Measuring Impact in Practice

Reflections and Recommendations from Coastal Enterprises, Inc.'s Experience

February 2006
# TABLE of CONTENTS

ACKNOWLEDGEMENT ......................................................................................... iv

I. SUMMARY AND RECOMMENDATIONS .............................................................. 1

II. INTRODUCTION .............................................................................................. 9

III. WHAT CEI MEASURES AND WHY ................................................................. 10
    Defining and Measuring Impact ................................................................. 10
    Determining What to Measure ................................................................. 11
    Consistent and Reliable Measures ......................................................... 13
    Qualitative Data ......................................................................................... 17
    Long-term Systemic Impacts .................................................................. 17
        Community and Regional Impacts .................................................... 17
        Quality of Life Impacts .................................................................. 18
        Sector Impacts ................................................................................ 18
        Institutional Impacts ....................................................................... 19
            Demonstrating New Markets ....................................................... 20
            Policy Initiatives ..................................................................... 21
            Achieving Scale ....................................................................... 21
    Internal or External Studies .................................................................... 22

IV. EXTERNAL DEMANDS FOR MEASUREMENT .............................................. 22
    Standardized Measures ........................................................................ 22
    Reporting Requirements ...................................................................... 23
    Politicization of Measurement .............................................................. 23

V. EVOLUTION OF CEI’S MEASUREMENT SYSTEMS ...................................... 25
    The Social Information System (SIS) .................................................... 25
        Inconsistent Data Definitions ......................................................... 25
        Misinterpretation of Data .............................................................. 25
        Resistance to Change ..................................................................... 26
TABLE of CONTENTS

Improved Coordination of Data Systems and Reporting ........................................... 26
Confidentiality and Disclosure of Data ................................................................. 27
Feedback of Results ................................................................. 27
Organizational 3E Metrics ................................................................. 28
Capacity and Resources ................................................................. 29

VI. MEASUREMENT OF CEI PROGRAMS ................................................................. 30
Loan Programs ............................................................................. 30
  Background and Assumptions ......................................................... 30
  Measurement Studies ................................................................. 31
    Return on Taxpayer and Charitable Investment ........................................... 31
    Studies of Loan Portfolio Outcomes ....................................................... 32
Workforce Development Programs ................................................................. 34
  Background and Assumptions ......................................................... 34
  Measurement Studies ................................................................. 34
    Program Evaluations ................................................................. 35
    Low-Income Longitudinal Study .............................................................. 35
    Internal Evaluation of PACT Collaborative Project .................................. 37
Affordable Housing Programs ................................................................. 38
  Background and Assumptions ......................................................... 38
  Measurement Studies ................................................................. 39
  Study of Lease-Purchase Program .............................................................. 40
  Quality-of-Life Outcome Survey .............................................................. 40

VII. CONCLUSION ....................................................................................... 40

TABLES
1. CEI Studies, Findings and Lessons ................................................................. 5
2. Examples of Different Approaches to Community Development Outcome Measures ................................................................. 14
### FIGURES

1. Selection of Measures .......................... 12
2. Feedback Loop .................................. 28

### APPENDICES

1: Measuring Job Outcomes for Low-Income Individuals .................. 42
2: Organizational 3E Metrics (Draft) .................................. 44
3: External Surveys Required of CEI .................................. 45

### REFERENCES .................................................. 46
This paper builds on an ongoing dialogue among practitioners, trade groups, funders and academics about how to measure impact in the community development field. We particularly benefited from Rob Hollister and John Caskey's work on measuring impact in community development finance organizations, and from participation in the Community Development Venture Capital Association’s Return on Investment Project in 2004. We thank CEI staff Elaine Sederlund, David Bennett and Tracie Pooley for providing information for the paper, as well as several people who gave us useful feedback on early drafts: Ron Phillips, Lisa Page, Rob Hollister, Garrett Martin and John Weiler. We are most grateful to the F.B. Heron Foundation for their financial support and to John Weiler at Heron for his encouragement to write the paper.
I. SUMMARY and RECOMMENDATIONS

Coastal Enterprises Inc. (CEI) systematically started measuring and monitoring its program outcomes in the early 1990s in order to provide funders, policymakers and staff with a better understanding of the difference it was making in achieving its mission to help create economically and environmentally healthy communities in which all people, especially those with low incomes, can reach their full potential. CEI's most in-depth measurement work has been in its small business financing, workforce development, and affordable housing programs. (See table 1 that summarizes various CEI studies, key findings and lessons.) This paper reflects CEI's experience and learning about measurement over the last 12 years from its own experimentation and from the community development industry. It highlights the trends and challenges that CEI and the industry face in developing and implementing quality measurement systems, both for internal strategic planning and for external advocacy, marketing and policy development. CEI's approach to these issues and recommendations are summarized below.

ASSESSING IMPACT VERSUS MONITORING OUTCOMES

Social impact is the bottom line of the community development industry. For CEI, impact means “an outcome that would not happen but for CEI's intervention.” Over the years, CEI realized that it was unlikely it could “prove” its impact since rigorous random assignment studies with control groups that are used to determine causal relationships to program outcomes were infeasible other than in exceptional circumstances. In reality, CEI “monitors outcomes” which occur after its program interventions. This enables CEI to look for anomalies and to question trends. Although rigorous evaluation methods are largely unattainable, CEI has searched for indicators and evidence that describe its impact. The process of inquiry, in itself, is valuable.

Recommendations:

- It is essential to demonstrate impact, even if imperfectly, using a variety of quantitative and qualitative methods.
- Existing research studies should be used to demonstrate how findings elsewhere may be applicable to local settings.
- Academics should be encouraged to do more in-depth studies of programs and institutions in the community development industry.
- When appropriate and financially viable, random assignment studies should be done to confer the highest level of proof of program impact.

DETERMINING WHAT TO MEASURE

CEI selects measures based on (1) outcomes that will result directly from its program assumptions and interventions (i.e., a “theory of change” approach), (2) external demands for measurement and evaluation from funders, trade organizations and government, (3) data that convey CEI's story and impact for advocacy purposes, and (4) its capacity and available resources.
Recommendations:

- Data and measures ideally come out of an organization’s “theory of change” that articulates how a program makes a difference and what outcomes are anticipated.

- The primary focus should be on measuring direct program outcomes rather than indirect community outcomes, especially if work is dispersed geographically.

- If there is sufficient concentration of activity, it may be possible to claim an indirect outcome of the program at the community level, such as the change in the value of housing in a block or neighborhood.

- Studies that measure a return on public and/or charitable investment through a cost/benefit analysis are vulnerable to the assumptions used in selecting relevant costs and benefits and determining how much of the benefit a program can claim. These studies need to be compared to the opportunity cost of investing the program dollars for alternative purposes. Comprehensive studies are expensive, they do not prove impact, and they are not necessarily the best value for internal learning or advocacy purposes.

MEASURING LOW-INCOME POPULATIONS

Consistent definitions of measures across the industry and within CEI are always a challenge, as is the ability to collect the necessary data. One area that deserves attention is how to define and measure low-income populations, particularly people employed in portfolio companies. This is a key measure for CEI and many other rural community development finance institutions that target low-income populations for federal grants. Eighty percent of median family income is the standard the Community Development Finance Institution (CDFI) Fund uses. However, there is currently no consistency across the field in what data should be collected to measure low-income status (e.g. self-reported income, entry wages as a proxy for low income, or objective earnings records from state unemployment insurance data bases). Tracking low-income individuals over time to determine long-term outcomes is also very difficult and costly. Follow-up surveys require updating contact information on a six-month basis and paying for interviews.

Recommendations:

- More discussion among trade groups, funders and development organizations is needed to see whether a common method of measuring low-income populations is possible or desirable.

- It may be possible to sample individuals, but it would still require updating contact information for all participants frequently to insure that a sample can be reached. Unemployment insurance (U.I.) wage records are a less expensive data sources, but require birth dates and social security numbers, and cooperation from the state Department of Labor.

Institutional Impacts

The most promising and possibly the most difficult area to assess or even describe impact is the long-term role of the CDFI institution in the financial industry and in the community. Impact must be looked at over time in the whole portfolio rather than in a specific deal. CEI is now look-
ing at studies that would document more systemic impacts from its work in specific sectors such as farming, fishing, forestry and child care where it has targeted initiatives; in communities with a concentration of CEI programs; and in the financing sector where CEI has played an important role over the years in increasing conventional lending in riskier markets.

Recommendations:

• Use a combination of quantitative and qualitative methods to describe institutional impact over time.

• Create more dialogue nationally among trade organizations to develop and study the industry’s theory of institutional impact.

EFFECTIVE MEASUREMENT SYSTEMS

CEI has invested heavily in its Social Information System, which captures relevant data across the organization for reporting and internal feedback. Over the years, CEI’s systems developed bottom up from the needs of specific departments and programs. As a result, it has had to align these decentralized data bases so there are consistent definitions, interpretation and reporting of data. More centralized coordination also brings resistance to change. Departments have a strong interest in controlling their own data and maintaining existing systems. Individuals who develop a sense of ownership of the data and rely on specific systems for reporting are often reluctant to revise them because of how data will reflect on their performance both within the organization and with funders.

Recommendations:

• Attention has to be paid to both technical and social dimensions of designing and implementing measurement systems.

• Consistent definitions of measures must be codified and employees trained to create and interpret the measures.

INTERNAL FEEDBACK LOOP

Time and resources invested in a feedback loop are essential if the information generated through assessments is to be used effectively. CEI’s best example of this process was in its workforce development programs. The Low-Income Longitudinal Study, funded by the Ford Foundation and the CDFI Fund, led CEI to examine the underlying assumptions of its role in providing low-income individuals access to job opportunities in its loan portfolio. The study resulted in more focus on barriers to job retention and in designing programs that meet the needs that workers have in addition to a job opportunity, such as job coaching (for the hardest to employ), child care and targeted training.
Recommendations:

- Organizational commitment at the top is essential to create an ongoing measurement system where data collection and analysis are an integral part of strategic planning.

- Organizational culture must support internal critiques, questioning and learning to develop better products and approaches. It helps to designate specific staff or a department to play the role of internal evaluator and to coordinate systems.

- Required program evaluations are a good opportunity to increase program knowledge. It is worth putting in extra time to decipher trends and anomalies that appear in the data and to engage staff in reflecting on the program and its direction. Periodic management letters during the evaluation, either by an internal or external evaluator, can bring issues to the attention of program staff in a timely manner.

EXTERNAL USE OF DATA

There is an inherent tension between collecting and using data for internal purposes versus using it effectively for external marketing, advocacy and policy. Trade groups play a significant role in this effort by standardizing a core set of measures in order to compare results across institutions, as well as promote the institutions to wider markets. These processes require significant investment of time, along with a willingness to conform to the standard. The jury is still out on what the effect will be, particularly for attracting more private capital to CDFIs.

Recommendation:

- Practitioners need to have a voice in selecting appropriate quantitative measures and qualitative data to convey impact in industry-wide reports.

Capacity and Resources

A major challenge is how to cover the costs of measurement systems. Measurement is the cost of doing business, but community development is one business that does not cover full operating costs. The spread on loans does not fully cover the social data collection, nor do program budgets. Ongoing subsidies are needed.

