



EVALUATING COMMUNITY AND ECONOMIC DEVELOPMENT PROGRAMS

**A LITERATURE REVIEW TO INFORM EVALUATION OF
THE NEW MARKETS TAX CREDIT PROGRAM**

**Martin D. Abravanel
Nancy M. Pindus
Brett Theodos**

Prepared for
**U.S. Department of the Treasury
Community Development Financial Institutions (CDFI) Fund**

SEPTEMBER 2010

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**Martin D. Abravanel
Nancy M. Pindus
Brett Theodos**

With the assistance of

Betsy Chang
Kassie Dumlao
Adam Greenberg
Randy Rosso
Ashley Williams

**The Urban Institute
Metropolitan Housing and Communities Policy Center
2100 M Street, NW
Washington, DC 20037**

Prepared for
**U.S. Department of the Treasury
Community Development Financial Institutions (CDFI) Fund**
601 Thirteenth Street, NW
Washington, DC 20005

September 2010

Contract No. GS-23F-8198H, Task Order TPD-CDF-07-K-00016
UI Project No. 07112-031-00

The nonpartisan Urban Institute publishes studies, reports, and books on timely topics worthy of public consideration. The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.

ACKNOWLEDGMENTS

The authors wish to thank Gregory Bischak, James Greer, Matt Josephs, Rosa Martinez and David Meyer of the CDFI Fund for their careful and thoughtful review of earlier drafts of this report. Consultants John Caskey, Robinson Hollister, Michael Rich, Julia Sass Rubin, Ken Temkin and Sean Zielenbach suggested important literature resources and provided valuable comments on previous drafts. At the Urban Institute, Betsy Chang, Kassie Dumlao, Adam Greenberg, Randy Rosso and Ashley Williams made significant substantive contributions to the report.



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I. INTRODUCTION

The federal government's New Markets Tax Credit (NMTC) program was established by the Community Renewal Tax Relief Act of 2000 to encourage private capital investment in low-income communities that are, or are perceived to be, high investment risks.¹ Under the program, tax credits are allocated competitively to special purpose organizations that, in turn, use them to invest in projects intended to improve the development and economic viability of such communities. The U.S. Department of the Treasury's Community Development Financial Institutions (CDFI) Fund, which is responsible for awarding these credits, contracted with the Urban Institute to complete an evaluation of the NMTC program by 2011. The evaluation must address the fundamental question of whether the program is, in fact, doing what was intended and also inform important policy-relevant questions, such as

- How, and in what manner, is the program affecting the flow of new private capital to low-income communities?
- With what rates and terms are businesses or organizations in those communities obtaining capital?
- Where, in what timeframe, and how is the capital invested to achieve community revitalization objectives?
- What outcomes are associated with those investments?
- How efficient are NMTCs with respect to these outcomes?

In preparation for designing the evaluation, it is essential to understand not only the NMTC program's unique legislative and administrative history and its mandate, but its context—i.e., its similarity to, or difference from, other past and present government programs that are also intended to improve the development and economic viability of low-income communities. This includes understanding how such programs have been evaluated and what those evaluations concluded. As a foundation for conducting a NMTC evaluation, therefore, this document reviews the literature on the program as well as that on community and economic development programs more generally.

¹ P.L. 106-554 was signed into law on December 21, 2000. It defines low-income communities as consisting of census tracts with a poverty rate of at least 20 percent, a median family income of less than 80 percent of the metropolitan area's or statewide median (whichever is greater) or, for non-metropolitan census tracts, a median family income of less than 80 percent of the statewide median. Census tracts typically contain between 1,500 and 8,000 people, with an average size of about 4,000 people.



Program Context

Many public dollars and numerous programs support community and economic development activities. According to one estimate, total federal spending on community development exceeded \$45 billion in 2004—the equivalent of approximately \$155 for each person living in the United States² (Gerenrot, Cashin, and Paulson 2006). According to another source, 14 federal government agencies spent a total of \$76.7 billion on 250 separate programs involving activities “useful to regional economic development” during FY 2006 (Mills, Reynolds, and Reamer 2008). The NMTC program is unquestionably a significant part of this major federal effort to promote community and economic development.

While past and present community and economic development programs provide useful context for assessing the NMTC program, there is no consensus as to which of them is most appropriate for comparison purposes. This is evidenced by the fact that during informal conversations between Urban Institute researchers and several dozen prominent NMTC stakeholders in mid-2008, some of the latter made primary reference to the Low Income Housing Tax Credit (LIHTC) program because, like NMTCs, the former involves use of tax credits for investors—although, unlike NMTCs, they are strictly for the construction and rehabilitation of rental housing. Others referenced the earlier Urban Development Action Grant (UDAG) or current HUD Section 108 programs because they support diverse types of community and economic development projects similar to those produced by NMTCs—although, unlike NMTCs, UDAGs were federal agency grants to local governments and Section 108 consists of loan guarantees for private investors using future Community Development Block Grant (CDBG) entitlement funds as security. And yet others referenced the federal Empowerment Zone/Enterprise Communities (EZ/EC) program because it uses various tax benefits to stimulate community and economic development—although, unlike NMTCs, it requires preparation of comprehensive community-based strategic plans and awards federal grants.

Given that knowledgeable observers bring different perspectives to the question of *which* programs are similar to NMTCs and *how* they are similar, we reviewed a broad swath of literature pertaining primarily to federal government programs that, in one way or another, may bear on NMTC program evaluation. The literature dealing with these programs is extensive and, as such, full coverage is beyond the scope of this review. However, many important studies and

² The authors defined community development as “construction, operation, and support of housing and redevelopment projects and other activities to promote or aid public and private housing and community development,” as per the U.S. Census Bureau, Governments Division, 2000, *Federal, State, and Local Governments: Government Finance and Employment Classification Manual*, November 16.



reports that can inform the design of an evaluation of the NMTC program are referenced in the pages that follow.

A case can be made that authorization of the Public Housing program in 1937 was the first major federal government effort to improve the economic viability and development of low-income communities. The Housing Act of 1937 was not only intended to provide affordable housing resources but also employment opportunities, economic stimulation, and slum removal. It was not until Title 1 of the Housing Act of 1949, however, that the Urban Renewal program, which was originally designed to eliminate slums, evolved to emphasize economic development as a primary objective. Similarly, several programs to develop rural areas were created in the 1930s and 1940s—including those administered by the Rural Resettlement Administration and, later, the U.S. Department of Agriculture's Rural Electrification Administration, Rural Development Assistance Program, and Farmers Home Administration.

In recent decades there has been a succession of federal government programs or regulations, some of which have expired and others of which are currently in operation, which have as one of their purposes improving the economic viability and development of communities. These include, among others: the Small Business Loan Guaranty (1953–) and Venture Capital (1958–) programs, which in 1964 incorporated an explicit emphasis on economically distressed communities; the Economic Development Administration (EDA) grant programs (1965–); the Model Cities program (1966–1974); the New Communities program (1968–1983); various National Park Service grant programs (1968–) the Community Development Block Grant (CDBG) program together with the Section 108 Loan Guarantee program, the Economic Development Initiative (EDI) and the Brownfields Economic Development Initiative (BEDI) (1974–); the EDA Revolving Loan Fund (1974–); the Urban Development Action Grant (UDAG) program (1977–1986); Rehabilitation Tax Credits (RTC) (1977–); the Community Reinvestment Act (CRA) (1977–); the Low Income Housing Tax Credit (LIHTC) program (1986–); the HOME Investments Partnership program (1990–); the HOPE VI program (1993–); the Renewal Community/Empowerment Zone/Enterprise Community (RC/EZ/EC) initiative—along with Neighborhood Revitalization Zones, HUB zones, and the Gulf Opportunity Zone (1993–); USDA Rural Development loan and grant programs relating to business development, housing, community facilities, electricity, telecommunications, and water (some, dating back to the 1930s and 1940s were reorganized in 1994); and the Community Development Financial Institutions (CDFI) Fund's New Markets Tax Credit (NMTC) program (2000–). In addition, many states and localities have their own community and economic development programs and tools such as state tax credits for business, Tax Increment Financing (TIF), industrial revenue bonds (IRBs), industrial development bonds



(IDBs), state enterprise zones, tax abatements, inclusionary zoning ordinances, and community benefits agreements (CBAs).³

