



Report of the Vermont State Auditor

December 30, 2010

AUDIT STRATEGY FOR STATE JOB CREATION PROGRAMS

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Vermont State Auditor

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**THOMAS M. SALMON, CPA
STATE AUDITOR**



**STATE OF VERMONT
OFFICE OF THE STATE AUDITOR**

December 30, 2010

Members of the Senate Committee on Economic Development, Housing and General Affairs
Members of the House Committee on Commerce and Economic Development

Dear Colleagues:

Sec. 14 of Act 78 requires that our office develop and recommend an audit strategy to comprehensively validate job-creation programs in Vermont and incorporate design elements taking into account possible "job inflation" caused by multiple economic development programs claiming creation of the same job. In accordance with Act 78, I am providing this proposed job creation programs audit strategy for your consideration. The audit strategy provides information about three potential audits.

Foremost, we believe it is sensible to plan for a series of discrete audits over a period of 18 months, with each audit building upon the conclusions reached in prior audits. We believe this approach balances our office's current staff and funding resources with our other statutory commitments. However, one of the suggested audits involves utilization of an outside consulting firm, the cost of which is not currently in our budget, and is likely to represent a significant expense.

First, we suggest that a profile audit be conducted to establish the universe of State economic development programs that have job creation as a public policy objective. This would provide a vehicle for collection of data necessary to proceed with additional audits. The second audit would focus on an assessment of the relevance and reliability of all performance measures currently reported by the job creation programs identified in the first audit and possibly include a comparative analysis of Vermont's performance measures relative to selected other states. The final audit would assess the job creation impact of selected programs - selection of particular programs for this assessment would be made based upon information obtained in the first and second audits.

Absent alternative instruction from the Legislature, we plan on conducting the first audit in the first half of 2011 and continuing with the second upon conclusion of the first. The remaining audit will be contingent based upon Legislative approval of funding to hire a consulting firm.

Please feel free to contact me with any questions. I would be pleased to provide you with further information.

Sincerely,

Thomas M. Salmon CPA

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Vermont State Auditor

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Abbreviations

CFED	Commission on the Future of Economic Development
DED	Department of Economic Development
TIF	Tax Increment Financing District
UEDB	Unified Economic Development Budget
VEPC	Vermont Economic Progress Council

Background

A myriad of State, quasi-State, not-for-profit, education and business organizations work to shape economic development in Vermont¹ which is defined in state statute as the process of generating wealth and vitality, security and opportunity for all Vermonters.² Various public policy objectives are associated with economic development efforts in Vermont, including job creation. As the budget continues to tighten, economic development practitioners and policy makers are seeking better tools to assess the impacts (i.e., whether the public policy objective is achieved) of these investments. Concerns exist about whether performance information is credible and whether sufficient rigorous analysis is conducted to determine the impacts of the programs.

Assessment of economic outcomes is not a simple task, given the complexity of the economic environment. Further, economic development programs may result in direct and indirect effects (i.e., jobs created by the business receiving the incentive and the ripple effect that this new employment has on the economy). Many researchers and practitioners agree that making the link between the use of incentives and direct economic impact is difficult at best. However, a systematic framework for monitoring and evaluating economic development incentives or programs is necessary to inform policy makers and economic development practitioners about the impact of programs and for making resource allocation decisions to maximize the impact of economic development programs.

For more than 15 years, Vermont state government organizations have been required to submit a variety of performance measurement information to the General Assembly. Other more recent legislative initiatives, such the establishment of the Commission on the Future of Economic Development (CFED)³, demonstrate the importance that the Legislature places on having a strategic plan for economic development and a systematic means of

¹ The Vermont Department of Economic Development lists 96 external partners working with its various programs.

² 10 VSA §3(a) and(b).

³ CFED was established in 2006 to develop a strategy for economic development and associated goals and benchmark measures.

analyzing the resources dedicated to and measuring the results of the state's economic development programs.

In an effort to capture all the state's economic development activities and the associated outcomes, the legislature requires the Department of Finance and Management and the Agency of Commerce and Community Development to compile the Unified Economic Development Budget (UEDB).⁴ According to the 2010 UEDB, approximately \$33 million of federal and state funds were appropriated for spending on core economic development programs for fiscal year 2010. In addition, the UEDB reported \$925,000 of tax credits for various tax credit programs in fiscal year 2007 and \$2,033,000 of education property taxes retained by municipalities with Tax Increment Financing Districts (TIF) in fiscal year 2009.⁵ Although the UEDB provides selected information for the Legislature about core economic development programs⁶ and reports results for some of the programs, it did not include measures for the TIFs, nor for some of the tax credits.