Recommendations:

Given limited resources, practitioners must:

- select measures and studies that are the most important for internal learning and advocacy;
- continuously improve the efficiencies of data systems;
- use existing studies when available to supplement measurement and evaluation work;
- educate funders (and each other) about what is realistic to accomplish with available resources.
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<th>STUDY</th>
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<th>KEY FINDINGS</th>
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<tr>
<td>Evaluating Social and Economic Effects of Small Business Development Assistance Josephine LaPlante, Muskie School of Public Service, University of Southern Maine</td>
<td>1996</td>
<td>Pre-and post-study of SMEs’ and Microenterprises that received loans from CEI from 1983 to 1993. Cost/benefit study of Return on Taxes and Charitable Investment (ROTCHI) in CEI firms.</td>
<td>The average job created in CEI-financed companies paid $9.30 per hour with health benefits. Microenterprises were an important employment alternative that offers job flexibility and quality of work life for entrepreneurs in rural areas. Under the most conservative assumptions, CEI’s business and workforce programs had a positive net return on investment of 14 to 1.</td>
<td>Different surveys are needed for SMEs than for microenterprises to reflect employment and self-employment goals. A limited group of key metrics of SMEs and microenterprises are valuable for ongoing monitoring and assessment of social performance of loan portfolio. ROTCHI is not a useful measure for internal learning or advocacy, unless there are standardized assumptions for estimating and comparing costs and benefits across the industry.</td>
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<tr>
<td>Biennial and Annual Impact Studies of CEI’s Loan Portfolio CEI R&amp;D Staff</td>
<td>1996 1998 2000 2002 2003 2004 (data collected)</td>
<td>Pre-and post-study of job creation and retention, job quality, taxes and location of markets in SMEs and microenterprises active in CEI’s loan portfolio.</td>
<td>The percentage of job growth in SME firms since loan closing ranged from a high of 62.6% in 1998 to 9.6% in 2002. SMEs continue to create better quality jobs than micros, although micros produce a large proportion of household income for owners. The percentage of SME firms that provide health care has increased.</td>
<td>Surveys became shorter over time and metrics were simplified in order to get a larger response rate. Return rates are much higher when loan staff actively monitor data requests. Tax data are difficult to collect and are not uniformly reported in different types of firms. Different firms respond from year to year, so that comparisons of results over time represent changes in the portfolio rather than yearly changes in individual firms.</td>
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\(^1\)Small and Medium Size Business (SME)
### TABLE 1: CEI STUDIES, FINDINGS AND LESSONS

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<td><strong>FINANCE AND BUSINESS ASSISTANCE PROGRAMS</strong></td>
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<td>Sustainable Fisheries Project Impact Report</td>
<td>1999</td>
<td>Measured CEI’s fisheries portfolio according to economic, equity and environmental measures.</td>
<td>Every dollar of investment in the fisheries portfolio leveraged an additional $2.30 external investment. The greatest job impact was in processing and infrastructure loans. People who were low-income and disabled accessed about half of the jobs created.</td>
<td>Economic and social measures were consistent with measures in CEI’s loan portfolio studies. Environmental measures were largely process measures or indicators of sustainable communities, not outcome measures.</td>
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<td><strong>WORKFORCE DEVELOPMENT PROGRAMS</strong></td>
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<td>Case Study of Soleras</td>
<td>1995</td>
<td>Best Practice Case Study of a CEI ETAG company that hired low-income individuals.</td>
<td>The low-income individuals hired performed as well as employees they would have otherwise hired; the ETAG did not inhibit company efficiency.</td>
<td>Successful ETAGs require a commitment and an openness of management to targeted employment, as well as the type of jobs that entry-level workers can learn on the job.</td>
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<tr>
<td>Longitudinal Study of Low-Income Individuals</td>
<td>2004</td>
<td>Pre-and post-study of employment and asset outcomes of low-income individuals employed in CEI-financed, SME firms that participated in CEI’s ETAG over an 18-month period. Attempted to contract a comparison group from state unemployment insurance records.</td>
<td>Survey results indicated a growth in median personal and household income, homeownership rates, health care coverage, and banking accounts for respondents, but the results were likely better than the population as a whole. Over one-third of respondents who left the CEI job took a job that was not as good in terms of wages, benefits and a number of other job quality indicators. Of the people who left the CEI job and took a lower-wage job, almost half reported leaving the CEI job voluntarily. Employees who left voluntarily reported they left for a variety of reasons, internal and external to the workplace.</td>
<td>A good entry-level job opportunity is only one of many factors necessary for job retention or progression to a better job. Many factors on the job, as well as life events, affect whether low-income individuals retain a job. A control group is needed to understand the true impact of the program and interpret the meaning of the results.</td>
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*ETAGS are Employment Training Agreements, described in Workforce Development Programs in Section V.*
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<td>Longitudinal Study of Low-Income Individuals (cont'd)</td>
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<td>The study did not have an adequate comparison group and could not determine whether the results were better or worse than what would have happened without CEI's workforce programs.</td>
<td>It is difficult to construct comparison groups from earnings data gleaned from unemployment insurance records in order to determine what would have happened in absence of CEI's programs. The data have few variables for drawing a matched comparison group.</td>
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<tr>
<td>Low-Income Longitudinal Study: Firm Study Report</td>
<td>2002</td>
<td>Interviews with 18 selected loan portfolio businesses that signed an ETAG with CEI.</td>
<td>No firm felt the ETAG process was too onerous. CEI's greatest success stories for accessing jobs for low-income individuals were in firms that (1) did not require high skilled workers, (2) had not been hiring at the bottom of the labor market, (3) had an employer committed to making the ETAG work, and (4) had slack in their labor market. Although many firms reported that their perception of low-income hires had not changed greatly, the ETAG had a significant effect upon the firms' hiring practices.</td>
<td>The study corroborated past case studies and experiences that CEI staff had working with ETAG companies.</td>
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<td>&quot;Meeting Them Where They are Are –The Opportunities and Challenges of a Unique Social Enterprise&quot; A Case Study of Faithworks</td>
<td>2001</td>
<td>Case Study</td>
<td>The pressures to survive as a business are often pulling against the social mission. Faithworks could no longer allow the same degree of flexible employment for some of the &quot;hardest to serve&quot; populations and still perform as a business.</td>
<td>The study illuminates the issues and developmental challenges facing this social enterprise.</td>
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## TABLE 1: CEI STUDIES, FINDINGS AND LESSONS

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<td><strong>WORKFORCE DEVELOPMENT PROGRAMS</strong></td>
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<td>Evaluation of WERC (Work, Education, Resources and Community) First Collaborative Initiative for Kellogg Foundation</td>
<td>2000</td>
<td>Pre-and post-study of employment and investment outcomes in a number of communities that involved collaborative partnerships. Qualitative study that analyzed lessons about the collaborative process.</td>
<td>Project met goal of creating jobs for low-income individuals Because of the strong economy at the time, companies were desperate for workers, and the unemployed low-income population placed in jobs were those with multiple barriers to employment who needed intensive support. An unintended consequence was that CEI staff provided human resource services almost full-time in key firms.</td>
<td>In tight labor markets, CEI needs to assess whether human resource services to large companies should be subsidized or whether companies can pay for services. Collaboratives are labor intensive and require leadership and attention to detail. Successful collaboratives need tangible goals and outcomes in order to sustain participant interest.</td>
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<td>Evaluation of PACT (Progressive Alliance for Careers and Training) Project</td>
<td>2004</td>
<td>Pre-and post-study of results of three-year U.S. Department of Labor grant for a collaborative approach to workforce and economic development in two Maine counties.</td>
<td>Training and employment goals for displaced workers were met and were exceeded for incumbent workers. Collaborative processes were successful, but during the grant period, there was limited evidence that the collaboratives or training programs could sustain themselves without grant support.</td>
<td>Long-term institutional changes resulting from a project usually take a longer time to evaluate than the grant period. Internal evaluators face a tension in how to provide program staff with useful feedback to improve the project and how to present any shortcomings for public reports.</td>
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<td><strong>HOUSING</strong></td>
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<td>A Study of Coastal Enterprises, Inc.’s Lease-Purchase Housing Program</td>
<td>2002</td>
<td>Survey of Residents to assess physical condition of home, affordability, proximity to employment and services, previous living situations, and life changes.</td>
<td>Program served target population. Residents gave the program high marks for meeting their housing priorities and leading to other changes in their lives. Only 9 out of 41 participants successfully purchased a home at the time of the study, and over two-thirds were beyond the program’s two-year lease period.</td>
<td>Only a small band of low-income individuals who qualify for the program can actually save the necessary down payment and make the transition to homeownership. Better screening and counseling are needed to identify and prepare those most likely to succeed in homeownership.</td>
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<td>Quality of Life Outcome Survey</td>
<td>2004</td>
<td>Attitudinal survey of residents in CEI housing projects.</td>
<td>Residents indicated positive outcomes in their lives beyond their satisfaction with housing.</td>
<td>The survey tests subjective responses. A more powerful indicator of indirect housing outcomes would be to document behavioral changes that occur after residents move into affordable housing. It is difficult for program staff to implement consistent surveys over time.</td>
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II. INTRODUCTION

Coastal Enterprises, Inc. (CEI), founded in Maine in 1977, has grown to be one of the country’s leading Community Development Corporations (CDCs) and Community Development Finance Institutions (CDFIs). In the early 1990s CEI systematically started measuring its program outcomes and its return on investment in order to provide funders, policymakers and staff with a better understanding of how it was achieving its goals and mission.

CEI recognized early that social impact measurement would be a growing issue for its field. Social impact is why community development organizations exist and should be the first bottom line of any CDC or CDFI. As CEI delved deeper into the issues of measuring impact, it realized how difficult it would be to prove its impact. Nevertheless, it searched for indicators that describe its impact. The process of inquiry in itself was valuable in clarifying its goals and strategies.

CEI’s priorities for measurement and evaluation result from how it thinks it accomplishes its mission to help create economically and environmentally healthy communities in which all people, especially those with low incomes, can reach their full potential. CEI develops job-creating natural resource-based and small business ventures in primarily rural regions of Maine but is now working in Northern New England and other states on specific investments. The key approaches to achieve its goals include the following:

- debt and equity financing for small businesses;
- business technical assistance;
- affordable housing development;
- targeted job creation for low-income individuals and welfare recipients;
- sector development (e.g., fisheries, farms, forestry, child care);
- policy and research initiatives that strengthen and direct its activities.

CEI’s mission has evolved over time to embrace larger sustainable development goals, and thus requires measures for environmental impact as well as the more conventional economic and equity impacts that the CDC/CDFI field has traditionally claimed.

Most of CEI’s in-depth assessment work has focused on its role in financing programs to support small business development, targeted job creation and affordable housing rather than in business technical assistance. Key outcomes focus on the ability for low- and moderate-income individuals to access jobs or affordable housing as a result of CEI’s programs. Business success outcomes are also critical in order to provide ongoing quality job opportunities.

This paper reflects CEI’s learning over the last 12 years and its attempt to navigate the complexity

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3CEI has a 15-member, community-based board of directors, 90 employees, and currently $246 million of assets under management. CEI has financed over 1,500 small businesses, natural resources enterprises, community facilities and housing projects with $187 million, leveraging another $634 million, for a total of $821 million in socially-targeted capital.

4Measuring business technical assistance outcomes is more difficult than measuring outcomes in its financing programs. CEI hypothesizes that its assistance helps business owners gain more knowledge that informs their decisions and business practices. The challenge is delineating how CEI contributes to any changes in behavior. A positive outcome might be that a would-be business owner decides not to start a business.
of measurement and impact analysis, as well as the progress the community economic development industry has made to achieve greater standardization of metrics and methods. The paper is organized according to what CEI measures and why, external demands for measurement, evolution of CEI’s measurement systems, measurement of CEI’s programs, and conclusion.

III. WHAT CEI MEASURES AND WHY

The methodology of impact measurement for the community development and community development finance industry (called “the industry” in this paper) is still under development. There has been discussion over a number of years concerning what is impact and how to measure it, what measures are appropriate for the industry and individual organizations, how to collect consistent and reliable data, and who should undertake the work. CEI’s approach to these issues, discussed below, has evolved over time.

DEFINING AND MEASURING IMPACT

The definition of “impact” varies throughout the industry. Some interpret impact as long-term changes for individuals or communities that occur after a program is implemented, and others relate impact to growth and a larger scale of operations. CEI uses a causal definition of impact: an outcome that would not happen but for CEI’s intervention. This definition is consistent with academic evaluators (Hollister 2004) and has been adopted by some of CEI’s peers.

In reality, it is very difficult to measure impact according to this definition. It requires a very high level of proof that programs actually caused an observed outcome. Evaluators establish what is called “a counterfactual” that can tell “what would have happened to that outcome measure had that activity not been taken” (Hollister, 2004, p. 7). The most acceptable scientific method to create a counterfactual is through a random assignment study that compares a population served by a community development organization to a similar population that does not receive the service. Such a study would analyze whether the outcomes differ for the two populations. Qualified participants are randomly assigned either to receive the program’s services or to a “control group” that does not receive these services. It is then possible to determine whether the program causes any difference in the outcomes between the two groups since participation in the program is the only variation between the two groups.

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5 Caskey and Hollister (2001a, 2001b) have written extensively on the status of the field and methodological issues.
6 For example, the Opportunities Finance Network (2004) uses this definition in its CDFI Assessment Rating System (CARS).
7 Ratliff et al, (2005, pps. 37-41) discuss the relationship between scale and impact.
8 The Community Development Venture Capital Association (CDVCA 2005) uses this definition.
This type of study is almost impossible to do, particularly for business financing programs. In such a case, there is usually an insufficient number of financing deals to generate a control group, and even if this were not an issue, CEI would be wary of jeopardizing its ongoing market and customer relationships for a study that assigns qualified customers to a control group that cannot receive CEI’s services. It is much easier to show impact in affordable housing programs. A randomized study is not needed to show that subsidized housing programs create housing that low- and moderate-income people could not afford but for the subsidy.

