs, there are important restrictions on when and how the investments can be made. Alabama CAPCOs must make qualified investments in an amount cumulatively equal to at least 35 percent of its certified capital before the third anniversary of its allocation date, and qualified investments in qualified technology businesses of at least 50 percent of its certified capital before the fifth anniversary. Premium tax credits may be forfeited for failure to meet these investment timelines. Distributions cannot be made until all of the certified capital is invested.

Qualified companies must be based in Alabama, have less than 100 employees, and cannot be in retail sales, real estate, insurance, banking, or provide professional services such as attorneys, accountants, or

physicians. The program is focused on job creation, such that qualified companies must have a reasonable expectation of creating *new* permanent jobs in Alabama.

A defining feature of Alabama's CAPCO program is that the state retains little to none of the value of the investment that is supported by state-sponsored tax credits. It is worth noting that the Alabama CAPCO statute (281-2-1-10(3)) requires that "Alabama shall receive a ten percent (10%) share of any distributions other than qualified distributions, payments with respect to indebtedness, and the return of the initial \$500,000 equity contribution and any other equity contributions, from the CAPCO to its equity holders." However, the sum total of those payments has been just over \$800,000 according to administrative data provided by the Department of Commerce. The returns to the state are thus largely confined to any potential economic development gains and revenue enhancements that come from successful entrepreneurial activities.

# **Comparisons with Other States**

According to Tharpe (2012), CAPCO programs originated in Louisiana in 1983, and were active in nine states as of the time of his study. The experiences in other states is revealing, and indicative of problems with the public perception and the economic impact estimates surrounding these relatively controversial programs. An additional 12 states had rejected the concept, and others had repealed or simply not extended their CAPCO programs (Tharpe, 2012, and McClaughlyn, 2004). Francis (2016) provides more up-to-date numbers, citing that only seven states plus the District of Columbia had active CAPCO programs in early 2016.

CAPCO programs are just one example of the ways in which states try to support venture capital formation. Venture capital is unique because most traditional lenders are unwilling to make loans to startups with little or no track record in the marketplace. As a result, entrepreneurs must secure funding from alternative sources. Barkley, Markley, and Rubin (2001) discuss the importance of venture capital to business start-ups and expansions, and note that venture capital activity tends to be concentrated in a relatively small number of regions. Doran and Bannock (2000) provide additional discussion of the geographic distribution of venture capital activity, and Tharpe (2012) notes that most of it occurs in Silicon Valley, Boston, and New York. This is perhaps not surprising, to the extent that these areas provide a diversified portfolio of start-up activity that can help venture capitalists form

networks and manage overall risk levels. The locational concentration of venture capital means that some regions are at a disadvantage in terms of nurturing new small enterprises.

Alabama has not traditionally been a hotbed of venture capital activity, so state policy to address an apparent market failure may indeed be appropriate. This logic actually applies in most of the U.S. states, and is at the core of the diverse array of venture capital promotion programs that includes CAPCO programs as well as other tax credits and incentives (DiSabatino, 2012). Barkley, Markley, and Rubin (2001) point out that CAPCOs emerged in response to state-run venture capital programs that were either poorly funded, poorly managed, or suffered from undue political influence or conflicts of interest. They reviewed state-assisted venture capital programs in 13 states and found that although rare, those that have the greatest success have adequate public funding for capitalization and management, expertise in fund management, distance from the political process, supportive government regulations, and strong financial returns on fund investments. We discuss these features along with several others in our evaluation below.

Barkley, Markley, and Rubin (2001) also discuss the evolution of CAPCO programs over time, as states and venture capital fund managers have learned from prior experiences. Examples of program improvements include reductions in the value of the tax credits to insurance companies, caps on the total amount of credits, limits on the size of participating CAPCOs, more deliberate targeting policies to direct investments to particular types of high-return companies, and profit-sharing arrangements such that state governments retain rights to a certain percentage of returns. Alabama's program includes some, but not all, of these improvements.

Barkley, Markley, and Rubin (2001, p. 360) note that "most changes in CAPCO programs over time are little more than fine-tuning a generic model," and that "the CAPCO industry is aggressively involved in state legislation to ensure that the basic program design is preserved." They note that CAPCOs and insurance companies have benefited substantially from these programs, and as a result, they are heavily vested in supporting the enactment and continuation of similar programs in several states. Doran and Bannock (2000) also discuss the politics and lobbying efforts surrounding CAPCO programs. These political influences are important for a number of reasons, including the fact that CAPCOs were intended in part to diminish the impact of political factors compared to alternative financing mechanisms like direct state loan programs.

#### Analysis of Economic and Revenue Impacts

Given their significant financial size along with the amount of political activity surrounding CAPCO programs, it should come as no surprise that the literature is full of studies citing the very large or very small impact of the programs on state revenues and state economies. Our comprehensive review of this literature revealed that the available studies take one of two broad forms. On one hand are the industry-funded studies that attribute every dollar and job associated with an assisted firm to CAPCO and estimate rather large gross economic impacts in an attempt to sell or defend a particular program.<sup>2</sup> Importantly, these studies make no effort to discern *new* economic activity from ongoing economic activity, leading to an overstatement of economic and tax revenue benefits. On the other hand are state-funded studies that take a more careful approach to estimate net impacts that account only for new economic activity, and unsurprisingly find smaller impacts on investment and jobs. They also highlight the typically large and negative impacts on state revenues.<sup>3</sup> Tharpe (2012) provides a useful summary, concluding that there is no reliable evidence to support the claim that generated activity and job creation yields additional or new tax revenues for states with CAPCO programs.

Our in-depth analysis of the confidential project-level data provided by the Alabama Department of Commerce showed that a total of 94 companies received CAPCO investments totaling \$175.3 million from 2004 through 2015. Most of these companies—58 of the 94—received multiple investments, either from a single CAPCO in multiple years or from multiple CAPCOs in a single or multiple years. Three companies received at least 10 different investments. The investments are heavily concentrated geographically, with 56 of the companies and slightly more than 70 percent of the invested dollars occurring in Birmingham and surrounding areas. To be sure, this is not necessarily problematic if one goal of the program is to establish a venture capital "hub" in the state.

Interestingly, most of the companies that have received CAPCO investments are still in business. Only 6 of the 94 companies are dissolved, either as noted in the administrative data or as determined by our own research efforts. Another company is listed as "out of business." Eight companies have been acquired, four have unknown status, and the remaining 75 appear to be still in operation. This

\_

<sup>&</sup>lt;sup>2</sup> See, for example, the evaluation of the Texas program by Trybula, Mak, and Casselberry (2011), the studies of the Missouri program by the Economic Policy & Analysis Research Center and Edward H. Robb Associates (2004) and Jarrett (2000), and the Adams Group's (2003) review of the Colorado program.

<sup>&</sup>lt;sup>3</sup> See, for example, the analysis of Louisiana's program by Postlethwaite & Netterville CPA (1999), the Colorado State Auditor's (2003) report on the Colorado program, McCaskill's (2004) audit of the Missouri program, Nichols' (2009) audit of the District of Columbia program, and the Texas Comptroller's (2014) audit of the Texas program.

distribution of current status does not indicate a strong focus on risky start-ups, in which case we would almost certainly see a higher rate of business failure. As discussed in greater detail elsewhere in this report, the program's incentive structure encourages the CAPCOs to supplement a typically-riskier venture capital portfolio with a large number of less-risky investments. These data certainly suggest that the resulting portfolio is less risky than would be the case in a typical venture capital portfolio.

A contributing factor in the above analysis is that a large percentage of the companies were in business before the CAPCO program began, as indicated in national company databases or on the companies' own documents and internet postings. Of the recipient companies with known founding dates, 11 were founded in 1990 or earlier, and another 24 were founded between 1991 and 2000. Another six were founded between 2001 and 2003, ten in 2004, and 40 since 2004. Only about 19 of the companies received their initial CAPCO investment in their first year of operation, and only four received pre-launch funds. Another 25 received funding in their first four years, while 27 received funding between their fifth and ninth years. A total of 20 companies received CAPCO investments more than 9 years after they were founded. Again, this distribution is not necessarily indicative of a venture capital program that is focused primarily on new or start-up firms.

In terms of targeting, it is not clear from the available data that the program has either (a) successfully focused on the desired industries or (b) avoided the industries that are prohibited in the statute. Our analysis of the confidential company-level data showed that the most heavily-represented industrial groups (with the number of companies in parentheses) were professional, scientific, and technical services (28), manufacturing (18), and information (12). However, we also found recipient companies in real estate rental and leasing (2), retail trade (5), wholesale trade (6), accommodation and food services (1), finance and insurance (5), administrative and support and waste management and remediation services (5), construction (2), health care and social assistance (4), mining (2), other services (3), and the management of companies and enterprises (1).

