STATE OF FLORIDA

Report No. 95-08

Office of Program Policy Analysis And Government Accountability

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October 18, 1995

REVIEW OF THE FLORIDA TECHNOLOGY RESEARCH INVESTMENT FUND

PURPOSE OF REVIEW

This review evaluates the Florida Technology Research Investment Fund (TRIF) administered by the Enterprise Florida Innovation Partnership (EFIP). The Office of Program Policy Analysis and Government Accountability (OPPAGA) conducted reviews of Innovation Partnership programs, including the TRIF, as required by s. 288.9517, F.S. [1] The Innovation Partnership is required by statute to develop research designs for evaluating each of its programs. OPPAGA is to use these designs in performing its reviews. The objectives of this review were to: review and evaluate the TRIF using its research design developed by the Innovation Partnership; report on the TRIF's implementation status; and identify alternatives that could make the TRIF more efficient and cost-effective.

[1] The Office of Program Policy Analysis and Government Accountability is a unit of the Office of the Auditor General but operates independently and reports to the Legislature.

BACKGROUND

The TRIF was established by the Florida Legislature in 1993 (s. 288.9515, F.S.) as one of the programs of the Enterprise Florida Innovation Partnership. The Innovation Partnership is a public-private partnership charged with fostering the growth of small and mid-sized high technology manufacturers and increasing the number of high technology jobs in Florida. To achieve its mission of fostering technological innovation and the creation, growth, and expansion of Florida enterprises, the Innovation Partnership created three programs: the Innovation/Commercialization Program and the Manufacturing Technology Center Program, which are reviewed in a separate report, and the TRIF.

The goals of the TRIF are to stimulate technological innovation by partnering with the private sector and the state's research universities to create marketable technologies, and to make research and development affordable and accessible to small and mid-sized Florida firms. Objectives include increasing company sales and creating new jobs.

To achieve its goals and objectives, the TRIF invests in projects that have potential to generate marketable technologies beneficial to the state's economy. The TRIF was intended to become self-sufficient over time by earning a return on successfully commercialized products through royalty and/or equity agreements with the companies involved in the projects.

For fiscal year 1993-94, the Innovation Partnership allocated $1.2 million for the TRIF from its appropriation of $4.3 million in general revenue. However, the Partnership did not allocate funds for the TRIF in fiscal years 1994-95 or 1995-96. In fiscal year 1993-94, the Partnership awarded the $1.2 million to a total of 36 projects at eight Florida universities.

RESEARCH DESIGN

***The TRIF's Research Design Does Not Include Performance Measures That Specify Baselines, Expected Levels of Future Performance, or Timeframes for Accomplishment. In Addition, Many Projects Are Not Providing Required Performance Information*.**

The Innovation Partnership adopted the original research design for the TRIF in March 1994 after receiving suggestions and recommendations from the Office of the Auditor General as required by s. 288.9517, F.S. The research design included outcome-type measures such as: achieving $5 million in sales by 1997 for all products or processes funded by TRIF commercializing 25 new technologies by 1996; developing 150 new technologies to the prototype stage by 2000; leveraging $5 million in capital investments by 1996; and creating 100 new high quality jobs by 1996 and 10,000 new high quality jobs by 2005. The research design indicated that data for these performance measures would be tracked on a continuous basis, but did not provide detailed information on data collection methodologies to be used.

The Innovation Partnership subsequently revised the performance measures for the TRIF in its Operational Plan for fiscal year 1994-1995 (adopted in October 1994) without consulting with OPPAGA. The Operational Plan's revised measures did not specify any baselines, expected levels of future performance, or timeframes for accomplishment. Without specifying expected performance levels or timeframes, outcomes and results cannot be readily evaluated. The Operational Plan also did not define the performance measures, which is necessary to ensure consistent interpretation, and did not specify methodologies to be used for collecting needed data.

In April 1995, the Innovation Partnership requested OPPAGA to review the Operational Plan's performance measures. OPPAGA provided its comments and recommendations on these measures. The Innovation Partnership is in the process of revising its research design.

The Innovation Partnership has experienced problems collecting data for the research design's performance measures. TRIF projects are contractually required to submit final project reports to the Innovation Partnership within 30 days after project completion and to submit quarterly reports throughout the course of the project. As of June 1995, 11 of 24 completed projects had not provided the Innovation Partnership with their final reports. In addition, half of the projects failed to submit quarterly reports. Many of the reports the Partnership received did not address project accomplishments and thus provided no performance data. In response to these reporting problems, the Partnership sent out follow-up letters and conducted visits to universities in an attempt to obtain performance data.