To provide a basic sense of the scale and trends in federal community and economic development funding, figure 1 displays the pattern of appropriations (expenditures) and foregone taxes associated with nine prominent federal community and economic development programs, by year, beginning in 1960. The data are adjusted to reflect constant 2007 dollars. During the earlier portion of the period, the Urban Renewal program and, later, the Model Cities program accounted for between \$2 and \$9 billion annually, peaking in the early 1970s. With the advent of the CDBG program in the mid-1970s and the addition of the UDAG program, total appropriations (and foregone taxes) reached their high-water mark, varying from \$9 billion to almost \$14 billion annually through the early-1980s. Economic development funding declined through the rest of the 1980s before climbing again in the early 1990s. For most of the 2000s, the programs that continued have accounted for about \$12 billion annually.⁴

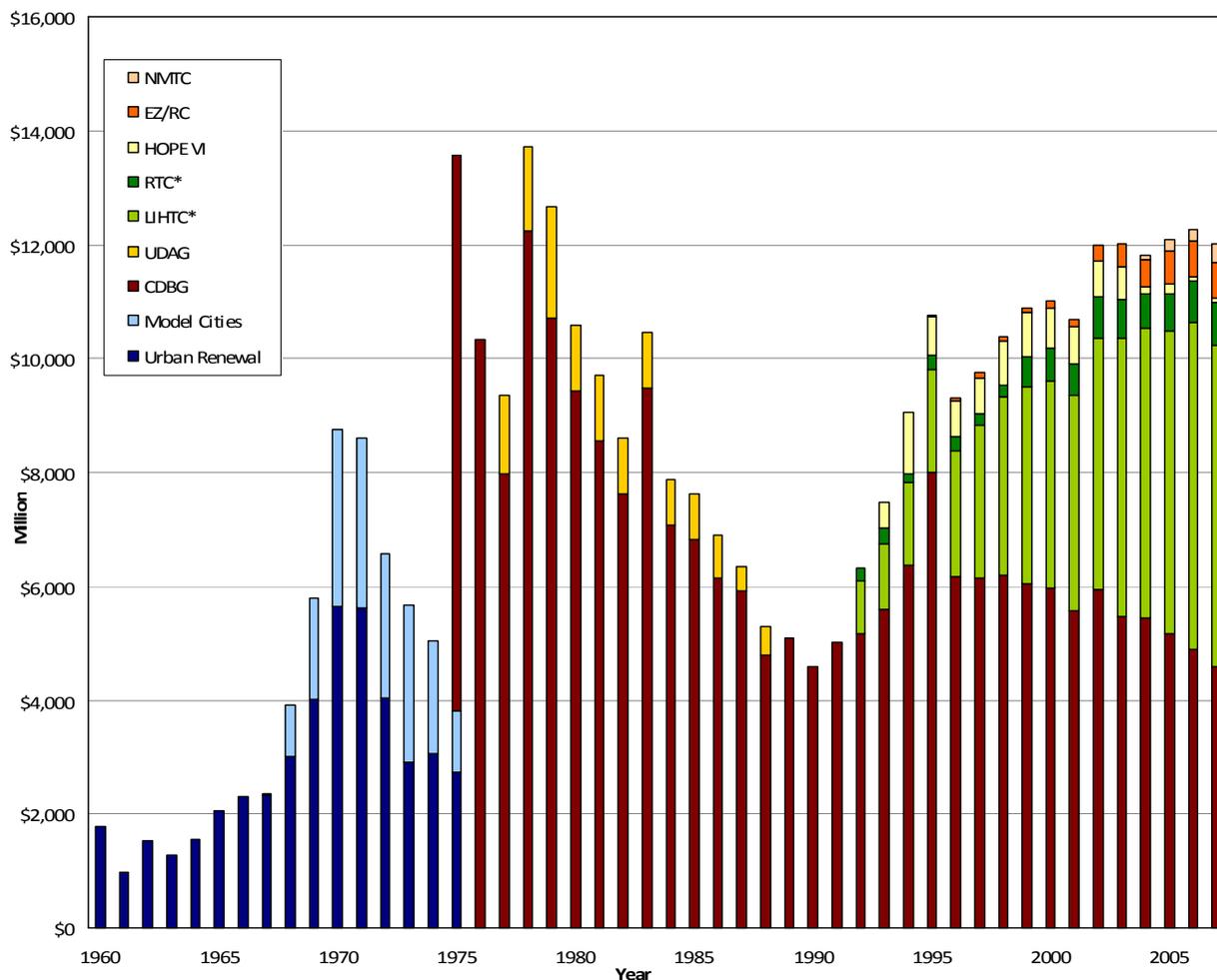
By this measure, the NMTC program has been a relatively small addition to the economic and community development landscape, representing three percent of total spending and foregone taxes for these programs in 2007 (figure 2). But the NMTC program is poised to grow. Most directly, it will grow because more allocations have been made available for investments: \$5 billion each year from 2008 through 2010 (table 1), of which tax credits can be claimed for 39 percent of these amounts. Further, tax credits from previous rounds of NMTC allocations are still beginning to be claimed. These credits cannot be claimed until a project is completed, which may take years; furthermore, after being awarded an allocation, CDEs have up to five years to initiate projects. Finally, once projects are completed, tax credits are redeemed over seven years and counted as foregone taxes only for the years in which they are claimed.

³ As discussed in the *Journal of Affordable Housing and Community Development Law*, Volume 17, Issues 1-2, Fall 2007/Winter 2008, CBAs allow low-income communities to secure gains from city supported development projects. In the *Journal*, Scott L. Cummings, (“The Emergence of Community Benefits Agreements”) notes that although “CBAs come in many forms and there are disagreements about “what counts” as a CBA, we may generally think of the CBA as a negotiated agreement between community groups and developers (or sometimes city agencies) that require the delivery of specific benefits to communities affected by the development project.” (p. 5) Also in the *Journal*, William Ho (“Community Benefits Agreements: An Evolution in Public Benefits Negotiation Processes”) discusses the origins of CBAs—beginning with Urban Renewal and covering Model Cities, CDBG, UDAG and EZs (pp. 7-34).

⁴ Annual expenditure variations for some programs (such as CDBG) depend on Congressional appropriations whereas the amount of foregone taxes associated with the RTC program depends on taxpayer claims, which are not capped on a yearly basis. Note that program spending does not necessarily occur in the same years in which funds are appropriated or credits are allocated; hence, investments made from such appropriations or allocations may lag.



Figure 1. Expenditures and Foregone Taxes for Nine Community and Economic Development Programs (in 2007 Dollars) *

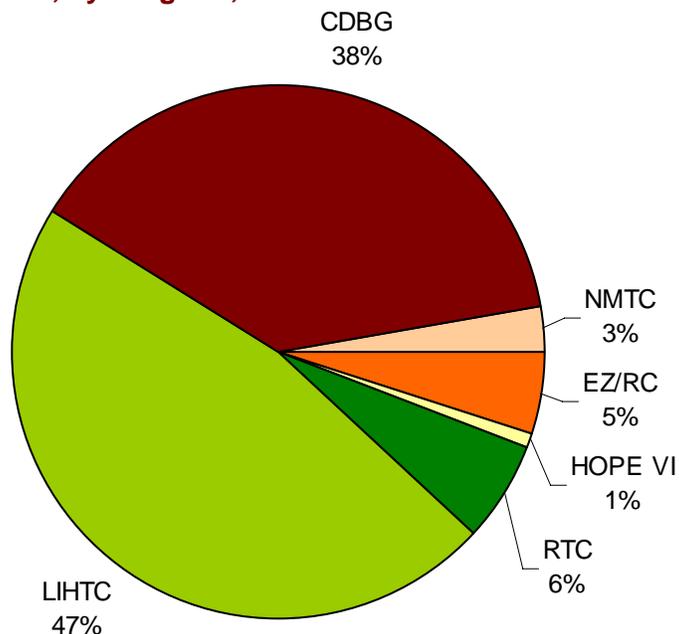


* RTC and LIHTC data are missing prior to 1992.