The Alabama CAPCO program's primary focus, as noted above, is on job creation. An economic impact assessment of the program by Addy (2015) sought to account for portfolio company impacts through 2013; this is the only analysis of the state's CAPCO program to date. The study was funded by three of the CAPCOs participating in Alabama's program at the time and does not include all CAPCO activity. RIMSII multipliers were used to evaluate the economic and state and local revenue impacts of the

program.<sup>4</sup> Economic and revenue effects were identified as beginning in 2004, while the first credits were not actually taken until 2006.

Addy's (2015) study finds that the \$6.5 million in credits in 2006 were *associated* with 1,043 direct jobs in assisted companies and a total of 2,188 jobs, accounting for indirect and multiplier impacts. Over 2006-2013, \$68.1 million in credits were taken, or \$8.5 million per year; an additional \$20.1 million in credits were outstanding for the programs under scrutiny in the study. Average annual direct employment over 2004-2013 was 979 while total employment averaged 2,112. Direct employment stood at 505 in 2004, reached 1,043 in 2006 when the first credits were taken, peaked at 1,258 in 2008 and then rested at 948 in 2013. The descriptive data show no distinct upward trend in direct employment or any signs of cumulative growth effects since the first credits were taken in 2006.

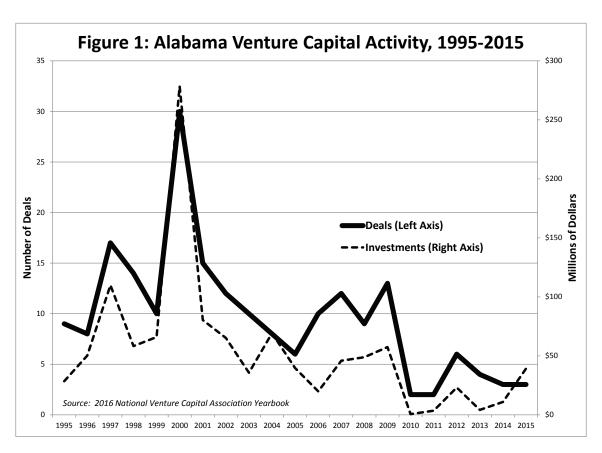
The \$8.5 million in average annual credits implies a nominal revenue cost of \$8,699 per direct job. However, this is not a one-time cost since the CAPCO program incurs costs across years to create and sustain jobs. On a cumulative basis, the program entails credit costs of \$69,589 per direct job (or \$68.1 million/979 direct jobs) and \$32,257 per total job given the current level of credit utilization.

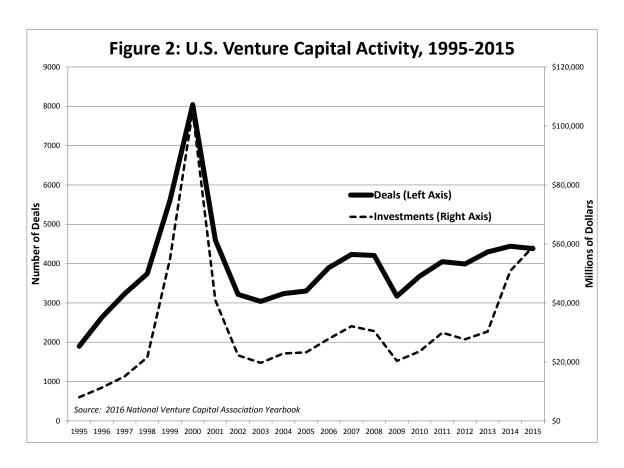
Our own analysis of the updated and more inclusive (but confidential) company-level data shows a total of 1,905 jobs created from the CAPCO investments in the 94 recipient companies. This amounts to \$92,161 in invested funds per job created. The data also indicate an average wage among created jobs of \$52,769, and while that is a strong number compared to the broader Alabama labor market, it indicates that the state has essentially placed a value of \$39,392 per job (the extent to which the per-job investment exceeds the average wage) on the induced economic activity.

It is worthwhile to consider the extent to which the economic impacts of Alabama's CAPCO have endured the test of time. We consulted several national company databases and found total employment of 3,309 across all sites within the recipient companies with non-missing data as of 2016. We then compared this current employment figure with the data for initial jobs and created jobs in the administrative CAPCO files. Specifically, we subtracted the initial and created jobs from the current total employment for the set of companies with non-missing current employment data. The result of this exercise is a combined net loss of 362 jobs.

<sup>&</sup>lt;sup>4</sup> RIMSII multipliers are available from the U.S. Bureau of Economic Analysis. Background on the multipliers and their use is available at <a href="https://www.bea.gov/regional/pdf/rims/rimsii\_user\_guide.pdf">https://www.bea.gov/regional/pdf/rims/rimsii\_user\_guide.pdf</a>

It is also important to explore the effect of Alabama's CAPCO program on the statewide venture capital market. One of the goals of the program is to address the geographic disparity of nationwide venture capital funds, such that Alabama becomes a more desirable location for venture capitalists. A successful program should thus be reflected in an upward trajectory of venture capital activity since the program's inception. Data from the 2016 *National Venture Capital Association Yearbook* (Thomson Reuters, 2016) are shown in Figures 1 and 2 below. In Figure 1, we plot the number of venture capital deals and the total dollars of investment from 1995 to 2015 in Alabama. Despite a noticeable dramatic spike in 2000 and a slight increase just before the Great Recession, the observed trend in both series is downward. This is certainly the case in the post-2000 Alabama data, which run counter to the slight upward trends observed in the national data in Figure 2.





The Addy (2015) study carefully and accurately captures the impacts *associated* with the portfolio companies, thus yielding gross measures of economic and revenue impact. But the analysis does not distinguish between newly-induced economic activity and activity that would have occurred without CAPCO. If not all of the activity is induced, *net* economic impacts will fall short of gross economic impacts. For example, for illustrative purposes assume that only 50 percent of the economic activity is in fact new. In this scenario, the net annual credit cost per new direct job is \$17,398 or \$139,178 on a cumulative basis.

Two alternative dimensions of net impact should be considered in evaluating incentives. The first considers any new revenue associated with assisted activity allowing a comparison of credit costs against newly-created revenue. The second considers net fiscal costs to state and local governments, accounting for credit costs, new revenue impacts and public service delivery costs associated with new economic activity. Most traditional impact studies do not account for public service costs, which is unfortunate since truly new economic activity will give rise to new costs for state and local governments.

Gross average annual state and local tax revenue was estimated by Addy (2015) at \$11.3 million for 2004-2013; gross revenue was \$11,565 per direct job and \$5,361 per total job. Annual credit utilization was \$8.5 million per year for the eight years that the credits were taken (or \$6.8 million if credits are averaged over the 10 years covered by the impact assessment). For the years that credits are used, there is an implied annual revenue gain of \$2.8 million over the costs of credits. But this implied gain is not in fact a surplus since the state has sacrificed \$8.5 in revenue collections. This means that even if there were 979 *new* direct jobs and 2,112 total *new* jobs generated per year, there would be challenges in funding public service delivery. Rather than having \$11.3 million in new revenue each year to fund the services required of new businesses, workers and their families, there would be only \$2.8 million per year. This would create budgetary pressures that could necessitate a tax increase and/or service delivery cut. Such policy changes could then hamper economic development.

The problem is more serious still if some of the tax credits go to support jobs that would have been created in the absence of the CAPCO program, thus creating fewer than 979 new direct jobs. Following the example above, if only 50 percent of the direct jobs were newly-induced jobs, then the average net new revenue would be just under \$5.7 million rather than \$11.3 million. Compared to average annual credit costs of \$8.5 million, this implies a loss of nearly \$2.9 million per year for the eight years the credits were utilized. Across 2004-2013, total new revenue would be only \$56.6 million compared to credit utilization costs of \$68.1 million, a cumulative revenue loss of \$11.5 million. But state and local governments would have new and expanded businesses, 490 new direct workers and their families, and 1,056 other new workers and their families to provide services to. As above, this would require tax increases or expenditure cuts to keep budgets balanced. In order for induced revenues to fully compensate for the *credit costs* of CAPCO, 75.2 percent of the employment would have to represent newly-created jobs.

The final perspective considers the net fiscal position of Alabama state and local government, accounting for credit costs, new revenues and new service delivery costs. New and expanded businesses will require new services, ranging from police and fire protection to the use of the courts. Workers and their families will also require state and local public services. To put the expenditure side of the budget in closer perspective, consider the costs of elementary and secondary education in Alabama, which were \$9,028 per pupil in 2014. If the average annual direct employment of 979 workers represented new people working in the state, then as noted above there would be only \$2.8

\_

<sup>&</sup>lt;sup>5</sup> See <a href="http://www.governing.com/gov-data/education-data/state-education-spending-per-pupil-data.html">http://www.governing.com/gov-data/education-data/state-education-spending-per-pupil-data.html</a>.

million in revenue available after credits to finance service delivery. If these 979 direct workers (and 2,112 total workers) had just 310 children, then education costs alone would consume the \$2.8 million in net-of-credit revenue. The net fiscal impact of the CAPCO program, even if highly effective at creating jobs, would be negative. A more careful and comprehensive analysis of public service costs would simply show a much larger net fiscal gap.

