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ECONOMIC INCENTIVE PROGRAMS: PERFORMANCE EVALUATION AND THE IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT

by

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June 1999

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The Iowa Department of Economic Development (IDED) oversees a broad range of economic development programs and services designed to meet the needs of individuals, companies and communities. Evaluating economic incentive programs can help determine what works and what does not work for an individual state. The effectiveness of economic incentive programs is largely unknown. The purpose of this study is to determine how the IDED can measure the effectiveness and performance of its economic incentive programs. A performance evaluation methodology developed by Todd Calhoun was utilized to organize the economic development objectives of key IDED stakeholders into a Global Hierarchy. IDED program objectives were then linked to the Global Hierarchy to demonstrate that IDED objectives were in alignment with State objectives. The performance indices developed serve as an example of how to complete the process of breaking down objectives into specific indicators of performance

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ECONOMIC INCENTIVE PROGRAMS: PERFORMANCE EVALUATION AND THE IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT

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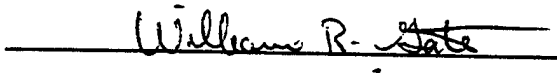
Approved by: 

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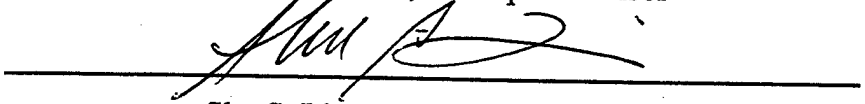

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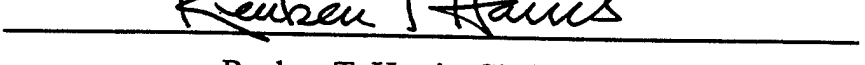

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ABSTRACT

The Iowa Department of Economic Development (IDED) oversees a broad range of economic development programs and services designed to meet the needs of individuals, companies and communities. Evaluating economic incentive programs can help determine what works and what does not work for an individual state. The effectiveness of economic incentive programs is largely unknown. The purpose of this study is to determine how the IDED can measure the effectiveness and performance of its economic incentive programs. A performance evaluation methodology developed by Todd Calhoun was utilized to organize the economic development objectives of key IDED stakeholders into a Global Hierarchy. IDED program objectives were then linked to the Global Hierarchy to demonstrate that IDED objectives were in alignment with State objectives. The performance indices developed serve as an example of how to complete the process of breaking down objectives into specific indicators of performance

TABLE OF CONTENTS

LIST OF FIGURES

I. INTRODUCTION

A. BACKGROUND

1. State and Local Economic Development

State and local governments utilize a wide variety of methods to encourage economic development. Individual states spend tens of millions to hundreds of millions of dollars annually on economic development programs (Snell, 1998, p. 6). Defenders of economic incentives contend that incentives are necessary and valuable:

- They encourage job creation and keep firms from moving;
- They allow historically underdeveloped states to catch up with other states;
- They level competitive differences among the states;
- They benefit business nationally by prompting states to make tax and regulatory policies more uniform; and
- They reduce the tax burden on business.
- Critics of incentives contend:
- They create windfalls for business;
- The jobs they create in a state are simply stolen from other states;
- They reduce funding for education, transportation and other government services that are necessary for economic growth;
- They create inequities among industries and firms within a state;

- They foster voters' suspicion that government is a matter of giveaways and insider deals;
- They are a zero sum game for the national economy; and
- Governments should minimize their interference with the private sector (Snell, 1998, pp. 2-3).

Creating a state strategy for economic development is one way for legislators and other policy makers to resolve these issues (Snell, 1998, p. 3). The primary goal is to outline state programs that are specifically intended to promote a good business. A state's business climate is usually defined as its reputation in the business community for being accommodating and responsive to the needs of business. The main argument for this strategy is that businesses will relocate to, expand within, or remain in states with favorable business climates (Lynch, 1996, p. 5).

Incentives for economic policy can be grouped into several broad categories such as tax policy, loans and loan guarantees, and infrastructure finance. The Iowa Department of Economic Development utilizes all of these methods to various degrees.

2. Iowa Department of Economic Development

The Iowa Department of Economic Development (IDED) has a broad range of programs and services designed to meet the needs of individuals, companies and communities. Their mission is "to continually develop the economic well being

and quality of life of Iowans" (IDED Owner's Manual, 1995, p. ii). IDED oversees a wide variety of business financial assistance programs designed to encourage the growth and profitability of businesses expanding in the state and create quality job opportunities. The following is a broad overview of the programs administered by IDED.

a. Community Economic Betterment Account (CEBA)

The CEBA provides financial assistance, through loans and forgivable loans, to businesses that plan to make a capital investment and create new jobs and/or retain existing jobs. Assistance is provided to encourage new business start-ups, expansion or retention of existing businesses, or recruiting out-of-state businesses into Iowa. Eligible projects include: building construction or reconstruction, land acquisition, equipment purchases, operating and maintenance expenses, and clearance, demolition and removal of buildings to develop sites. Cities, counties or community colleges on behalf of eligible businesses, which meet certain wage standards for the county, file applications.

b. Economic Development Set-Aside Program (EDSA)

The EDSA program provides assistance to businesses by granting direct loans and forgivable loans to businesses that plan to make a capital investment and create and/or retain quality employment opportunities for low- and moderate-income employees. Cities, counties or community colleges on behalf of

eligible businesses, which meet certain wage standards for the county, file applications.

c. Entrepreneurial Ventures Assistance (EVA)

The EVA program provides financial and technical assistance to beginning companies that must be located in Iowa and in a sector offering the greatest start-up and growth potential for the state. Sectors include biotechnology, recyclable materials, software development and computer-related products, advanced materials, advanced manufacturing, and medical/surgical instruments. An initial investment may be awarded for product development, working capital, purchasing machinery/equipment, or other qualifying business expenses.

d. New Jobs and Income Program (NJIP)

NJIP benefits include withholding, investment, and R&D activity corporate tax credits. Eligibility is based in part on job creation, quality of employment, benefits for the state and local community, capital investment, and not closing or significantly reducing operations elsewhere in Iowa in order to relocate the operation. Since implementation in 1994, NJIP has generated nearly $2 billion in new capital investment.

e. Enterprise Zones

An Enterprise Zone is an area of a city or county targeted for redevelopment based on economic weakness. Businesses expanding or locating in

an Enterprise Zone may receive property tax exemptions and expanded state tax credits.

Eligibility is based in part on job creation, quality of employment, benefits for the state and local community, capital investments and not being a retail establishment. Counties are eligible if they rank among the bottom twenty-five counties in average weekly wage rate and rank among the top twenty-five counties in family poverty rate, percentage population loss, or percentage of persons over sixty-five. Cities are eligible if they have per capita income of $9,600 or less, family poverty rate of twelve percent or higher, housing vacancy of ten percent or more, property values at seventy-five percent or less of the city wide average, and match the Iowa Code definition of a "blighted" area.

f. Value-Added Agricultural Products and Processes Financial Assistance Program (VAAPFAP)

VAAPFAP provides grants and/or loans to projects utilizing agricultural commodities. Awards are based on project feasibility, utilization of Iowa commodities, and new or innovative products or processes.

g. Targeted Small Business Financial Assistance Program (TSBFAP)

The TSBFAP program assists in creating and expanding minority- and women-owned businesses through low interest loans, loan guarantees or

equity loans. Eligible applicants are businesses with $3 million or less in annual sales and certified as a Targeted Small Business.

h. Self-Employment Loan Program (SELP)

The SELP program is designed to assist low-income entrepreneurs by providing low-interest loans for new or expanding small businesses. Applicants must meet Job Training Partnership Act or equivalent low-income eligibility guidelines, or persons with disabilities guidelines.

i. Entrepreneurs With Disabilities (EWDI)

The EWDI program is a collaborative effort of the Department of Education, Division of Vocational Rehabilitation Services, Department for the Blind, and the IDED. It provides technical and/or financial assistance to qualified individuals with disabilities seeking self-sufficiency by establishing, maintaining, expanding or acquiring a small business.

Services include technical assistance for business-related services and/or financial assistance for purchasing business equipment, supplies, inventory, rent or other start-up, expansion or acquisition costs identified in an approved business plan.

j. Iowa Capital Corporation (ICC)

The ICC is a for-profit venture capital corporation established with state funds and equity investments by private institutions. It provides an attractive

risk-adjusted rate of return on investment to the corporation's shareholders and advances economic development in Iowa. Financing may take many forms and is tailored to the particular business situation.

k. Infrastructure Financial Assistance Programs

Infrastructure Financial Assistance Programs finance rail, road and community infrastructure. The Rail Economic Development Program funds construction or rehabilitation of rail spurs. The Revitalize Iowa's Sound Economy program funds expenditure on city, county and state highways. The Public Facilities Set-Aside Program provides financial assistance to cities/counties to provide infrastructure improvements for businesses. Assistance is limited to grants to cities and counties; grants cannot exceed two-thirds of the total cost of the improvements needed.

l. Tax Increment Financing (TIF)

TIF uses tax revenue growth, produced by increases in the tax base of a specified area, to repay the costs of investment in the area. City councils or county boards of supervisors may use the property taxes resulting from an increase in taxable valuation due to construction of new industrial or commercial facilities to provide economic development incentives to a business or industry.

These programs constitute the methods approved by the State of Iowa and managed by the Iowa Department of Economic Development to create a good business climate.

3. Economic Incentives and Government

How much state tax policy affects economic growth is a hotly debated issue. Legislators and state economic development personnel usually agree that tax incentives foster business growth. Academic researchers agree, in general, but with warnings that the effect may be small or limited to special circumstances. Some observers continue to argue that tax incentives are counterproductive. If there is a general consensus on the effect of tax policy on business growth, it is limited to two very general points:

- It is undesirable (from the perspective of development) for state taxes to be very far out of line with those of neighboring states, and
- Policymakers cannot automatically assume that tax cuts and tax breaks will stimulate growth (Snell, 1998, p. 8).

Business climate, as the term was used in the 1980s, was gauged by low wages, low taxes, and minimal regulatory requirements -- ideal circumstances for the mass production, smokestack industries of the past. An obvious flaw in such an evaluation was that the states that met these standards often did not, in fact, attract much development.

More recent studies take a broader view. Financial World, in its November 18, 1996 ranking of what contributed to a good business climate, considered such features as state growth rates, poverty rates, business closings, educational attainments in the work force, and numbers of colleges and business schools (Snell, 1998, p. 43).

Evaluating economic incentive programs can help determine what works (or what works relatively well) and what does not (or does not work as well as other programs). Such knowledge would help state policymakers utilize limited public resources in the most effective manner.

B. STATEMENT OF PROBLEM

No one knows much about the effectiveness of economic incentive programs (Snell, 1998, p. 53). In this time of unprecedented economic growth, state and local governments are faced with the challenge of measuring the effectiveness of devoting valuable resources to economic development programs to create a good business climate.

How effective these programs are in promoting a good business climate is difficult to measure. Most state evaluations are compliance audits, designed to determine whether a program conforms to the law rather than to measure effectiveness. Academic assessments tend to focus on tax policy alone, and to

produce results that offer little practical advice for legislators. Economic development agencies focus on their successes, but not on evaluation or cost-effectiveness. Stories of successes and failures have their uses, but they cannot answer the question of whether this would have happened anyway.

C. RESEARCH QUESTIONS

The primary research question of this thesis is: **What are the essential characteristics of a performance evaluation system for selected IDED programs?**

Subsidiary research questions supporting this issue are:

1. What are the challenges to performance evaluation of public programs?
2. What are the measures of success for economic incentive programs?
3. What are appropriate measures of performance?
4. Are state programs evaluating their programs with appropriate measures?
5. Is there data that exists to support an appropriate evaluation?

D. OBJECTIVE

The objective of this project is to determine how the IDED can measure the effectiveness and performance of selected economic incentive programs. It will investigate potential methods for performance evaluation of these programs and attempt to answer the question of how to evaluate economic incentive programs.

E. METHODOLOGY

The following approach will be used during this study:

1. Identify policy and program evaluation paradigms within the public sector performance evaluation literature.
2. Identify the key IDED programs and the objectives and goals of each.
3. Develop performance indicators for selected IDED programs.
4. Address the impact of the proposed evaluation methodology on the current IDED programs.

F. ORGANIZATION OF STUDY

Chapter I, *Introduction*, will present the focus of this study. It will introduce the economic incentive programs administered by the IDED.

Chapter II, *Literature Review*, will present the purpose, current utilization, and future use of performance measurement in government. It will also explore the challenges of public sector performance evaluation and conclude with a description of the process that will be used to measure the effectiveness of the IDED program.

Chapter III, *Methodology*, will outline the research methodology used to conduct this study.

Chapter IV, *Evaluating IDED Performance*, will evaluate the program's current measures of effectiveness.

Chapter V, *Analysis*, will propose various performance indicators and measures of effectiveness for the IDED program.

Chapter VI, *Conclusion*, will summarize the researcher's findings and recommend a course of action to implement an IDED performance evaluation system.