Sources: Budget of the United States Government (various years); Danter Company, Statistical Overview of the LIHTC Program 1987-2005, <http://www.danter.com/TAXCREDIT/stats.htm>; Federal Reserve Archival System for Economic Research, Economic Report of the President (various years); Novogradac & Company, Affordable Housing Resource Center, State Tax Credit Information (various years) http://www.novoco.com/low_income_housing/lihtc/state_lihtc.php; U.S. Department of Housing and Urban Development, CDBG Expenditure Report, http://www.hud.gov/offices/cpd/community_development/budget/disbursement_reports; U.S. Department of Housing and Urban Development, An Impact Evaluations of Urban Development Action Grant Program, January 1982, Washington, DC; Revitalization Grant Awards (various years) <http://www.fhasecure.gov/offices/pih/programs/ph/hope6/grants/revitalization/index.cfm>; U.S. Department of the Interior, Federal Tax Incentives for Rehabilitating Historic Buildings, February 2008, Washington, DC; National Park Service, Technical Preservation Services; U.S. Government Accountability Office, Economic Development Activities Reflect Local Priorities, GAO-RCED-94-109, February 1994, Washington, DC; ___ Effects of the 1987 Amendments on Project Selection, RCED-89-64, January 1989, Washington, DC; Government Accountability Office; ___ Federal Revitalization Programs are Being Implemented, but Data on the Use of Tax Benefits are Limited, GAO-04-306, March 2004, Washington, DC; Government Accountability Office; Insights into Major Urban Development Action Grant Issues, RCED-84-55, March 1984, Washington, DC; Government Accountability Office; ___ Program Offers Recipient Flexibility but Oversight Can Be Improved, GAO-06-732, July 2006, Washington, DC; Government Accountability Office; ___ The Federal Empowerment Zone and Enterprise Community Program, GAO/T-RCED-98-27, October 1997, Washington, DC; Government Accountability Office.



Figure 2. Appropriations and Foregone Taxes for Selected Community and Economic Development Programs, by Program, in 2007



NMTC Background

The NMTC program provides incentives for private capital to flow to businesses or organizations situated in low-income, economically distressed communities that otherwise lack financing for community or economic development. It works by providing federal tax credits to corporations or individuals in exchange for investing in specialized Community Development Entities (CDEs) that, in turn, make debt or equity investments in qualified businesses. Each business or economic development initiative supported by the program can be considered a project consisting of one or more transactions (investments or loans). All projects, therefore, involve at least three types of entities: CDEs; corporate or individual investors; and recipients of the investments.

CDEs. These are domestic corporations or partnerships that serve as intermediary vehicles for the provision of loans, investments, or financial counseling in low income census tracts (low-income communities, LICs). To become certified as a CDE, an organization must submit an application to the CDFI Fund that demonstrates it is certified as a legal entity at the time of application, has a primary mission of serving LICs, and maintains accountability to the residents of its targeted LICs. CDEs are competitively awarded an allocation of tax credits by



the CDFI Fund—with more CDEs requesting an allocation than receiving one. Those that receive tax credit allocations have five years to sell them, in turn, to individual or corporate investors and use the proceeds to make loans to, or equity investments in, qualified business entities—i.e., recipients. Substantially all of the cash received by CDEs in exchange for tax credits must be used within a year of receipt (a) to make loans or investments to businesses located in LICs for development of commercial, industrial or retail real estate projects (including community facilities) or for-sale housing; (b) to invest in or loan to other CDEs; (c) to purchase qualified loans from other CDEs; or (d) to provide certain financial counseling services to business and residents in low-income communities.

As a result of the federal subsidy, CDEs are expected to offer preferential terms to borrowers and take on higher-risk deals, though they are given a high degree of flexibility with respect to how to meet that requirement. For example, they may choose to: offer lower-than-standard origination fees; accept nontraditional collateral; allow a lower-than-standard debt service coverage ratio; provide more equity financing or flexible debt financing (e.g., equity products, equity equivalent terms, debt with equity, subordinated debt); assess lower (i.e., below-market) interest rates; allow longer-than-standard amortization schedules; or permit lower-than-standard loan loss reserves.

Corporate or individual investors. These entities or individuals, which may or may not be affiliated with a CDE, purchase federal tax credits in return for making investments in CDEs. The latter, called qualified equity investments (QEIs), must remain in a CDE for seven years. The tax credits received by investors are shallow, equaling 39 percent of the amount invested over seven years—five percent of the investment for each of the first three years and six percent for the remaining four years. According to Armistead (2005b), the actual value of the credits to investors is less than 39 percent of their investment since they are taxed capital gains at the end of the period; the perceived present value of the credit is roughly 25 to 30 percent of the total investment, implying a discount rate of seven percent.⁵ Investors have been estimated to pay 70 to 80 cents per dollar of credit.

Recipients of the investments. These entities, which can be for profit or nonprofit, are known as Qualified Active Low Income Businesses (QALICBs). They carry out projects using CDE investments and, oftentimes, capital from other sources as well.⁶ There is considerable

⁵ Unlike the LIHTC program, NMTC investors cannot claim operating expenses—including management fees and depreciation on assets—in addition to the tax credits.

⁶ QALICBs may be pre-existing or newly established businesses or organizations in which (a) at least 50 percent of the total gross income is from the active conduct of a qualified business in low-income communities, (b) at least 40 percent of the use of tangible property of the business is within low-income communities, (c) at least 40 percent of the services performed by the businesses' employees are performed in low income communities, (d) less than 5 percent of the average of the aggregate unadjusted bases of the property is attributable to collectibles (e.g., art



flexibility as to the types of projects QALICBs can undertake—including those involving real estate or business purposes ranging from commercial to industrial, retail, manufacturing, or mixed uses. Projects can also involve development or rehabilitation of for-sale housing units or of community facilities used for such purposes as childcare, health services, museums or charter schools.

Between 2002 and 2009, the CDFI Fund allocated \$26 billion in tax credit authority to a total of 186 CDEs. Through the end of the federal government’s fiscal year 2008, \$12.3 billion of financing had been lent to or invested in 2,656 projects using NMTCs (see Table 1). The difference between the amount of credits allocated to CDEs by the CDFI Fund and the level of investment by CDEs in projects results from (a) CDEs having up to five years to issue their allocated tax credits in exchange for QEIs and (b) after receiving a QEI, CDEs having up to 12 months to invest substantially all of the proceeds in projects.

Table 1: NMTC Allocation and Financing by Round, as of February 12, 2010^a

Round	Year of Allocation ^b	Qualified Equity Investment Amounts Allocated to CDEs (in Billions)	Amount of NMTC Financing by CDEs (as of FY2008) ^b	Number of Projects Financed (as of FY 2008)
1	2001/2	\$2.50	\$2,757,632,552	891
2	2003/4	\$3.50	\$3,441,580,333	757
3	2005	\$2.00	\$1,947,634,456	341
4	2006	\$4.1 ^c	\$2,993,719,711	527
5	2007	\$3.9 ^c	\$1,088,729,654	127
6	2008	\$5.0 ^d	e	e
7	2009	\$5.0 ^d	e	e
8	2010	\$5.0 ^f	e	e
Total		\$31.0	\$ 12,278,639,126 ^f	2,656 ^g

^a These estimates were accurate as of February 12, 2010.

^b The amount of NMTC financing by CDEs for a given round does not necessarily occur in the year of allocation.

^c Credits in Rounds 4 and 5 reflect extra allocations of \$600 million and \$400 million, respectively, to the Gulf Opportunity (GO) Zone.

^d Credits in Rounds 6 and 7 reflect extra allocations of \$1.5 billion in each round from the American Reinvestment and Recovery Act of 2009.

^e As of FY 2008, no projects had yet begun in Round 6, 7, or 8.

^f Round 8 funds will be awarded in October 2010.

^g It is unclear in which round 13 projects occurred. They are included in the total calculations.

and antiques) other than those held for sale in the ordinary course of business (e.g., inventory), and (e) less than 5 percent of the average of the aggregate unadjusted bases of the property is attributable to nonqualified financial property (e.g., debt instruments with a term in excess of 18 months).



II. PROGRAM EVALUATION CONCEPTS

This section presents an organizing framework for reviewing salient examples from the research literature on a broad range of community and economic development programs. Since the intent of this review is to inform the design of a NMTC evaluation, we begin with some basic evaluation concepts that apply across community and economic development programs. We then present a framework based on program evaluation stages that serves to structure the remainder of the review.

Bases for Evaluating the NMTC Program

Fundamentally, an evaluation addresses the issue of whether a program is achieving what it was intended to do—i.e., whether it is working. This requires having: (a) an understanding of the program's intent; (b) an approach to measuring its accomplishments; and (c) benchmarks for comparison. Items (a) and (b) are briefly discussed below, and item (c) is considered in Part III.