# **Evaluation of Alabama's CAPCO Program**

In this section, we evaluate the program in accordance with the features outlined above and discussed in greater detail in our initial report. For each component, we provide a brief discussion of advantages and disadvantages, and we also provide a letter grade. We combine the component-specific letter grades at the end into a composite overall evaluation grade, which reflects our own views of the relative importance of each component.

# **Efficiency**

At the heart of the issue of efficiency is whether the estimated economic benefits (jobs and investment impacts, etc.) are worth the costs in terms of foregone tax revenues. The discussion above raises serious questions regarding market and revenue returns to the state of Alabama. While we have provided a more in-depth discussion of the overall efficiency of Alabama's CAPCO program in our discussion above, we use this section to highlight a few of the more salient aspects of the program related to efficiency. We emphasize that a recurring theme in the many evaluations of CAPCO programs in other states is that these types of programs are *highly inefficient*. Tharpe (2012) provides a particularly critical review of available evidence, including McCaskill's (2004) assessment of the Missouri CAPCO program as the least efficient among available options.

As noted by DiSabatino (2012) and Barkley, Markley, and Rubin (2001), one aspect of the actual operation of state CAPCO programs that contributes to inefficiency is that CAPCOs often make low-risk investments or focus on later-stage firms rather than start-ups in order to guarantee returns to insurance companies and to cover the management and operation costs within the CAPCO itself. Catts (2002) discusses these financial arrangements in detail, noting that CAPCOs typically place about half of the available capital into a low-risk bond fund in order to generate an acceptable return for the

insurance companies and to cover the allowable management fees, typically on the order of 2.5 percent of the capital under management. The other half tends to be invested repeatedly in shorter-term (and potentially lower-risk) investments in order to reach the total investment sufficient to meet the state requirements and voluntarily decertify from the program. The CAPCO (rather than the state) then generally maintains any equity investments and the returns (or losses) therefrom. Our analysis of the Alabama data, as described above, is certainly consistent with this broad characterization from the literature.

In a traditional venture capital arrangement, the venture capitalist retains all of their invested principal plus a substantial share (on the order of 80 percent) of the generated profits. In CAPCO programs, the CAPCOs or insurance companies retain the ownership of invested principal and typically return less than 20 percent of the generated profits (if any at all) to the state, depending on the specific legislation. They are making an investment in the form of foregone insurance premium tax revenue in hopeful exchange for generated economic activity such as investment and job creation. Francis (2016, p. 5) provides a useful summary of the available evidence on CAPCO programs:

"these programs have stirred controversy after a series of audits in different states showed that most of the money was not invested in local small businesses but instead in safe, low-risk investments—and fees for fund managers. Insurance companies profited, getting their money back plus the tax credit and interest. The fund managers were also winners, mainly through fees, but the states lost the tax revenue and got very little in the way of local investment."

Barkley, Markley, and Rubin (2001) note that CAPCO programs have been able to attract substantial funding from insurance companies in a relatively short period of time, which is an efficiency advantage over several other programs. The credits also open a broader segment of the risk-return continuum to the insurance companies, who are traditionally limited to safer investments (Krumm, 2010). Additionally, CAPCO programs might be the only legal way for some states to access venture capital markets, especially when state law prohibits direct investments in private businesses.

Another aspect of efficiency that may be especially relevant for CAPCO programs is their impact on local markets. State support of venture capital can disrupt already-functioning markets, both in terms of venture capital markets and the markets within which recipient start-ups operate (Barkley, Markley, and Rubin, 2001, and McFarland and McConnell, 2012). Lerner (2009) and Reynolds, Storey, and Westhead (1994) discuss the possibility that state efforts to promote venture capital markets can be especially dangerous if state or local agencies do not possess the necessary management skill, capitalization, or industry expertise to maximize efficiency in the selection of recipient firms.

The inherent structure of CAPCO programs can also bring well-informed and well-connected managers to the table, which can improve efficiency relative to state-run venture capital support programs. This is especially true since CAPCOs typically do not have to abide by state restrictions on salaries and benefits for fund managers, and can thus attract higher-quality human capital (Krumm, 2010, and Barkley, Markley, and Rubin, 2001). The obvious cost of this is that state administrators have less control over CAPCO managers and the overall operation of the program. In the end, CAPCOs will serve their own interests, not necessarily the interests of the state within which they operate.

Despite several efficiency advantages over other possible approaches to venture capital promotion at the state level, our view echoes the theme from the literature that the CAPCO arrangement is woefully inefficient from the state's perspective.

GRADE: D

# Transparency

It is important for tax incentive programs to be transparent, such that benefits to taxpayers and costs to the state are clear. On one hand, the costs to the state are fairly obvious, in that the total amount of insurance premium tax credits across the two phases of the program is limited to \$200 million. On the other hand, in terms of generated impacts, it is not obvious to the casual observer whether the program generates meaningful economic benefits. This relates to the non-public nature of project-level data, and the complex nature of economic impact analysis as described in detail above.

A key advantage of most state CAPCO programs, including Alabama's, is that it is relatively heavily insulated from political influence. Once the state approves a CAPCO, the specific decisions over where to invest capital lie entirely with the CAPCO (subject to state rules and regulations, of course) and not directly with state officials. While this importantly removes some—but perhaps not all—political pressure from the selection of recipient start-up companies, the tradeoff is that it also limits transparency in a very significant way (DiSabatino, 2012, and Krumm, 2010).

Indeed, while state reports provide useful information at the CAPCO level, project-level data on recipient companies and their resulting investments and jobs is not publicly available. This makes public oversight and evaluation of the program difficult, to say the least. It also raises the possibility that some of the investment may actually be taking place across state lines (Doran and Bannock, 2000).

GRADE: D

Certainty

One advantage of the use of insurance premium tax credits for Alabama's CAPCO program is that the

revenue impact is potentially more stable than other tax incentives, such as income tax credits (Krumm,

2010). While this does not entirely remove the uncertainty with regards to the timing of credit claims by

insurance companies, it greatly reduces it, allowing the state to more clearly anticipate the revenue

impact at least across years. The limited nature of the credits also smooths out the revenue impact over

time, especially relative to a direct investment program in which all of the necessary capital would be

needed up front. The CAPCO structure is such that insurance companies provide the up-front capital

and then generate a relatively steady and predictable stream of credits that reduce state revenues over

a period of several years (Barkley, Markley, and Rubin, 2001, and Krumm, 2010).

The evaluation of the Alabama CAPCO program on this dimension is certainly mixed. It provides

necessary certainty in some areas (e.g., anticipated total revenue impact and diminished up-front

impact) while suffering from a lack of certainty in other areas (e.g., the timing of that impact on annual

state budgets).

GRADE: C

Prospective

A good tax incentive rewards firms for future changes that benefit the broader economy, rather than

rewarding (or even penalizing) them for past behavior. This maximizes the program's chances of

spurring new activity directly in response to the incentive, rather than pouring valuable state resources

into activity that would have taken place anyway. The Alabama CAPCO program is certainly prospective

in the most basic sense. But it is not clear that the policy adequately limits investments to new activity

that would not have otherwise taken place. Indeed, as described above, our analysis of the company-

level data show substantial investment dollars going to companies that were founded many years prior

to the program's inception. This is reflective of a fundamental misalignment of incentives. While the

state would likely prefer to invest in riskier start-up companies in a traditional venture capital approach,

the CAPCOs face strong incentives to generate at least a minimum guaranteed return to compensate the insurance companies and their own managers.

GRADE: D

Simplicity

It would be difficult to argue that the Alabama CAPCO program is too complex for participating organizations such as insurance companies and the CAPCOs themselves, given their substantial lobbying efforts surrounding these and similar programs. The program is also quite simple for the state to administer, as it only requires annual reporting from a relatively small number of CAPCOs to the state. CAPCOs also appear to be more than adequately compensated for their efforts in managing the program, given the allowable threshold for management fees. Alabama's program also appears to be quite a bit less prescriptive than those—especially newer programs that have learned from prior experiences—in other states. On the other hand, the program is not straightforward for policy makers and the public to understand. In some sense, the program's rather costly complexity could be beneficial if it allows the CAPCOs to operate free of political influence and in a manner consistent with traditional venture capital activity.

GRADE: B

KADE:

**Targeted** 

Good incentives for economic development should be targeted and provided on a discretionary basis in order to maximize return on investment and generate new activity that would not have otherwise taken place. Targeting allows the screening of possible recipient organizations, and therefore in principle allows CAPCOs to focus their capital on higher-return entities. While this may increase the costs of running the program, it also reduces the revenue cost to the state (relative to a broader-based entitlement-style program).