Other second-best methods for creating a counterfactual include constructing comparison groups of similar populations or communities using data sets of key identifying variables. CEI attempted this approach in its Low-Income Longitudinal Study, described below.

In reality, CEI “monitors outcomes,” meaning it collects baseline data and then reports changes in those data after its program or intervention occurs (Hollister, 2004). This documents what outcome occurred, but it cannot claim its program caused the outcome.

**DETERMINING WHAT TO MEASURE**

Ideally, the best way to select what to measure is first to state how specific programs and strategies carry out the organization’s mission in a “theory of change” approach (Weiss, 1995). In this process, it is important to hypothesize how programs have an impact even if impact cannot be proved. An organization or its programs can be thought of as a social experiment that has inputs, outputs and outcomes that can be measured along the way. The more distant the outcome is from the actual program intervention, the more difficult it is to measure it and claim it as a direct result of the program.

CEI’s priority is to choose a unit of analysis that it directly affects, such as a business, an employee or a house. Longer-term outcomes that may be plausible, such as an increase in community employment rates or an increase in neighborhood housing values, are further removed from immediate programs and interventions and are impossible to capture, unless the scale of the program is sufficient to actually make a difference in a neighborhood or community as discussed below. A thoughtful process in the beginning can discipline what outcomes are realistic to achieve, and whether data are easily available to measure them.

In reality, external requirements of funders and trade organizations, as well as internal capacity and resources, also determine what CEI measures, as discussed below. For example, the social bottom line for the CDFI fund, U.S. Department of Health and Human Services and many foundations (as well as CEI) is data demonstrating outcomes for low-income individuals or communities.

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9 Hollister (2004, p. 9) has outlined the difficulties of CDFIs using an experimental design methodology to study the impact of CDFIs on communities or firms. Although it may be more feasible to randomly assign firms to such a study, it would still require a large number of applicant firms to find a number of qualified applicants that exceeded the amount of capital a CDFI has available to lend. Many CDFIs do not have a sufficient deal flow to generate qualified borrowers, much less an excessive supply.

10 CEI has explored doing a random assignment study in its CEI Staffing Services Initiative (described below) where it may be easier to create a control group, assuming there are excess applicants for the program.

11 For a review of these methods, see Hollister (2004).
To be certified as a CDFI, a CDFI must demonstrate that 60 percent of its activities are directed towards low-income communities or populations.\textsuperscript{12} It is easy to document if investments serve low-income or distressed communities according to various federal program definitions for census tracts. However, in rural areas, there are far fewer census tracts that meet the low-income criteria. This is because the size of these tracts is large, and the overall income dilutes pockets of poverty in the tract. Instead, CEI and other rural CDFIs often choose to target low-income populations so that the individual is the unit of analysis for demonstrating low-income outcomes for affordable housing units or jobs.\textsuperscript{13}

Other social data points for the CDFI Fund are:

- jobs created and retained;
- business opportunities for minorities, women or low-income individuals;
- creation of affordable housing units;
- projected capacity of community facilities financed (e.g., health care or child care slots);
- square footage of commercial real estate developed.

These are generally the immediate outcomes that CEI measures. Beyond that, it attempts to measure the quality of jobs created in companies that it finances.

Other funding sources may require comprehensive “process” data on how the program operated, such as the number of loan applications received or loans made. When resources are tight, CEI provides what is necessary, not what is comprehensive. Figure 1 below summarizes the process for selecting measures.

\textsuperscript{12}The standard in previous years was more difficult; 60 percent of assets had to be directed to low-income goals.

\textsuperscript{13}Efforts are also underway to allow targeting of low-income individuals as well as low-income communities in the reauthorization of the New Markets Tax Credit Program.
Consistent and Reliable Measures

Even reliable outcome measures can be problematic. Consistent definitions of measures, as well as the ability to collect the necessary data, are challenges for CEI and the industry. CEI’s approach to collecting some of these measures is described below.

Documenting Low-Income Outcomes

A method for measuring low-income job outcomes has not been standardized by funders or trade organizations, but is an area that needs greater attention. (See Appendix 1 for more discussion.) It is relatively easy for CEI to collect income data from tenants or homebuyers in its affordable housing projects since it controls the development process and is in direct contact with them. It is much more difficult to collect reliable income data for people employed in portfolio companies. The companies usually do not know at the time of hire whether their employees are low income according to family income definitions.\(^\text{14}\) CEI asks employees to fill out a voluntary income certification form at the time a loan is made and for new employees, at the time of hire.

Defining a Job

Only full-time jobs, which are 35 hours per week or more, are counted.

Measuring Job Creation and Retention

CEI complies with CDFI and OFN requirements to measure net jobs at year end compared to the jobs in a firm at the time of loan closing. This number can be negative if there are more jobs lost than the number of jobs at the time a loan was made. Hollister and Caskey (2000) recommend measuring jobs created and jobs sustained separately. Jobs created are counted as zero or more; they never go to a negative number. Jobs sustained, however, can go below zero if there is job loss. CDVCA has adopted a metric that shows cumulative number of employment years per person in order to capture the benefits of job creation in a firm, even if jobs are eventually lost or the firm goes out of business.\(^\text{15}\) This requires tracking jobs longitudinally per company.

Defining Job Quality Measures

Measures include wages and salaries, wealth creation, benefits and training opportunities for full-time employees, and health benefits for part-time employees. These measures are internally driven to meet mission goals. Wages are benchmarked against the state’s definition of a livable wage, even though it is not a perfect comparison (see Section IV).

Tracking Individual Employees Over Time

Job status, employment, income and assets of individuals were tracked in CEI’s Low-Income Longitudinal Study through phone surveys and administrative data from Maine Department of Labor’s Unemployment insurance (U.I.) records, described in Section IV.

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\(^{14}\) Rob Hollister of Swarthmore College argues that CDFIs should use the individual and not the family as the unit of analysis in measuring low-income status since it is the individual that the CDFI affects through its financing products and various programs. It is much too difficult for CDFIs to determine family size and income, and arbitrary decisions are made. (Correspondence June 29, 2005.) However, CEI’s other funding sources, such as the U.S. Department of Health and Human Services, require family income data as a baseline.

\(^{15}\) Community development venture capital companies participating in CDVCA’s Return on Investment (ROI) Project adopted this cumulative measure (see CDVCA, 2005). While it is an effective measure for marketing and policy purposes, it gives only a partial picture of performance and could be misinterpreted if it stood alone.
Collecting Tax Data

CEI has collected tax data with difficulty from firms in order to show a public return on investment. Taxes are not uniformly reported across businesses with different corporate structures. Hollister (2004) has questioned whether taxes are an appropriate social outcome for a CDFI, whose mission is to create investments and job opportunities for low-income individuals and communities. Logically, he may be correct, but politically, tax data are useful in getting the attention of public policymakers.

Measuring Environmental Outcomes

CEI has begun measuring environmental outcomes in selective programs and is in the process of developing a set of organization-wide, 3E (equity, economic and environmental) metrics (see Appendix 2).

Table 2 summarizes the different industry approaches to these measures.

<table>
<thead>
<tr>
<th>OUTCOME MEASURES</th>
<th>PRO</th>
<th>CON</th>
<th>CEI PRACTICE</th>
<th>OTHERS</th>
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</thead>
<tbody>
<tr>
<td>Full-Time Equivalent Job (FTE)</td>
<td>Standardizes all full- and part-time employment and can be aggregated over time to show cumulative impacts of a fund’s investments.</td>
<td>Requires firm to estimate average hours of part-time employees.</td>
<td>CDVCA\textsuperscript{17} - 37.5/hours/week = FTE</td>
<td></td>
</tr>
<tr>
<td>Full-Time Job</td>
<td>Easier to collect and no calculation required.</td>
<td>Underestimates full job generation since part-time jobs are excluded.</td>
<td>x Full-time job = /\geq 35\text{ hrs/wk}</td>
<td>CDFI FUND\textsuperscript{18}, OFN\textsuperscript{19} Full-time Job =/\geq 35 hours</td>
</tr>
</tbody>
</table>

\textsuperscript{16}For example, sole proprietors and S-Corporations pay business income as part of their personal income. Thus, the information is not easily available and requires an additional calculation to isolate the tax contribution from the business.

\textsuperscript{17}Community Development Venture Capital Alliance (CDVCA)

\textsuperscript{18}Community Development Finance Institution (CDFI) Fund

\textsuperscript{19}Opportunities Finance Network (OFN), formerly National Community Capital Association
### TABLE 2: DIFFERENT APPROACHES TO COMMUNITY DEVELOPMENT OUTCOME MEASURES

<table>
<thead>
<tr>
<th>OUTCOME MEASURES</th>
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<th>CON</th>
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</thead>
<tbody>
<tr>
<td><strong>JOB CREATION</strong></td>
<td></td>
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<tr>
<td><strong>Net Jobs</strong>: Overall job change between fiscal years for a whole portfolio; can be a negative number.</td>
<td></td>
<td></td>
<td>x</td>
<td>OFN, CDFI, CDVA</td>
</tr>
<tr>
<td><strong>Jobs Maintained</strong>: Number of jobs in portfolio firms at loan closing.</td>
<td></td>
<td></td>
<td>x</td>
<td>OFN, CDFI</td>
</tr>
<tr>
<td><strong>Jobs Retained</strong>: Counts number of jobs at year-end compared to number of jobs when investment was made. Number is equal to or less than baseline.</td>
<td>Clear picture of job retention.</td>
<td>Time intensive if calculated per company; requires measuring change at the firm level.</td>
<td></td>
<td>ECD&lt;sup&gt;20&lt;/sup&gt;, CDVCA</td>
</tr>
<tr>
<td><strong>Jobs Created</strong>: Additional jobs at year-end compared to time of investment; The number is zero or above.</td>
<td>The metric is necessary to calculate number of jobs added per dollar invested.</td>
<td>Time intensive if done by firm; requires measuring change at the firm level.</td>
<td></td>
<td>ECD, CDVCA</td>
</tr>
<tr>
<td><strong>Cumulative Employment</strong>: Years of persons employed over time or years of FTEs employed.</td>
<td>Captures the benefit of a firm’s employment even if the firm loses jobs or goes out of business; number only goes up.</td>
<td>Requires measuring employment longitudinally at the firm level. The measure can be misinterpreted if it stands alone.</td>
<td></td>
<td>CDVCA</td>
</tr>
<tr>
<td><strong>Job Quality</strong>: e.g., wages, benefits, training and career opportunities.</td>
<td>Provides more information on what an employee gets from a job.</td>
<td>Detailed information requires more resources and may deter company response.</td>
<td>x</td>
<td>CDVCA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOW INCOME EMPLOYEE Standards Definitions</th>
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</thead>
<tbody>
<tr>
<td><strong>80% of Family Median Income</strong> By county or SMSA</td>
<td>Conforms with federal HUD guidelines.</td>
<td>Requires information on both family income and size.</td>
<td>x</td>
<td>CDFI, Ford Foundation.</td>
</tr>
<tr>
<td><strong>Poverty Guidelines by Family size</strong></td>
<td>Conforms with federal HHS guidelines.</td>
<td>Requires information on both family income and size.</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

<sup>20</sup>Enterprise Corporation of the Delta (ECD)
<table>
<thead>
<tr>
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<tr>
<td><strong>LOW INCOME EMPLOYEE</strong></td>
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<td></td>
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<tr>
<td>Standard Family Definitions</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Definition of &quot;Target Employee&quot;</td>
<td>Only requires information on the individual's income.</td>
<td>Does not comply with all federal grant requirements to demonstrate low income.</td>
<td>CDVCA - at or below 80% of area family median income.</td>
<td>Pacific Ventures - at or below livable wage determined by local studies.</td>
</tr>
<tr>
<td><strong>LOW INCOME EMPLOYEE</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Method of Income Verification</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Voluntary Certification:</td>
<td>Baseline family income data needed for federal grant compliance.</td>
<td>Subjective data that likely under-report low-income status; requires both income and family size. Time consuming to collect.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Self-reported data of household income prior to employment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary Levels:</td>
<td>Easy to collect.</td>
<td>Does not show low-income family status or income status prior to employment.</td>
<td>Pacific Ventures, CDVCA measure current income of individual only, not prior income or household income.</td>
<td></td>
</tr>
<tr>
<td>Proxy of low-income.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Insurance Records:</td>
<td>Objective income data available over time that show employment history.</td>
<td>Limited to those covered by unemployment insurance. Need to collect social security numbers and birth dates to access data. Need cooperation from state Department of Labor.</td>
<td>x For special study.</td>
<td></td>
</tr>
<tr>
<td>Earnings of individuals who are covered by unemployment insurance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TAX OUTCOMES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Measures:</td>
<td>Show public tax payback.</td>
<td>Difficulty collecting comparable information across different types of firms. Question whether it is an appropriate outcome measure of CDFIs.</td>
<td>x Difficulty collecting.</td>
<td>CDVCA Not required by CDFI or OFN.</td>
</tr>
<tr>
<td>Property, income, sales, payroll.</td>
<td></td>
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</thead>
<tbody>
<tr>
<td><strong>ENVIRONMENT OUTCOMES</strong></td>
<td></td>
<td></td>
<td>Shorebank Enterprises Pacific collects organizational-wide metrics, such as water use.</td>
<td>Sustainable Jobs Fund measures tons of materials recycled, companies with energy saving efforts, companies with green products or services. CDVCA measures companies with green products or services in its core survey.</td>
</tr>
<tr>
<td>Diverse Measures:</td>
<td>Provides broader measures of sustainable development.</td>
<td>Requires time and expertise to determine relevant measure for each type of business or sector. Not standardized across organizations.</td>
<td>Measure specific outcomes for different natural resource and finance programs. Organizational-wide metrics, such as energy use, have been drafted.</td>
<td></td>
</tr>
</tbody>
</table>

**Qualitative Data**

Recognizing the limited tools available to prove impact, CEI has supplemented quantitative measures with qualitative approaches. Interview data and focus groups are important methods of describing what would have happened to people or businesses but for CEI’s programs. These data usually rely on subjective accounts of the individuals involved, but methods can be used to document changes in behavior as a result of its work and to corroborate the story from different parties involved if there are sufficient time and resources to do so.