II. LITERATURE REVIEW

A. PERFORMANCE EVALUATION IN THE PUBLIC SECTOR

This thesis will draw on Todd Calhoun's findings about the challenges of performance evaluation in the public sector. To fully understand performance evaluation, one must clearly define a measurement system, differentiate between process and results-oriented systems, recognize the purpose and need for a system, and appreciate the forces affecting its application. (Calhoun, 1998)

1. Purpose of Performance Measurement

Measurement of program efficiency involves collecting and reporting on input, throughput, and output factors in an effort to improve agency processes. Assessing the effectiveness of a program requires measuring outcomes against stated objectives (Calhoun, 1998). Various government reports and private scholars have remarked on the lack of results-oriented measurement in government (Quade, 1984; Greiner, 1996, Halachmi/Bouckaert, 1996). "Without adequate measurement, managers and employees within the agency, other agencies and oversight bodies, interest groups, the public, or the courts may not be able to document changes in performance" (Halachmi/Bouckaert, 1996, p. 3). Many reasons have been proposed for this, including institutional, technical, and

financial obstacles. Many practical reasons exist, however, for implementing performance measurement systems in government (Calhoun, 1998).

There is a spectrum of approaches to public sector performance evaluation within the literature. Anchoring one end of the spectrum is the "technically rational paradigm" that presupposes objectives consensus and treats performance measurement as a coldly objective and scientific aid to decision-making. On the other end is the "politically rational paradigm" that recognizes that objective consensus, when it exists, is a result of political bargaining among multiple stakeholders. It emphasizes identifying stakeholders and their respective objectives as a preliminary step in the performance measurement process. (Calhoun, 1998)

2. Problems Associated with Public Sector Performance Evaluation

Performance measurement in public policy is more easily discussed than implemented. Public sector operations possess multiple or poorly defined objectives, lack comparative standards, and often result in non-quantifiable outcomes. Public sector performance evaluation cannot be completely scientific. The political pressures of powerful stakeholders, the lack of institutional readiness, and various technical obstacles must be considered. For public agencies to remain politically viable in today's world they must attempt to measure the effectiveness, or outcomes, of their programs. (Calhoun, 1998)

The difficulties of measuring performance have been well documented in the current literature (Flynn, 1986, 1993; Jackson and Palmer, 1992). Regardless of these difficulties, organizations are continually challenged to demonstrate effective performance to their stakeholders. The desire for demonstrable performance was clearly behind the Government Performance and Results Act (GPRA) of 1993 (Public Law 103-62). This law requires all federal agencies to complete a strategic plan by 1996; the plan must be based on outcomes rather than inputs or process measures (Bryson, 1995, p. 30). Several states have initiated performance-oriented planning systems as well (National Governors Association, 1993). "Budgeting for Results is a part of Iowa's effort to respond to the need for government fiscal reform and accountability." (Budgeting for Results Handbook, 1997-1998)

B. ECONOMIC DEVELOPMENT

American states have engaged in economic development for more than 200 years; and for practically the same length of time there have been those who have argued against such activities. The extraordinary grant and incentives packages that some states have provided for economic development have drawn attention to this issue in recent years (Snell, 1998, p. vii). "It is tempting to put the term *economic development* in quotes, as something inherently embarrassing. It should

be embarrassing, if it is not...Of course, no firm will turn down gifts, even ones of small value, and any firm will say that a gift will persuade it to do nice things." (Kenyon, 1991, p. 221)

Individual states spend millions of dollars annually on economic development programs. Few states know the exact amount they spend to support economic development initiatives. No state knows how effectively the money is spent (Snell, 1998, p. 1). A complete list of state activities that foster economic development would include almost everything funded by states. Public education, transportation, public safety, and administration of the courts are essential parts of the physical and social infrastructure (Snell, 1998, p. 6). There are not many state and local government activities that do not affect their economies, for good or for ill (Kenyon, 1991, p. 221). The major types of recognized economic development measures now in use include: capital subsidies, subsidies of other inputs, tax preferences, enterprise zones and promotion of the state, region, or city as a good place to locate or visit (Kenyon, 1991, p. 224).

1. Capital Subsidies

a. Grants and Direct Payments

Direct grants to individuals, corporations or other types of businesses are not constitutionally possible in every state. Where they can exist, they offer the advantage of great flexibility. They can include detailed reporting and

compliance requirements, and can be terminated if recipients fail to meet agreed upon employment or other targets (Snell, 1998, p. 16).

b. Loans and Loan Guarantees

Most states have created a variety of business-oriented loan programs, funded by bonds, appropriations and federal grants (Snell, 1998, p. 16). Some of the major categories include: industrial development bonds, linked deposit programs, direct loans, loan guarantees, and revolving loan funds.

Industrial development bonds (IDBs) are issued by state and local governments, often through special authorities such as an industrial finance authority or a department of commerce (Snell, 1998, pp. 16-17). Linked deposit programs designate a portion of state deposits in lending institutions to help provide low-cost capital for specified investments in the state (Snell, 1998, p. 17). Direct loan programs can be targeted as broadly or as narrowly and specifically as states wish. State loan programs are usually limited to less than fifty percent of project cost, and are intended to encourage private lending by making a project more attractive to the private sector (Snell, 1998, p. 19). Loan guarantees ensure the repayment of some portion of a loan that a commercial lender has made to an approved firm. State programs may include minimum and maximum amounts, specify or limit the purposes for which the proceeds of the guaranteed loan are used, specify ceilings on interest rates, and require nonfinancial performance from

the borrower, such as creation of a specified number of jobs (Snell, 1998, p. 20). Revolving loan funds represent a funding source that can be used for the kinds of lending programs previously described. The program consists of a dedicated capital fund that is lent to finance successive projects over an extended period. Depending on the design of the program, such funding can be used for loan guarantees, fixed asset loans, working capital loans, housing loans, or loans to cover short-term start-up costs.

c. Venture Capital Programs

Venture capital programs use public funds to provide high-risk capital investment to bring technologically innovative products and processes to market (Snell, 1998, p. 18). State venture capital funding was used extensively in the 1980s; activity seems to have declined in the 1990s. The effect on job creation has been difficult to demonstrate, and the high risks and delayed returns of venture capital investments have made them less appealing to elected officials (Snell, 1998, p. 19).

2. Subsidy of Other Inputs

This category includes training costs, research and development costs, marketing and promotion costs and site search costs (Kenyon, 1991, p. 224).

3. Tax Preferences

Legislators and state economic development personnel usually agree that tax incentives foster business growth. Academic researchers agree, in general, but with warnings that the effect may be small or limited to special circumstances, such as competition within metropolitan areas that cross state lines. Some observers continue to argue that tax incentives are counterproductive. Statistical and econometric studies are nearly unanimous in concluding that state and local tax incentives fail to attract business, create jobs, or enhance state economic performance (Lynch, 1996, p. 12). If there is a general consensus on the issue of state tax policy on business growth, it is limited to two very general points: it is undesirable (from the perspective of development) for state taxes to be very far out of line with those of neighboring states, and policymakers cannot automatically assume that tax cuts and tax breaks will stimulate growth (Snell, 1998, p. 9).

a. State Tax Provisions

General tax policy involves tax law provisions that apply to everyone who is liable for a tax, not to exemptions, deductions or credits targeted to particular kinds of businesses or activities (Snell, 1998, p. 8). State business taxes include corporate income taxes, franchise taxes, sales and excise taxes, and property taxes. Many states impose specialized taxes on certain industries, particularly insurance companies, banks and other financial companies,

telecommunications businesses, and public utilities. Major trends in recent years have been to reduce the highest rates for income taxes and to exempt machinery, tools, and materials used in productive processes from state sales taxes (Snell, 1998, p. 9).

b. Targeted Tax Incentives

Targeted tax incentives are intended to benefit a limited number of taxpayers – or even an individual taxpayer – to encourage some specific activity. State governments use such provisions to attract major projects (Snell, 1998, p. 10). Examples in recent years are legislation in Alabama to benefit Mercedes-Benz; Minnesota legislation on behalf of Northwest Airlines; Nebraska legislation on behalf of the Union Pacific Railroad; and Virginia tax legislation to attract a joint IBM-Toshiba facility (Snell, 1998, pp. 10-11). The argument for such targeted tax laws is that they allow states to compete in a national or global market for major facilities. The arguments against targeted tax incentives are that they are inequitable and undermine tax law uniformity. They will not provide compensatory tax revenue in the short run, and maybe not in the long run. They reduce a state's ability to provide services at the same time they encourage growth. They may create a competitive disadvantage for companies that do not receive the benefit. Finally, they can allow companies to make non-negotiable demands on state government (Snell, 1998, p. 11).

c. General Tax Incentives

General tax incentives include tax abatements, tax credits, and tax increment financing. Tax abatement is a targeted reduction or elimination of a firm's local tax bill – usually the property tax obligation. Abatements are used as a tool to attract businesses or industry to a community (Snell, 1998, p. 13). A tax credit is deducted, dollar for dollar, against the tax that would otherwise be owed. States use several types of credits: investment tax credits, investor tax credits, and job creation tax credits are examples (Snell, 1998, pp. 13-14). Tax increment financing (TIF) uses tax revenue growth produced by an increase in the tax base of a specified area to repay the costs of investment in the area. Practices vary greatly, but generally allow a governing body to create TIFs without voter consent or the consent of overlapping jurisdictions (Snell, 1998, p. 15).

4. Enterprise Zones

An enterprise zone is specific, limited area of a city that is targeted for redevelopment on the basis of high unemployment, poverty, aging housing stock, or other evidence of economic weakness (Snell, 1998, p. 26). A variety of incentives are usually available, normally on a more generous basis than elsewhere in the state or city (Kenyon, 1991, p. 224).

5. State, Region or City Promotions

States provide tax and other incentives to travel-related businesses in addition to funding advertising to attract tourists. State tax breaks to encourage commercial movie making sometimes augment other state programs to encourage movie and television film production (Snell, 1998, pp. 39-40).

C. CHAPTER SUMMARY

Performance measurement in public programs is still a developing issue. In the wake of GPRA, government agencies at all levels are attempting to measure their performance more effectively in order to convince the public of their necessity. State economic development programs fall into this difficult area of public policy measurement.

One of the main difficulties of performance measurement of these programs is the political nature of economic incentives. "Local economic development officials have every reason to exaggerate the effectiveness of their wares, so as to assure the continuance of the program and their continuance in office." (Kenyon, 1991, p. 231) A competition has developed through these various incentives to win businesses away from other states. Once one state uses economic development incentives, it encourages all others to match those incentives; the more closely the better (Kenyon, 1991, p. 225). Although almost any state policy

affects its economy, several economic development measures have been developed solely for stimulating the local economy. The measures used by the State of Iowa are common to most states.

III. METHODOLOGY

A. INTRODUCTION

This chapter will outline the methodology used to conduct this study. It will describe the selected research focus and the primary research methods used. The chapter will conclude by describing the methodology Calhoun used to evaluate public sector performance.

B. RESEARCH FOCUS

The objective of this thesis is to help the Iowa Department of Economic Development (IDED) determine appropriate measures of success for their economic incentive programs. It is commonly held that no one knows much about the effectiveness of economic incentive programs. Academic assessments have focused primarily on tax policy. State evaluations are generally restricted to compliance audits. The economic development agencies focus on their successes and not on evaluation or cost-effectiveness (Snell, 1998, p. 53). However, it seems possible to objectively measure the effectiveness of economic incentive programs.

C. RESEARCH METHODS

This primary research method is collecting data through unobtrusive measures, specifically archival research.

1. Unobtrusive Measures: Public Archival Data

Webb, et al. (1966), point out that archival sources of information have been widely used in public administration research for many years (Webb, Campbell, Schwartz, and Sechrest, 1966). Archival data sources include written materials from public and private records (Yeager, 1989). Archival research examines recorded facts (Buckley, Buckley and Chiang, 1976, p. 25). The archival data collected in this study come solely from public records.

Buckley, Buckley and Chiang distinguish three archival domains: (1) primary, (2) secondary, and (3) physical. The first two deal with written records, tapes and other forms of documentation. A primary archive is one consisting of original documents or official files and records such as invoices, purchase orders or receipts. A secondary archive publishes data gathered by other investigators using primary documents. Data can also be stored in the physical environment, such as footprints in the snow or graffiti on a wall (Buckley, Buckley and Chiang, 1976, p. 25).

Secondary public sources include published books, articles, studies, papers, and academic lectures (Yeager, 1989). An example of a secondary public source is the *Public Administration Review*, the oldest of the public administration journals (Yeager, 1989).

2. Deficiencies in Archival Research

Archival sources are not without deficiencies. The major deficiencies are: (1) selective depositing, (2) selective survival, (3) selective retrieval, (4) "filling in the gaps," (5) inherent researcher biases, and (6) researcher skill-deficiencies. Webb, et al. (1966), devote the major part of their book on Unobtrusive Measures to the opportunities and problems associated with archival research (Buckley, Buckley and Chiang, 1976, pp. 40-41). While these problems might exist, particularly with individual documents, this thesis used multiple sources to ensure a fair picture of each issue. Agency-specific sources were compared to reports from other agencies or to similar secondary sources. While there is no assurance that archival data comprehensively represent all the stakeholders, every effort was made to incorporate archival data from all parties.