Alabama's CAPCO program is certainly targeted in terms of the written statutes behind the program, but the question remains as to whether the qualifying investments by the CAPCOs are truly as targeted as the enabling legislation might have preferred. Indeed, the confidential company-level data reveal

significant investment activity among companies that are not necessarily in targeted industries and/or have been in existence for quite some time prior to the CAPCO program's inception. As noted earlier,

the incentive to create relatively safe private sector returns may overwhelm the intended targeting.

GRADE: C

**Protection of Public Funds** 

A good incentive program should minimize fiscal exposure by limiting the size of the program, limiting the time period for use of the incentives, or limiting each project's allowable incentive amount.

Alabama's CAPCO program appears to stack up rather well on this dimension, given the overall caps on

available tax credits, requirements surrounding the investment of capital, and other constraints and

limitations within the program. The limitation on the total amount of tax credits provides an upper

bound on the program's cumulative direct revenue impact.

DiSabatino (2012), Brunori (2005), and Barkley, Markley, and Rubin (2001) are among the studies that

emphasize the impact of CAPCO and similar programs on public budgets. Essentially, the insurance

premium tax credits used to finance these programs reduces state tax revenue which, assuming no

corresponding spending reductions or revenue increases elsewhere in the budget, creates a financial

burden for other taxpayers. Additionally, the necessary targeting of program benefits creates winners

and losers that can be viewed as unfair by some. These same arguments apply generally to tax credit

programs.

The Alabama program also falls behind in terms of preserving invested principal and a share of

generated profits. While programmatic caps limit the state's fiscal exposure, the structure of the CAPCO

programs means the state will see little direct return from its investments in entrepreneurship.

GRADE: C

**Leverage** 

Leveraging is the extent to which the CAPCO tax credit program draws in complementary resources from

elsewhere to support entrepreneurship. Krumm (2010) and Barkley, Markley, and Rubin (2001) point

out that one advantage of CAPCO programs is that they make it more likely that private venture capital funds will participate in the state program. They might have been reluctant to partner with state-run programs, but view the private nature of the CAPCOs as a strength. It is not clear whether the Alabama program has fostered such arrangements, but there is nothing in the enabling legislation that would preclude them. That being said, the available aggregate venture capital data shown in Figure 1 above does not suggest that the program has had a strong impact on statewide venture capital activity. Additional information on complementary investment dollars would support a more rigorous evaluation of the state's CAPCO program.

GRADE: B

Accountability

Recipients of economic development incentives should generally demonstrate accountability in the use of public resources. In practice this can be achieved, at least in part, through performance-based incentives and claw-back provisions that maximize the chances for positive economic impacts and returns on state tax credit investments. These features appear to be completely absent in the Alabama CAPCO program. As described above, the fact that the state cedes control over the invested principal and virtually all of the generated profits can be viewed as a significant disadvantage, in that the state no longer has meaningful authority over the CAPCOs and recipient businesses.

At the same time, it must be recognized that some of the business activity supported by CAPCOs will ultimately fail—this is the very nature of the market that venture capital supports. As such, traditional performance incentives and clawbacks are not ideal mechanisms. Accountability could be enhanced through better documentation of recipient firms and their performance prior to and after receipt of CAPCO funds.

GRADE: D

**Evaluation** 

In some respects, a sound evaluation system is the most important feature of a good incentive program. Sound evaluations help determine program effectiveness and thus efficiency, and lessons can be learned

that ripple across other elements of a good incentive program. The Alabama CAPCO program falls woefully short in terms of building in meaningful oversight and rigorous evaluation. Other than annual reports from the CAPCOs, the complete absence of publicly-available data at the project level makes substantive evaluation virtually impossible without direct state support. This is not unique to Alabama, unfortunately, and may be part of the reason for the proliferation of economic impact studies funded by the CAPCOs themselves, using their own private data. On a similar note, the program is not directly tied to measurable goals, such as the total number of jobs created for Alabama residents or dollars invested in Alabama companies.

Alabama's CAPCO program should be subject to rigorous econometric analysis by independent experts; information on the existing program could potentially support such an analysis. This should occur prior to any new allocation of credits in support of the incentive program. More detailed information reports should be provided on an annual basis to inform policy makers and the public on the use of public resources. These steps would enhance transparency and promote accountability.

GRADE: F

**Ownership** 

While the Alabama CAPCO program is understandably and reasonably administered by the Department of Commerce (formerly the Development Office), that agency did not create it or push for its implementation. This can create ownership issues if the agency might have preferred an alternative use of a similar pool of state dollars for economic development purposes, or if they might have preferred more direct involvement in the venture capital processes that are virtually entirely handled by the CAPCOs without much state oversight.

GRADE: D

Overall

In principle, Alabama's CAPCO program provides an important boost to in-state venture capital markets and provides several important advantages over alternative economic development incentives. Unfortunately, it falls short in terms of economic impact, efficiency, and accountability. The program entails relatively high costs and based on the available evidence provides little market or fiscal return to

the state. It is up to state officials to determine whether the limited benefits of the program are worth the costs.

Grade: D

# Suggestions for Improvement or Replacement

With this evaluation in hand, the state faces several options. On one hand, significant improvements could be made to enhance the CAPCO program, using other states' experiences as learning tools.

Barkley, Markley, and Rubin (2001) discuss several ways in which state CAPCO programs might be improved. A particularly intriguing suggestion is to expand qualified CAPCO investors beyond the traditional insurance companies, to allow other businesses and perhaps even individuals to access the credits. A second area for improvement concerns the retention of ownership stakes in recipient companies. In the program's current form, little of the proceeds of the CAPCO investments return to the coffers of state government so the program's potential effectiveness is limited to the one-time allocation of capital. Alabama's program could be restructured to include a greater rate of return on investment to the state. This could be used to defray the tax expenditure costs of the program and fund service delivery; alternatively, proceeds could be plowed back into the venture capital market.

On the other hand, given the fact that most states have turned away from CAPCO-style arrangements, the state is almost certainly better served to consider an entirely different approach to venture capital support. CAPCOs were created largely as a mechanism to impart greater market forces on the allocation of venture capital and diminish political influences on the program and fund allocations. As is clear from the discussion above, placing greater reliance on private sector actors shifts incentives to the promotion of private sector returns rather than investments that provide good returns to taxpayers and the public. It is also clear that the CAPCOs have not eliminated all political influences or lobbying activity.

Many alternative financial incentive models like loan guarantees are not likely to be effective in the context of venture capital. Consideration should be given to a public-private direct investment model where lending capacity is determined by a lump sum legislative appropriation or bond allocation. An independent private sector management team would run the program, chosen through a competitive bidding process, with ongoing oversight provided by a board appointed by a combination of the legislature and governor. This structure would blend the public interest with private interests. It could

be a revolving loan fund model, where unlike CAPCO, principal is returned the lender—the state of Alabama. As funds are repaid, they can be reloaned to help spark additional economic activity. This creates a loan multiplier effect that is absent under CAPCO.

This model has the potential to more effectively reflect the preferences of policy makers and citizens of Alabama. Potential political influences cannot be ignored, but they will present in some fashion regardless of the structure of the program. The program could be structured to promote certainty, transparency, improved targeted, greater accountability and enhanced efficiency.

One of the best examples of this sort of hybrid model is observed in the Connecticut Innovations programs. Specifically, the venture capital component of the broader quasi-state program involves not only an appointed Board of Directors, but also an Advisory Committee made up of industry experts who make recommendations to the board sub-committee that actually evaluates and selects investments. This true public-private partnership provides transparency and insulation against political pressure. It also allows the state to maintain equity positions in addition to providing important loans to new businesses. Proceeds can then be reinvested in additional start-ups in an ongoing process. Importantly, this structure permits a more intense focus on riskier start-ups, with clearer incentive alignment than the CAPCO structure.

More general approaches to fostering venture capital development would be to use the broad powers of the state budget, including either tax policy or public expenditures. This is problematic if the goal is to grow venture capital in the state. The broad brush of corporate and personal income tax policy cannot easily target and *create access* to venture capital. Similarly, the traditional public service components on the spending side of the budget cannot create pools of venture capital. Fostering a culture of entrepreneurship, with the long-term goal of creating in-state pools of supportive venture capital, is a blended approach that might include incentives under the personal income tax and spending programs aimed at promoting quality of life.

-

<sup>&</sup>lt;sup>6</sup> See <a href="http://ctinnovations.com/">http://ctinnovations.com/</a> for additional details.

#### Alabama's Historic Rehabilitation Tax Credit Program

# **Background**

The Alabama Historic Rehabilitation Tax Credit (HRTC) program is overseen by the Alabama Historical Commission and provided \$20 million in tax credits per year for 2013, 2014, and 2015. The credits amount to 25 percent of qualified rehabilitation expenditures for certified historic buildings used for income-producing or residential purposes, or 10 percent for pre-1936 non-historic structures. Credits are not refundable, but unused credits may be carried forward for up to 10 years.