In 2009, our office issued a report assessing the performance measurement systems in place at the Department of Economic Development (DED) and the Vermont Economic Progress Council (VEPC).⁷ With respect to data reliability, we found that for most of its measures, DED had not documented its methods and sources used for calculating performance results nor was validation of actual results routinely performed. VEPC had documented its methods and sources for calculating performance results for one program, but not the other. Similarly, there were validation procedures in place for one program, but not the other. In addition, we found mathematical and documentation errors with three of the four DED measures we tested. Since our report assessed performance measurement for all of DED's and VEPC's major programs and operations, the findings related to the framework

⁴ UEDB was first required in fiscal year 2008. It became a permanent requirement per 10 VSA §2. Per the statute, the UEDB shall report all appropriations or expenditures for all types of development assistance by all agencies, departments, authorities and other instrumentalities of the state. In addition, performance measures shall be reported.

⁵ Per the UEDB, the most recent information available for tax credits was 2007 and for TIF's was 2009.

⁶ The 2010 UEDB specified that it included core economic development programs, but did not include a definition of what core means.

⁷ See Appendix I for summary of findings and recommendations from this report, the full report can be found on our website, www.auditor.vermont.gov

supporting performance measurement may be applicable to job creation measures if DED did not institute changes to processes based upon our recommendations.⁸ However, the mathematical and documentation errors that we found were specific to the select measures that we tested and may or may not exist in other measures.

Comprehensive Profile of State Job Creation Programs

In order to audit the impact of the state's job creation initiatives, the first step is to identify the economic development programs that have job creation as their public policy goal. A profile audit is a necessary precursor to other audits as it will establish the universe of state economic development programs with a public policy objective of job creation. Given that Vermont state statute and the state's agency primarily responsible for economic development do not have a comprehensive list of economic development programs that have job creation as an objective, this audit is a prerequisite to conducting additional audits.

As part of our preliminary research, we reviewed the UEDB and prepared an overview of the economic development programs, including source of funding, that have job creation as a goal and/or report job creation as a performance measure. We found that of 60 programs reporting performance measures, 8 reported job creation as a goal and 13 reported job creation as a measure.⁹ While the UEDB purports to provide a listing of the activities and results of economic development in the state, we note that it did not include programs managed by the Agency of Transportation and the Agency of Natural Resources, two agencies that manage programs that make potentially significant infrastructure investments, which could lead to job creation. Further, we noted that the tax incentive programs and the TIF program did not report any performance measures and both of these programs may have either direct or indirect effects on job creation.

A significant challenge for this audit is to develop criteria to determine which programs are intended to result in job creation, either through direct or

⁸ Management's response to our report indicated general agreement with the findings in the report, but did not indicate specific actions to address the recommendations.

⁹ See Appendix II for a listing of the programs, as reported by the UEDB, which have job creation as a goal and/or a performance measure.

multiplier effect.¹⁰ These criteria likely would be developed through a combination of review of statutes establishing various programs and interviews with various stakeholders. Stakeholders would include the Agency of Commerce and Community Development, the Department of Taxes, the Regional Development Corporations, Vermont Economic Development Authority, administration's and legislature's economists, among others.

Based upon the interviews and development of criteria to identify those programs that result in job creation, we anticipate developing a data collection instrument to distribute to the state agencies and departments responsible for the programs identified to confirm and to add programs we may have inadvertently omitted.

We anticipate this engagement would result in a comprehensive inventory of the state economic development programs focused on job creation. It would provide information about the programs' objectives, general activities,¹¹ goals, reported performance measures,¹² assistance provided,¹³ beneficiaries and obligations (i.e., funding). We anticipate using this information to analyze programs by various dimensions, including activities, beneficiaries and direct versus indirect job creation.

¹⁰ For purposes of this audit strategy, direct means the jobs created by the business receiving the incentive and multiplier is the ripple effect of the increase in employment of the business to its employment in all other industries (i.e., new employees are spending some of their earnings in the region which means another round of indirect earnings by the recipients of their new income).

¹¹ Activities may include preparing plans and strategies for economic development, constructing facilities, supporting business incubators, developing industrial parks, constructing water and sewer facilities and providing workforce training.

¹² Those measures reported in the UEDB, the annual performance report to the legislature required by 32 VSA §307(c), or other reports provided to the legislature.

¹³ Types of assistance include loans, grants, and tax incentives.

Relevance and Reliability of Performance Measures Reported by State Job Creation Programs

If performance information is inaccurate (invalid or unreliable), reliance on performance data can be expected to lead to poor decisions. Therefore, data quality is of great significance.