Understanding program intent. The legislative intent of the NMTC program is to encourage private capital investment in low-income communities. That is its core objective. Although not explicit in the statute or legislative history, a logical corollary to this is that tax credits should be necessary for encouraging that investment. If they simply substitute for other types of investment that would be made in low-income communities, the objective of using federal resources to encourage such investment is not achieved.

In addition to the NMTC program's statutory language and legislative history, there are other indicators of its intent that derive from its regulatory and operational features, including the following:

- CDEs use their tax-credit allocations to make investments in communities designated as low-income, but also consider the benefits and beneficiaries of those investments.
- In some cases projects may qualify for NMTC support even though they are not located within designated low-income communities, as long as they otherwise serve targeted populations.



- Tax credits may be used for a broad range of projects that further community and economic development objectives, based on a determination of community need.
- Although the NMTC program uses federal tax credits and is administered by the CDFI Fund, individual projects are selected and underwritten by CDEs (that are required to include low-income community representation) — not by federal administrators.

These features suggest that in addition to directing capital investment to low-income communities, the intent of the NMTC program is also to provide benefits to certain types of people and be responsive to community need, as articulated at the community level.

Finally, in addition to what is explicitly stated in NMTC program legislation and established in regulations and operations, there are implicit assumptions about what a federal community or economic development program should accomplish more generally. These may vary from observer to observer and derive from general principles related to the purposes of any such government program. Several observers, for example, reason that:

(T)he goal of economic development involves more than increasing the level of private investment or jobs in a locale. There are two related but distinct goals that are nearly always implied if not explicitly stated in the formulation of an economic development program. One is that the benefits of the investment should flow to people with greater need for the resulting jobs and income. A second is that short-term public stimulus should leverage a long-lasting or multiplying gain in economic welfare for the area and its people (Redburn et al., 1984, p. 119–120).

It is not unreasonable, therefore, to view the NMTC program as intending to benefit people (as well as places) in greatest need, and sustain (and preferably enhance) those benefits over time.

Measuring program accomplishment. Measuring NMTC program accomplishment poses several challenges. Some of these are generic to community and economic development programs more generally, while others follow from the program's particular objectives and features.

In terms of generic evaluation challenges, communities are extremely complex systems. They consist of many inter-related structures and activities that, along with external factors, influence the very conditions any community or economic development program, including NMTCs, seeks to affect. It is also the case that most community and economic development program investments are small in size relative to the neighborhoods or communities in which they are made. This can make it unrealistic to expect to be able to measure impacts of a particular investment or project—such as on poverty levels or property values (GAO 2009;



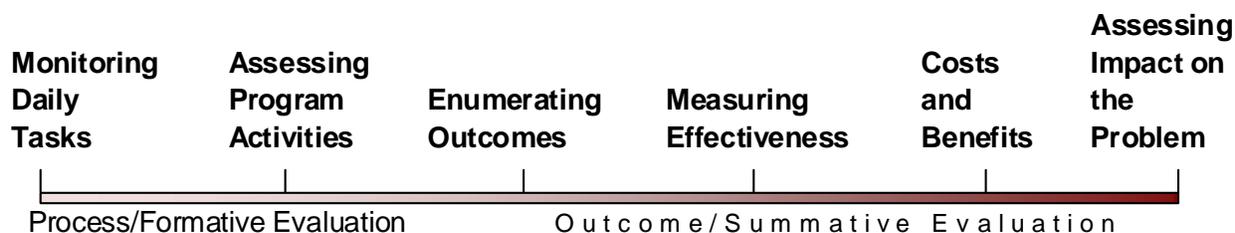
Hollister 2007). Hence, identifying outcomes, determining whether benefits flow to those with greater needs, and sorting out (both short-term and long-term) causes and effects are difficult tasks.

There are NMTC program-specific evaluation challenges as well. For example, the fact that the program provides more than one designation of a qualifying community means that evaluators must take into account service to targeted populations as an alternative to assessing capital flow strictly based on community attributes. Also, the fact that the program devolves project selection to CDEs means that evaluators must consider multiple conceptions of need, as articulated by different CDEs, as legitimate. And, finally, the fact that the program can be used to support a wide array of project types—from commercial, industrial and real estate projects to community facilities, investments by one CDE in another CDE, and financial counseling services—means that there is no single outcome metric that applies to all projects, program wide.

The literature reviewed herein is an attempt to understand these basic challenges and how they have been addressed by others. It is organized around a set of evaluation questions, concepts and considerations, and clustered by evaluation stages—as discussed below.

Program Evaluation Stages

A useful framework for thinking about program evaluation in general is Bartik and Bingham’s (1997) conceptualization of a continuum that roughly corresponds to a program’s life-cycle sequence. It consists of six different “levels,” each of which builds on the previous. Points on the evaluation continuum are as follows:



The continuum begins, on the left, with two levels generally considered to involve formative or process evaluation (“monitoring daily tasks” and “assessing program activities”); these focus on how a program is delivered. The first consists of monitoring the internal workings of a program to assess, for example, what tasks are taking place, whether they are being carried out efficiently, or whether contractual obligations are being met. The second involves



assessment of program activities to determine how simple or complicated procedures are or how well the program is being implemented. The third level (“enumerating outcomes”) involves determining whether a program’s objectives are being achieved; it is the initial stage of an outcome or summative evaluation. Further along the continuum is effectiveness measurement, which considers whether a program’s goals have been accomplished and if it is working. The final two levels involve cost-benefit analyses and impact assessment, the latter seeking proof that a program is, in fact, having a measurable impact on the problem(s) to which it responds.

Each successive level of program evaluation presents increasingly difficult challenges. The ultimate challenge, at the impact-assessment level, is to establish what would have happened in the absence of a program (i.e., the counterfactual) to ensure that the intervention, as opposed to other factors, brought about particular outcomes.⁷ Outcomes are events and conditions that follow from an intervention whereas impacts are events and conditions that have been directly caused by it. Experimental methods—where treatment and control groups are randomly selected and outcomes are tracked and compared between the two—are preferred for impact assessment. Whether conducted at the project, neighborhood or community level, however, there are substantial issues and costs associated with implementing such designs in relation to complex community and economic development program interventions (GAO 2002a, 2009). Because rigorous efforts to prove cause and effect might only be achieved in very limited circumstances, researchers often use quasi-experimental methods including econometric simulation, propensity-score matching, geographically based adjusted time series analyses, or financial or social accounting standards to assess program outcomes (Immergluck 2008; Hollister 2007). And, even quasi-experimental designs are not always feasible or practical for evaluating programs that operate in complex and dynamic contexts (Margoluis et al. 2009).

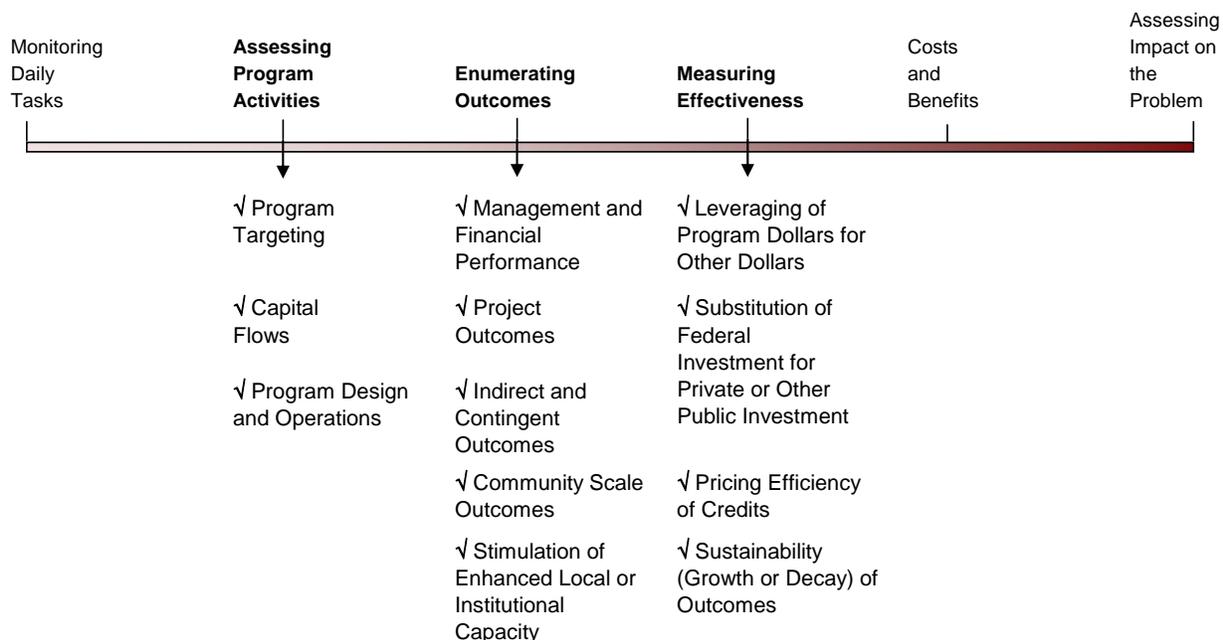
To the extent possible, this literature review concentrates on studies and reports that address questions falling roughly in the middle range of the program-evaluation continuum—between monitoring daily tasks, at the lower end, and assessing costs, benefits and impacts, at the upper end. This is because of how far along the NMTC program has evolved from its inception to date as well as the difficulties of establishing its impacts at any time. With respect to the former, the program is currently beyond its formative phase but still at a point where its