Eligible projects must involve structures that are either listed individually in the National Register of Historic Places (NRHP), listed as a contributing resource in a NRHP district, or eligible for NRHP listing. Eligible applicants include taxpayers filing Alabama state tax returns, or federally-exempt entities who own buildings or hold leases for a term of 39 years or more. Credits are distributed on a first-come, first-served basis until they are exhausted. A total of 39 projects have received reserved tax credits, and another 13 have been approved but are on a waiting list (Novogradac & Company, 2016).

The program includes several requirements and limitations in order to target benefits to substantial and impactful projects. The total rehabilitation project expenditure must exceed 50 percent of the owner's original purchase price or \$25,000, whichever is greater. Work must follow the Secretary of the Interior's Standards for Rehabilitation, and limits are placed on approved items and services. There is a per-project credit limit of \$5 million for commercial projects and \$50,000 for residential projects. Of the 52 approved projects, 40 are commercial and only six are at the maximum \$5 million level. Only one of the 12 residential projects (which includes 4 apartment projects) is at the \$50,000 maximum.

It is reasonable to think of this type of credit simply as a means to reduce the cost of historic rehabilitation for the purposes of preserving valuable structures. Indeed, the actual preservation of historic structures is meaningful and desirable in and of itself to many residents, and these programs make the effort less costly to the private sector. Ryberg-Webster (2015, p. 205) points out, however, that "the original congressional motivation for adopting rehabilitation tax incentives emphasized urban revitalization and economic development more than purely preserving the nation's architecture."

The common thread through both of these arguments is that historic rehabilitation provides spillover benefits, or public goods, that accrue to many individuals beyond the actual owners or occupants of the

historic structure, including future generations. The owners themselves might not fully appreciate those spillovers, however, and might thus invest an inefficiently low (by society's standards) amount of resources into maintaining them or alternatively simply abandon them. Public assistance in the form of HRTC tax credits or other programs can be helpful in generating the socially-desirable level of historic rehabilitation activity. Rypkema, Cheong, and Mason (2013) provide a useful discussion of this issue within the context of historic rehabilitation tax credit programs.

Additional private sector benefits might be created through the economic activity linked to historic rehabilitation. For example, new residences will give rise to a demand for retail trade and service acquisition opportunities for consumers; commercial developments may directly provide these purchasing opportunities. This can create jobs and expand the sales tax base. As historic preservation occurs, property values might rise, yielding additional revenues for local governments.

It must be recognized that some of this "new" economic activity may displace other economic activity, both in the areas around historically-preserved facilities and elsewhere. For example, a commercial enterprise whose creation was facilitated by the HRTC may take retail sales or other business activity from other businesses in the local area. On the other hand, the location of new residences facilitated by the HRTC means a reallocation of where people live. One potentially desirable feature of such a reallocation may be a greater concentration of people in once-blighted areas as opposed to sprawling growth and movement to the suburbs. These are important factors to consider in assessing the HRTC.

#### **Comparisons with Other States**

According to Novogradac & Company (2016), Alabama is one of 34 states nationwide offering a similar historic rehabilitation or preservation tax credit. Schwartz and Kuhlman (2016) describe several common features of the state-level credits:

- Specific criteria for qualifying buildings or projects;
- Standards to preserve the historic/architectural character of the structure;
- Credits determined as percentages of approved expenditures;
- Project-specific minimum expenditure thresholds; and
- Clear ownership and management of the program, usually in an established state government agency or department.

Clearly, Alabama's program resembles those in most other states, as it possesses these common positive attributes.

Schwartz and Kuhlman (2016) discuss the varying degrees of success with the myriad state tax credit programs, and point to two key shortcomings than can reduce the amount of stimulated rehabilitation activity. The first is an annual limit on the amount of credits that can be awarded. While limits such as those present in Alabama can provide several advantages such as certainty in terms of the revenue cost to state governments, they also reduce the number of potential projects that can receive assistance. The second is the lack of transferability, such that a recipient is unable to use the credit assistance that is available. Alabama's program allows a one-time transfer, which can allow the recipient to realize the full (discounted present) value of a stream of credits on an up-front basis. This enhances the certainty of taxpayer relief under the HRTC.

Schwartz and Kuhlman (2016) recognize that tax credits for historic rehabilitation and preservation must be sufficiently high enough to induce new rehabilitation activity. They cite credits on the order of 20 to 30 percent as sufficient to represent a meaningful incentive. Alabama's credit falls in the middle of this range. Schwartz and Kuhlman (2016) also discuss the importance of geographic fairness, and cite examples of states that have either set aside certain percentages of available credits for rural areas or limited the urban/metropolitan share. State officials must weigh the advantages of regional distributional equity against the disadvantages of favoring some projects over others simply on the basis of where they are, rather than their importance to local or regional economic development. Alabama's credit does not have geographic constraints, but the list of approved projects spans 10 cities across the state. This allocation of funds may lead to the lack of broad-based regional political support.

Recipients of state tax credits are also frequently able to leverage additional resources through the Federal Historic Preservation Tax Credit, which amounts to an additional 20 percent of qualified rehabilitation expenditures. The National Park Service (2015) documents that nearly half of the projects that used a federal credit also received a state-level credit, and that states with credits that coordinate better with the federal credit tend to be the heaviest users of the federal program. Oakman and Ward (2012) provide empirical support, showing that states with active historic tax credit programs were able to access significantly greater amounts of federal tax credit support. Recipients can also frequently access other programs such as the New Markets Tax Credit or Low Income Housing Tax Credit, which can help to further reduce the costs of rehabilitation.

#### Analysis of Economic and Revenue Impacts

The popularity of the federal and state tax credits for historic rehabilitation is based in large part on their purported economic impacts on local communities. Listokin, Lahr, Heydt, and Stanek (2011) discuss the impacts of historic rehabilitation relative to other prominent development programs, concluding that historic rehabilitation provides significant "bang for the buck." The literature is replete with studies of state historic tax credits that document large gross economic impacts.<sup>7</sup>

Rypkema, Cheong, and Mason (2013) discuss the need for, and problems with, the measurement of economic impacts of historic rehabilitation. While methods are readily available for estimating jobs or income created or dollars invested, it is more difficult to assess less tangible impacts such as environmentally-beneficial positive spillovers or neighborhood ("halo") effects that are good for quality of life, economic development and local tax bases. On a similar note, it is important to recognize that historic rehabilitation can be relatively cost-effective by removing demolition components from alternative options that would require new construction on a previously-built site (Rypkema, 1991).

There is some credible evidence that historic preservation tax credits can improve property values in the area surrounding rehabilitation projects. The Indiana Legislative Services Agency (2015) provides a useful survey of the empirical literature on this topic. One study by Cyrenne, Fenton, and Warbanski (2006) found that every dollar of historic rehabilitation led to increases in assessed value of about 33 cents. Another by Leichenko, Coulson, and Listokin (2001) found that historic designation was associated with assessed values that were five to twenty percent higher. However, as implied above, alternative investments in other places could very well boost property values there.

The Indiana Legislative Services Agency (2015) provides a helpful summary of recent efforts to estimate economic impacts of various historic tax credits. They note that most studies assume that all of the rehabilitation activity occurs directly as a result of the credit itself, and would not have occurred without the credit. They also note that most of the studies conclude that the credit programs more than pay for themselves. In other words, they typically find that the gross economic benefits more than offset the loss of tax revenues. Their survey of state impact studies concludes that each \$1 million in rehabilitation spending generated an average of 16 jobs. A similar theme emerges from the summary of 17 state-level impact analyses conducted between 1997 and 2013 that is presented by According and Fasulo (2014).

<sup>&</sup>lt;sup>7</sup> The National Trust for Historic Preservation maintains an online listing of state economic impact studies at <a href="http://forum.savingplaces.org/learn/fundamentals/economics/tax-credits/state-httc?ga=1.165524090.453262556.1479154150.">http://forum.savingplaces.org/learn/fundamentals/economics/tax-credits/state-httc?ga=1.165524090.453262556.1479154150.</a>

Most used some form of input-output analysis, although a few involved simpler calculations and a few used more sophisticated econometric techniques. All of them estimated sizeable economic impacts.

It is important to critically evaluate assumptions regarding the extent to which the credit created new activity or displaced activity that might have otherwise taken place. As described in greater detail above and in our earlier report, determining the extent to which a particular tax credit program truly generated new and meaningful activity is very difficult. Most studies assume that no rehabilitation activity would take place in the absence of the credits (i.e., that all of the activity was induced by the credits themselves and would not have taken place otherwise). A study by the Iowa Department of Revenue (Jin, 2014) is notable in that it explores an alternative scenario in which the absence of the credit would still result in an equivalent amount of spending on new (rather than rehabilitated older) structures. This implicitly assumes that the incentivized rehabilitation activity displaces other construction activity that might have taken place in the absence of the credit. The jobs impact in this alternative scenario was less than one-quarter of that in the scenario where the absence of the credit resulted in no construction activity at all.