Focus groups collect data on specific research questions through discussions but are open-ended and allow flexibility in response. They generate themes and trends about the collective group as opposed to very detailed information on each participant. Individuals’ responses can be influenced by the group discussion. As a result, they require a different kind of subjective analysis to make sense of what was said in the groups (see Morgan 1998, 29-33).

There is always a tendency to focus on anecdotes rather than on aggregate trends or outcomes, but if qualitative methods are combined with quantitative outcomes, they provide a more comprehensive picture of program outcomes, particularly for advocacy and policy purposes. Qualitative methods also help in understanding whether strategic investments have resulted in wider changes in a sector or a community. Qualitative data may not definitively measure impact, but they can point in the direction of impact or further understanding of how impact is achieved.
**Long-term Systemic Impacts**

One of the major questions for CEI and the industry is how to measure the long-term impact of the institution as a whole rather than simply focusing on individual program outcomes. With almost 30 years of experience, CEI now has opportunities to document long-term outcomes and describe its impact. CEI believes it has had an impact on communities and regions in Maine, on quality of life, on specific sectors that it has targeted for more intensive work, on public policy, and on financial institutions. However, these need to be selected carefully as discussed below.

**Community and Regional Impacts**

When the community becomes the unit of analysis for determining impact, a whole host of problems arises in showing relationships between the observed outcomes and practitioners’ interventions. In CEI’s case, its work is spread out in many communities and more recently across several states. It has little ability to identify a discernable impact at a community level unless it has a cluster of activity focused in a small geography, such as a neighborhood. Therefore, CEI usually does not attempt to measure a change in the community or region as a whole.

That said, there are a couple of examples of concentrated housing activity in the cities of Lewiston and Bangor that might warrant a closer look at community impacts, such as changes in housing values or visible neighborhood improvements. However, even in a small geographic area, it is not always easy to attribute changes to community development programs.

Other groups select a set of social indicators in targeted communities that measure changes in the community which an organization’s programs might influence. Indicators show whether progress is being made in the community, but they do not prove one way or another what role a CDFI or CDC has played in that outcome.

**Quality-of-Life Impacts**

Another recent effort by the SEACORP Collaborative, a group of CDCs and CDFIs who are Sustainable Excellence Awarders of the Fannie Mae Foundation, focuses on how to assign a monetary value to the quality of life benefits that CDCs and CDFIs help create. For example, one might assume that affordable housing development creates stable housing, which in turn leads to less job turnover and less school absenteeism. The avoided costs of these secondary outcomes would be given a dollar value. The method requires a series of assumptions in order to determine the scope and value of the benefits, and then attribute what proportion community development

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21 See Hollister and Hill (1995) for an extensive discussion of these pitfalls.

22 Rural CDFIs generally have more difficulty measuring geographic impacts because of the need to target a larger geographic area in order to find viable deals and opportunities.

23 In one study of wider community impacts, Esty (1995) assessed the impact of South Shore Bank’s banking and development work in the Hyde Park neighborhood in Chicago using a comparison group of a similar adjacent neighborhood outside the Bank’s area of loans. The difficulty of the methodology is what Hollister and Hill (1995) refer to as a “boundary” issue. The positive investment activity in Hyde Park that South Shore Bank stimulates can spill over and “contaminate” the outcomes in the adjacent communities that represent the comparison group.

24 The Success Measures Project developed an extensive list of both community indicators and outcome measures for housing and economic development programs, using a variety of data collection tools, many of which are resource intensive. See McAuley Institute (n.d.).
organizations can reasonably claim. The SEACorp Collaborative is responding to the challenge that other industries are using these methods to gain resources and power. Why should community developers not compete using a credible methodology that aggregates these impacts across the industry?

One approach would be for community organizations to elaborate on their assumptions of how they create broader impacts grounded in their experiences and then entice outside academics to do the necessary research to validate assumptions and develop models of community impact. Organizations can then use the research findings to explain the implications for longer-term quality-of-life impacts from their work, without having to do elaborate studies themselves. Otherwise, it will be easy to attack the model and the assumptions.

Academic studies, however, may not always provide unambiguous outcomes. For example, a random assignment study now underway at HUD is analyzing the benefits of housing voucher programs that provide access to higher income neighborhoods and opportunities. Early results indicate there have been positive health benefits, but not employment benefits, and that benefits vary by gender. Thus, many other factors affect outcomes besides the income level of the neighborhood.

**Sector Impacts**

CEI has undertaken several sector initiatives (e.g., fish, farms, child care) that involve multiple program interventions (e.g., finance, business technical assistance, policy development). The challenge here is to document both the direct outcomes of each programmatic intervention, as well as the secondary outcomes of building a critical mass and essential infrastructure in the industry over time that have had a wider impact on the industry than just the businesses CEI has directly assisted. For example, in the fisheries sector, CEI was a critical investor in the Portland Fish Auction, the first open display market in this country. The auction created a market forum that attracted buyers to Maine from the Northeast. Fishermen received higher prices for higher quality fish. The investment affected the sector as a whole. A full sector study would require qualitative data from various stakeholders involved as well as quantitative data on the sector to describe the longer-term outcomes that are reasonable to associate with its investments.

**Institutional Impacts**

Institutional change is the area that has the most promise for pointing to social impact over time. CEI believes its role particularly as a financial intermediary enables it to achieve legitimacy and financial power for the purpose of leveraging private sector capital, and influencing both public and private policy.

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25 Enterprise Corporation of the Delta (ECD) Even if these secondary impacts occurred, a true cost/benefit analysis would also assess the “opportunity cost” of the investment, i.e., whether the impacts are the same or better than what would occur if the same amount of resources were allocated to different kinds of community investments.

Demonstrating New Markets

One way CEI thinks it has had an institutional impact is by demonstrating new financial markets. It has shown Maine banks that there is a market for them in high risk loans in which CEI’s subordinated debt (sub-debt) acts as an equity cushion. Over the years, CEI has increased its leverage of bank financing and the number of banks willing to co-invest. The practice of working with sub-debt lenders has become institutionalized in banks as part of a normal way of doing business.

Now most of CEI’s loan referrals come from banks, but rural community banks have been more reticent to get into sub-debt deals. Over the past few years relationships have been developing in eastern Maine, one of the poorest areas in the state, where CEI is not only bringing banks into sub-debt deals, but also showing them how to leverage multiple sources of other government financing.

CEI has also demonstrated that women-owned and microenterprises can be viable markets. Since CEI started its women and microfinance programs in the mid-1980s, it has seen that banks are more willing to invest in these markets. Other factors were also significant in these trends. The Community Reinvestment Act played a critical role in banks’ community investments that contributed to their willingness to partner in deals with subordinated debt. Similarly, increased use of technology and credit scoring helped lower transaction costs in smaller micro deals, often for women-owned enterprises.

If CEI were to do a study of its impact on financial institutions, it would require interviews with key stakeholders who have the organizational memory to provide an accurate recall of what specific changes occurred in banking practices and where CEI may have influenced them. It would be more promising to demonstrate this in its recent efforts working with more remote, rural banks.

Policy Initiatives

A second way to influence institutions is through policy work. Much of CEI’s work has focused on increasing resources for the field and for itself in the process. Recently CEI has focused more on regulatory policies that affect private financial institutions, such as the Community Reinvestment Act (CRA), pay day lending and predatory lending. It now has more credibility and capacity to address these larger policy issues than it did in the past.

Measurement of policy initiatives would involve both quantitative and qualitative approaches. It is easy to measure how much money is created for a specific program that would not be there but for policy work. However, external evaluations are needed to show the economic outcomes of the specific programs over time. Even so, policy work is in conjunction with many other participants, so again, isolating CEI’s contribution can only be done qualitatively.

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27 Aspen Institute defines this “market development” or “demonstration effect” as achieving a significant (or at least demonstrable or noteworthy) market share in a target area that is big enough to influence a market and change the behavior of other players. See Ratcliffe et al (2005, p. 37).

28 The Community Reinvestment Act of 1977 encouraged more investment in distressed communities by conventional bank lenders, and more recently has required regulatory agencies to base a bank’s CRA rating on an evaluation of the bank’s performance in meeting the credit needs of the community, such as by providing financing to small businesses and farms.

29 CEI believes that the CRA is the stick that has motivated banks to partner with CEI in subordinated debt deals, and to invest in CEI. As for predatory and pay day lending, these practices strip equity from the very populations whom CEI is trying to assist through its employment and housing programs.
Similarly, documenting institutional changes that may occur from policy initiatives to influence regulations (rather than program allocations), requires a longer time frame, but it is possible to draw on both quantitative and qualitative analysis to document changes from these initiatives and the role CEI played. Much of this work is at an early stage and not yet at a point for evaluation.

**Achieving Scale**

CEI also believes that achieving a larger scale of operations and building a stronger financial institution will increase its impact on both private and public institutions. For example, CEI and a number of other CDFIs are now leveraging larger amounts of private sector capital than they have previously handled through the New Markets Tax Credit (NMTC) Program. Even though CEI is gaining institutional stature and interacting in new ways with big financial players such as GE Capital, its social impact will rest on what net social benefits can be attributed to its activity; it is not simply a matter of increased scale. Scale and investment dollars still require an adequate amount of subsidy to target investments to underserved markets and distressed communities.

**INTERNAL OR EXTERNAL EVALUATORS**

The choice to engage an external researcher or evaluator depends on the purpose of the study, requirements of funders and availability of resources. Ongoing monitoring of data for internal reporting and feedback to funders is usually done internally. External evaluators become more important for special performance studies or process evaluations of particular programs, especially if a program is controversial.

University evaluators are perceived to provide the greatest legitimacy since they are required to abide by academic standards of independent research. But it is important to balance independence with both the knowledge of evaluation methods and the knowledge of the community economic development field so that results of the data are interpreted competently, and the CDFI/CDC learns as much as possible from the study.

Internal studies have the advantage of intimate knowledge of the programs. An internal evaluator can also probe issues and ask tough questions, but in interpreting and reporting the results, that person confronts an inherent tension between learning and self-improvement goals of the organization versus marketing and advocacy goals.

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8For example, a key legislator involved in blocking a pay day lending bill in the Maine legislature in 2005 attributed his interest directly to CEI’s reputation and leadership role in the bill. The measurement challenge is to document his view and weigh it against other perceptions of what made a difference in the final outcome.

9The NMTC Program is federal tax credit program that provides a 39 percent tax credit over seven years to leverage $15 billion in private investment in distressed rural and urban regions. As of the end of 2005, CEI’s tax credit allocation resulted in almost $111 million of investment that leveraged almost $420 million additional capital for total financing of $531 million.

10A recent paper by the Aspen Institute has argued that there are not sufficient subsidies for the CDFI industry to achieve a larger scale unless more subsidy is generated internally through a mix of market investments that can cross-subsidize other projects with higher social impact (Ratliff et al, 2005).
IV. EXTERNAL DEMANDS FOR MEASUREMENT

External demands for measurement and impact evaluation have increased dramatically from foundations, trade groups and the government. Efforts have been made to coordinate these requests, but there is still substantial variation in what is requested and how it is reported.