⁷ Galster and Temkin, et al. (2004, 504) summarize the challenges of measuring the effects of place-based initiatives as follows: “An intervention may not be discrete and/or may occur in multiple phases, rendering it difficult to delineate precisely pre- and postintervention periods; effects may be difficult to measure, especially if they involve changes in attitudes and expectations; the most appropriate indicators of effects may not be obvious or might vary by neighborhood context; effects may be produced by synergistic relationships, making attribution to individual causes difficult; effects may emanate over space to an extent that does not closely correspond to the boundaries established for the neighborhood under investigation; effects may emanate over space to such wide extent that ‘control neighborhoods’ are inadvertently affected by a distant intervention; and people who may accrue most benefits in target neighborhoods may be most likely to leave the environs, making it difficult to measure full program benefits.”



longer-term outcomes are not yet fully evident. Hence, assessment of program activities, enumeration of project intermediate outcomes, and aggregation of project outcomes to assess program effectiveness are reasonable evaluation objectives to pursue. At the summative end of the continuum, however, demonstrating the program's impacts is inherently more difficult. Indeed, some serious academic and government researchers question the feasibility of being able at all to rigorously determine the impacts of diverse community and economic development investments, such as those supported by the NMTC program, *on a program-scale basis* (Hollister 2007, Immergluck 2008, Rubin and Stankiewicz 2005, GAO 2002a).

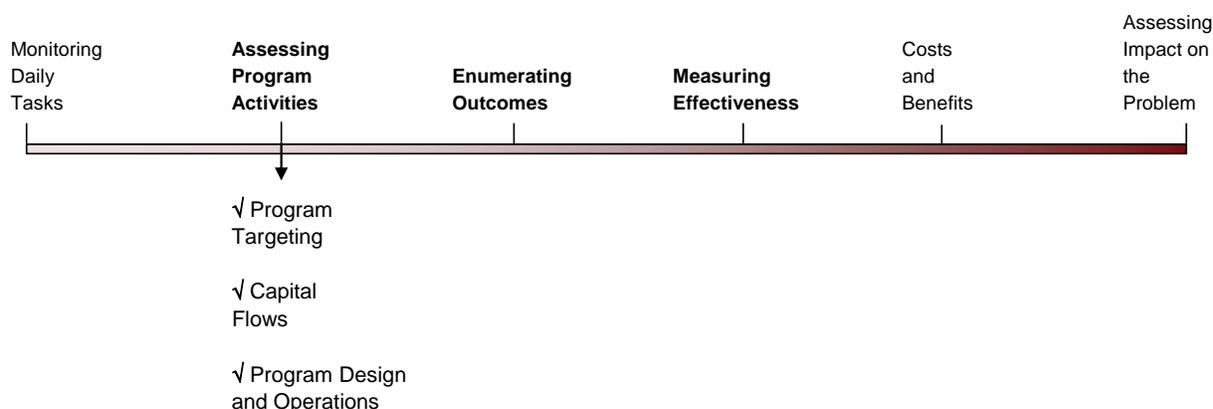
The remainder of this document is divided into three sections corresponding to the mid-range of the evaluation continuum. Within each section—assessing program activities, enumerating outcomes, and measuring program effectiveness—key evaluation questions, concepts and considerations are presented. The following 12 topics are covered: program targeting; capital flows; program design and operations; management and financial performance; project outcomes; indirect and contingent outcomes; community scale outcomes; stimulation of enhanced local or institutional capacity; leveraging of program dollars for other dollars; substitution of federal investment for private or other public investment; pricing efficiency of credits; and sustainability (growth or decay) of outcomes. These are listed below under the appropriate evaluation level.





III. ASSESSING PROGRAM ACTIVITIES

Studies and reports pertinent to assessing the activities of community and economic development programs often address important issues such as (a) program targeting, (b) capital flows and (c) program design and operations. Each of these is considered in this section.



Program Targeting

Continuing public policy debate concerns whether community and economic development programs should be directed primarily to particular types of places or to particular types of people—apart from where they live or work. Through one community or economic development program or another, the federal government has applied both approaches, and there are advocates and arguments favoring each.

Louis Winnick (1966) was one of the first to note the controversy between “place prosperity” and “people prosperity” as it relates to the geographic redistribution of economic activity. He disapproved of place-based interventions, arguing that they were difficult to target appropriately, which resulted in the inefficient redistribution of resources. Later, Roger Bolton (1992) made the case that place-based interventions are necessary for efficiently providing public goods because there are market imperfections or externalities. He also noted that social capital and a sense of community should be considered in assessing the value of place-based interventions. Considering these arguments more recently, Crane and Manville (2008) asserted that the two distinct approaches to community and economic development follow from the fact



that the problem of individual poverty is conceptually separate from the problem of spatial externalities and community goods. They wrote:

The debate over place-based development encompasses two distinct problems, often blurred together. One concerns targeting individuals for labor market, housing market, and/or social service assistance. In this case, place conditions are second best in principle to more direct, or people-based, development instruments, though they may have value in specific instances in identifying problems and intended beneficiaries. But second, even in a world of generous transfer payments, many low-income households are clustered in areas characterized by low levels of property wealth and high numbers of renters. In many such circumstances, vital local public goods are likely to be underprovided, and it is appropriate for policy makers to channel money to those places for schools, policing, and infrastructure (Crane and Manville 2008, p. 7).

It is clear that poverty, unemployment, lack of housing affordability, and lack of economic opportunity are often linked by their spatial proximity, yet not all of those experiencing such problems reside in common places and not all assistance to such places necessarily benefits intended populations. Inasmuch as there are both place and people problems motivating community and economic development policy, therefore, it seems important to consider and evaluate whether, and the extent to which, particular programs—*regardless of their approach*—benefit the appropriate places and/or people in need.

Program emphases. Programmatically, the difference between “people prosperity” and “place prosperity” programs is that, in the case of the former, grants or tax credits accrue directly or indirectly to individuals regardless of where they reside, invest, or own businesses. Relevant examples of economic or community development programs not primarily targeted to particular places include SBA guaranteed loans or equity investments, LIHTC provided housing, and RTCs. Programs that focus on “place prosperity” are explicitly targeted to locations and often involve funding to institutions or intermediaries. Among federal programs requiring, encouraging or emphasizing spatial (place-based) targeting are the Community Action Program, the Model Cities program, Urban Renewal, UDAG, EZ/EC/Renewal Communities and NMTCs.⁸

In actual design or implementation, many programs have both people-based and place-based components. A good example is the CDBG program, which can be allocated in part for place-specific activities such as infrastructure improvements and, in part, for people-specific activities such as employment training services.



Accordingly, some researchers distinguish among pure place-based strategies, pure people-based strategies, and place-based people strategies (Ladd 1994, Immergluck 2008). Rich (1993) uses a three-tiered approach to targeting that moves from the broader to the narrower scale and considers both place and people. He distinguishes between needy jurisdictions (states, counties, and cities), needy neighborhoods, and needy people. Focusing on federal grant programs, he follows the flow of funds and decisions as well as intended program outcomes and asks if they flow to needy jurisdictions, the neediest neighborhoods of those jurisdictions, and who benefits. Funds invested in projects in needy neighborhoods may not necessarily benefit needy people, of course.

Targeting to needy places. A key issue for evaluating any community or economic development program is whether its resources go to the appropriate or intended places, including both jurisdictions and neighborhoods. To address this, a sequence of questions must be considered:

1. How is jurisdiction defined by the program?
2. How is a neighborhood defined by the program?
3. How is jurisdiction or neighborhood need defined and measured by the program?
4. Are resources targeted to the *right* jurisdictions or neighborhoods?