An economic impact study evaluated the Alabama HRTC in January, 2016, using the most recently available data at that time (Novogradac & Company, 2016). This evaluation used the well-known Implan model. When the report was prepared, only a small share of the \$60 million credit allocation had been tapped for effective tax relief; the 10-year carryforward implies much higher revenue costs to the state in future years when the remainder of the credits is realized for use. (Actual credits claimed in 2014 totaled \$2.2 million and just \$2.5 million in credits were claimed in 2015.) The economic impact analysis considers one-time construction impacts, which are significant, as well as ongoing operational impacts arising from assisted projects. The ongoing impacts are extrapolated out to 2033 which assumes that the economic activity is not only sustainable but grows over time. In practice, some of the activity will no longer be present. Over 2014-2017, 2,133 one-time direct construction jobs are estimated along with another 2,020 jobs arising through the supply chain and multiplier processes. Ongoing direct employment for assisted projects over this window of time was estimated to be 1,373 plus an additional 622 jobs from supply chain and multiplier activity. This yields a total of 1,995 ongoing jobs associated with assisted projects. These are not necessarily jobs induced by the HRTC.

<sup>&</sup>lt;sup>8</sup> See <a href="http://implan.com/">http://implan.com/</a>. Implan produces results that are similar to those that come from RIMSII multipliers. One difference in the modeling structure is that Implan separately estimates supply chain and multiplier effects; RIMSII multipliers collapse the same impacts into one category.

We assume that the full \$60 million in allocated credits will be used at some point during the 10 year carryforward window, thus representing the full tax costs of the program. This figure implies a credit cost of \$43,700 for each direct job (1,373) and \$30,075 per job for all jobs created (1,995). Average annual construction jobs were 1,038. Adding in these one-time benefits to the ongoing job total produces a credit-cost-per-job figure of \$19,782.

The impact study estimated gross impacts, having made no adjustments for economic activity that might have taken place without the HRTC. In this regard, the study provides an accurate depiction of the economic activity *associated* with assisted rehabilitation projects. If not all of this activity is in fact induced by the tax credit, then the *net* economic impacts will necessarily fall short of the gross impacts. This could arise if an assisted project would have moved forward absent the credit or if the assisted project crowded out other economic activity in the local area. For illustration, we assume that only 50 percent of the activity associated with the HRTC is new economic activity. Under this 50 percent inducement scenario, the credit costs of the program rise appreciably: each ongoing direct job costs \$87,336, each overall ongoing job costs \$60,120 and each of the total jobs (including one-time construction impacts) costs \$39,552. Alternative scenarios would produce different outcomes, highlighting the importance of isolating induced effects from gross impacts.

Two alternative dimensions of net impact should be considered in evaluating incentives. One accounts for any new revenue associated with assisted activity allowing a comparison of credit costs against newly-created revenue. A second considers net fiscal costs to state and local governments in Alabama, accounting for credit costs, new revenue impacts, and public service delivery costs associated with new economic activity. Most traditional impact studies do not account for public service costs.

The impact study estimated \$6.9 million of gross state and local government revenue associated with direct employment and \$10.6 million in gross revenue for the 1,995 ongoing jobs. This implies \$5,045 in state and local government revenue for each direct job and \$5,336 for each overall ongoing job. Credit costs, on the other hand, are \$43,700 per direct job and \$30,075 for each overall ongoing job. Based on these figures, and ignoring one-time construction impacts, the state faces a payback period of 8.7 years on direct employment and 5.6 years for overall employment.

If as above it is assumed that only 50 percent of the activity associated with the HRTC is newly induced, then there is only \$3.5 million in new state and local revenue from direct jobs and only \$5.3 million from all ongoing jobs. This means that another \$5.3 million in revenue is forgone, revenue that would have

accrued even in the absence of the HRTC. The new \$3.5 million in revenue for direct jobs translates into just over \$5,000 per job, while the \$5.3 million in overall revenue means \$5,336 for each ongoing job created. However, the credit costs of the program have effectively doubled on a per-job basis to \$87,336 for each direct job and \$60,120 for each overall job. Under this scenario, the payback period for direct jobs increases to 17.3 years and grows to 11.3 years for overall employment.

Analysis of net fiscal costs would incorporate estimates of service delivery requirements and compare these to net-of-credit revenue effects. New workers and new and expanded businesses will require services from the state and from local governments. Elementary and secondary education is perhaps the most costly service provided by state and local governments in Alabama, with annual per pupil costs of \$9,028, as noted above. If all of the economic activity associated with the HRTC is new, then the program necessarily produces a net fiscal loss to the state for many years. The payback period for the credit alone would be 5.6 years for all of this ongoing economic activity. Adding service delivery costs like education would translate into substantial budget shortfalls for state and local governments. Each new job produces only \$5,336 in revenue while a single child in the public school costs \$9,028. 10

If some of the associate activity would have taken place absent the HRTC, then the fiscal situation confronting state and local government is weakened further. The credit program costs Alabama the same amount, but some revenue is forgone on jobs that would have been created anyway. Plus there are new service delivery requirements for the new people and economic activity. In the end, the state and local governments in Alabama would need some combination of higher taxes and lower spending to reign in implied budget imbalances. Such policies would in turn hamper economic development.

Two final points warrant attention. First, the relatively high cost of the HRTC (and CAPCO) is not likely to be that different than many other tax incentive programs. But we have highlighted these costs in a fashion that is not traditionally done in economic impact studies. Second, while the HRTC has a high implied cost per job, the analysis presented here has done nothing to place a value on historic rehabilitation itself or any other intangibles. Alabama residents and policy makers will have to decide what these values are in order to properly evaluate the efficiency of the program.

<sup>10</sup> Some of the employment induced by the HRTC could reflect previously-unemployed individuals who were consuming services from the state but generating little tax revenue. Accounting for such individuals would improve the net fiscal outcome but not fundamentally alter the conclusion of this analysis.

<sup>&</sup>lt;sup>9</sup> See <a href="http://www.governing.com/gov-data/education-data/state-education-spending-per-pupil-data.html">http://www.governing.com/gov-data/education-data/state-education-spending-per-pupil-data.html</a>.

# Evaluation of Alabama's Historic Rehabilitation Tax Credit Program

We now present a point-by-point evaluation of the HRTC using our established criteria. As with the CAPCO evaluation above, we provide component-specific letter grades which are combined into a composite letter grade based on our evaluation of the relative importance of each component.

# **Efficiency**

There are several aspects of efficiency that are worth discussing when it comes to Alabama's Historic Rehabilitation Tax Credit. The most basic question is whether the state could enjoy a similar amount of positive spillovers from an alternative investment of resources of an equivalent or even smaller size. The timing of the claiming of tax credits is relevant, as the ten-year carry-forward provision can allow the state to enjoy the benefits of the rehabilitation activity before actually losing the revenues, to the extent that the credits are actually claimed on tax returns long after the project is completed.

That being said, the monetization of the credits—if they are transferred for immediate financial benefit—can reduce efficiency if they are claimed sooner. Simply put, in order for the transfer of the credit to be valuable to all parties, it is likely that the original beneficiaries accept a lower present value. Some percentage of the total value of the tax credits is therefore lost to the transfer process, potentially reducing the program's economic impact. This could be avoided by the use of directly-refundable credits. Yes, this can raise the costs to the state, but the same policy would enhance the degree of tax relief and thus presumably increase the amount of rehabilitation.

Another question is the extent to which projects that benefit from the tax credits (a) would have been undertaken even without the credit, and/or (b) crowd out other local construction activity. If some of the rehabilitation would have taken place anyway, then the program's impact is overstated and its efficiency is reduced. And any crowd-out of activity that would otherwise have occurred will represent yet another efficiency loss. As we have discussed elsewhere, there is no good way to address this question, at least *ex ante*.

On a similar note, the limited nature of the credit program puts the state in a position of picking winners and losers, and the first-come first-served nature of the program limits the state's ability to do that effectively on a longer-term basis. Effectively, projects that are better able to assemble and submit

suitable applications enjoy implicit advantages over other projects that might actually have higher

historic value or spillover benefits.

Finally, it is important to recognize that historic rehabilitation credits can end up rewarding owners that

have long-deferred maintenance, and similarly penalizing those who have kept up their properties over

time. While unlikely, these programs can end up encouraging owners of historic structures to allow

them to fall into disrepair, such that they might later qualify for a credit.

**GRADE: C** 

**Transparency** 

The Alabama Historic Rehabilitation Tax Credit program appears to be a very transparent program. It

also benefits from a fairly rigid structure, as is clearly laid out in the enabling legislation. The Alabama

Historical Commission is justifiably proud of the many rehabilitation projects that have been granted

credits under this program, and they have provided a great deal of information about each one of them.

This information demonstrates qualitatively some of the important spillover benefits that accrue to local

communities from investments tied to the HRTC.