D. LINKING THE PUBLIC SECTOR PERFORMANCE MEASUREMENT PROCESS TO DATA COLLECTION AND ANALYSIS

The methodology Calhoun used to evaluate the Expanded International Military Education and Training (E-IMET) program is applied to IDED. The public sector performance measurement process used in this thesis involves four iterative stages:

1. Identify the Key IDED Stakeholders;
2. Identify the Objectives of Iowa Economic Development and the IDED Program;
3. Develop Performance Indices for the IDED Objectives;
4. Apply technically rational performance measurement techniques.

Step #1 involves collecting secondary archival research data. Step #2 continues collecting archival data but concludes by forming a Global Objectives Hierarchy, thus moving the study into the analysis stage. The analysis stage proposes performance indicators for the IDED program objectives and depends heavily on data gathered through secondary archival sources. Step #4, actually measuring program performance, is beyond the scope of this study. Conclusions will then be drawn from the experiences and insight gained from the applying the process (Calhoun, 1998).

E. THE PERFORMANCE MEASUREMENT PROCESS AND IDED

1. Step #1: Identifying the Key IDED Stakeholders

The purpose of this step is to identify and classify the key stakeholders of the IDED program. This process will involve in five sequential steps.

First, the concept of a stakeholder will be clearly defined using secondary archival sources. Internal and external IDED stakeholders will then be identified. Once individual stakeholders have been identified, they will be grouped according

to the stakes they share in evaluating IDED performance. The assumption here is that individual stakeholders within the same agency share common views on IDED performance evaluation and have similar effects on the IDED program. This assumption simplifies the analysis to remain within the study's scope. The basis for this grouping will be the organizational charts found in the secondary archival sources.

Each group's stake in the IDED program will then be discussed, to better understand the effects that they have on the program's overall objectives. This is a very subjective step and will be based on agency-specific documents. The last step in the stakeholder identification process is to formally organize the various stakeholder groups into a "stakeholder map." The map graphically presents the various stakeholders potentially conflicting effects on IDED objectives consensus. This, too, is a subjective step, but will be based on agency-specific documents.

2. Step #2: Identifying the Objectives of Iowa Economic Development and the IDED Program

This step constructs a broad Global Economic Development Objectives Hierarchy to serve as a basis for objective performance evaluation and to link the IDED objectives back to each of the stakeholders. This process will take place in four sequential steps.

First, each stakeholder group's economic development objectives will be outlined using official agency-specific documents. Once outlined, a subjective sifting process will separate objectives from strategies (ends versus means) resulting in separate agency-specific objective hierarchies. A Global Objectives Hierarchy will then be constructed using common stakeholder objectives. This Hierarchy will break the broad governor and state objectives down into sub-objectives and specific attributes that characterize those sub-objectives using the multiple objectives found in the existing individual hierarchies. While this process is inherently subjective, it is more a function of pattern recognition amongst the separate stakeholder hierarchies. The final step in objective identification is to link the specific IDED objectives to the Global Hierarchy. This last step forms the logical link between common state economic development objectives and the IDED program.

3. Step #3: Developing Performance Indices for the IDED Objectives

The next step in the public sector performance evaluation process, and the purpose of the last step in this study, is to propose performance indicators for the IDED program objectives.

This is the most critical and problematic step in the performance evaluation process. It involves identifying the qualities inherent in each of the objectives.

Quantifiable performance indicators must then be matched to specific characteristics of the overall objective. In short, it requires understanding economics, state economic policy making, and resource management. These hierarchies will then be used to develop performance indicators for the IDED program.

It is important to note that the result of the process is simply a starting point for further discussion. The indicators found in this study will be developed largely outside the influence of IDED officials. This process is inherently subjective and must be combined with informed IDED data to yield the most beneficial performance measures.

F. CHAPTER SUMMARY

1. The Public Sector Performance Evaluation Process

The four-step method to measure public sector program performance is an iterative process utilizing data gathered through archival and interview research. While every effort was made to gather data that is representative, adequate, and reliable, limitations did exist.

2. Limitations of the Study

The chief limitation of this study is the limited past efforts to measure the effectiveness of economic incentive programs. Testimony to the Task Force on

Economic Development indicated that there is a weak connection between cause and effect in economic development work, and economic development agencies have not developed effective ways to monitor their own performance (Snell, 1998, p. 55). There is no standard evaluation format for economic incentive programs. This is why Calhoun's methodology was adapted for this evaluation.

Another study limitation was the limited access to various IDED stakeholders. Time and distance between Iowa and California precluded many face to face meetings.

IV. EVALUATING IDED

A. INTRODUCTION

The purpose of the 1993 Government Performance and Results Act (GPRA) is "to improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction" (GPRA, 1993, p. 2). This act has initiated a fundamental change in the way government agencies at all levels evaluate themselves. Budgeting for Results is a part of Iowa's effort to reform government and improve fiscal accountability. Performance management and Budgeting for Results begin by defining the stakeholders and customers and what they expect from state programs or services (BFR Handbook, 1997-1998). It is essential to consider the various stakeholders that affect the agency or program before developing a set of overall objectives.

The purpose of this chapter is to identify the stakeholders of the IDED program. Once the stakeholders have been identified, they will be grouped according to similar stakes and organized into an IDED stakeholder map. Chapter V will identify the economic development goals (objectives) of each stakeholder group based on their written documentation, i.e., Budgeting For Results and the Iowa Code. The IDED objectives provide the basis for developing of performance indicators for the IDED program.

B. IDED STAKEHOLDERS

1. Identification of Stakeholders

Measuring the IDED program performance must begin by identifying of key stakeholders. A stakeholder is defined as any person, group, or organization that can claim an organization's attention, resources, or output or is affected by that output (Bryson, 1995, p. 27). The Iowa State government defines stakeholders as everyone who has a vested interest in the service provided, and in the quality, costs, and results of the program (BFR Handbook, 1997-1998). To identify key stakeholders, Roberts and King ask the question: "What are the key stakeholder groups that are affected by or can affect the policies and programs which you are attempting to introduce?" (Roberts and King, 1989, p. 68).

Descriptions of a stakeholder range from the highly specific to the general (Clarke, 1998). Stakeholders can be either internal or external to the organization or program (Roberts and King, 1989). They can also be potentially hostile or adversarial. Any group, internal or external, can potentially make a difference to the organization or program (Roberts and King, 1989). Once identified, individual stakeholders are grouped according to similar stakes and organized into an overall "stakeholder map" (Roberts and King, 1989).

The first step in a stakeholder analysis is to identify the organization's stakeholders (Bryson, 1995, p. 27). The presence of multiple stakeholder groups

may result in diverse or conflicting ideas concerning a program's objectives. Thus, carefully identifying dominant stakeholders is the critical first step in defining a single set of objectives for a program (Calhoun, 1998). Figure 1 shows the dominant individual stakeholders for the IDED program.

Figure 1. Individual IDED Program Stakeholders

2. Stakeholder Issues, Concerns, or Stakes

Once the key stakeholders have been identified it is necessary to determine the "stake" each has in E-IMET effectiveness evaluation. According to Roberts and King,

> A stake is the claim on the organization that each stakeholder has. The concept of a stake is based on the idea of one's having something to lose or gain in a given situation, and therefore the nature of the stake depends on the issue at hand. Thus, the stake may be tangible (money, material, resources) or intangible (time, prestige, self-esteem), explicit or implicit. Moreover, a stake may be economic, political, social, or psychological in nature (Roberts and King, 1989, p. 66).

a. The Grouping Process

The individual stakeholders will be placed into groups to simplify the stakeholder analysis. Individual stakeholders that are organic to higher level governmental agencies can be grouped according to their formal organizational charts. This assumes that individual stakeholders under operational and administrative control of their higher-level agency will possess a similar stake in the IDED program. Other stakeholders will be grouped according to related interests. It will then be possible to characterize the stakes of each group and construct an overall stakeholder map. The following stakeholder groups, along with their key individual stakeholders, have been identified for this study:

The Executive Office of the Governor Group

The Governor
The Council on Human Investment
The Department of Revenue and Finance
The Department of Commerce
The Department of Iowa Workforce Development
IDED Employees

The Community Group

Citizens
Communities
Local Governments

The Business Community Group

The Business Community
The Financial Community

The Legislative Group

The House Economic Development Committee
The Senate Business & Labor Committee
The House Commerce and Regulation Committee
The Senate Small Business, Economic Development & Tourism Committee
The Senate Appropriations Committee
The House Appropriations Committee
The Iowa Commission on Interstate Cooperation

b. Stakes Analysis

The following describes the stakes for each stakeholder group. It focuses on each groups' stands role in IDED performance evaluation.

(1) **The Executive Office of Governor Group**. The Governor's state policy objectives are developed through the Iowa State Government's Enterprise Strategic Planning Process. This process brings agency directors together in Planning Teams to develop strategic plans for each enterprise to implement the Governor's Leadership Agenda. The Governor's Leadership Agenda includes goals, strategies, and Governor's State Policy Objectives. The

planning teams develop a vision for each strategy and recommend a small number of Governor's State Policy Objectives (BFR Handbook, 1997-1998). Each department is also subject to the Budgeting for Results guidelines. The IDED employees have a stake in demonstrating the effectiveness of IDED in order to ensure the program's continued existence.

(2) **The Community Group**. Iowa citizens are key stakeholders in the IDED program. The programs' effects are either directly or indirectly focused on Iowa citizens. The use of their tax dollars to fund these programs should also be of primary concern. The citizens' concerns are captured through public surveys. State policy objectives are developed through statistically valid public surveys that identify what is important to Iowans (BFR Handbook, 1997-1998).

(3) **The Business Community Group**. The business community has both positive and negative outcomes from the IDED. It has members that benefit from IDED and others who may feel that IDED is offering an unfair advantage to their competitors. The financial community may find itself in competition against IDED's low interest or forgivable loans.

(4) **The Legislative Group**. The legislature establishes the laws, authorizes the programs, appropriates the funds, and oversees the role that economic development plays in state affairs. The basic legislative stakeholder

organization is the committee. Traditionally, powerful Appropriation Committees, as well as their respective Subcommittees, are the dominant stakeholders. These committees provide program oversight during annual hearings on fiscal year spending.

(5) **Summary**. Four different groups of stakeholders have a stake in IDED performance evaluation. The Executive Office of the Governor Group has a political stake in determining whether the IDED program meets the Governor's economic development priorities. The Community Group desires a strong economic base to maintain their quality of life. The Business Community Group has a financial interest in IDED. The Legislature has a stake in the government-wide adherence to the Budgeting for Results legislation. The people's elected representatives want to prove to their constituents that their money is not being wasted.

C. THE STAKEHOLDER MAP

Based on their different stakes in evaluating the IDED program, the various stakeholder groups can finally be organized into an overall stakeholder map. Figure 2 contains the IDED stakeholder map.