PROGRAM IMPLEMENTATION AND RESULTS

All 36 TRIF Projects Are Continuations of Projects Funded by a Predecessor Program. Little Progress Has Been Made Toward Achieving Desired Outcomes: Only One of These Projects Resulted in Sales and New Jobs.

All 36 TRIF projects funded in fiscal year 1993-94 were continuations of projects funded under its predecessor, the Applied Research Grants Program (ARGP) of the Florida High Technology and Industry Council and the State University System. [2] The Innovation Partnership did not initiate any new TRIF projects in fiscal year 1994-95.

According to Innovation Partnership reports, three TRIF projects each developed a product that was transferred from a university to a company for commercial production. However, as of the completion of our fieldwork, only one project developed a product that resulted in commercial sales and new jobs. (See Exhibit 1.)

Exhibit 1: Progress in Achieving Outcomes

Research Design Objective	Actual As of August 1995
Commercialize 25 new technologies by 1996	3 products commercialized
Create 100 new high quality jobs by 1996	9 jobs created
$5 million in sales for TRIF funded products by 1997	$2.2 million in sales

Source: Enterprise Florida Innovation Partnership reports and documents.

A major factor contributing to the slow progress in achieving desired outcomes is that the TRIF was not implemented consistently with the Innovation Partnership's original intentions. Innovation Partnership officials said that the Partnership originally planned to contract with companies rather than universities for TRIF projects. The Partnership believed if it contracted directly with businesses, projects would be more accountable for achieving commercial results. However, due to time constraints in implementation, the Partnership decided to retain the ARGP's practice of contracting with universities.

Our review of similar technology development programs administered by six other states determined that four states contracted with companies, not universities. [3] Funding companies provides advantages such as higher potential for product commercialization, creation of jobs, and payment of royalties to the state.

We identified two other areas of concern regarding TRIF's implementation. First, the Innovation Partnership disbursed lump-sum payments to university researchers at the start of the projects, which prevented it from being able to discontinue funding if projects did not submit timely reports or meet expected milestones. Three of the other states we contacted use performance-dependent funding in which funds are disbursed in stages, with each stage dependent on the successful completion of project milestones. Second, the Innovation Partnership did not incorporate royalty and/or equity provisions into the TRIF contracts as it originally intended. This would prevent the Partnership from earning a return from successful projects.

[2] The Florida High Technology and industry Council was created by the Legislature to help plan and coordinate state efforts related to high technology industries. The Council established a technology-related research program with state universities; the goals of this program did not include product commercialization. The Legislature abolished the Council in 1993.

[3] Interviews were conducted with representatives from the technology development programs of Arkansas, Connecticut, Kansas, Maryland, Oklahoma, and Wisconsin. These states also provided OPPAGA with documents and data on their programs.

OBSERVATIONS

- These kinds of technology development and commercialization programs, when properly designed and implemented, have the potential to provide economic benefits to the state in terms of increased sales and job creation.
- These kinds of technology development and commercialization programs are long-term in nature. It often takes a number of years before a project develops a technology that can be refined, manufactured, and marketed by a commercial business. Additional time is required for product sales to spur the creation of new jobs. Although the TRIF was established in 1993, its projects are long-term continuations of projects funded by its predecessor program.

CONCLUSIONS AND RECOMMENDATIONS

The TRIF has made little progress toward achieving desired outcomes. A major factor contributing to this condition is that the Innovation Partnership did not implement the TRIF consistently with its original intent to contract with companies instead of universities.

Some similar programs in other states contract with companies and use performance-dependent funding in their contracts.

The Innovation Partnership's contracts with universities did not include royalty or equity provisions, which would prevent it from earning a return on potentially successful commercial products.

We recommend that:

- The Legislature not fund the TRIF in the future unless the Partnership: contracts with companies, implements performance dependent funding, and incorporates royalty or equity provisions into project contracts; and

- The Innovation Partnership complete revising the TRIF's research design. Specifically, it should develop baselines, expected levels of performance, timeframes for accomplishments, and methodologies for collecting performance data.

ENTERPRISE FLORIDA INNOVATION PARTNERSHIP RESPONSE

The President of Enterprise Florida Innovation Partnership responded that "Innovation Partnership is in the process of revising its research design for the TRIF, including the development of baselines, expected levels of performance, time frames for accomplishments, and methodologies for collecting performance data. Innovation Partnership has also instituted in 1995 a competitive investment program funding energy-related projects, where contracts are with companies, funding is dependent on performance and meeting project milestones, and which incorporates royalty provisions consistent with the original intent for the TRIF."

This review was conducted in accordance with generally accepted government auditing standards and included appropriate performance auditing and evaluation methods. Copies of this report in alternate accessible format may be obtained by contacting Report Production at (904) 488-0021 or FAX (904) 487-3804.

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