GRADE: A

Certainty

While the transfer or monetization of the credit provides important up-front benefits for property

owners or leaseholders who are engaged in historic rehabilitation, it reduces the certainty of the

program for state officials. Tax credits cannot be claimed until the projects are completed, and it is also

not clear who will be claiming them and under which state tax system. The eventual revenue impact

depends crucially on the take-up rate and realization of the credits, and therefore on the construction

and completion schedules for each project. While the total credit amount is limited, these issues can

inject unnecessary uncertainty into the state's revenue structure.

**GRADE: B** 

**Prospective** 

The Historic Rehabilitation Tax Credit program is certainly prospective in the basic sense that credits are

only granted for qualified projects that were started no earlier than six months before application.

Unfortunately, the limited nature of the program and the first-come first-served manner in which credits

are allocated puts the state in a position of potentially rewarding activity that might otherwise have

taken place, or encouraging the deterioration of the historic structures in the first place. That being

said, it is also important to note that the induced economic activity and resulting benefits to the state

can often accrue well in advance of the claiming of the tax credits themselves.

**GRADE: B** 

**Simplicity** 

The HRTC is complex in terms of its restrictions on qualified projects and qualified expenditures. The

determination of these is difficult, both upon application and later in the process of monitoring projects

through to completion. Monetization adds some complexity to the program and thus additional costs of

compliance. Simplicity is enhanced by linkages in the state law to federal codes or requirements, which

also enhances the ability to leverage funds from the federal tax credit.

**GRADE: B** 

**Targeted** 

The program is certainly targeted and limited: the focus falls on historic preservation, project support

depends in part on the nature of the investment, and there are per-project limits on the amount of

allowable credits. That said, the first-come first-served nature of the program removes discretion and

makes it very difficult for the state to efficiently target the benefits to the most deserving projects. The

program is also blind to geography. The limit on total credits and the other features described above

might make it harder for projects in rural areas to gain funding.

**GRADE: B** 

**Protection of Public Funds** 

Alabama's HRTC program stacks up quite well when it comes to protecting public funds. Specifically, the

upper limits both on overall credit allocations and also on per-project credits serve as safeguards to help

minimize the revenue risk to the state.

GRADE: A

Leverage

Recipients of state tax credits are also frequently able to leverage additional resources through the

Federal Historic Preservation Tax Credit, which amounts to an additional 20 percent of qualified

rehabilitation expenditures. The National Park Service (2015) documents that nearly half of the projects

that used a federal credit also received a state-level credit, and that states with credits that coordinate

better with the federal credit tend to be the heaviest users of the federal program. Oakman and Ward

(2012) provide empirical support, showing that states with active historic tax credit programs were able

to access significantly greater amounts of federal tax credit support. Recipients can also frequently

access other programs such as the New Markets Tax Credit or Low Income Housing Tax Credit, which

can help to further reduce the costs of rehabilitation. The extent to which this is happening in Alabama

is not clear, but the program appears to be set up to maximize those opportunities.

GRADE: A

**Accountability** 

It seems reasonable to house this program within the Alabama Historical Commission, and it is notable

that they have commissioned an economic impact study (Novogradac & Company, 2016) and must also

make regular reports to the legislature. But the Commission can be viewed as an advocacy organization

for historic preservation more broadly. A more formal monitoring structure might provide additional

oversight and accountability benefits for the state.

**GRADE: B** 

**Evaluation** 

The enabling legislation (460-X-23-.12(2)) requires a report in the third year following passage, and

annually thereafter, on the "overall economic activity, usage, and impact to the state from the

substantial rehabilitation of Qualified Structures for which tax credits have been allowed." No

additional structure is provided for the required reporting. Again, it is noteworthy that the Alabama

Historic Commission sponsored the economic impact study that was prepared by Novogradac &

Company (2016). But the legislation does not establish any clear performance thresholds, or provisions

for making adjustments if those standards are not met.

**GRADE: C** 

**Ownership** 

Again, it is reasonable to house this program with the Alabama Historical Commission, as their interests

are almost certainly aligned with the broader public interests embedded within the program.

GRADE: A

Overall

The Alabama HRTC program provides important benefits to local, regional, and state economies. It

fosters rehabilitation of historic structures while providing important and meaningful (but difficult to

measure) spillovers. And while the state does not retain an ownership stake in supported projects (not

unlike the CAPCO program described above), it is able to enjoy an ongoing stream of induced economic

activity that emanates from visible and lasting fixed capital investments. Importantly, those

investments—the rehabilitated historic structures—cannot be moved out of state, unlike companies

that receive start-up capital or other inducements. Of course, the question remains as to whether those

spillovers are worth the revenue cost to state government. We discuss several possible improvements

to the program below.

**GRADE: B** 

# Suggestions for Improvement

While Alabama's Historic Rehabilitation Tax Credit provides several important advantages over alternative approaches and scores well on our evaluation, we identify several improvements that could make the program even more effective for the state. One straightforward improvement would be to make the tax credits refundable, such that recipients can enjoy their full value upon approval. We recognize the risk in provide credits in advance, but our sense is that the approved projects thus far in Alabama are not at risk of failing to be completed. Indeed, the odds of completion surely would increase if the full value of the credits were available earlier in the rehabilitation process. This would also eliminate the need for inefficient monetization of the credits.

An additional efficiency gain could arise from a modification of the application review process, which we have highlighted in several sections above. Specifically, the state should consider eliminating the first-come first-served requirement and instead allow applications to be submitted over a longer predetermined period of time and evaluated collectively. This would more closely mirror a typical Request for Quotations process, and would put the state in a better position to allocate available credits to the most impactful projects. Care would obviously need to be taken to ensure an open and neutral process, perhaps by engaging a panel of experts representing local interests as well as state program administrators.

It would also be wise to establish a more formal evaluation process for the ongoing review of rehabilitation projects that lies outside the Alabama Historical Commission. This would protect the Commission from the criticism that is common with similar types of credit programs, while also protecting the public interest by ensuring a fair and open evaluation process. The current evaluation, which is the subject of this report, is one step in the right direction.

As part of the ongoing evaluation process, significant effort should be devoted to a study of the extent to which the HRTC actually induced the rehabilitation activities on approved projects. The program is actually set up well to enable such a study, as approved projects that have received allocated tax credits could easily be compared to wait-listed projects or others that were not approved for credits. If the wait-listed or non-funded projects have not moved forward without the credits, then the case can more easily be made that the HRTC truly induced the rehabilitation activity in the funded projects.

Beyond the HRTC, it may be worthwhile to consider alternative financial incentive programs that could be developed to support historic rehabilitation in Alabama. These could include such things as loan

assistance programs and private activity bonds. It is not obvious, however, that any of these alternatives would be superior to the current HRTC. Moreover, alternative incentive structures could potentially reduce leveraging opportunities and would lead to new costs of program development, implementation, administration and compliance.

We would also point out that the use of broad tax components and public service elements of the state budget for historic rehabilitation or preservation would not be a reasonable path for policy insofar as the goal continues to be historic rehabilitation. As with CAPCOs and venture capital, broad tax reductions will not necessarily lead to a new pool of loanable and accessible funds to support rehabilitation. Traditional spending functions of the state suffer from the same limitation.

#### Conclusion

Alabama's CAPCO program and Historical Rehabilitation Tax Credit program are both designed to foster local economic development, though in somewhat different ways. Both programs involve the use of tax credits—representing foregone state revenues—to encourage a particular type of activity that will hopefully generate tangible economic activity in the form of jobs and earnings, and expand state and local tax bases. Both involve state investments without the retention of ownership stakes in recipient projects, whether those are new or existing businesses or rehabilitated historic structures. This is typical of tax credit programs. This elevates the importance of garnering other returns from the investment of scarce state tax dollars.

Despite these similarities, our evaluation comes to starkly different conclusions regarding the overall value of these programs to the state of Alabama. The following table provides a concise summary of our evaluation of both programs. In our final evaluation, we recommend the replacement of the CAPCO program with an alternative approach to venture capital support, and we recommend several refinements to an already-successful HRTC program as discussed above.

Component	CAPCO	HRTC
	Grade	Grade
<b>Efficiency</b> : a well-defined return on investment to the state of Alabama.	D	С
<b>Transparency</b> : clear benefits to taxpayers and costs to the state.	D	Α
Certainty: defined impact on state budget and program beneficiaries.	С	В
<b>Prospective</b> : encourage future activity rather than reward previous decisions.	D	В
Simplicity: easy to administer and easy to comply with.	В	В
<b>Targeted</b> : focused and provided on a <i>discretionary</i> basis to promote new activity.	С	В
<b>Protection of Public Funds</b> : through caps or time limits on the use of credits.	С	Α
Leverage: to encourage additional public or private resources.	В	Α
Accountability: performance-based incentives should be built into the program.	D	В
<b>Evaluation</b> : to identify the extent to which incentives induced new activity.	F	С
Ownership: to ensure proper administration and to support a thorough evaluation.	D	Α
OVERALL	D	В

#### References:

Accordino, John, and Fabrizio Fasulo. 2014. "Economic Impact of Historic Rehabilitation Tax Credit Programs in Virginia." VCU Center for Urban and Regional Development, prepared for Preservation Virginia. Available at

http://dhr.virginia.gov/pdf\_files/VCU\_Historic%20Tax%20Credit%20Report\_FINAL\_21-1-2014.pdf.