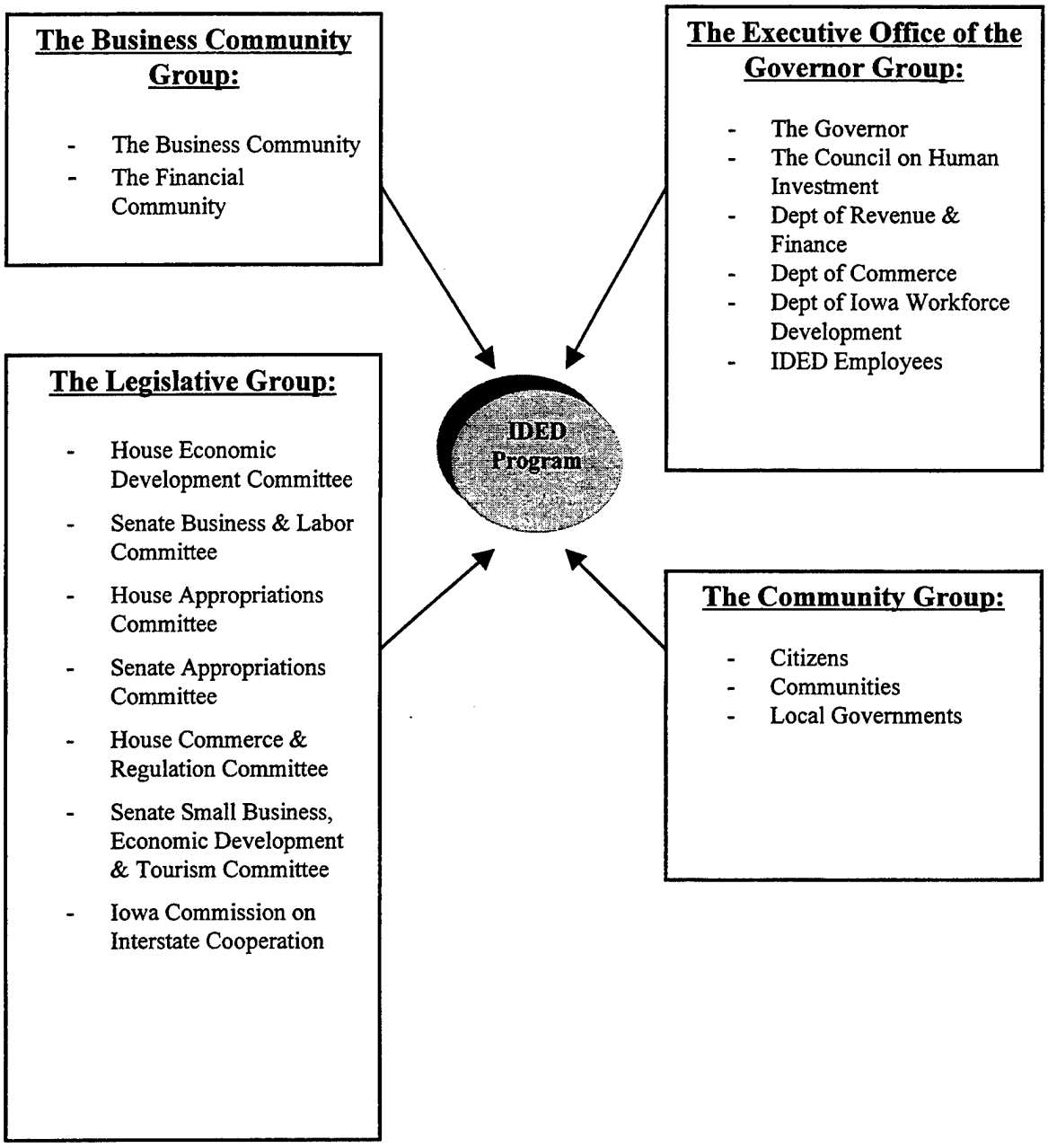


Figure 2. The IDED Stakeholder Map

V. ANALYSIS

A. INTRODUCTION

The Iowa Invests legislation of 1993 created the Council on Human Investment which was charged with developing and implementing performance management for the Iowa State Government (BFR Handbook, 1997-1998). Government usually measures its efforts in terms of outputs and activities, which does little to gauge the impact government funded efforts have on Iowans (BFR Handbook, 1997-1998). GPRA emphasizes setting clear program goals and measuring program performance against those goals (GPRA, 1993). Developing a clear set of agreed-upon program goals (objectives) can be difficult if an organization has many internal and external stakeholders. Each stakeholder may define the program's objectives differently. If a shared definition of program objectives does not exist, then any attempt to objectively measure program performance will fail as multiple constituencies contend over whose set of objectives will serve as the performance baseline. Thus, it is necessary to analyze individual stakeholder objectives in order to determine if a single set of program objectives exist.

The purpose of this chapter is to identify each stakeholder's economic development objectives to determine if a single set of common objectives emerge. Using written documentation from each group of stakeholders, economic

development objectives were singled-out and compared to other stakeholder groups. In the end, a single set of economic development objectives emerged and was arranged into a "Global Hierarchy." Specific attributes were then identified for each of the common global sub-objectives and used to link the IDED programs back to the Global Hierarchy, creating an objective baseline for future performance measurement efforts.

B. THE GLOBAL HIERARCHY

1. Methodology

This section will present the logic used to construct the Global Hierarchy. It will outline the steps in the process, highlight the key assumptions that were necessary, and examine the difficulties encountered during the process. The section will include a Global Objectives Hierarchy for economic development.

a. Step #1: Document Review

A detailed review of the key stakeholder documents that contain the stakeholder's economic development objectives is required to develop a Global Objectives Hierarchy for economic development. Although the Executive Branch sets policy, all stakeholder documents should be used to form the Global Hierarchy. However, the researcher found no documents to represent the Business Community Group's objectives. The following stakeholder documents were analyzed:

Executive Office of the Governor Group

Budgeting For Results Handbook 1997-1998
Governor Tom Vilsack's Inaugural Speech
Governor's Budget FY 00
Building Tomorrow's Workforce: Iowa's Strategic Plan
IDED Owner's Manual

The Community Group

Council on Human Investment poll results

Legislative Group

Code of Iowa 1999
Legislative Guide to the Iowa General Assembly

The preceding list of documents is a fair representation of the key documents that guide stakeholder economic development policy.

b. Step #2: The Sifting Process

Once the key stakeholder documents were chosen, a sifting process separated economic development objectives from other unrelated objectives for each stakeholder group. Although this process is largely subjective, many of the documents clearly identified objectives as being economic development related.

The final step compared economic development objectives among the stakeholder groups to determine if objectives consensus existed. Objectives consensus is the foundation for the Global Hierarchy and the key prerequisite for objective performance evaluation (Calhoun, 1998).

(1) Sifting Process Challenges. Extracting the few specific economic development objectives from the key stakeholder documents was a difficult and highly subjective process. Three specific difficulties were encountered during the sifting process.

(a) *Objectives for Everything.* A common problem found in the key stakeholder documents was the exhaustive list of objectives to be accomplished. The State policy objectives found in the BFR Handbook set nearly all possible positive outcomes as objectives. Many of the stakeholder documents highlighted a broad objective that could have numerous interpretations.

(b) *Practice in Constructing a Global Hierarchy.* As Calhoun discovered, "constructing a global security assistance hierarchy proved to be an original exercise," so did constructing a global economic development hierarchy. No documentation from any of the stakeholder agencies contained any previous effort to link economic development program objectives using a Global Hierarchy. The lack of documentation concerning a global economic development Objectives Hierarchy created a significant challenge.

c. Step #3: Constructing the Global Hierarchy

The next step is to actually construct the Global Hierarchy. The existence of objective consensus among the individual stakeholders is vital to constructing an objectives hierarchy. Eventually, there emerged a consensus of some very broad economic development objectives among stakeholders.

Two simple criteria were used to select the individual stakeholder objectives and specific attributes that would be incorporated into the Global Hierarchy. First, the stated objective had to fit the definition of an "end." In other words, to qualify as an objective it could not be interpreted as "means," or an

alternative. It must be a clear statement of the final result desired, not a method to get there. Second, the objective had to directly or indirectly relate to economic development. This requirement is purposefully subjective and broad to recognize that economic development takes many forms and is related to many objectives.

The broad economic development objectives of **strengthen the economy, diversify the economy, and improve the economic well being and quality of life of all Iowans** came primarily out of the Governor's Budget and the State Policy Objectives. Figure 3 displays the final Global Objectives Hierarchy.

d. Step #4: Validation

Ideally, the resulting Global Hierarchy, and the criteria used to select the sub-objectives and specific attributes, should be validated through an interview process with various stakeholders. The thesis scope, time constraints, and geographic considerations precluded completing this step.

2. Linking the IDED Program Objectives to the Global Hierarchy

Once the Global Hierarchy was constructed and specific attributes were identified the next logical step was to link the specific IDED program objectives back to the hierarchy. If an IDED objective could be logically linked to the achievement of a specific attribute within the Global Hierarchy then that program was placed with that attribute. Figure 3 demonstrates how the programs are linked to the global hierarchy.

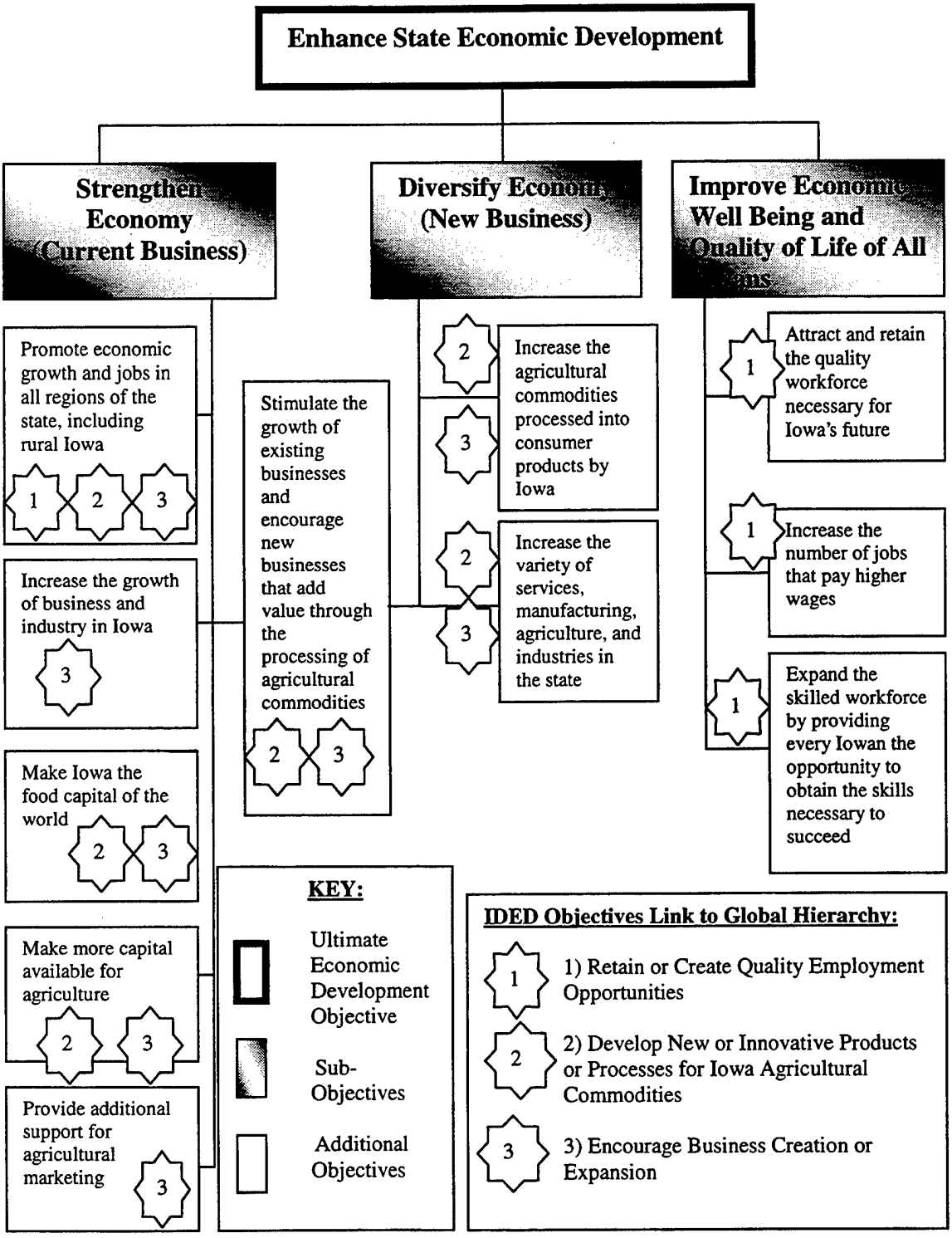


Figure 3. Economic Development Objectives: *The Global Hierarchy*

Because performance measurement systems do not yet exist within the IDED, any attempt to link selected IDED program objectives back to the Global Objectives Hierarchy is largely subjective. Quantitative data needs to be collected that objectively concludes that IDED programs have achieved higher global objectives.

C. INDICATORS OF PERFORMANCE

The third step in the public sector performance evaluation process is developing performance indices for each program objective. The IDED programs were categorized according to their objectives as follows:

1. Retain or create quality employment opportunities
   - Community Economic Betterment Account
   - Economic Development Set-Aside Program

2. Develop New or Innovative Products or Processes for Iowa Agricultural Commodities
   - Value-Added Agricultural Products and Processes Financial Assistance Program

3. Encourage business creation or expansion
   - Entrepreneurial Ventures Assistance
   - Targeted Small Business Financial Assistance Program
   - Self-Employment Loan Program
   - Entrepreneurs with Disabilities
   - Iowa Capital Corporation
   - Enterprise Zones
   - Tax Increment Financing

The Infrastructure Financial Assistance Programs are not considered a direct economic incentive program.

In order to evaluate whether various IDED programs are having the desired effect results must be measured against the original objectives. This section will attempt to identify specific performance indicators that can be used to evaluate the effectiveness of the IDED programs and highlight the key difficulties encountered in the process.

The indices proposed in this section are developed from the data collected through secondary archival research. This section is not meant to be an exhaustive list of IDED performance indices, but rather a starting point for future development.

1. The Importance of a Baseline Assessment

The performance evaluation process essentially compares post-intervention results against objective data gathered during a baseline assessment (Calhoun, 1998). A baseline assessment is defined as the "initial collection of data to establish a basis for comparison" (National Performance Review, 1997, p.27). The success of the IDED performance evaluation process hinges on the objective initial assessment of Iowa's workforce and economic conditions. If one does not possess a clear understanding of economic conditions within the state before a specific program is initiated, attributing future incremental changes to the IDED program is not possible. All program results must therefore be stated in terms of a progression away from the baseline assessment.

Another difficult task in measuring program performance against the baseline is discerning the influence of external factors on the changes from the baseline. Many external factors could affect the economy and unjustifiably reflect either negatively or positively on program performance. It is important to account for external factors, such as a strike, drought, or general economic boom is required to effectively utilize and understand the data gained by analyzing changes from the baseline.