Each is discussed, in turn, below.

1. *How is jurisdiction defined by the program?* Rich (1993) refers to the allocation of funds by the federal government to jurisdictions as the first tier of targeting. A federal policy tool can direct funds to the neediest jurisdictions in a number of ways, such as through formula grants (e.g., CDGB) or through competitive grants that meet some defined threshold of need (e.g., UDAG). For each program, federal policymakers must decide the level or levels of state and/or local government that are eligible to participate and the criteria for determining need. Funds may be distributed to state, county, or city governments, or to agencies that overlap boundaries. For example Low Income Housing Tax Credits are distributed to State Housing Finance Agencies and HOPE VI funds are awarded to local Public Housing Authorities. From an operations perspective, using such standard jurisdictional units facilitates the distribution of funds through existing government mechanisms and allows the use of consistent national data to assess need.

⁸ Beyond the federal level, many state and local community and economic development programs—including state enterprise zones, tax increment financing (TIF) districts, and business and residential improvement



2. *How is a neighborhood defined by the program?* Rich's (1993) second tier of targeting involves what happens to federal resources once they reach a jurisdiction. Local choices, he asserts, are a critical factor in the allocation of funds to neighborhoods within a community, complicated by the fact that there is no standard definition of "neighborhood." The use of census tracts or locally defined planning districts to define neighborhood has the advantage of linking such places with data that can be used to assess need and measure change; such units can also easily be visually displayed on a map. However, an issue in defining communities or neighborhoods using legal or census-type definitions is that such units may not necessarily correlate well with the distribution of problems or, for that matter, with a local understanding of community or neighborhood boundaries or business markets.

An alternative approach involves a more subjective definition of place. For example, a study of Making Connections, a comprehensive community change initiative (CCI) that focused on selected neighborhoods in ten cities, employed a household survey to document resident perceptions of the location and boundaries of their communities (Coulton et al., 2008). Using Geographic Information Systems (GIS) to generate maps that were somewhat larger than each target community, survey respondents were asked to draw on it the boundaries of their neighborhoods and provide neighborhood names.⁹ The process demonstrated several challenges associated with defining neighborhoods as they are experienced by residents. The researchers found that, even among residents living in close proximity to one another, there were a number of divergent opinions about neighborhood names, sizes, and boundaries. The neighborhoods identified through this process were shown to be influenced, in part, by racial and ethnic differences in the population and by housing tenure patterns. While, in most cases, common spaces did emerge that were seen as part of the neighborhood by many residents, the identified places were often overlapping and seldom comported with pre-defined target areas set forth by the Making Connections Initiative.

3. *How is jurisdiction or neighborhood need defined and measured by the program?* A range of indicators have been used by various community and economic development programs to assess the needs of different places. Levels of poverty, unemployment, and population loss are often among those used to measure level of distress, for example. In 2006, HUD funded a project to develop an index of community need (Eggers 2007). A list of 26 indicators was compiled, ranging from housing conditions, physical conditions, economic conditions, and quality of life. Nearly all were based on publicly available data sources, including the American Community Survey (ACS), the decennial and economic census data, the Home

districts—have also employed geographic targeting (Thomson 2008).

⁹ The maps displayed selected streets to orient the respondent, and the interviewer pointed to the location of the respondent's home.



Mortgage Disclosure Act (HMDA) data, and the Bureau of Labor Statistics Local Area Unemployment Statistics. All were defined in percentage or ratio terms to allow for geographic comparisons so that magnitude did not depend on size of place.

The CDBG program was one of the first attempts by the federal government to allocate community development funds based on a formula. The intention was to provide larger grants to communities with relatively higher need in contrast to awarding grants on the basis of an application and selection process.¹⁰ The original formula for allocating CDBG funds contained three variables: population, poverty, and overcrowding, with the largest weight given to poverty. Since the premise of CDBG targeting was that a community with high need should receive a larger per capita grant than a community with low need, HUD periodically conducted studies to assess the extent to which the allocation formula was successful in achieving this objective (Richardson 2005). This was done by creating a needs index and comparing the allocation resulting from a formula against the index. The first such study, conducted in 1976, led to the creation of a dual CDBG allocation formula (beginning in 1978) that targeted funds to both places with large poverty populations and older and declining communities.

In the case of the UDAG program, which attempted to stimulate economic development through use of public funds that leveraged private-sector investments, federal public funds were allocated through competitive grants awarded to communities. Level of community distress was a factor in the application review process. Indicators of community distress included: the percentage of a city's aging housing stock (built before 1940); the percentage increase in per capita income (1969–1977); the percent of the population that was at or below the poverty level; the rate of population growth (1960–1978); the rate of growth of retail and manufacturing employment (1972–1977); and the average annual unemployment rate (HUD 1982).

4. Are resources targeted to the right jurisdictions or neighborhoods? While program funds may be allocated based on needs indicators, it may not always be the case that benefits are delivered to the right places—i.e., those with the most need, if that is the criterion, or those with lower levels of need, if that is the program objective. Depending on the criteria used, certain “deserving” communities may be ineligible for funding. This situation may arise as a result of limitations in the data (e.g., insufficient or old data) or conceptual/measurement issues (e.g., the measures do not reflect the contextual environments facing certain communities) associated with selection criteria. Or, depending on the way in which geographic units are designated, some neighborhoods that are part of larger, affluent areas may be unable to receive funding

¹⁰ After setting aside funds for special purposes such as technical assistance, projects specified by Congress, and the Indian CDBG program, the annual appropriation for CDBG funding is split so that 70 percent is allocated among eligible metropolitan cities and counties (referred to as entitlement communities) and 30 percent among the states (Richardson 2005).



(Markusen and Glasmeier 2008). Various studies have examined whether place-targeted programs deliver resources to places with need.

In the most recent study of CDBG targeting to community development need, Richardson (2005) developed a needs index to assess the effects of Census 2000 data on the CDBG formula. Using CDBG formula allocation studies, he identified income, social and demographic characteristics, and economic, housing, and population trends, as well as other indicators such as crime and population density, for the index. Most of the indicators are available from the US Census. Richardson found that, while the current formula continues to target more funds per capita to communities with high need index scores, the targeting has weakened over time.

HUD's evaluation of the UDAG program observed that 17 percent of all metropolitan cities in the most distressed quintile (i.e., rankings that classified cities based on the percent increase in per capita income, population growth rate, and retail and manufacturing growth rate) had not received any funding as of June 1981—nearly three years after the inception of the program (HUD 1982). However, when *per capita* funding was used as the indicator, it turned out that the most distressed cities received the highest per capita UDAG dollars.

While targeting to places with the most need is the intent of many community and economic development programs, it generally takes more resources to achieve results in places with more need than in places with less need. Some programs, therefore, may not target the former but, instead, places that appear more likely to succeed. For example, Greenbaum (2004) investigated the factors that contributed to the *state* decision making process in identifying distressed areas as formal empowerment zones by using ZIP code-level information on 10 state (including District of Columbia) programs designated between 1983 and 1994.¹¹ He found that siting decisions were influenced by factors including: population density, local housing market, and demographics. However, while most states used the expected threshold requirements to designate zones (such as median income, poverty rate, and unemployment rate), he also found that zones were placed in distressed areas bordering on less distressed areas. Selected zones tended to have a preexisting employment base (business establishments), implying that they did not target areas with the highest employment need.

The NMTC program employs geographic targeting that focuses on low-income census tracts (see definition in footnote 1). Yet, as Armistead (2005a) pointed out, the definition of low-income community used by the program was linked to the issue of the equitable allocation of

¹¹ To stimulate economic activity, EZs target neighborhoods to receive tax and regulatory relief. In addition to the federal EZ program, states have also designated their own EZs since the early 1980s as part of local economic development efforts.



NMTCs to rural and urban communities. To provide greater equity for rural census tracts in qualifying for NMTC investments, Congress broadened the definition of “low-income communities” to include census tracts that experienced out migration.¹² About 39 percent of all census tracts in the United States qualify to receive NMTCs (Forbes 2006)—a broad band with respect to need. Despite concerns that the definition of “low-income communities” may be too broad, however, the program’s competitive allocation process seems to have resulted in selecting CDEs that intend to direct their investment to those communities with high economic distress within this band (Bershadker et al. 2008).