STANDARDIZED MEASURES

Standardization is occurring both bottom up from the field and top down from funders. From early on, CDFI practitioners recognized there would be increased external demands for consistent financial and social outcome data and preferred to set the standards themselves before funders set the standards for them. Those discussions have focused on how to establish an efficient set of core measures on which everyone can agree, and yet allow flexibility for CDFIs to establish additional measures that make sense for their own organizations.

There has also been discussion of how measures are used to establish industry benchmarks, recognizing that there are different degrees of difficulty in producing outcomes in different CDFI markets and locations that should be acknowledged. The CDFI Data Project, consisting of the Ford and MacArthur Foundations, the CDFI Fund and the industry trade groups, consolidated reporting requirements for CDFIs so funders would ask for the same metrics. And the Aspen Institute has been assessing microenterprises with a standardized survey through Microtest.

Recently, industry trade organizations and ad hoc collaboratives within the industry have embarked on rating and standardization projects to increase the visibility of the industry and create consistent metrics and benchmarks that can attract more public and private investment. Among these, the Opportunities Finance Network (OFN) is testing the CDFI Assessment and Rating System (CARS); the Community Development Venture Alliance Association (CDVCA) launched its Return on Investment (ROI) Project with five community development venture capital companies; and SEACORP, mentioned previously, is also asking members to standardize data collection and develop a methodology to monetize quality-of-life impacts. There is a great deal of hope that standardized measures and assessment processes will help private investors and funders have greater confidence in evaluating CDFI/CDC performance and will eventually bring more resources to the industry. These industry groups have a challenge of developing consistent quantitative measures across diverse settings.

The industry also needs standards for generating qualitative data to tell its story better. CDVCA’s members in the ROI Project accepted that the industry will not be able to meet a definitive test of impact, but it can fill in the gaps through case studies and stories of successful firms and employees who advance in those firms, or through the secondary impacts of a venture investment, such as spin-off companies that agglomerate and build a new industry, or enhance the local entrepreneurial climate (CDVCA, 2005).
While the ultimate goal is to improve stature, performance and access to capital for CDFIs and CDCs, standardization requires a heavy upfront investment of time to develop and implement the system. The proliferation of so many efforts can conflict with each other (hence the idea behind the CDFI Data Project). Member organizations may also incur costs in changing or adding to existing measures that conform with the system.

**REPORTING REQUIREMENTS**

CEI (not counting its venture capital subsidiaries) responds to seven major surveys for various funders and trade organizations (see Appendix 3). In addition, it receives ad hoc requests every year, such as recent requests from the Ford Foundation or the CDFI Coalition. Such requests usually do not require as detailed information as in annual surveys and provide a good marketing opportunity for CEI. However, the requests are multiplying as each of its trade groups and funders is asking for data on a more frequent basis.

Despite efforts to coordinate data reporting requirements and improve the consistency of data required from year to year, there are still small differences between one request and another. Such differences can include asking for slightly different time periods, or wanting breakouts according to different standards of low income. Often, different organizations have varying standards as to what size loan is a micro-loan. Requests for information on low-income outcomes are fraught with inconsistency, since there has not been a frank discussion within the community development industry about how to determine low-income impact as discussed above.

While there are difficulties in the practical aspects of answering these different questions, CEI has a greater concern that the various standardized approaches fail to give an accurate picture of its work. For example, CEI must report on how many loans are made to finance housing development and the associated housing units for the CDFI Fund. However, housing finance often involves multiple loans to the same borrower. Questions asking for aggregate information often require CEI to decide at what point units are counted (initial financing), whether units are counted for each lending event, and other such details that may influence the ratios of units to dollars lent. Ideally, data integrity is maintained and double counting is avoided. Those administering the surveys should articulate a clear methodology, anticipate how to ask each question, and ask themselves, “If I ask this question, what will the organization omit in order to fit within my parameters?” Yet funders appear to be unaware of some of these issues. If they expect they will get different methodological approaches to data collection, then they should require that the method used be transparent.

**POLITICIZATION OF MEASUREMENT**

Despite all of the efforts in the industry to upgrade measurement systems, they appear to be less relevant to federal funding decisions. The Bush administration has instituted the Program Assessment Rating Tool (PART) administered by The Office of Management and Budget (OMB) in order to provide consistent evaluation of federal programs as part of the executive budget for-
mulation process.\textsuperscript{33} PART has been critiqued for its narrow focus on efficiency goals rather than the full legislative mandate of the program, which is usually more complex;\textsuperscript{34} ignoring reasons why programs may have operational problems, lack resources to implement evaluations, or have legal restrictions on collecting data (Radin 2005); and “disaggregating programs for the PART reviews that ignored the interdependency of programs by artificially isolating them from the larger contexts in which they operate” (General Accounting Office, 2004, p.7).

In fact, the administration’s program and budget decisions are not consistently based on the PART rating. In some cases, it will recommend shutting down a program if it is deemed to be ineffective or unable to demonstrate results, and in others, it will maintain or even increase funding.\textsuperscript{35}

For example, the CDFI Fund received a satisfactory grade on its PART review based on the metrics that grantees collect. However, the PART summary sheet states that the program is duplicative of other state programs and private investment.\textsuperscript{36} Based on duplication of effort, the administration proposed consolidating the Fund with other community development programs through the Strengthening of American Communities Act and reducing its FY06 funding to $7.9 million, which would only maintain the Fund’s administration of current programs, with no additional program funding. Congress pushed back on this legislation and reinstated CDFI funding to $55 million. Nonetheless, as long as PART exists, the industry needs to pay attention. The difficult question is deciding how much time to put into critiquing PART and other similar evaluation initiatives\textsuperscript{37} when, in fact, program and budget decisions have not been based on the results of the analysis.

To summarize, the external demands for measurement and data are escalating, as are the politics of how data and measurement are used. Attempts to standardize and coordinate data reporting have helped, but still the requests for reporting are mushrooming. A unified voice from the industry about appropriate and inappropriate measures is needed on an ongoing basis but requires significant investment of time and resources.

\textsuperscript{33}PART is an executive branch initiative rather than the bipartisan approach to management reform involving both Congress and the White House laid out in the Government Performance and Results Act (GPRA) in 1993. PART evaluates programs, whereas GPRA requires evaluation at the agency and departmental levels.

\textsuperscript{34}Programs often have multiple and conflicting goals that PART does not recognize. See Radin (2005).

\textsuperscript{35}According to OMB Watch, a nonprofit organization that reports on OMB’s activities, of the programs that have been reviewed, “close to 20 percent of programs receiving an ‘effective’ or ‘moderately effective’ PART score - the two highest ratings - were eliminated. Further, 46 percent of programs receiving the middle rating of ‘adequate’ were eliminated.” Others, such as the Substance Abuse Prevention and Treatment Block Grant, had the lowest possible rating of “ineffective” but were not cut. See Gary Bass and Adam Hughes “All PART of the Game”, March 25, 2005, at http://www.tompaine.com/print/all_of_the_game.php

\textsuperscript{36}See http://www.whitehouse.gov/omb/budget/fy2006/pma/treasury.pdf

\textsuperscript{37}The CDFI Fund designed a related measurement effort named PLUM (Performance, Leverage, Underwriting and Management), which it did not implement. The Opportunities Finance Network and various members, including CEI, put in a considerable amount of time understanding the implications of the system and critiquing it. Like PART, PLUM was purely quantitative and did not allow for any diversity of context, changing conditions among CDFIs, or metrics beyond the narrow focus of the system.
CEI’s measurement systems attempt to respond to the internal and external demands for data, given limited resources for maintaining these systems. This section looks at how the systems have evolved over time and some of the key challenges.

THE SOCIAL INFORMATION SYSTEM (SIS)

CEI’s Social Information System (SIS) was developed during the mid-1990s. The concept behind the system was a comprehensive database that would enable CEI to collect and analyze key social indicators and would provide accessible information to loan officers on loan funds available, loan and borrower characteristics, and employee characteristics. Currently, the system is in an ACCESS database and consists of: (1) employment data in CEI’s portfolio companies, (2) projected social characteristics of loans made, and (3) fund management data.

Nine additional systems have arisen from the needs of specific program areas and subsidiaries to provide reporting information. Although there have been substantial investments and improvements to the SIS system, the decentralized growth of measurement systems by department and program area has impeded progress on concise organization-wide measures and a comprehensive data system. There is a constant need to revise and review measures that are collected to ensure that data remain relevant, measures are consistent, and data are entered efficiently, yet at the same time balance diverse program and organizational needs.

Nonetheless, this decentralized approach for the most part worked until a few years ago when the CDFI Fund in particular required consistent, comprehensive data on the entire organization and not just the CDFI portfolio. CEI’s R&D Department is now charged with developing internal coordination and oversight of the data collection systems to get greater consistency and efficiency in data collection and reporting. Some of the issues involved in this effort are described below.

Inconsistent Data Definitions

As is true for the industry as a whole, at CEI, data collected are not always defined or classified consistently within or between departments. For example, data on jobs or company sectors are entered into CEI’s social information system from loan officers’ investment memos but are not checked regularly for consistency. Although efforts have been made over the last several years to create standard definitions (e.g., 35 hours equals a “full-time” job), the definitions have not been consistently implemented, partly due to staff turnover. CEI is now organizing ongoing training for staff collecting and handling of data.

Misinterpretation of Data

Existing data can easily be misinterpreted for reporting purposes, especially if multiple departments have access to the data bases. For example, the existing data base has many gaps due to underreporting from customers and therefore may not fully represent the programs’ outcomes. However, without knowing the response rate, staff might think the data were conclusive, when in reality the results need to be interpreted. Or there may be a misinterpretation of what data actually say.\(^{21}\)

\(^{21}\)For example, data are collected on how many people are hired in CEI-portfolio companies through its workforce programs but those data can be misinterpreted as jobs, which is an over count because of turnover.
The mistakes get reported and embedded into the organization’s history. Removing the data becomes increasingly difficult. Departments rely on some data sets to document their program history for proposal writing and reporting, even though they may have been flawed from the start. Concern arises over success in future proposals if data are changed or no longer collected.

**Resistance to Change**

Organizational change is often met with resistance, and CEI’s efforts to coordinate and streamline are no exception. Reexamining, critiquing and representing data are a difficult process since both programs and individuals often have a strong sense of ownership of the data and therefore feel defensive. The program inherently wants to survive, and the data need to show whether or not it is effective in attaining its goals and objectives. By maintaining control of the data, the program can determine how to present its data in the best possible light.

**IMPROVED COORDINATION OF DATA SYSTEMS AND REPORTING**

CEI has a data coordinating group that assesses data systems, measures and methods on an ongoing basis. Recent funding from the CDFI Fund is supporting this effort. The R&D Department is developing a social data dictionary, training for existing staff and a new staff orientation to improve usage and reporting. Staff are also working with different departments to create more connectivity between databases, accommodating the needs of funder requests and internal accountability. The CDFI Assessment Rating System (CARS) is also creating an incentive to improve coordination since CEI is rated on how well its systems perform.

Data collection from loan customers is also improving. CEI depends on portfolio firms to provide updated job creation and retention data as well as job quality information. In the past, CEI has written letters to businesses describing the importance of the data for continuing its programs and receiving funding. Now stronger covenants are in its loan documents, requiring that customers complete a baseline and annual social impact reports that are submitted with their financial statements. Failure to provide timely reports is a cause for default (although this sanction has not been used). Loan officers are responsible for following up with companies that do not comply.

The Loan Department has been apprehensive about requiring too much information that might deter a company from filling out a report. This is especially true for the smallest companies. However, the department is recognizing the need to meet the external demands for such information as well as the importance of the information for internal management. Already, these changes have resulted in a higher rate of return on annual impact studies of loan portfolio companies.

Collecting information on family income from employees in CEI-financed firms still remains a challenge. The employees are not CEI’s customers and do not have a relationship with CEI unless they have participated in a special CEI-sponsored job training program. CEI relies on companies to make the case to the employees to fill out a voluntary certification form of their household income so that it can report on its low-income impact. Even so, individuals are likely to underreport their low-income status.
Unlike other CDFIs, CEI must often document family income rather than individual income to meet funding requirements, particularly for federal programs at the U.S. Department of Health and Human Services that provide both program support and loan capital. In order to get a better response rate, it has reduced the data requested in the certification form, including the social security number. However, this decision will prevent CEI from doing more objective research in the future on employees’ earnings through the Maine Department of Labor’s Unemployment insurance (U.I.) data base. CEI has used this data base in the past, but had social security numbers in order to access these records.