The profile audit would provide the information for our next proposed audit. Specifically, we plan to utilize the information gained in the first audit to determine which job creation programs should be subject to further evaluation. For example, we may choose to audit the relevance and reliability of the performance measures of those job creation programs with the highest costs.

We anticipate that the audit objectives would be to determine whether selected job creation programs, (1) reported performance measures that were relevant, accurate, valid,¹⁴ and based on consistent data sources, and (2) have adequate control systems in place over the selection, collection, calculation and reporting of their performance measures. In addition, we may provide a comparison of Vermont's measures and tools used to analyze the results of its job creation programs to a selection of other states, providing options for additional measures or analysis tools.

To perform the audit, we would obtain supporting documentation for a selection of performance measures for each program, review the calculations and test to source documents to verify the accuracy of the performance measure. We would verify whether the measure was valid by analyzing whether the data collected and the calculation reflect the definition of the measure and correspond to what is reported. If certain measures were calculated using an econometric model, we would utilize a consultant to assist us with analyzing the validity and accuracy of the inputs and to perform a recalculation. Finally, we would compare the data and calculation with that collected in the previous period to assess consistency of the measure. To obtain information about the adequacy of the control systems in place, we would perform interviews of agency and program officials and review documentation of internal controls and processes. In addition, for those

¹⁴ In this context, valid refers to whether the data actually represent what is presented as being measured.

programs managed by DED and VEPC, we would follow-up on the issues noted in our 2009 performance measure system audit.

To perform a comparison with other states' measures, we would need to hire a consulting firm with expertise in assessment of economic development programs to assist us. Therefore, performance of this aspect of the audit is contingent based upon our available budgetary resources.

The results of this audit will indicate the general relevance and reliability of performance measures for job creation programs as reported to the legislature. We will also be able to identify whether multiple programs are using the same source data to calculate performance measures which could result in multiple programs claiming the same impact. In addition, our office will be able to comment on the adequacy of policies and procedures on selecting, collecting data for and calculating performance measures and will provide recommendations for improving the reliability of the performance measures, if applicable.

Assessment of the Impact of Job Creation Programs

One of the most vexing questions related to economic development programs is the extent to which they improve the economic environment of the state. Our third audit proposes to address this question with the assistance of a consulting firm with expertise in econometric modeling.

The scope for this audit (i.e., the programs included in the audit) will be determined based upon the information collected in the other audits. The level selected for assessment would be dependent, in part, on the type of program being evaluated and the data available.¹⁵ Information gained about the programs in the first audit would assist with determining the appropriate level of assessment and whether primary or secondary data (or both) are available for analysis purposes. Our office would work with a consulting firm to identify the most appropriate level of assessment given the program characteristics and available data and would utilize the consulting firm to perform the requisite analysis.

¹⁵ Level refers to individual projects, a single program with multiple projects or recipients or all programs and deals in an agency's portfolio.

The appropriate methodology to estimate program impact may vary by program and is dependent, in part, upon the level of discretion that practitioners have over which potential clients can receive an incentive and of course, by the availability of data for analysis. For example, it may be possible to conduct an experimental evaluation for a program if a control group of clients that did not receive an incentive can be identified. Assuming these clients have similar characteristics to the clients receiving the incentive, it may be possible to compare a number of measures, such as wage growth, investment in capital equipment, growth in net income, etc., which could indicate if growth in jobs or net income or investment in capital would occur absent the incentive. Another possible methodology is employing analytical tools, such as econometric models, to estimate the impact. Either of these approaches would necessitate our office hiring a consulting firm with the requisite skills to gather data, run the models or comparisons, and provide an analysis of the results.

Based upon the preliminary research we conducted, econometric models are valuable because they provide a fairly educated estimate of impacts and they offer a standardized way of achieving estimated impacts across projects or programs. However, data problems can occur in economic development program evaluation studies. Data limitations may hinder the use of econometric models or limit our ability to conclusively determine the impact of job creation programs. Collecting primary data (by surveying firms, for example) can be expensive and data used from existing sources can become out-dated rapidly (data collection time lags). Further consideration and the assistance of the consultants will be needed to assess the type and quality of data available. Type and quality depend upon several factors, including the, (a) collection of the right data to satisfy the evaluation variables, (b) credibility and objectivity of the collection source, (c) accuracy and standardization of the data, and (d) proper use of the data in the analysis.

Since this audit will require significant involvement of an outside consultant, we contacted an economic research firm in the Boston area to obtain a preliminary estimate of costs. Assuming that approximately 15 programs would be evaluated with a range of 10 to 20 participants per program, an impact assessment using an econometric model could cost approximately \$100,000 for the purchase of econometric modeling software and consulting fees.