Targeting to needy people. Rich’s (1993) third tier of targeting concerns who benefits from community and economic development investments and how. To determine this, it is necessary to answer the following questions:

1. What categories of people are targeted by a program?
2. By what criteria are they selected?
3. Are such persons direct or indirect beneficiaries of program resources?

Of economic and community development programs that target persons as opposed to places, several use individual or household income as targeting criteria and others target particular population groups, such as minorities or women. While the LIHTC program has income restrictions with respect to tenants, LIHTC properties can be developed in any neighborhood. A 2000 assessment of the program illustrates the effects that income targeting, without geographic targeting, can have on neighborhood demographics and outcomes. It showed that: the program was adequately targeted to needy individuals, with 80 percent of the units within sampled properties reserved for qualifying tenants, far exceeding the requirements; and properties were constructed in low-income, high-poverty neighborhoods, typically located within cities, comprising a high proportion of minority residents that were already dominated by rental units (Buron et al. 2000). However, studies have also shown that, as compared to other federal housing programs, a larger percentage of properties were constructed in suburban neighborhoods, many of which had moderate rather than high levels of poverty (Freeman 2004, Oakley 2008). Oakley (2008) attributes the clustering of LIHTC properties in low-income areas to a place-based incentive in the program’s policy—i.e., a Qualified Census Tract (QCT) bonus that promotes production of units in particularly distressed areas. This suggests dual, potentially contradictory, policy motivations: serving areas most in need while deconcentrating poverty.

¹² HR 4520 enacted as PL 108-357 October 22, 2004 defines a high migration rural county as a county that, during the last 20-year period ending in the year in which the last census was conducted (1980-2000), has net outmigration of inhabitants for the county of at least 10 percent of the population of the county.



Among small businesses, all of which may face a capital gap, veterans, women and minority owners, as well as firms located in rural or special economic development zones, are thought—whether due to historical legacy, current disparities, or discrimination—to face more extensive barriers to securing capital. The SBA has several loan guaranty programs targeted towards supporting these borrowers because they are typically underrepresented in the private market. In a study analyzing the extent to which SBA's 7[a] and 504 programs serve these groups, Temkin and Theodos (2008a) found that women- and minority-owned firms accounted for a higher share of the loans made under them between 2001 and 2004, as compared to such firms' share of conventional small business loans during the same time period.

Consideration of the consequences or outcomes for individuals is pertinent for programs that target places as well as those that target individuals, as will be discussed further in Section IV, Enumerating Outcomes. Notwithstanding the fact that community and economic development programs generally intend to target high-need places, the implication may be that such programs also intend, directly or indirectly, to improve the community environments and economic opportunities of high-need persons. Whether an explicit requirement of such programs or not, it is certainly legitimate to inquire about the types of persons who benefit from any program, even those targeted to places. The Urban Renewal program, for example, was criticized for its record related to the needs of minorities and inner-city residents and its gentrification efforts to replace such persons with higher-income non-minorities (Bradford, 1992). Likewise, UDAG was criticized by Barnekov and Hart as being a “lush picnic basket” for private developers as opposed to deserving residents (1993, p. 1478).

Targeting and program evaluation. While place- or person-based targeting makes sense as a way to strategically direct benefits, there are powerful political incentives that work against highly targeted programs (Watson, Heilman, and Montjoy). Regarding UDAG, for example,

(T)he eight specific measures identified in this chapter taken to broaden UDAG are consistent with the view, derived from Lowi's theory, that redistributive programs will either become distributive or lose political support and languish or die. UDAG's demise, in hindsight, exemplifies this political dilemma. On one hand, UDAG had to be broadened to maintain political support. On the other hand, when eligibility was broadened, UDAG was criticized for not concentrating on its mandated targets. (p. 64)

This suggests that evaluations should take into account not only that community and economic development programs may differ with respect to whether they are targeted to places or persons or how highly targeted they are, but also to whether targeting criteria have changed over time in response to pressures of one sort or another. Hence, evaluators need to establish what beneficiary definitions have been and are being used, what targeting strategies have been



and are being employed, and what data and measures have been and are being applied to target benefits. Equally important is the decision-making process that is inherent in a program's structure and how that process affects targeting at the jurisdiction, neighborhood, or people levels. In terms of performance, however, outcomes can be evaluated with respect to which jurisdictions, neighborhoods, and people benefit from a program—regardless of whether the program targets places or people or whether the program is highly targeted or not.

Capital Flows

The literature suggests six key domains important for generating regional and local development: human capital, equity and openness, the broader economic environment, the costs of doing business, and amenities (Pindus, Theodos, and Gentsch 2008; Wolman, Hill, and Furdell 2004; Eberts, Erickcek, and Kleinhenz 2006; and Mills, Reynolds, and Reamer 2008). While all of these domains are significant, it is safe to say that access to capital is integral to the physical and business development of an area. A lack of access to patient, reasonably priced capital has seriously hindered the community and economic development environments of certain urban as well as rural areas, despite the fact that many of them contain viable opportunities.

Urban markets. Analyses of entrepreneurship and small business development suggest that because of limited access to capital, some urban communities are severely limited with respect to business formation (Aldrich and Carter 2004; Aldrich, Carter, Ruef, 2004). In such communities, insufficient access to capital is reflected in inadequate personal as well as business opportunities. By one estimate, 35 to 54 million Americans remain outside of the mainstream national credit system, many in impoverished communities (Turner 2006).

There are several factors which motivate this lack of capital in distressed urban areas. Researchers have documented that a gap in the information about markets that is available to investors partially explains this disinvestment. In the mortgage finance area, for example, Lang and Nakamura (1993) find that a lack of information leads to lower lending volumes and larger required down payments. Furthermore, a large share of the economic activity in low-income neighborhoods is informal; Losby et al. (2002) estimated that its size in the U.S. ranges from 7 percent to 27 percent of GDP. Through their reliance on administrative data to estimate income and market attributes, investors cannot take into account the true level of market activity in these areas—these formal sources underreport revenue and the bartering economy (Schneider and Enste 2000; Losby et al. 2002). Additional evidence from analyses, observations, and field studies (e.g., Venkatesh, 2006) suggest a quite vibrant entrepreneurial community in low-income areas that is absent from formal data sources.



The structure of lending entities in these areas as well as regulatory and industry changes also contribute to insufficient access to capital. With banking deregulation in 1980, banks that had traditionally been protected from competition and required to locate in impoverished communities were freed to compete for customers, leading to decreased service in distressed urban communities as banks sought to attract clients in wealthier areas. While, private financial institutions still had some regulatory motivations for remaining in and investing in projects in disinvested areas—i.e., it helped them meet CRA requirements—the financial products they offered often did not well meet the capital needs of local residents and business owners. Finding a ready market in low-income areas that was not being met by banks, businesses such as payday lenders, check cashing operations, pawn shops, and auto-title lenders became primary venues for personal loans (Barr 2004; Barr 2007; Fellowes and Mabanta 2008). These businesses offer a different set of financial services than those provided by banks—however, one that is often wealth-stripping rather than wealth building. Further, while individuals were able to access personal loans from these alternate finance sources, there were few private investors willing to make substantive investments in distressed urban or rural areas.

Urban communities have faced disinvestment for several additional reasons. They have lower levels of human capital, which means a less developed skill base is available for employers. There are smaller consumer bases supporting economic activity in these communities and lower levels of personal and familial wealth. Additionally, many retail and investment decisions are tied to suburban models for economic development and designed for homogeneous demographics (Porter 1995). Impoverished urban communities face lower levels of investment due to relatively higher risks resulting from elevated security costs, greater tax burdens, greater costs of land assembly, and higher actual or perceived rates of crime. There are several additional reasons why distressed urban areas have difficulty attracting equity investments, including: limited investment opportunities; few available investment exits; little developed investment infrastructure; less experience with and understanding of venture capital; and few connection to venture capital support networks (Carlson and Chakrabarti 2007).

A final additional factor is discrimination, as many low-income urban communities have a high representation of ethnic and racial minorities. Modern disinvestment in poor urban communities has direct roots in the discriminatory commercial, personal, mortgage, and small business lending practices of previous generations. By rule and practice, entire communities were cut off from accessing capital. In mortgage lending, this process was often called redlining



because many banks literally drew red lines on maps to demarcate areas where they would not lend, or would lend only on unfavorable terms.¹³

With passage of the Fair Housing Act (1968), the Equal Credit Opportunity Act (1974), the Home Mortgage Disclosure Act (HMDA) of 1975, and the CRA in 1977, lenders were prohibited from discriminating on the basis of race, national origin, religion, gender, family status, and disability in their personal and home lending activities.¹⁴ Yet, the introduction of these regulations in the 1960s and 1970s did not bring about an immediate reversal of fortune in disinvested urban areas.