The performance indices proposed in this chapter assume that IDED staff conducted an objective baseline assessment *before* specific programs were initiated. The design and implementation of an IDED performance evaluation baseline assessment is beyond the scope of this study, but its importance within the performance evaluation process should not be ignored. Furthermore, developing procedures to account for external influences is also beyond the scope of this thesis.

2. Problems Associated with Performance Indicators

Halachmi and Bouckaert categorized thirteen "measurement diseases." A disease being "a dysfunctional effect for an organization or its environment caused by the activity and/or assumptions of measuring the organizational situation" (Halachmi/Bouckaert, 1995, p388). The first three diseases, the Pangloss disease, the impossibility disease, and hypochondria; are about assumptions and

convictions that harm the activity or measurement itself. The remaining ten diseases are about the measurement activities themselves. Four of these, the convex/concave disease, hypertrophy disease, atrophy disease, and Mandelbrot disease; involve the numbers and volumes perceived. Six concern the content, position, and amount of measures; these include the pollution disease, inflation disease, enlightened top-bottom disease, time-shortening disease, mirage disease, and shifting disease. These diseases show how the practice of measurement can affect the functioning of an organization. The following briefly defines each disease:

- The Pangloss Disease reflects the conviction that there is no need for productivity measurement because there is no inefficiency problem in government. In wake of GPRA and Budgeting for Results this belief has probably been overcome.
- The Impossibility Disease is the conviction of the impossibility of the ability to conduct measurement itself in the public sector.
- Hypochondria is the feeling that the public sector has to be worse than the private sector.
- The Convex/Concave Disease is diagnosed when measuring a process component result in a measured output different from the "real" output volume. The convex disease causes a higher-volume value and the concave a lower-volume value, whereas, in reality the opposite is true.
- The Hypertrophy Disease causes the measurement process to actually stimulate the production of real output.
- The Atrophy Disease causes the measurement process to actually reduce the output volume or certain aspects of the output.

- The Mandelbrot Disease results when utilizing a more detailed measuring device causes an increase in perceived amounts. The higher the intensity of measurement, the higher the perceived output.

- The Pollution Disease is caused by mixing up input, activities, output quantity, output quality, and effects. Confusing outputs and effects, or outputs and quality, is common and makes outputs, effects, and quality less visible.

- The Inflation Disease involves a series of measures. The problem occurs when there is a mushrooming of measures in the agency. The measurement process requires an exhaustive information system that is costly and time consuming. The more measures that are available, the more likely that there are contradictory measures.

- The Enlightened Top-Bottom Disease involves measures introduced from outside and/or from the top of the organization and imposed on the rest of the organization.

- The Time-Shortening Disease makes the organization focus on the short run instead of on the intermediate or long run.

- The Mirage Disease shows something different from what is thought or perceived. The use of indicators in the place of measures produces measurement noise that may make us hear something different from what we think or hear.

- The Shifting Disease affects measures that do not match the goals or purposes of the organization. Because of the measure, activities move away the intended activities and outputs (Halachmi/Bouckaert, 1995, pp388-406).

3. Indicators of Performance for the IDED

a. Retain Or Create Quality Employment Opportunities

The first IDED objective is retaining or creating quality employment opportunities for Iowans. In order to propose performance indicators for this

objective one must define the specifics of quality employment opportunities. Unfortunately, this can be a highly subjective definition.

(1) Quality of Employment. Numerous factors could be included to evaluate the quality of a job. These factors include wage rates, comprehensiveness of benefits package, career orientation and whether it is a full time position. After getting past wage rates and benefits, evaluating employment quality is largely subjective.

Personal preferences towards job location and environment have a strong influence on perceived employment quality. If everyone has an individual standard for these things then there is obviously no overall standard that can be applied. If we assume that everyone enjoys higher wages, increased benefits, and possibilities for advancement then we can include these in an overall standard.

(2) Quality of Employment Objectives Hierarchy and Performance Indices. In order to develop performance indices for employment quality, the broad objective of create or retain quality employment is broken down into sub-objectives and specific attributes. The goal of this process is to construct a quality employment opportunity objectives hierarchy that can be used to identify subsequent performance indicators. Figure 4 displays the Retain or Create Quality Employment Objectives Hierarchy.

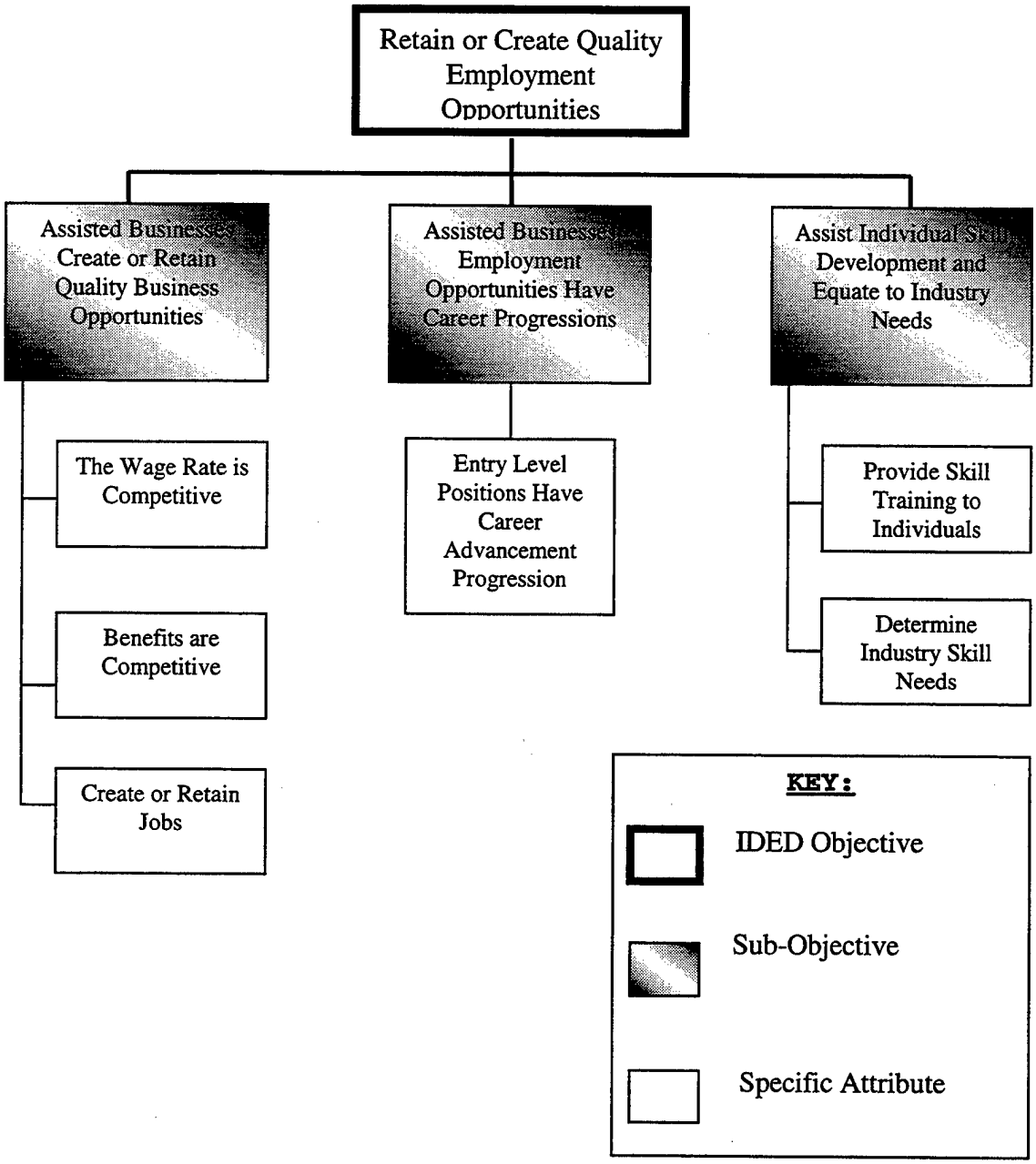


Figure 4. Retain or Create Quality Employment Objectives Hierarchy

The objective of create or retain quality employment opportunities can be broken down into the following sub-objectives:

Sub-Objective #1:

Assisted Businesses Create or Retain Quality Employment Opportunities

Sub-Objective #2:

Assisted Businesses Employment Opportunities have Career Progressions

Sub-Objective #3:

Assist Individual Skill Development and Equate to Industry Needs

Specific attributes that describe each sub-objective can then be identified. Based on the specific attribute, indicators of performance will be proposed that can be used to support whether the IDED program is achieving its stated objective. The specific attributes of each sub-objective, along with their respective indicators of performance, follow.

Sub-Objective #1:

Assisted Businesses Create or Retain Quality Employment Opportunities

Specific Attributes:

1. The wage rate is competitive.

Indicators of Performance:

- The wage rate is greater than or equal to the median county wage rate.
- The wage rate includes cost of living adjustments.
- Impact on competitors.

2. Benefits are competitive.

Indicators of Performance:

- Benefits package provides full medical coverage.
- Benefits are equal to or greater than median value for county.
- Impact on competitors.

3. Create or retain jobs.

Indicators of Performance:

- Number of jobs created.
- Number of jobs retained.

Sub-Objective #2:

Assisted Businesses Employment Opportunities have Career Progressions

Specific Attributes:

1. Entry level positions have career advancement progression.

Indicators of Performance:

- Position is full time.
- Position has defined skill levels.
- Position has defined requirements for advancement.

Sub-Objective #3:

Assist Individual Skill Development and Match to Industry Needs

Specific Attributes:

1. Provide skill training to individuals.

Indicators of Performance:

- Number of individuals trained.
- Number and type of skills that are available for training

2. Determine industry skill needs.

Indicators of Performance:

- Number of new skills required by industry.
- Types of new skills required by industry.

b. Develop New or Innovative Products or Processes for Iowa Agricultural Commodities

(1) Agricultural Products or Processes. In 1996, gross sales for the entire Iowa agricultural system were $55.8 billion. Agriculture contributed 25.6 percent of the state's total gross state product. Agriculture certainly remains at the heart of Iowa's economic future. However, the cyclical nature of the industry makes strategic planning difficult.

Developing new products and processes is a difficult area to measure in any business. Research and development requires a great deal of experimentation. If every lead is evaluated then precious resources may be wasted, especially financial ones. If too few resources are committed then a

striking new advancement may be missed. This is the challenge in funding and measuring the success of research and development projects.

(2) New or Innovative Agricultural Products or Processes Objectives Hierarchy and Performance Indices. No sub-objectives were developed for this objective. Figure 5 displays the New or Innovative Agricultural Products or Processes Objectives Hierarchy. The following attributes were developed from the objective:

Specific Attributes:

1. Assist Businesses that Develop New Agricultural Products or Processes

Indicators of Performance:

- Number of new agricultural products or processes proposed
- Number of new agricultural products or processes developed

2. Coordinate with Public Research Facilities to Develop New Agricultural Products or Processes

Indicators of Performance:

- Number of agricultural research programs established at public universities
- Number of private businesses with links to public agricultural research facilities

- Number of private businesses with private agricultural research facilities

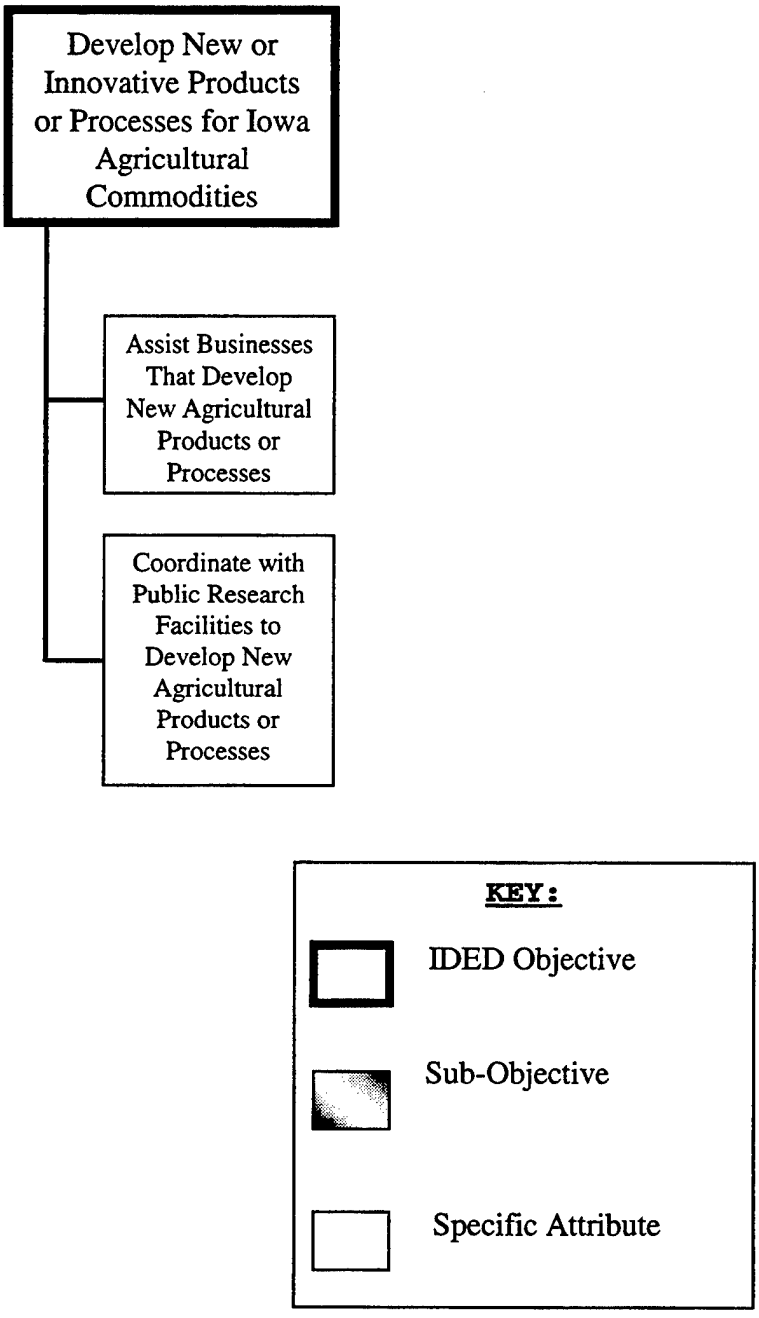


Figure 5. New or Innovative Agricultural Products or Processes Objectives Hierarchy

c. Encourage Business Creation or Expansion

The third IDED objective is encouraging business creation or expansion within the state. Providing assistance to existing businesses is a much less risky proposition than assisting a new business. The majority of businesses assisted by IDED are existing businesses undertaking an expansion.