The Adams Group. "The Colorado CAPCO Program: An Analysis," 2003.

Addy, Samuel. "Economic Impacts of CAPCOs on Alabama: 2015 Update." University of Alabama Center for Business and Economic Research, 2015.

Barkley, David L., Deborah M. Markley, and Julia Sass Rubin. 2001. "Certified Capital Companies (CAPCOs): Strengths and Shortcomings of the Latest Wave in State-Assisted Venture Capital Programs," *Economic Development Quarterly* 15: 350-366.

Brunori, David. 2005. *State Tax Policy: A Political Perspective, 2<sup>nd</sup> ed.* Washington, DC: Urban Institute Press.

Catts, Timothy. 2002. "Certified Capital Companies Spur Investment—But at What Cost?" *State Tax Notes*, June 3, 2002, pp. 919-920.

Colorado State Auditor. "A Review of Colorado's Certified Capital Company Program," 2003.

Combs, Susan. "2014 Biennial Certified Capital Companies Report," Texas Comptroller, 2014.

Cyrenne, Philippe, Robert Fenton, and Joseph Warbanski. 2006. "Historic Buildings and Rehabilitation Expenditures: A Panel Data Approach." *Journal of Real Estate Research* 28(4): 349-380.

DiSabatino, Dominick. 2012. "State Venture Capital Funds: Analyzing the InvestMaryland Program," *State Tax Notes*, July 9, 2012, pp. 95-106.

Doran, Alan, and Graham Bannock. 2000. "Publicly Sponsored Regional Venture Capital: What Can the UK Learn from the US Experience?" *Venture Capital – An International Journal of Entrepreneurial Finance* 2(4): 255-285.

Economic Impact Group, LLC. 2014. The Projected Economic and Fiscal Impacts of a Tennessee Historic Rehabiliations Investment Incentive. Available at <a href="http://www.preservationnation.org/take-action/advocacy-center/additional-resources/Tennessee-Historic-Rehabilitation-Investment-Incentive-Economic-and-Fiscal-Impacts-Full-Report.pdf">http://www.preservationnation.org/take-action/advocacy-center/additional-resources/Tennessee-Historic-Rehabilitation-Investment-Incentive-Economic-and-Fiscal-Impacts-Full-Report.pdf</a>

Economic Policy & Analysis Research Center, University of Missouri-Columbia, and Edward H. Robb Associates. "Certified Capital Companies and State Economic Development." 2004.

Econsult Corporation. 2011. "The Economic Benefits of Historic Preservation Activities in Pennsylvania." Prepared for Preservation Pennsylvania. Available at <a href="http://www.preservationpa.org/uploads/economicbenefits/EconBenefitsBaseDocumentLowRes.pdf">http://www.preservationpa.org/uploads/economicbenefits/EconBenefitsBaseDocumentLowRes.pdf</a>.

Georgia Tech Research Institute. 2013. *The Projected Economic and Fiscal Impacts of Improvements to Georgia's Historic Rehabilitation Investment Incentive*. Atlanta, GA. Available at https://www.novoco.com/sites/default/files/atoms/files/georgia tech htc impact study 111913.pdf.

Indiana Legislative Services Agency Office of Fiscal and Management Analysis. 2015. "2015 Indiana Tax Incentive Evaluation," <a href="https://iga.in.gov/static-documents/6/d/e/c/6dec6072/indiana">https://iga.in.gov/static-documents/6/d/e/c/6dec6072/indiana</a> tax incentive review 2015 annual report.pdf.

Jin, Zhong. 2014. "Iowa's Historic Preservation and Cultural and Entertainment District Tax Credit." Tax Research and Program Analysis Section, Iowa Department of Revenue. Available at <a href="https://tax.iowa.gov/sites/files/idr/Historic%20Preservation%20Tax%20Credit%20Evaluation%20Study.pdf">https://tax.iowa.gov/sites/files/idr/Historic%20Preservation%20Tax%20Credit%20Evaluation%20Study.pdf</a>.

Jarrett, James E. "The Certified Capital Companies Economic Development Innovation: Missouri's Experience to Date," The IC<sup>2</sup> Institute, The University of Texas, 2000.

Krumm, Brian. 2010. "Understanding The New Tennessee Small Business Investment Company Credit Act: Stimulating Economic Growth At The Intersection Of Free Market Capitalism And Government Intervention," *Transactions: The Tennessee Journal Of Business Law* 11: 93-130.

Leichenko, Robin M., N. Edward Coulson, and David Listokin. 2001. "Historic Preservation and Residential Property Values: An Analysis of Texas Cities." *Urban Studies* 38(11): 1973-1987.

Lerner, Josh. 2009. Boulevard of Broken Dreams. Princeton, NJ: Princeton University Press.

Listokin, David, Michael L. Lahr, Charles Heydt, and David Stanek. 2011. "Second Annual Report on the Economic Impact of the Federal Historic Tax Credit." Rutgers University Center for Urban Policy Research. Available at <a href="https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2009-2010.pdf">https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2009-2010.pdf</a>.

McCaskill, Claire. 2004. "Review of Missouri's Tax Credits Under CAPCO and NECA," by the Office of State Auditor Claire McCaskill, *State Tax Notes*, September 6, 2004, pp. 723-737.

McClaughlyn, Kerrita. 2004. "Colorado Governor Approves End to CAPCO Incentive Program," *State Tax Notes*, March 22, 2004, pp. 948-949.

McFarland, Christiana, and J. Katie McConnell. 2012. "Small Business Growth During a Recession: Local Policy Implications," *Economic Development Quarterly* 27(2): 102-113.

National Park Service. 2015. "Federal Tax Incentives for Rehabilitating Historic Buildings: Annual Report and Statistical Report and Analysis for Fiscal Year 2015." Available at <a href="https://www.nps.gov/tps/tax-incentives/reports.htm">https://www.nps.gov/tps/tax-incentives/reports.htm</a>.

Nichols, Deborah K. 2009. Certified Capital Companies Program. Office of the District of Columbia Auditor.

Novogradac & Company LLP. 2016. "Alabama Historic Rehabilitation Tax Credit Program Comprehensive Economic Impact Study," Prepared for the Alabama Historical Commission. Available at <a href="http://www.downtownmobile.org/images/news/htc">http://www.downtownmobile.org/images/news/htc</a> economic impact study final.pdf.

Oakman, Jeffrey, and Marvin Ward. 2012. "Leveraging Federal Economic Development Resources with State Historic Rehab Tax Credits." National Tax Association Proceedings of the 105<sup>th</sup> Annual Conference on Taxation.

Postlethwaite & Netterville CPA. "CAPCO Study." Prepared for the Louisiana Department of Economic Development, 1999.

Reynolds, Paul, David J. Storey, and Paul Westhead. 1994. "Cross-National Comparisons of the Variation in New Firm Formation Rates." *Regional Studies* 28(4): 443-456.

Ryberg-Webster, Stephanie. 2015. "Urban Policy in Disguise: A History of the Federal Historic Rehabilitation Tax Credit." *Journal of Planning History* 14(3): 204-223.

Rypkema, Donovan D. 1991. *The Economics of Rehabilitation*. Washington, DC: National Trust for Historic Preservation.

Rypkema, Donovan D., Caroline Cheong, and Randall F. Mason. 2013. "Measuring Economic Impacts of Historic Preservation, 2<sup>nd</sup> ed." A Report to the Advisory Council on Historic Preservation, PlaceEconomics. Available at <a href="http://culturalheritagetourism.org/wp-content/uploads/formidable/Measuring-Economic-Impacts-of-Historic-Preservation-20131.pdf">http://culturalheritagetourism.org/wp-content/uploads/formidable/Measuring-Economic-Impacts-of-Historic-Preservation-20131.pdf</a>.

Tharpe, Wesley. 2012. "CAPCO: A Bad Investment for Georgia," Georgia Budget & Policy Institute.

Thomson Reuters. 2016. National Venture Capital Association Yearbook. Available at http://nvca.org/research/stats-studies/.

Trybula, Walt, Simon Mak, and Craig Casselberry. "Texas CAPCO and Economic Growth." Texas Business Review, University of Texas, 2011.

# **Appendix: Contact List**

The authors would like to extend their gratitude to the many individuals who provided input and data to

support this analysis.	The authors take full responsibility for the report and its content.
Steve Windom	
Philip Bryan	
Elizabeth Stevens	
Carol Hunter	
David Fleming	
Fred Rendfey	
Samuel N. Addy	
Lisa Jones	
Angela Till	
Brian Krumm	
Ann Strickland	
Dan Schmisseur	
Bart Graham	
Ben Patterson	
MacKenzie S. Ledet	
Tony Toups	
Carling Dinkler	
Steven W. Davis	
Dave Stewart	
Kelly Graham	