**CONFIDENTIALITY AND DISCLOSURE OF DATA**

Even with eliminating social security numbers, CEI still must address confidentiality and disclosure issues concerning the voluntary certification from employees and other data that is collected. Access is already limited to sensitive data to protect confidentiality. CEI is discussing whether it needs to set up protocols to disclose to employees how information collected is used and require them to sign a release form to allow CEI to use their data in aggregated forms for reports. The release form, however, may deter more people from providing any personal information needed to validate low-income impact.

**FEEDBACK OF RESULTS**

Information and findings from data collected are reported to relevant departments, the manager’s group, board and staff. In the loan portfolio report, CEI looks consistently at key program outputs on an annual basis. Recently, the R&D staff have broken down findings by each loan officer’s portfolio and asked for their feedback on trends before writing the final report. However, there has not been a consistent schedule of presenting findings either at the staff or board level. When results have led to some questioning of basic program assumptions, the specific department has paid more attention to the report and its program assumptions and, in some cases, has pushed back, questioning the validity of the study method and results. The process has also led to changes in program design as demonstrated in the examples described below in Section V.

Required program evaluations are the best opportunity to provide feedback to program staff. Usually evaluations require “bean counting” of program outputs and some outcomes. It is worth putting in extra time to examine the trends and anomalies that appear in the data and engage staff to reflect on program purpose and direction. Periodic management letters either from external or internal evaluators during the evaluation can bring issues quickly to the attention of program staff for timely correction.

A second feedback loop for CEI’s measurement work is information and advocacy targeted to its external constituents, funders, policymakers and private investors. As discussed above, much of the effort to standardize metrics is to advocate for the industry by providing a unified picture of each organization and the industry as a whole. More attention is needed concerning how metrics and stories are used to enlist greater external support, especially in the media.
Organizational 3E Metrics

CEI has started to look at some common 3E metrics (economy, equity and environment) to serve as a regular benchmark on its organizational progress in meeting its overall mission and inform strategic planning (see Appendix 2). Shorebank Enterprise Pacific uses a select set of metrics like this to track their work and align all staff with organizational priorities by reporting on the metrics. Shorebank is smaller than CEI, and it is easier to select metrics that are relevant to the organization as a whole in a smaller organization. Nonetheless, a few common metrics can keep CEI focused on whether its work is aligned with its mission. For example, to ensure that it is serving low-income populations and communities, CEI is considering the following measures:

- percentage of CEI’s total assets applied to low-income populations;
- number of low-income individuals assisted;
- percentage of total assets applied to federally defined distressed regions such as Empowerment or Enterprise Zones, or the New Market Tax Credit census tracts;
- number of clients served in distressed regions.

See http://www.shpac.com/bins/site/templates/splash.asp. 3E metrics are listed under performance and mission measures.
These data are relatively easy to collect and can be monitored on a regular basis as a proxy for how resources are targeted. However, these are process measures rather than outcome measures. It would be preferable to monitor program outcomes, such as “increase in earnings” or “asset accumulation,” as a better indication of whether CEI is achieving its low-income mission, but the data needed to measure these are impossible to collect, given available resources.

Similarly, environmental measures need to be meaningful for the whole organization and efficient to manage. Organization-wide metrics, such as energy saved through conservation or alternative energy, are easier to aggregate but may miss the true impact of a particular environmental technology. Environmental outcomes vary according to the type of business or program in which CEI invests, putting even greater demand on staff to understand what data are relevant and how to collect it.  

CAPACITY AND RESOURCES

CEI spent over $300,000 per year (3.4 percent of its FY05 budget) utilizing approximately five “full-time equivalent” employees for ongoing data management and reporting requirements. This does not include staff time devoted to internal evaluations or special measurement studies, or data collection undertaken by program staff. With efforts to improve the efficiency of its systems, CEI hopes to reduce these costs. Even so, these expenses are not totally covered in the limited administrative costs assigned to program budgets nor in CEI’s spread on its loans.

Specific project grants may fund a program evaluation but do not usually cover the full cost of information systems to support the evaluation. It is not easy to raise external grant funds consistently to cover these routine costs, although the Heron Foundation has provided core support to CEI, which has been used for measurement, and the CDFI Fund has awarded CEI periodic grants to support design and analysis for new measurement systems and system upgrades. A major organizational issue is how to cover these costs, particularly if CEI wants to solicit new sources of social investors who will likely require both social and environmental outcome measures. Ideally, they should be factored into an overall overhead charge as a cost of doing business, but government and foundations are resistant to increase any overhead expenses.

To summarize, management information systems must reflect program and organizational data priorities, and staff must be trained to input, retrieve and interpret data consistently. The results then need to be fed back internally to improve programs and set strategic directions and for external marketing, advocacy and policy.

*For example, CEI has encouraged environmental audits of firms. To determine an outcome from the audit, it would need to know whether the audit led to changes in the firm’s behavior, such as using substitute materials or compact fluorescent light bulbs. This change must then be converted into environmental outcomes, such as toxic reduction or amount of energy conserved.*
V. MEASUREMENT OF CEI PROGRAMS

This section looks at how CEI has applied the measurement process to three specific program areas: sub-debt financing, workforce development, and housing. It describes program assumptions, specific measures used, and studies undertaken, as well as the learnings from the results. In some cases, CEI’s R&D Department has contracted with external researchers and overseen the research project; in other cases, R&D has undertaken internal evaluations.

LOAN PROGRAMS

Background and Assumptions

CEI hypothesizes that high-risk, subordinated debt financing programs are needed because conventional finance institutions fail to serve the full “market” of business and community financing demand. This is due to

- high transaction costs for very small loans, such as in micro-loans;
- high risk deals in which conventional lenders cannot recoup the cost through higher interest rates;
- imperfect information about entrepreneurs based on their normal practices of due diligence (whereas CEI has better access through its community networks and a willingness to incur higher transaction costs in due diligence).

In particular, subsidies for small business financing programs are justified because of social benefits of supporting small businesses: they create jobs, they help diversify local economies, and they are locally owned and controlled. Because owners and managers are rooted in their communities, they are more likely to give back to their communities through both financial and in-kind contributions.

In the case of small microenterprise loans (under $50,000), CEI does not assume that the goal of these firms is to grow and create jobs. Rather, they tend to supplement existing income of an individual or household (although some provide family support), respond to lifestyle needs and preference, or are a last resort for individuals, particularly in rural communities that do not have many job opportunities locally. Therefore, the most important outcome of a microenterprise is the self-employment opportunity for the entrepreneur.

The test for impact for CEI’s loan programs is that the deal would not happen but for its loan, or that it would not happen in the same way or under the same terms. Yet, this simple approach has some nuance. The need for gap financing changes according to the economic cycle and bank liq-
uity. In an upturn, conventional lenders are flush with money and are willing to take more risk in businesses that CEI would normally target. And in the recent upturn, interest rates were at an all-time low, so lenders were even more willing to do higher risk deals.

CEI is then faced with how to weather an upturn in order to survive as a financial institution. CEI must continue to invest, either by financing even riskier businesses and accepting greater losses, or partnering with banks to get them to diversify their risk (even if banks feel they can take on the whole deal). In practice, CEI does both.

In the latter case, there is no impact directly from the investment, although it often creates an opportunity for helping low-income individuals to access jobs created through these investments (discussed below). Also, there is likely to be a long-run institutional impact for keeping CEI in business when it is most needed in less robust markets.

**Measurement Studies**

**Return on Taxpayer and Charitable Investment**

CEI began measuring its financing programs through a comprehensive external study of its loan portfolio in 1993 (LaPlante 1996). That study collected outcome data from both active and inactive firms that CEI had financed from the beginning of its revolving loan program in 1983. It also analyzed the data in relation to economic trends and in comparison to other state-wide benchmarks. The study used three surveys for: small- and medium-sized enterprises (SMEs); microenterprises, since they had different characteristics and different outcomes than SMEs; and employees in selected companies looking at the quality of job provided from their perspective and also their personal demographic characteristics, income status, and use of transfer payments.

LaPlante did a cost/benefit study of CEI’s investment in these companies in order to come up with CEI’s return on taxpayer and charitable investment (ROTCHI). She compared the total costs of the programs and related CEI support programs, such as workforce development, with various monetized outcomes over time, including payroll, taxes paid by the companies and workers, transfer payments avoided, and secondary multiplier effects.

This was one of the first studies of its kind applied to a CDFI. While it has been critiqued methodologically (Hollister 2004, Hollister and Caskey 2000), it did launch CEI’s ongoing measurement efforts, created more evaluation literacy in CEI, contributed to the growing attention to measurement in the CDFI field, and inspired other work in measuring social return on investment.

CEI has not attempted to recreate the social return on investment methodology. LaPlante’s study showed positive returns on investments in CEI under even conservative assumptions, but outcomes were highly dependent on the series of assumptions needed to develop the cost/benefit models.

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41 A cost/benefit study of Kentucky Highlands preceded CEI’s study. See Tom Miller (1993) for a study of Kentucky Highlands and Bradshaw (n.d.) who undertook a public return on investment approach in California.
The results were not worth the expense to continue this exercise, particularly when the assumptions had not been standardized in the industry, and there was nothing that allowed CEI to compare its results to other CDFIs or to other economic development programs.

**Studies of Loan Portfolio Outcomes**

CEI institutionalized a set of basic measures from LaPlante’s study to monitor its loan portfolio over time. Since 1996, CEI took on biennial studies (now annual) of its SME and micro-loan portfolio companies, tracking jobs sustained or created from the initial loan investment, the quality of jobs (e.g., wages, benefits, training opportunities), leverage of additional financing, and location of markets. CEI started collecting more fine-tuned wage and salary data so that it could see how many full-time employees were at various pay levels rather than relying on average wage data that were collected in its initial study. It also attempted to collect ongoing financial and tax data, but the reporting of these data was spotty and inconsistent.\(^4\) Key outcomes have been compared over time for the portfolio although results are imperfect since the response rates have not been large enough to represent the portfolio as a whole.

The studies initially asked businesses whether they could have received financing without CEI, and, if so, would it be on the same terms. Similar questions had been asked in LaPlante’s study as a second-best method of determining impact. CEI stopped using the question because of its inherent subjectivity. Also many business owners did not have sufficient knowledge to answer the question. Banks often referred them to CEI right after they discussed a loan (not after a loan rejection), but the owner did not realize that the bank would not have done the deal unless CEI made a sub-debt loan.

The loan fund data have confirmed patterns that CEI suspected – SMES are better job generators than microenterprises (although the majority have modest job growth)\(^5\) – and provide higher quality jobs in terms of pay and benefits. Microenterprise owners varied widely in their income. The averages for owners’ draw or income that the owner received from the business were higher than the medians, indicating a small number of firms were pulling up the averages. Medians varied from $9,500 in 2000, $3,500 in 2002 and $14,500 in 2003. Since 1998, over 50 percent of micros reported that their income from self-employment accounts for over 50 percent of household income, indicating the importance of this source of income. However, the response rates from microenterprises were under 50 percent each year. It’s likely that respondents are doing better than the population of micro borrowers as a whole.

Selecting the appropriate benchmark for interpreting job quality data has been challenging. For SMEs, CEI looked at how wages paid compared to what income is needed to support a basic needs budget in Maine. LaPlante’s study of the 1993 portfolio showed that earnings of 74 percent

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\(^4\)As a result of the study, CEI participated in numerous panels and roundtables on measurement at trade organization or funders’meetings.

\(^5\)Jed Emerson, former Executive Director of the Roberts Enterprise Fund, told CEI staff in 2004 that the study helped inspire him to develop his social returns on investment (SROI) analysis for social ventures in the nonprofit sector. See Emerson, Wachowicz and Chun (1999).

\(^4\)Companies file their returns at different times and CEI’s loan department collects financial statements on a rolling basis as part of an annual loan review.

\(^4\)The median net job growth varied between 2 and 3 full-time employees except for 1996 when it was -3 full-time employees.
of respondents met or exceeded the estimated living wage based on data employees provided on specific expenditure questions. Subsequent studies compared earnings at the CEI job to statewide living wage thresholds calculated by outside organizations that showed a greater percentage of full-time employees in CEI-firms were below the threshold. However, these thresholds are calculated based on a basic needs budget that includes the cost of paying for health care.