(1) Encouraging Business Creation or Expansion. Encouraging new business creation or expansion is one of the most criticized areas in economic development. The government is no better than the private sector at picking the winners and losers in the economy. IDED must select specific businesses that it will assist. With every investment comes the risk of failure. Some would argue that this is not the place for the government to be gambling with taxpayer money. Still, it is the primary way to target an industry segment for development.

(2) Encouraging Business Creation or Expansion Objectives Hierarchy and Performance Indices. Figure 6 displays the Encouraging Business Creation or Expansion Objectives Hierarchy.

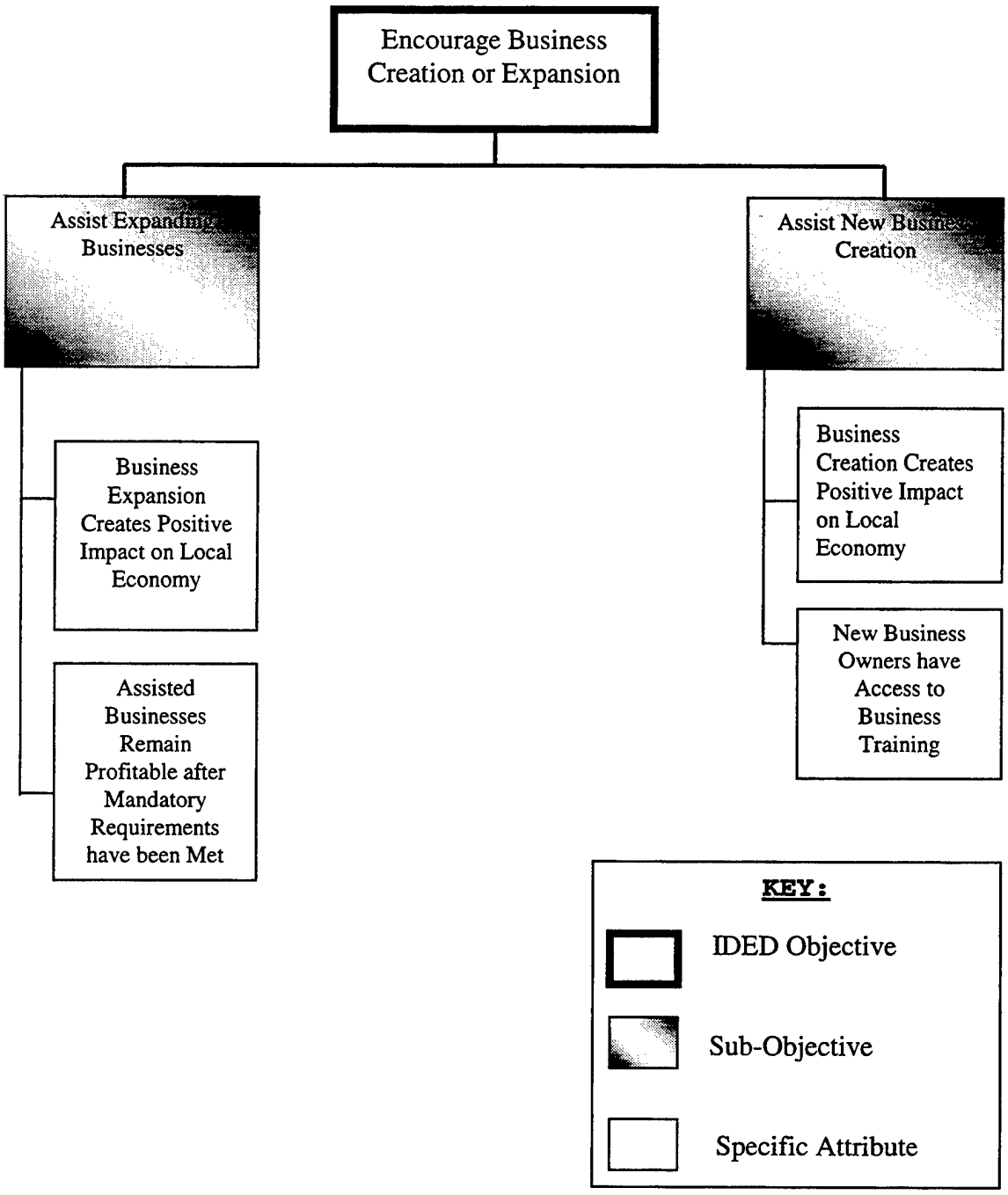


Figure 6. Encouraging Business Creation or Expansion Objectives Hierarchy

The IDED objective of encouraging business creation or expansion can be broken down into the following sub-objectives:

Sub-Objective #1:

Assist Expanding Businesses

Sub-Objective #2:

Assist New Business Creation

The following specific attributes, along with their respective indicators of performance, have been identified for the sub-objectives of encouraging business creation or expansion:

Sub-Objective #1:

Assist Expanding Businesses

Specific Attributes:

1. Business expansion creates positive impact on local economy.

Indicators of Performance

- Number of new jobs created
- Wage paid is greater than the median city/county wage
- The expansion did not result in the business closing operations elsewhere in the state

2. Assisted businesses remain profitable after mandatory requirements have been met.

Indicators of Performance

- After all mandatory requirements have been met, the businesses ROI remains competitive with industry
- After all mandatory requirements have been met, the number of jobs remains the same or increases

Sub-Objective #2:

Assist New Business Creation

Specific Attributes:

1. Business creation creates positive impact on local economy.

Indicators of Performance

- Number of new jobs created
- Wage paid is greater than the median city/county wage
- Survival rate of new businesses assisted by IDED vs. unassisted

2. New business owners have access to business training.

Indicators of Performance

- Number of programs offering business skill training
- Number of people enrolled in business skill training

d. Indicators of Performance Limitations

The performance indicators mentioned above are examples of how one would formulate performance indicators based on a stated objective. They are

certainly not all encompassing and would require refinement to fit any particular economic incentive program.

D. THE BALANCED SCORECARD

Collecting data on every indicator will likely be time consuming, expensive, and overwhelming for the IDED manager. Program managers must choose a handful of indicators to apply to their specific program. The "balanced scorecard" format developed by Kaplan and Norton is a user-friendly manner in which to present the various indicators of performance for each IDED objective.

1. The Kaplan/Norton Balanced Scorecard

After a year-long research project with twelve companies at the leading edge of performance measurement, Kaplan and Norton devised a 'balanced scorecard'—"a set of measures that gives top managers a fast but comprehensive view of the business" (Dyson and O'Brien, 1998, p. 55). Kaplan and Norton developed the Balanced Scorecard after realizing that senior private sector executives do not rely on only one set of performance measures to the exclusion of another (Kaplan and Norton, 1992).

> No single measure can provide a clear performance target or focus attention on the critical areas of the business. Managers want a balanced presentation of both financial and operational measures (Kaplan and Norton, 1992, p. 71).

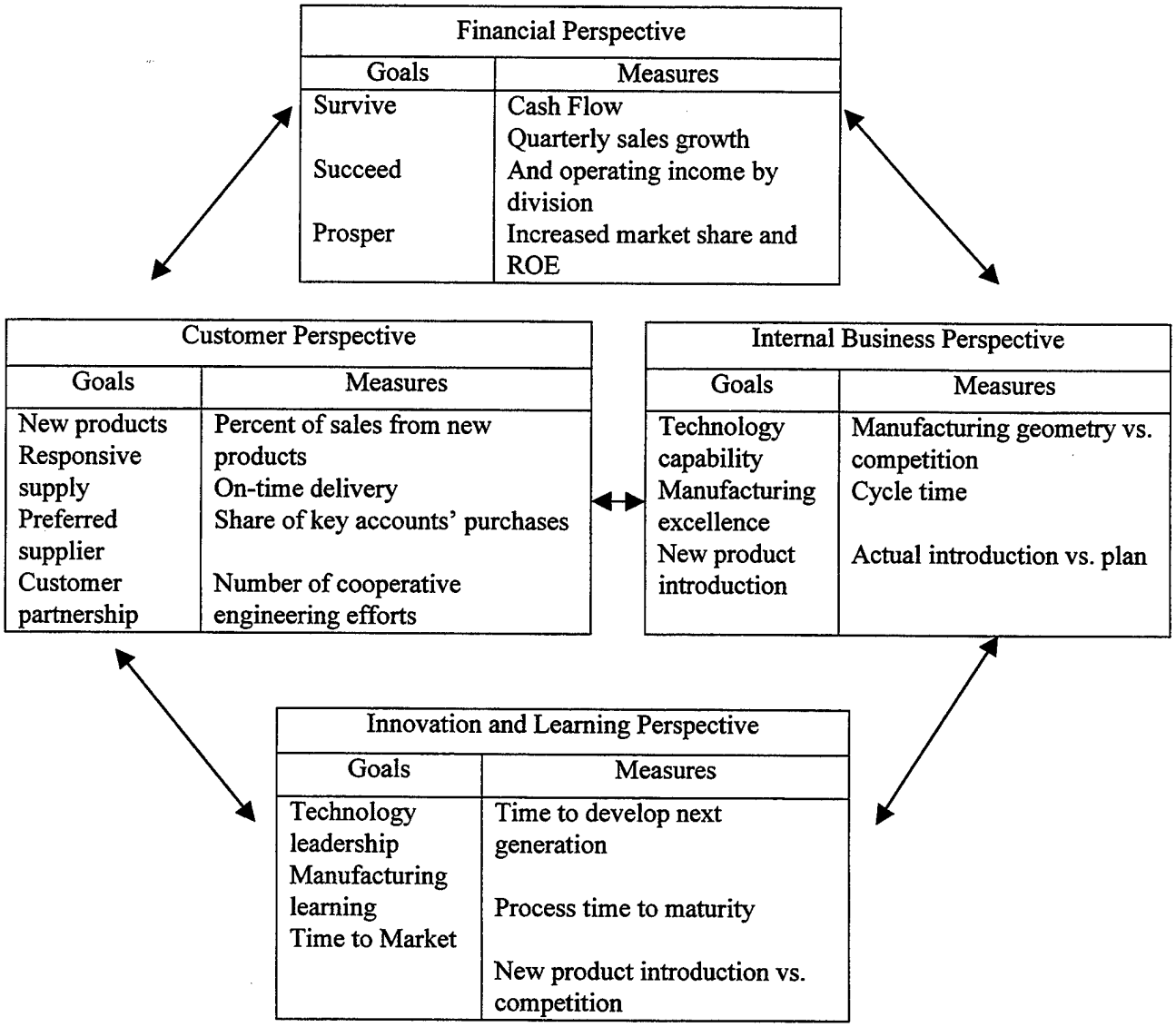
> Think of the Balanced Scorecard as the dials and indicators in an airplane cockpit. For the complex task of navigating and flying an airplane, pilots need detailed information about many aspects of the flight. [They need] indicators that summarize the current and predicted environment (Kaplan and Norton, 1992, p. 72).