Appendix I

Highlights: Report of the Vermont State Auditor Department of Economic Development and Vermont Economic Progress Council: Enhancements to Performance Measurement Systems Could Be Made

September 14, 2009, Report 09-05

Why We Did This Audit

Performance measurement has been used by other governments to more effectively manage their operations. To assess whether DED and VEPC have performance measurement systems that could be used in this manner, we evaluated whether the Department and Council have goals and measures that gauge the effectiveness and efficiency of their major programs and operations, ascertained the extent to which DED and VEPC track actual results against performance targets and validates the reliability of such data, and determined whether DED and VEPC is reporting performance measurement data to the Legislature for each of their goals.

What We Recommend

We provided a variety of recommendations to improve DED's and VEPC's performance measurement system. In particular, we recommended that both DED and VEPC develop strategic plans for their internal programs; develop a better mix of measures and targets; and document and validate the sources and methods for calculating actual results. Moreover, we recommend that more complete information be reported to the Legislature by DED which includes comparisons to targets and prior year actual results.

Findings

Although DED and VEPC had each established a set of goals and measures, neither had a documented strategic plan which would have provided a roadmap for the organizations to determine how their programs and operations met their goals efficiently and effectively. Without this roadmap, DED lacked clear alignment between one of its major programs, grants to Regional Development Corporations (RDC), and its goals. The types of measures used by DED and VEPC to gauge the effectiveness and efficiency of the programs could be enhanced to provide more usefulness to the organizations. DED's measures were predominantly of one type – output – which demonstrate the level of activity in a program but do not indicate whether the program is effective or efficient. For instance, “increasing available job opportunities” is a repeated element of the Department's goals yet none of the measures for any of the Department's programs include this important outcome. VEPC had measures for their two programs that were mostly outcome-based measures but was missing measures relating to the efficient use of resources.

DED and VEPC generally tracked actual results related to their respective measures but numerical targets were established for only half of DED measures and some of VEPC's measures. Targets are used to help evaluate the results of programs. Since both organizations compared actual results to targets for some but not all of their measures the results provided incomplete data against which to assess the programs' effectiveness. Both DED and VEPC had documentation for actual results in all cases tested. However, at DED three of the four results selected for testing revealed data and mathematical errors, or involved the use of estimates rather than actual results. For example, results from the Vermont Training Program, which is one of DED's major programs, included estimates rather than actual results and had mathematical errors. DED did not have a process in place to validate performance results. With a process, such errors may have been found and corrected.

In its most recent performance reports, DED and VEPC included some, but not all, critical information that would provide the Legislature with a complete set of performance information with which to assess DED's and VEPC's accomplishments. DED reported goals at both the department and program levels and identified strategies for achieving the program goals and measures to assess progress. However, the Department did not explicitly link its goals, measures and results in the report nor did the reports compare actual results to targets thereby making it difficult for the Legislature to effectively assess progress. VEPC did not include program goals or strategies to meet those goals in its legislative reports thereby inhibiting the Legislature's ability to assess the program's progress. Narrative was not presented on one of VEPC reports but another presented narrative explanations with important explanatory disclosures including relevant data limitations.

Appendix II

Table 1: Programs Reporting Job Creation as a Goal and/or Performance Measure in the UEDB

	State Funds	Federal Funds	Goal	Measure
Agency of Commerce and Community Development				
Brownfields		\$800,000	Yes	Yes
Sustainable Job Funds Grant	\$233,890		Yes	Yes
Vermont Software Developers Assoc.	\$55,000			Yes
Business Support	\$266,000		Yes	
Recruitment	\$128,000		Yes	Yes
Rural Development Corporation Block Grants	\$1,076,000		Yes	Yes ^a
Vermont Procurement Technical Assistance Center	\$232,320	\$493,680		Yes
Vermont Training Program	\$1,703,000		Yes	
Women's Business Center Grant	\$19,000			Yes
Community Development Block Grant		\$4,143,202		Yes
Micro 1% Technical Assistance Contract		\$85,300		Yes
Vermont Economic Progress Council				
Vermont Employment Growth Incentive	^b		Yes	Yes
Agency of Human Services				
Microbusiness program/Job Start Technical Assistance	\$313,814	\$68,886		Yes
Department of Labor				
Registered Apprenticeship Program	\$1,035,323			Yes
Vermont Economic Development Authority				
Interest Rate Subsidy Program	\$1,000,000		Yes	Yes

^a Five reported job creation as a performance measure.

^b The UEDB shows the net revenue to the State and does not provide tax expenditure information.