Many employees in CEI-financed companies get some health care benefits covered. Coverage has varied from a high of 80 percent of firms offering access to a health care plan in 1993 to 62 percent in 2003. There is a higher percentage of employees with health care coverage across all firms than the percentage of companies that offer insurance. This is because larger businesses with more employees are more likely to offer insurance. However, the percentage of firms contributing to the plan has declined. In 2000, 90 percent of firms offering coverage contributed to the plan whereas in 2003, only 57 percent offered coverage.

Participating in the plan tells only part of the story. The conditions for participating, how much the company contributes to the plan, how many employees enroll, and how many have other forms of coverage, all determine the quality of the benefit to the employee. This level of detail increases the time and effort a company makes in filling out a survey and may decrease the response rate. Therefore, CEI is selective in the comprehensiveness of job quality data.

Looking more closely at the job characteristics, CEI felt they did indeed reflect its program goals and screening processes. CEI targets companies that have 50 to 75 percent of jobs that can provide opportunities for entry-level, low-income workers who often have few skills. Although entry-level wages for these jobs are routinely lower than a living wage, the majority of companies also contribute to an employee’s health care plan, which would bring the job closer to the living wage threshold. The real question is whether workers who have an initial opportunity through CEI’s financing programs can develop their skills and advance either in the company or in another job. CEI could not collect these data through a firm study; it required a study of the individual employees. Thus, CEI did a more in-depth Longitudinal Study of Low-Income Individuals employed in CEI’s portfolio companies, described below.

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46 In 2000, at least 44% of full-time employees in responding firms earned less than Maine’s livable wage of $20,792 that is calculated for a single parent with one dependent based on the Maine Growth Council’s standard of 185% of poverty (See Maine Development Foundation 2001). In 2002, the Maine Center for Economic Policy estimated a more accurate measure of a basic needs budget that required just under $14 per hour for a single parent and one dependent. In 2003, 67% of full-time employees in CEI’s reporting firms earned less than the annual livable wage of $28,995 based on MCEP’s 2002 estimates. See Pohlmann and St. John (2002). Robinson Hollister at Swarthmore College believes that “living wages” is a very flawed concept despite conscientious efforts to get down to county level estimates. In an e-mail in June 2005, he says “people make decisions about family, location, autos, durables, etc. and it is hard to find a pattern on which to define as ‘necessary for adequate living’. We struggled with these things when first developing the poverty lines in the 1960s.”

47 For example, 97% of employees in all firms surveyed had access to health care in 2000 and 1998 because the larger portfolio companies that offer access to health care plans have a greater number of employees.

48 Increasingly, small businesses in Maine, as in other parts of the country, are having difficulty paying for the escalating costs of health care plans. In October 2004, the State of Maine rolled out a new Dirigo Health Plan to provide access for firms with fewer than 50 employees. In subsequent studies CEI will survey portfolio firms to see if they are accessing the plan.
WORKFORCE DEVELOPMENT PROGRAMS

Background and Assumptions

CEI’s workforce development programs evolved from the perspective that low-income individuals lacked the skills and networks to access and retain quality jobs, and that the economic and workforce development systems were not connected in a way that matched unemployed people with job opportunities. CEI hypothesized that it could play a critical brokering role to help low-income individuals supported by the state’s employment and training systems access entry-level job opportunities in firms that CEI financed, based on the following assumptions:

- CEI could gain leverage with companies’ hiring practices through an Employment Training Agreement or ETAG. Portfolio firms sign the ETAG at the time of loan closing whereby they agree to use CEI as a first source for filling entry-level jobs created through their expansion.
- CEI then would help the company screen candidates from the state’s employment and training systems to provide companies with qualified candidates and help them access additional training resources and support services that help both employees and the company succeed.
- Companies would work in good faith to fulfill the terms of the ETAG.

Initially, CEI also assumed that it could provide low-income individuals with a better job opportunity than they could get elsewhere because it screened companies that it financed for a certain threshold of job quality, including a starting wage level that was above the minimum wage, health benefits, and opportunities for advancement. Because of a better job opportunity, low-income individuals would be more likely to stay in these jobs, earn better incomes, develop assets, become self-sufficient, and achieve a decent standard of living than they would if they did not have access to CEI’s companies and support services.

As CEI’s programs and measurement efforts evolved, so did the theory of change. Staff recognized that workers had many needs, both in and out of the workplace, which hampered their ability to stay in their job. CEI developed new workforce programs and collaboratives with a variety of public and private partners to address workers’ needs and increase worker retention. The assumption was that collaboratives would create greater alignment of workforce and economic development systems that would result in an efficient and effective allocation of resources for training workers and meeting the workforce needs of businesses.
Measurement Studies

Program Evaluations

CEI has had a series of program evaluations, mostly externally done, that document the activities and short-term outcomes of its workforce development programs. These evaluations require documentation of activities or outputs, and short-term outcomes, such as job placements. The U.S. Department of Health and Human Services (HHS) and the U.S. Department of Labor (DOL) require documentation of household income prior to entering the program, in order to determine low-income status of participants. When CEI sponsors training programs, it has direct contact with participants and it is relatively easy to collect income status as a requirement for participating in the program. However, it is difficult to document income once a person leaves the program.

Low-Income Longitudinal Study

CEI addressed the question “what happens to individuals employed in CEI-financed firms and in other CEI-sponsored workforce programs?” through its Low-Income Longitudinal Study (Page 2004), funded mainly by the Ford Foundation with additional support from the CDFI Fund. CEI managed the study internally under the direction of Robinson Hollister of Swarthmore College, a nationally recognized expert in evaluation.

The study collected both survey data from individuals employed in CEI-financed firms, identified through voluntary certification forms, and administrative data on earnings from the Maine Department of Labor’s quarterly earnings records from its U.I. database over approximately an 18-month period. The two sets of data were meant to complement each other. Survey data provide an in-depth picture of the employee but are subjective, whereas administrative data are objective but provide information only on employment status and earnings only in firms providing unemployment insurance.

The U.I. records provided a larger sample than the survey data so that earnings and employment results could be generalized to a much larger portion of the participants than was possible just from the interview sample, which only had a 24 percent response rate. It is always difficult to survey low-income individuals over time because of instability and job changes. A great deal of time and money was spent on locating people in order to survey them. CEI paid participants to complete the survey and had a good response rate from those it could locate. However, the response rate was even lower than anticipated partly because the study population spanned a number of years, and those involved with CEI firms or programs at an early date were harder to reach.

*These have included evaluations of U.S. Department of Health and Human Services grants for their Discretionary program and Job Opportunities for Low-Income Individuals. See Margaret Chase Smith Center for Public Policy (1995a; 1995b; 1997; 1998; 2001), as well as internal evaluations of a Kellogg Foundation workforce development grant (Coastal Enterprises, Inc. 2000) and a U.S. Department of Labor grant (Dickstein and Thomas 2004). CEI also has four external evaluations of federally-funded programs in progress.*
CEI also attempted to construct a comparison group of other non-CEI workers in Maine through the administrative data that would approximate a “counterfactual” and address the question of whether CEI “caused” any difference in employment outcomes. However, the ability to create a good comparison group from the U.I. data was extremely limited, and the outcomes proved unreliable.

The study showed that a large number of workers did not have a strong wage progression in their employment. There was a pattern of people leaving the CEI job for a job in a different firm with lower earnings. Median starting wage and ending wage in the post-CEI job were lower than the starting wage in the CEI job. Thus, although the CEI job appeared better in terms of wages, benefits, and advancement than the subsequent job, more than one-third of employees left the CEI job, and 46 percent of those left voluntarily.

In order to understand these findings, the second round of the survey asked questions about barriers to work, such as problems with the supervisor or co-workers, or problems with budgeting money, child care, or health care or transportation that affected work performance. Interviews with select employers confirmed some of these difficulties and also the fact that most employees left voluntarily, often without a plan. But the survey results showed no clear pattern or reason for leaving. Because it was unable to construct a counterfactual through the comparison group, CEI does not know whether these findings, even if unexpected, were better or worse than what would have occurred without CEI’s ETAG program.

The cost of this type of pre- and post-study is considerable when individuals are surveyed over time. Few CDFIs can survey the population without outside resources and assistance. It is unlikely CEI would repeat individual surveys unless it were able to construct a randomly assigned control group that could determine what would happen without CEI’s workforce program and whether CEI had an impact.

Even with these limitations, the Low-Income Longitudinal Study was CEI’s best example in which research has been used effectively to inform decision making. The study results created more introspection about workforce program assumptions, which were shared with the Targeted Opportunities (TO) Department, with management, and with the board. It led staff and board to reevaluate CEI’s focus on creating access to quality job opportunities as the keystone for its theory of change for impacting low-income workers. Recognizing that job quality was important but not sufficient for job retention, CEI started looking at additional strategies for reducing the barriers to work.

CEI’s TO Department went on to develop a new program, CEI Staffing Services, Inc. (CSSI), which provides more direct employment coaching on the job for the hardest to employ in temporary work sites. The idea is to transition people to permanent employment in a variety of settings, including CEI’s portfolio companies. This project received a start-up grant from the U.S. Department of Health and Human Services and is currently undergoing an external process evaluation.

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50 A separate study of employers in CEI portfolio companies confirmed that employees left voluntarily, often because of unrealistic expectations of the job. See Hollister and Hollister (2002).
CEI had an opportunity for a random assignment study of the CSSI program through MDRC, a nationally recognized evaluation organization in New York City, but the timing was wrong for a start-up venture. Once the program can point to strong outcomes, CEI hopes to revisit the possibility of a random assignment study. Such a study might show that the outcomes would have happened even without CEI’s program, but it would be worth taking that risk in order to find out whether the program is truly having an impact. If results are positive, CEI could use those findings to market the program and hopefully enhance support for it. If results are less than stellar, ideally the findings would provide important feedback for revamping the program and/or resetting organizational priorities.

**Internal Evaluation of PACT Collaborative Project**

The PACT (Progressive Alliance for Careers and Training) Project created a collaborative of public and private partners working in western and central Maine. The evaluation provided an opportunity to explore broader institutional outcomes rather than just direct training outcomes of the project. The longer-term goal of the project was to bring workforce and economic development systems together for the purpose of allocating available training dollars to benefit displaced and incumbent workers. CEI’s R&D Department conducted the evaluation of the three-year project for the U.S. Department of Labor with guidance from Rob Hollister.

Staff were able to measure successful short-term training outcomes for individual participants in the project, but the broader institutional outcome goals of the collaborative work, such as longer-term links made between the workforce and economic development institutions, and more engagement by those systems with the private sector, were harder to evaluate during the evaluation period at the end of the project.

Interviews and qualitative data were used to document definite improvements in relationships between these institutions, as well as active involvement of the private sector in new initiatives, but the sustainability of partnerships was not evident during the evaluation period. Evaluating institutional changes requires a longer time frame than what is typically available in a program evaluation. Funders should systematically revisit what happens to programs over the long run.

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51 Random assignment studies have had important impacts on federal policy in the past. According to Hollister, “The evaluation of the Job Corps warded off attempts in several administrations to cut the program. On the other side, the results of the National JTPA [Job Training Partnership Act] study, which showed no earnings gains for most groups particularly youth, led to a large scale reshaping of policy within the U.S. Dept. of Labor. The welfare-to-work experiments of the 1980s played a big role in the shaping of the Family Support Act (as testified by members of Senator Moynihan’s staff who drafted the legislation), and the experiments of the late 1980s and early 1990s played a big role in the major 1996 PRWORA [Personal Responsibility and Work Opportunity Reconciliation Act] welfare reform.” (E-mail, June 2005.) But, given the experience to date with PART, it is not clear that even a “Cadillac” research study would influence policy decisions.

52 After the report was submitted, the Maine Bureau for Employment Services solicited input from three former PACT Advisory Board members from economic development organizations to develop a curriculum for Career Center staff. The curriculum will educate staff in how to develop and administer resources effectively in partnership with economic development entities for the benefit of private business.
AFFORDABLE HOUSING PROGRAMS

Background and Assumptions

CEI’s housing program aims to address the failure of the housing market to provide opportunities for decent affordable housing for low-income (and increasingly middle-income) individuals. The affordability gap between income and housing prices is widening, especially for homeownership and in coastal communities where out-of-state retirees or second home buyers bid up housing prices.

The housing program usually addresses the increase in the supply of and access to affordable housing for targeted populations. It assumes that it can bring down the price of housing to make it affordable for different types of low- and moderate-income consumers (80 percent of median income) through creative financing, access to various subsidy programs, and use of AmeriCorps volunteers for housing rehab and construction. It also assumes it can increase effective demand for homeownership through its Lease-Purchase Program. The program enables sub-prime applicants who have poor credit histories or difficulties saving for a down payment to save while they lease a house that CEI has purchased and often rehabilitates. They can credit $50 of their monthly rent over two years towards a down payment as well as save through IDAs (Individual Development Accounts).