The balanced scorecard allows managers to look at the business from four important perspectives: (1) How do customers see us? (customer perspective); (2) What must we excel at? (internal perspective); (3) Can we continue to improve and create value? (innovation and learning perspective); and (4) How do we look to shareholders? (financial perspective) (Dyson and O'Brien, 1998, p. 56). Private sector managers realize that they cannot absorb the information generated by every conceivable measure of performance. "The Balanced Scorecard brings together, in a single management report, many of the seemingly disparate elements of a company's competitive agenda" (Kaplan and Norton, 1992, p. 73). By selecting three to four key measures within each business objective managers can link a wide range of performance measurement data allowing them to make better decisions in a time critical environment. The format of the Kaplan/Norton Balanced Scorecard, as well as their private sector example of an electronics company, can be found in Figure 7.

Format:

Perspective	
Goals	**Measures**

Balanced Business Scorecard Example



Financial Perspective	
Goals	Measures
Survive	Cash Flow Quarterly sales growth
Succeed	And operating income by division
Prosper	Increased market share and ROE

Customer Perspective	
Goals	Measures
New products	Percent of sales from new products
Responsive supply	On-time delivery
Preferred supplier	Share of key accounts' purchases
Customer partnership	Number of cooperative engineering efforts

Internal Business Perspective	
Goals	Measures
Technology capability	Manufacturing geometry vs. competition
Manufacturing excellence	Cycle time
New product introduction	Actual introduction vs. plan

Innovation and Learning Perspective	
Goals	Measures
Technology leadership	Time to develop next generation
Manufacturing learning	Process time to maturity
Time to Market	New product introduction vs. competition

Figure 7. Kaplan/Norton Balanced Scorecard Format and Example

2. The IDED Balanced Scorecard

While Kaplan and Norton use the Balanced Scorecard to present financial and operational data for private sector firms, managers of public sector programs with multiple objectives can apply the balanced scorecard. The Kaplan/Norton Balanced Scorecard format can be modified so that chosen performance indicators are listed alongside their respective sub-objective for each of the IDED objectives. These modified scorecards can serve as comprehensive management tools for tracking achievement for each IDED objective within a given country. The Kaplan/Norton private sector Balanced Scorecard thus becomes the "(IDED Program) Balanced Scorecard."

Deciding what indicators of performance are most meaningful for an individual program is a subjective process. The program's managers should make these decisions.

A complete "(IDED Program) Balanced Scorecard" example can be found in Figure 8.

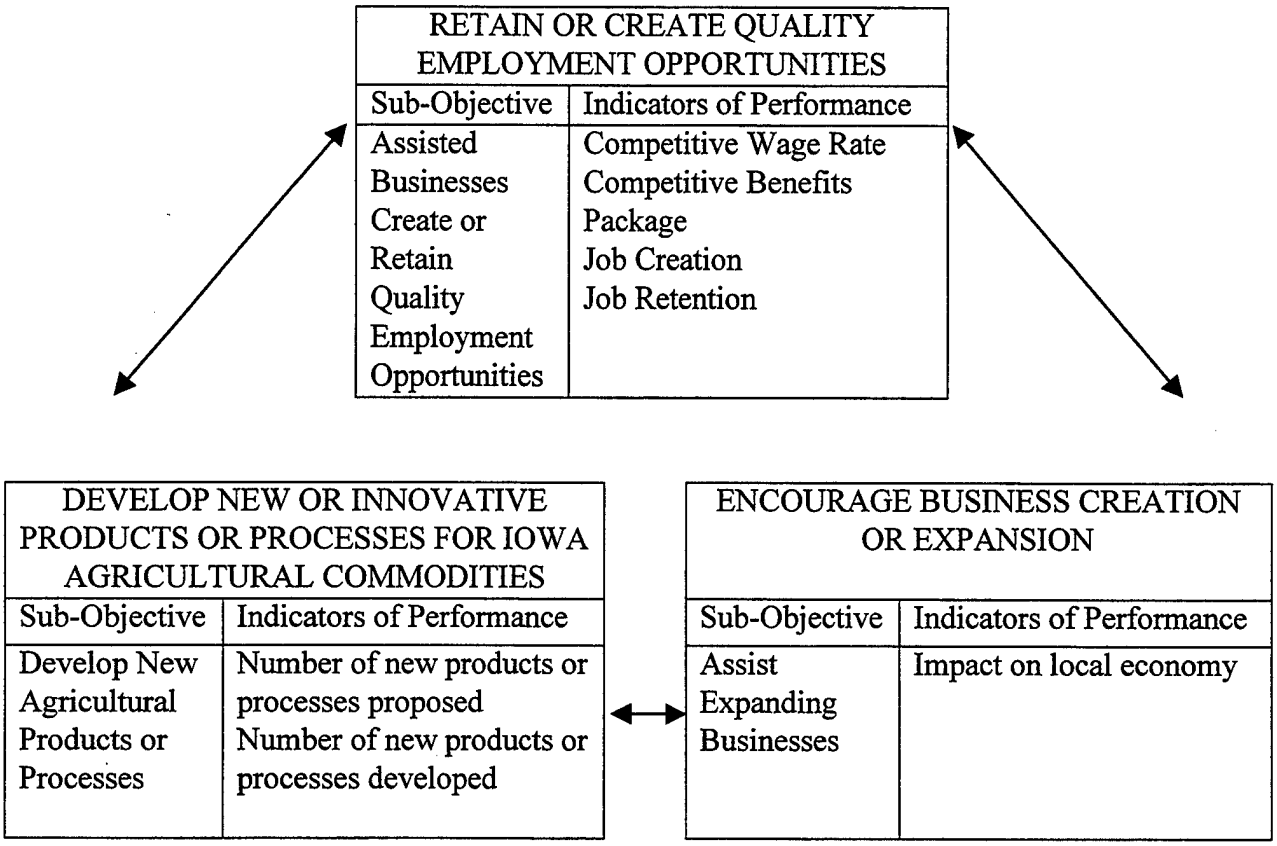


Figure 8. "(IDED Program) Balanced Scorecard" Example

E. CHAPTER SUMMARY

Figure 3 contains the Global Objectives Hierarchy for state economic development. To construct the hierarchy, a sifting process was applied to key stakeholder documents in an effort to identify their individual economic development objectives, sub-objectives and specific attributes. Governor and State policy objectives set the ultimate economic development objectives. To complete the hierarchy, each stakeholder's specific attributes for the common sub-objectives were added. Thus, in the spirit of the Government Performance and Results Act

and Iowa's Budgeting for Results effort, a Global Hierarchy emerged that incorporates each stakeholder group into the objectives-setting process. Next, performance indices were developed that objectively measure the effectiveness of the IDED programs.

Objectively measuring the results of the IDED effort involves tracking the changes within a city or county toward retaining or creating quality employment opportunities, developing new or innovative agricultural products or processes, and encouraging business creation or expansion. In order for one to determine whether the IDED program is responsible for significant economic changes, a baseline assessment must first be compiled. Various indicators of performance can then be used to compare economic conditions following program implementation with the baseline assessment to get a clearer picture of program effectiveness. While limitations do exist, the performance indicators proposed in this chapter offer an alternative to the lack of accountability in the current system.

VI. CONCLUSION

A. INTRODUCTION

The Iowa legislature mandated the Iowa Department of Economic Development (IDED) to "enhance the economic development of the state and provide for job creation and increased prosperity and opportunities for the citizens of the state..." (Code of Iowa, 1999). Financial incentives, whether as direct funding to an industry or tax credits, are an investment a state makes in its economic future and in a public partnership with the private sector (Jones, Jan 99, www.geocities.com). Economic development programs have been initiated in all fifty states. In the wake of the federal Government Performance and Results Act of 1993 at the federal level, many state governments are striving for greater public accountability of their programs.

Performance measures are becoming increasingly popular among Midwestern states, as skepticism grows over the value of incentive packages designed to lure individual companies or to reward certain activities by employers as a whole (Firstline Newsletter). The Iowa Invests legislation of 1993 created the Council on Human Investment which was charged with sponsoring the development and implementation of performance management for Iowa State Government (BFR Handbook, 1997-1998).

This study addresses how the IDED can measure the effectiveness and performance of its economic incentive programs. This chapter will summarize the study's findings based on the original research questions.

B. RESTATEMENT OF RESEARCH QUESTIONS

Primary Research Question:

What are the essential characteristics of a performance evaluation system for selected IDED programs?

Subsidiary Research Questions:

1. What are the challenges to performance evaluation of public programs?
2. What are the measures of success for economic incentive programs?
3. What are appropriate measures of performance?
4. Are state programs evaluating their programs with appropriate measures?
5. Is there data that exists to support an appropriate evaluation?

C. SUMMARY OF FINDINGS

1. Challenges to Public Sector Performance Evaluation

Calhoun concluded that the obstacles to public sector performance evaluation are primarily institutional, technical, and financial (Calhoun, 1998). Each of these obstacles presents a challenge to IDED performance evaluation.

a. Institutional Obstacles

Institutional obstacles are characterized by the influence of political pressure on performance measurement, the effect of multiple self-interested constituencies on objectives consensus, and the lack of experience of government managers in dealing with performance data. Each of these obstacles limits the ability of IDED program managers to measure the effectiveness of their programs.

There are many potential groups of stakeholders for the IDED. They are grouped here according to their ability to influence policy. They could be grouped according to their support of economic incentive programs. In this grouping there would be members of the same organization on both sides of the issue. The presence of so many stakeholder groups makes the setting of a single set of economic development objectives difficult. The Executive Office of the Governor sets state economic direction while the legislature appropriates the funds necessary to fund the programs. However, both have similar political stakes in the performance of the IDED. The economic success of a state is often tied to the governor's policies. The majority in the legislature is also held responsible for the success or failure of government programs. The budgeting decisions made by the governor and the legislature are often interpreted as policy decisions.

b. Technical Obstacles

Technical obstacles include differentiating between output and outcome measures, the need for several measures of performance for any one program, the lack of standards for judging governmental performance, and the lack of timely performance feedback.

Economic development presents a multitude of problems and possible solutions, each presenting a different direction for the IDED. No single measure of performance is adequate to handle these complexities. IDED officials must develop and implement multiple measures of performance simultaneously. Even with such a system, no standards exist that indicate whether the IDED assistance is "effective enough" to merit increased or continued funding. Periodic performance reporting must be compared with an objective baseline assessment of a city or county's economic characteristics (collected before any IDED program assistance) in order to credit specific results to the IDED assistance.

Additionally, economic development programs should be considered as long-term efforts. They should be geared at providing long term growth of the economy. Prediction of immediate results can be politically hazardous for elected and appointed stakeholders.

c. Financial Obstacles

Implementation of performance measurement systems can be very costly, especially for a department with a small budget, such as the IDED. A performance evaluation system that is easy to use and can be implemented without additional funding would be the ideal for the IDED.

2. Current Measures of Success for Economic Incentive Programs

The current measures of success suffer from distinct pathologies. IDED reports to the appropriations subcommittees each year how many dollars were awarded under a certain program, how many jobs were created, the average wage, etc.

3. The IDED Performance Evaluation System

The spectrum of approaches to the evaluation of public programs are anchored at one end by the "technically rational paradigm" that treats performance measurement as an objective, scientific aid to decision-making. Anchoring the opposite end of the spectrum is the "politically rational paradigm" that emphasizes the effect of political power on the measurement of performance (Calhoun, 1998). The politically rational paradigm was used to develop the following four-step IDED performance measurement process:

1. Identify the Key IDED Stakeholders;
2. Identify the Objectives of Economic Development and the IDED;

3. Develop Performance Indices for the IDED Objectives;

4. Apply technically rational performance measurement techniques.

Only steps #1-3 were completed during this study. Step #4 was beyond the scope of this study. The application of the IDED performance indices proposed in Chapter V should be preceded by an objective baseline assessment in each city or county that receives IDED assistance. Program managers must then select the indicators of performance that are most applicable to their program. A tracking of deviations away from the baseline assessment must follow in order to establish a stronger cause and effect relationship.

4. State Program Evaluation

The evaluation of state economic programs by state governments is severely lacking. Most state evaluations can only determine if a corporation is conforming to the program's rules. Program spending can be captured in state budget reports but this doesn't give any indication of effectiveness. Even the dollar amount can be lost because few states track tax expenditures associated with tax incentives. The tax revenue lost to tax incentives is normally considered to have never existed. The assumption is that the only reason the company expanded or commenced operations were to take advantage of the tax incentives. An unrealistic assumption in the face of millions of lost tax revenues.

As government becomes more accountable for the money it spends, maybe we will know the true costs of economic incentives.

5. Existing Data to Support Appropriate Evaluation

Following from the previous category, there is little data to appropriately evaluate the effectiveness of economic incentive programs.

D. RECOMMENDATIONS

1. Recommendations for Further Action

It is recommended that IDED consider the performance indicators proposed in this study as they come in compliance with the State's Budgeting for Results effort. The performance indicators provided serve mainly as examples of how to work through the process of developing objectives and breaking them down into performance indicators. The development of a standard baseline assessment format is required to provide the comparative basis from which to measure the effectiveness of the IDED. Any movement away from the baseline must then be tracked and presented as evidence for future funding decisions.

2. Recommendations for Further Study

This study was completed with little input from IDED officials. Building a Balanced Scorecard of IDED performance evaluation indicators requires a broad understanding of local economic conditions and business practices. The indicators of performance proposed in this study must be refined to fit the specific city or

county needs. A baseline assessment format must also be developed so that future movement toward the objectives of the IDED program can be measured.