The housing program does not usually claim it will have specific impacts on a community or neighborhood. Most of the activity is dispersed; the program develops affordable housing where communities are supportive and it is easy to get building permits. Lewiston and Bangor are the only communities where CEI’s housing activity is sufficiently concentrated that it might be possible to assess the neighborhood effects of the program. However, the program does hypothesize that decent housing can lead to other positive life changes for individuals, such as more stability, ability to focus on work, greater pride, and self-worth.

Only recently has CEI stated explicitly a theory of what its role should be in preventing or correcting for predatory mortgage lending practices or other consumer debt issues that strip housing equity and lead to a breakdown of supply and demand for low and moderate-income housing. In the past, CEI has thought that home owner counseling or financial literacy courses could help consumers prevent poor decisions. However, the predatory markets that attract consumers and strip equity are becoming more pervasive in Maine. CEI now assumes that this kind of practice cannot be stopped solely by consumer education programs but also needs strong anti-predatory lending legislation.\(^3\)

\(^3\)CEI and the Center of Responsible Lending (CRL) in Durham, NC coauthored a study on predatory lending in Maine that makes a number of recommendations to improve Maine’s consumer credit code. See Dickstein, Thomas, and King (2006).
Measurement Studies

Lease-Purchase Program Study

CEI’s R&D department conducted a study of the Lease-Purchase (LP) program in 2001 to determine who participated in the program, whether participants were able to purchase their house, and participant satisfaction with the program (Beane 2002). It also looked at any life changes that occurred after moving into the house through an open-ended question that allowed participants to initiate what changes had occurred and probed them as to what difference the changes had made. The study found that the program served the target population of people who could not qualify for homeownership because of credit problems or lack of a down payment. Participants gave the program high marks for meeting their housing priorities and leading to other changes in their lives. However, only nine of 41 people who enrolled in the program at the time of the study successfully completed the program by purchasing a home from CEI. Seven of them were able to purchase their homes in less than two years and none took more than three years. Of the 33 participants who were still leasing, 25 were beyond the program’s standard two-year lease period.

After the study was completed, the housing department implemented new underwriting policies and counseling requirements that have improved the number of people transitioning into ownership. The program’s experience showed that it was almost impossible for any one sub-prime borrower to surmount and correct multiple obstacles to homeownership within a time frame acceptable to CEI. The program now accepts applicants who face only one or two obstacles and who have a clear path to overcome those obstacles within the two-to-three-year lease term. Second, the program now requires that LP applicants take a 10-hour First-Time Homebuyers course before or while their application is reviewed. Previously, they were only required to complete the course during the lease-purchase period, which proved to be too late.

The housing market, as well as inherent tensions in the program design, have raised questions about how the program will go forward in the future. The cost of housing is too high in the program’s target areas of southern and midcoast Maine for the LP target population (e.g., 80 percent or less of median income) to purchase the house. The program could work in Maine’s more remote rural communities where housing prices are still affordable, but these communities are too distant from CEI’s office to operate the program efficiently.

CEI is now seeing an unintended consequence – that the marginal borrowers facing a deadline for purchasing their houses are starting to turn to the sub-prime and predatory lenders. Three program participants bought their houses through variable-rate, high interest loans with higher than normal closing costs.

CEI’s experience with the LP Program and other housing programs that counsel clients raises the question as to what extent homeownership should be a program focus or whether more attention should be placed on access to decent affordable rental or cooperative housing, especially in inflated Housing Markets. Yet, with so little subsidies available for rental housing, the Housing Department is still looking at ownership options. It is presently developing a cooperative in Lewiston and is also considering targeting higher-income individuals who are also priced out of the Housing Market. The Department is now completing a business plan to guide work over the next five years.
The Housing Department measures quality-of-life outcomes of its customers as an indicator of the program’s long-term merits. It has developed ten attitudinal measures of the well-being of housing customers (partly drawn from the Success Measures Project for all its housing programs).

Residents receive a mailed written survey asking them to respond to determine such things as “Do people feel safe?” or “Do they participate more in their community?” using a five-point scale to measure their response. All residents have shown positive response to the survey, and the department is implementing a revised version.

It would be even more valuable if the department were able to document actual behavioral changes that occurred after the change in housing rather than depending solely on a subjective response. However, a survey of that type would require interviews in order to get the necessary qualitative data, and neither the department nor CEI has sufficient capacity to do a more extensive study of this type.

VII. CONCLUSION

This paper has documented the challenges that CEI and other community economic development practitioners face in measuring social impact. CEI has become wiser in describing what it does as “monitoring outcomes,” but the mandate to demonstrate impact does not go away. It resorts to creative qualitative methods while still providing basic measures of what is quantifiable.

Consistent measurement requires:

- good data systems and the infrastructure to house and manage those systems;
- organizational commitment and systems to gather data;
- willingness of customers or clients to provide data;
- ability to analyze data in a timely way;
- a process for feeding data back to organization decision makers and other stakeholders for strategic planning and policy development.

Developing and maintaining these systems continue to be a challenge; the costs are not fully covered in the spread on loans or in program budgets and require additional grant support.

CEI has had to conform over time to increasing external measurement standards from public and private funders and trade organizations. These external pressures for reporting and standardizing measures across the industry put even more demands on its management information systems and staff resources, but they also offer opportunities for a stronger voice in public advocacy and benchmarks to market the industry to private investors.

One of the most important benefits of attempting to measure impact is that it has forced CEI to examine its underlying assumptions or “theory of change,” particularly in the programs that have
had more attention for evaluation. CEI’s mission emphasizes opportunity: *people and communities, given access to resources, can help themselves and improve their lives and their surroundings.* Its strategies primarily focus on addressing gaps in the private market in order to promote opportunities. Measurement has led CEI to examine what kind of opportunity it is providing and where it needs to strengthen its efforts if it is to provide significant benefits to its targeted low-income population. Increasingly, CEI is emphasizing strategies that change institutional behavior and public policy, which ultimately can affect more people and communities over the long run than direct program interventions.

Along with its peers, CEI now has the opportunity and the challenge to document longer-term program outcomes and institutional changes that arise from its work and provide a more comprehensive picture of its impact. These outcomes must be defined and measured to the degree possible if CEI and the industry are to point to long-term impacts and justify a role for community development institutions.
There is no standardized method for reporting low-income outcomes for low-income populations within organizations or the CDFI Fund. The Community Development Venture Capital Association’s (CDVCA) recent Return on Investment (ROI) project (CDVCA 2005) supported the approach that each CDVCA member would determine its own method for measuring its “targeted population.” Given the differences in the ways the venture funds operated and what their target populations were, it was more realistic to allow each fund to adjust the definition to its circumstances. Similarly, it is in the interest of CEI and other CDFIs to have flexibility in how low-income or targeted populations are measured. However, this increases the complexity of aggregating such data across CDFIs.

Ideally, CDFIs should establish what an employee’s income was before becoming employed in a portfolio firm in order to have a baseline to measure changes. However, it is not always possible to get these data without access to the individual employees and/or state employment records that provide objective data. CDFIs have used the following methods to document low-income status, depending on time and resource constraints and their judgment of what is the best proxy:

- Collect voluntary certification forms from the employees to verify family income data prior to employment. CEI has implemented this method of collecting self-reported data. The surveys are likely to under report low-income status because compliance is voluntary. Furthermore, the data represent job hires, which, if not defined properly, can be misinterpreted as the actual number of jobs filled by low-income individuals.
- Use the level of wages or salary paid to the employee as a proxy for low-income status. The Community Development Venture Capital Alliance (CDVCA) calculates “targeted employees” wages based on the HUD standard of 80 percent of Area Median Income.54 Pacific Community Ventures in California uses a livable wage standard to identify “targeted employees”, which was under $20 per hour in 2004.55 Salary and wage data, however, measure only current income status and do not capture total household income, nor income prior to employment.
- Use state Unemployment insurance (U.I.) records, which provide objective administrative data on individuals’ earnings over time for those covered under unemployment insurance. However, these data do not show family income, and are only available if a business provides unemployment insurance.

Even if a CDFI can demonstrate that low-income individuals are employed, this only shows that the opportunity for employment was achieved; it does not determine what happens to them as a result of the job opportunity. Tracking the individual over time can be very costly and is usually prohibitive for a CDFI without outside funding. The longer-term outcomes are important for CEI since its theory of

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54Median family income is then divided by 1875 hours (50 weeks x 37.5 hours) to get at a maximum hourly wage for targeted employees. See CDVCA (2005).

55This target corresponds to the Bay Area’s livable wage calculated on a realistic basic needs budget. In 2003 the wage was $16.88 for a two-parent family with two children where both parents work. See Foley and Twersky (2004).
change focuses on the job opportunity as a vehicle for increased income, assets, skills and self-reliance. (See discussion in Section V on CEI’s workforce development programs.) It may be possible to track a sample of low-income individuals to reduce costs. However, since this population is transient, contact information for all low-income employees would need to be updated at least twice a year in order to find those selected for the sample.

It is also possible to do more with administrative data from state U.I. records on a regular basis or sampling low-income employees every three years. CEI used both administrative records and employee surveys for its Longitudinal Study (Page, 2004). The main cost for the Department of Labor is in programming the data retrieval rather than the number of individual records requested. There are additional costs of setting up a process for collecting social security numbers and birth dates from employees that are needed to access the U.I. files and for maintaining confidentiality of the data. U.I. data are reported quarterly, and there are many interruptions when tracking low-income individuals.
APPENDIX 2:  
ORGANIZATIONAL 3E METRICS (DRAFT)

**Equity**

- **Low-Income**
  - % of total assets applied to low-income populations;
  - # of low-income individuals assisted.

- **Targeted Populations**
  - % of total assets applied to targeted populations (e.g. minorities, refugees, tribes, women, disabled);
  - # people from targeted populations assisted.

- **Distressed Regions**
  - % of total assets applied to federally defined distressed regions;
  - # of people served in distressed regions through investments and services.

- **Economic Sectors**
  - $ in investment and programs applied to sector initiatives (farms, fish, forestry, child care, etc.);
  - # of people served in sectors through investments and services.

**Environmental**

- Land owned and managed sustainably;
- Amount of energy conserved or produced through renewables in CEI projects;
- Amount of greenhouse gasses avoided through conservation or renewables;
- Avoided Sprawl Measure: $ and # investments in projects with existing water & sewer lines, or in service centers and villages.

**Economic**

- Taxes paid from portfolio/clients;
- Payroll generated from portfolio/clients.
# APPENDIX 3:
## EXTERNAL SURVEYS REQUIRED OF CEI

<table>
<thead>
<tr>
<th>Funder</th>
<th>Type of Data</th>
<th>Time of Year</th>
<th>Amount of Time – All Staff Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFN (CDFI Common Data project)</td>
<td>Annual survey</td>
<td>June</td>
<td>100 hours</td>
</tr>
<tr>
<td>CDFI Fund – CDFI program</td>
<td>Annual CDFI institution level survey</td>
<td>June</td>
<td>120 hours</td>
</tr>
<tr>
<td>&quot;</td>
<td>Annual CDFI transaction level survey</td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>&quot;</td>
<td>Annual report</td>
<td>November/March</td>
<td>80 hours</td>
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<tr>
<td>&quot;</td>
<td>Certification</td>
<td>No set time of year</td>
<td>120 hours</td>
</tr>
<tr>
<td>CDFI Fund – NMTC program</td>
<td>Annual CDE institution level survey</td>
<td>March</td>
<td>4 hours</td>
</tr>
<tr>
<td>&quot;</td>
<td>Annual CDE transaction level survey</td>
<td>March</td>
<td>4 hours</td>
</tr>
<tr>
<td>&quot;</td>
<td>Allocation tracking system</td>
<td>Whenever a NMTC deal is closed.</td>
<td>1 hour per deal</td>
</tr>
<tr>
<td>Calvert Survey</td>
<td>Annual survey and profile</td>
<td>June</td>
<td>4 hours</td>
</tr>
<tr>
<td>&quot;</td>
<td>Biannual in-depth profile</td>
<td>n/a</td>
<td>120 hours</td>
</tr>
<tr>
<td>SEACorp</td>
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<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>NCCED census</td>
<td>One-time census</td>
<td>December 2004</td>
<td>20 hours</td>
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<tr>
<td>FB Heron</td>
<td>Housing Survey</td>
<td>August</td>
<td>60 hours</td>
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REFERENCES