In order to begin a performance evaluation system a basic assumption is that the intentions of the program being evaluated are themselves worthwhile. This thesis did not explore whether or not states should be in the business of providing economic incentives to private corporations.

This is only one method of evaluating the effectiveness of economic incentive programs. A regression study relating outputs to inputs, and accounting for impacts from general economic, environmental and political conditions, could be conducted to establish a statistical correlation between programs and outcomes. Studies such as these are difficult due to the lack of quantitative data.

APPENDIX. IDED PROGRAMS

Incentive Category	IDED Program	Objective(s)	Method	Form	Requirement	Funding based on:
Capital Subsidy	Community Economic Betterment Account CEBA	Retain or create quality employment opportunities	Financial ($1 million)	Loans Forgivable loans	New employment Retain existing jobs, make new capital investment	#jobs created/retained
Capital Subsidy	Economic Development Set-Aside Program EDSA	Retain or create quality employment opportunities for low and moderate income employees	Financial ($500K)	Loans Forgivable loans	New employment Retain existing jobs, make new capital investment Target communities under 50K 51% of created/retained employment for must be made avail to low-mod income	#jobs created/retained
Subsidy of other Inputs Tax preferences	New Jobs and Income Program NJIP	Retain or create quality employment High median wage Capital investment Benefits for employees	Tax Credits and Exemptions	3% withholding tax credit up to 10% investment tax credit 13% R&D tax credit others	Capital investment ($10.38 mil) Create 50 or more jobs meeting wage and benefit targets Many others	
Enterprise Zones	Enterprise Zones	Encourage businesses to locate in economically distressed areas	Tax Credits and Exemptions	Property tax exemptions and state tax credits	Locate or expand in EZ 28 counties and 18 cities 10 full time jobs for 10 yrs Meet wage rates and benefits Invest min $500K	
Capital Subsidy	Value-Added Agricultural Products and Processes Financial Assistance Program VAAPFAP	Utilize Iowa agricultural commodities for new or innovative products or processes	Financial ($900K)	Loans Forgivable loans	Produce new and innovative products from agricultural commodities Produce renewable fuels	
Capital Subsidy	Entrepreneurial Ventures Assistance EVA	Assist new businesses in high start-up and growth potential businesses	Financial Technical		Start-up and early stage businesses	
Capital Subsidy	Targeted Small Business Financial Assistance	Assist in the creation and expansion of minority and women-owned businesses	Financial	Loans (low interest) Loan guarantees Equity grants	Women, minorities, disability	

Incentive Category	IDED Program	Objective(s)	Method	Form	Requirement	Funding based on:
	Program TSBFAP					
Capital Subsidy	Self-Employment Loan Program SELP	Assist low-income entrepreneurs in new or expanding small businesses	Financial	Loans (low interest)	Women, minorities, disability	
Capital Subsidy	Entrepreneurs With Disabilities EWDI	Assist individuals with disabilities to establish, maintain, expand or acquire a small business	Financial Technical	Grants	Disability	
Capital Subsidy	Iowa Capital Corporation ICC	ROI to corporation's shareholders Advance economic development in Iowa	Financial – for profit venture capital corp	Equity participation Loans		
Capital Subsidy	Infrastructure Financial Assistance Programs IFAP	Retain or create jobs	Financial		Railways City, county, state highways	
Tax Preferences	Tax Increment Financing TIF	Influence company location	Property Tax		Pay cost of public improvements and utilities	

LIST OF REFERENCES

Books:

Bryson, J.M., Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement, Jossey-Bass Publishers, 1995.

Buckley, J.W., Buckley, M.H., and Chiang, H., Research Methodology & Business Decisions, National Association of Accountants and The Society of Industrial Accountants of Canada, 1976.

Dyson, R.G., O'Brien, F.A. (Editors), Strategic Development: Methods and Models, Johns Hopkins University Press, 1996.

Flynn, N., Public Sector Management (2nd ed.), New York: Harvester Wheatsheaf, 1993.

Greiner, J.M., "Positioning Performance Measurement for the Twenty-First Century" in Organizational Performance and Measurement in the Public Sector, Quorum Books, 1996.

Halachmi, A. and Bouckaert, G. (Editors), Organizational Performance and Measurement in the Public Sector, Quorum Books, 1996.

Jackson, P.M., and Palmer, B., Performance Measurement: A Management Guide, The Management Centre, University of Leicester, 1992.

Kenyon, D.A. and Kincaid, J., Competition among States and Local Governments: Efficiency and Equity in American Federalism, The Urban Institute Press, 1991.

Lynch, R.G., Do State and Local Tax Incentives Work, Economic Policy Institute, 1996.

Quade, E.S., Analysis for Public Decisions: 2nd Edition, Elsevier Science Publishing Company, 1982.

Snell, R., A Review of State Economic Development Policy: A Report from the Task Force on Economic Incentives, National Council of State Legislatures, March 1998.

Webb, E.J., Campbell, D.T., Schwartz, R.D., and Sechrest, L.L., Unobtrusive Measures: Nonreactive Research in the Social Sciences, Rand McNally, 1966.

Yaeger, S.J., "Classic Methods in Public Administration Research" in The Handbook of Public Administration, Marcel Dekker Publishers, 1989.

Newspapers and Journals:

Calhoun, T., "Evaluation of Security Assistance Programs: Performance Evaluation and the Expanded International Military Education and Training (E-IMET) Program," Thesis, Naval Postgraduate School, December 1998.

Clarke, T., "The Stakeholder Corporation: A Business Philosophy for the Information Age," Long Range Planning, pp. 182-194, April 1998.

Flynn, N., "Performance Measurement in Public Sector Services," Policy & Politics, v. 3, pp. 389-909, 1986.

Kaplan, R.S. and Norton, D.P., "The Balanced Scorecard—Measures That Drive Performance," Harvard Business Review, pp. 71-79, January-February 1992.

King, P. and Roberts, N.C., "The Stakeholder Audit Goes Public," Organizational Dynamics, 1989.

Government Documents:

Code of Iowa, 1999.

Department of Management, "Budgeting For Results Handbook," 1998.

Iowa Department of Economic Development, "Owner's Manual," 1995.

National Performance Review, "Benchmarking Report," June 1997.

United States Congress, The Government Performance and Results Act, 5 January 1993.

Vilsack, T., Iowa Governor "Inaugural Address", January 1999.

Websites:

www.geocities.com/

BIBLIOGRAPHY

Books:

Adams, F.G. and Klein, L.R. (Editors), Industrial Policies for Growth and Competitiveness, Lexington Books, 1983.

Adams, F.G. (Editor), Industrial Policies for Growth and Competitiveness: Volume II, Lexington Books, 1985.

Barfield, C.E. and Schambra, W.A. (Editors), The Politics of Industrial Policy, American Enterprise for Public Policy Research, 1986.

Bingham, R.D., Industrial Policy American Style: From Hamilton to HDTV, M.E. Sharpe, 1998.

Bowman, J.H., Taxation of Business Property, Praeger Publishers, 1995.

Bozeman, B.B., Public Management and Policy Analysis, St. Martin's Press, 1979.

Brandl, J.E., Money and Good Intentions Are Not Good Enough, or, Why a Liberal Democrat Thinks States Need Both Competition and Community, The Brookings Institution, 1998.

Chi, K.S. and Leatherby, D., State Business Incentives: Trends and Options for the Future, The Council of State Governments, 1997.

Conklin, D.W., Comparative Economic Systems, Cambridge University Press, 1991.

Fisk, D.M., Measuring Productivity in State and Local Government, U.S. Department of Labor, Bureau of Labor Statistics, Dec 1983.

Friedman, M., Directory of Incentives for Business Investment and Development in the United States, The Urban Institute Press, 1991.

Gramlich, E.M., Benefit-Cost Analysis of Government Programs, Prentice-Hall, 1981.

Green, A.L. (Chairman), State and Local Taxation or Business Corporations, National Industrial Conference Board, Inc., 1931.

Grossman I.K., Initiatives in State Economic Development, Council of State Governments, 1984.

Haveman, R.H. and Margolis, J.M., Public Expenditure and Policy Analysis, 2nd Edition, Rand McNally College Publishing Company, 1977.

Itoh, M., Kiyono, K., Okuno-Fugiwara, M., Suzumura, K., Khosla, A., Economic Analysis of Industrial Policy, Academic Press, Inc., 1991.

Kieschnick M., Taxes and Growth: Business Incentives and Economic Development, Council of State Planning Agencies, 1981.

Klein, T.A., Social Costs and Benefits of Business, Prentice-Hall, 1977.

Mucciaroni, G., Reversals of Fortune: Public Policy and Private Interests, The Brookings Institution, 1995.

O'Sullivan, A. and Sheffrin, S.M., Macroeconomics: Principles and Tools, Prentice-Hall, 1998.

Otto, D.M. and Stone, K.E., Analysis of Economic Development Incentives, The Institute of Urban and Regional Research, The University of Iowa, 1982.

Rhoads, S.E., The Economist's View of the World, Cambridge University Press, 1985.

Rogers, R.M., Handbook of Key Economic Indicators, Irwin Professional Publishing, 1994.

Rosen, H.S., Public Finance, 5th Edition, Irwin/McGraw-Hill, 1999.

Salamon, L.M. (Editor) and Lund, M.S., Beyond Privatization: The Tools of Government Action, The Urban Institute Press, 1989.

Shepherd, W.G. and Wilcox, C., Public Policies Toward Business, 6th Edition, Richard D. Irwin, Inc., 1979.

Simon, R., Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal, Harvard Business School Press, 1995.

Washnis, G.J. (Editor), Productivity Improvement Handbook for State & Local Government, John Wiley & Sons, 1980.

Journals:

Anglin, R., "Constructing Cooperation: Instituting a State Plan for Development and Redevelopment," Journal of Policy Analysis and Management, v.14, pp. 433-445, Summer 1995.

Arestis, P. and Demetriades, P., "Financial Development and Economic Growth: Assessing the Evidence," The Economic Journal, pp. 783-799, May 1997.

Baffes, J. and Shah, A., "Productivity of Public Spending, Sectoral Allocation Choices, and Economic Growth," Economic Development and Cultural Change, v.46, pp. 291-304, January 1998.

Holmes, T.J., "The Effect of State Policies on the Location of Manufacturing: Evidence from State Borders," Journal of Political Economy, pp. 667-705, August 1998.

Kemsley, D., "The Effect of Taxes on Production Location," Journal of Accounting Research, pp. 321-342, v.36, Autumn 1998.

May, P.J. and Burby, R.J., "Coercive Versus Cooperative Policies: Comparing Intergovernmental Mandate Performance," Journal of Policy Analysis and Management, v.15, pp. 171-201, Spring 1996.

Mirrlees, J.A., "Information and Incentives: The Economics of Carrots and Sticks," The Economic Journal, pp. 1311-1329, September 1997.

Myers, Jr, S.L. and Chan, T., "Who Benefits from Minority Business Set-Asides? The Case of New Jersey," Journal of Policy Analysis and Management, v.15, pp. 202-226, Spring 1996.

Nechyba, T.J., "Local Property and State Income Taxes: The Role of Interjurisdictional Competition and Collusion," Journal of Political Economy, pp. 351-384, April 1997.

Parvin, R.D. and Koven, S.G., "Limits on Economic Development Policy: State-supported Gambling in Iowa," Policy Studies Review, pp. 431-442, Autumn/Winter 1995/1996.

Sato, K., "Economic Development and Financial Deepening," The Japanese Economy, v. 25, pp. 3-35, January-February 1997.

Teresawa, K.L. and Gates, W.R., "Relationships Between Government Size and Economic Growth: Japan's Government Reforms and Evidence from OECD," International Public Management Journal, pp. 1998.

Tsai, D.H. and Norsworthy, J.R., "Measuring the Effects of Macroeconomic Policy in Industry Economic Models: Toward Assessment of Industrial Policy," The Journal of Policy Modeling, pp. 289-334, June 1996.

Government Documents:

Iowa Department of Economic Development, "Community Economic Betterment Account (CEBA) Annual Reports," 1986-1998.

Iowa Department of Management, "Building Tomorrow Today: Guidelines for State Agency Strategic Planning," 1997.

Iowa Department of Revenue and Finance, "Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 1998," 1998.

Iowa General Assembly, "Legislative Guide to the General Assembly," Prepared by the Iowa General Assembly, December 1998.

Lutz, G.M., Losch, M.E. and Padgitt, S., "1997 CHI Poll: Iowans Ratings of Characteristics for State Government," December 1997.

United States General Accounting Office, "The Results Act: Observations on Commerce's June 1997 Draft Strategic Plan," 15 July 1997.

United States General Accounting Office, "Results Act: Observations on the Small Business Administration's Fiscal Year 1999 Annual Performance Plan," 28 May 1998.

Websites:

fisher.lib.virgina.edu.reis/

www.iowaccess.org

www.silo.lib.ia.us/

www.state.ia.us/government/ided/index.html

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