Studies examining several different credit products have documented higher pricing or decreased access for minorities, especially if located in predominately minority communities. Cohen-Cole (2008) found that individuals living in majority-black neighborhoods received less access to personal credit, after controlling for the socioeconomic characteristics of place. Immergluck (1999) examined commercial investment during the 1980s using commercial building permit data, finding that changes in the racial and ethnic composition of neighborhoods played a significant role in the investment flows. Edelberg (2007) found that minorities do not just lack access to capital but pay higher rates for the capital they receive, controlling for the creditworthiness of the borrower. Squires (1997) documented the existence of modern-day redlining in insurance markets. Similarly, several studies have empirically documented discrimination in the small business lending market (Bates 1997, Blanchflower et. al. 2003, Cavalluzzo and Cavalluzzo 1998, Cavalluzzo and Wolken 2002, Coleman, 2002). In a paired testing study of mortgage lenders, Turner et al. (2002) found unequal treatment that systematically favored white over black and Hispanic home buyers. And Holloway and Wylie (2001) and Schill and Wachter (1993) documented the neighborhood-level prevalence of discrimination in the home mortgage market.

Despite these many disadvantages, distressed, low-income urban areas hold several strategic and competitive advantages. Many of them have unrealized and untapped resources, and recent research has documented the relative strength of such markets. Cuomo (1999), Porter (1995), and Alderslade (2005), for example, identify the following strengths: concentrated spending power; strategic locations; integration with city and regional business clusters; an

¹³ Such practices were not, however, only the decisions of private lenders. The federal government also incorporated racially discriminatory criteria into its home appraisal and mortgage insurance programs. These private and public decisions produced wide-scale disinvestment in many urban communities—often communities that were predominately minority, given the differentiated racial outcomes of lending. For a thorough summary of urban disinvestment and redlining see Squires 1997.

¹⁴ For more detail on fair housing, credit access, and community investment regulations, see: Immergluck 2004; Hillier 2003.



available labor pool; and a high population density—which produce untapped purchasing power. Such areas, termed "emerging domestic markets" (Yago and Harrington 1999), can prove attractive to investors, though they often are in need of some level of subsidy through a local or federal community or economic development initiative.

Rural markets. Less extensive than the literature documenting economic development in disinvested urban areas, access to financing in rural areas has received some theoretical, though little empirical, attention. Rural areas have historically lacked sufficient access to capital, but not all rural markets are equally situated—some do not face capital gaps. The farm sector and rural housing, in particular, have been cited as having adequate access to capital. However, rural economic development projects, nonfarm businesses, and entrepreneurs lack sufficient access to financing (USDA, 1997). But, at least one recent study offers reason for optimism. In comparing the Appalachian Region to the nation, the National Community Reinvestment Coalition (NCRC 2007) found that the CRA has had a substantial effect in leveraging increases in community development lending and investing in the Appalachian Region, and that mid-size community banks were particularly responsive to the needs of small business in lower income and distressed rural communities in Appalachia.

Research has identified multiple reasons why rural areas may be disadvantaged in their access to capital—somewhat different reasons than those cited for urban communities. Several federal programs seek to address these shortfalls in capital, including SBA loan and investment programs, multiple USDA programs, the NMTC program, and the New Markets Venture Capital program.

Rural areas have lower penetration rates by financial institutions, meaning there are fewer banks to compete for borrowers (USDA 1997). The primary sources of debt capital available for rural development are rural banks and the farm credit system (Markley 2001). These predominately small and locally owned banks often employ conservative lending practices, relying on relationship lending rather than credit scoring models. Banks that provide debt or equity financing do not offer the number or sophistication of products as do banks in more developed areas. Particularly lacking in rural areas is equity financing. Venture capital is highly concentrated in a few states, mostly in high-tech corridors in California and Massachusetts (Temkin and Theodos 2008b). Especially in rural areas, equity investments face more difficult exits, given firm sizes and limitations, in taking a company public or finding other buyers (Rubin 2006a).

A second reason rural areas face capital gaps involves limited investment opportunities and small deal sizes. The small deal sizes are often a reflection of business sizes and supporting customer bases. Smaller deals result in higher costs of underwriting and assembly for investors. With a limited deal flow, investors must support higher costs per investment. This



is especially the case for large debt or equity financing, which is difficult to assemble in rural areas (Barkley et al. 2001). One advantage vis-à-vis urban communities, however, is that while the customer base in rural areas is small, such areas generally have lower costs of labor. This is especially likely to be true in rural manufacturing areas where the demand for low-skill labor is far lower than the supply (Howland and Miller 1990).

Rural areas may also face insufficient investment because they lack supporting infrastructure. Important components of rural infrastructure include the networks of roads, bridges, rail, and dams, as well as systems of power generation and transmission, waste, water and sewers, and communications.

Rural areas are thought to lack necessary investment as a result of market failures in the information available to lenders. While market failures in rural areas are not widespread, some areas, sectors, and deal types are not well served by the current financing environment (USDA 1997). In particular, costs of gathering information are high in rural areas. The existence of multiple different, and small markets, means that lenders can less readily value investments.

Finally, rural areas fail to attract significant equity capital for several additional reasons (See Barkley et al. 2001 and Barkley 2003). Due to smaller number of business establishments and customer base, rural areas have limited investment opportunities. Further, rural businesses are concentrated in slow-growth industries. Rural areas lack a developed investment infrastructure, which combined with limited information, means that venture capitalists face higher costs for making rural investments. In addition, rural areas lack an entrepreneurial culture and an understanding of how venture capital works. Business owners are often unwilling to relinquish company ownership.

Increased access to capital. Using disparate methods, many community and economic development programs attempt to overcome the cost and information barriers described above to encourage investment in low-income areas. The intellectual origin of these programs lies in the belief that distressed urban and rural areas are undercapitalized and that increased access to financing will jumpstart economic development. The purpose of some economic development programs (including the NMTC program, UDAG and EZs), is to directly encourage the movement of capital to low-income communities. Other economic development programs achieve similar results through a greater focus on housing, such as LIHTC and HOPE VI, while still others focus on small business development or workforce training.

Given the pivotal role that capital plays in developing poor urban and rural communities and the varying designs of community and economic development programs that attempt to address these shortfalls, a fundamental question for any program evaluation is whether, and by how much, a program increases investment in disinvested communities. While pivotal for



evaluation, accurately measuring local investment levels and attributing them to an economic development effort is a difficult undertaking. Direct outcome measures that comprehensively capture public and private debt and equity financing do not exist at a small enough geographic level to link to an economic development activity. And, correspondingly, few community and economic development programs achieve sufficient scale in a given neighborhood or community to produce a demonstrable effect in that area's capital flows. Furthermore, the supply for financing is, in part, a reflection of the demand for financing, which is difficult to quantify and, therefore, rarely measured.

Several outputs and intermediate outcomes can be measured, however, to inform key evaluation questions. And, in previous studies, researchers have relied on a mixture of quantitative and qualitative data to measure increased access to capital. The first and most basic measure is the total level of direct investment that occurs as a result of the program. This calculation is straightforward in the case of a grant-funded program or somewhat more difficult in the case of a tax credit where it is necessary to know, not just the amount of taxes forgone, but also the investment amounts for all the projects funded. A study of access to capital and credit for small businesses in Appalachia (NCRC 2007) compared the following lending trends for the Appalachian Region to the nation as a whole: percent of businesses that receive small business loans; percent of small business loans to businesses with revenues less than \$1 million, small business loan to deposit ratio; small business lending per branch, and small business lending by minority level of county.

More challenging, but also important, is measuring the additional investment in low-income areas above and beyond direct programmatic funds. Several useful measures have been tried or proposed. For example, evaluators may choose to look at indirect measures such as the dollar amounts in debt capital and in equity capital that are raised. Another method for measuring investment levels is to compare similar institutions that have and have not participated in an economic development program. This can be more or less challenging depending on programmatic design. In evaluating the NMTC program, for example, Rubin suggests estimating investment activities of nonreporting community development banks by using a ratio of their asset, loan, and deposit levels relative to banks whose activities are known (Rubin 2006b). GAO (2007a) assessed whether the NMTC program produced increased investment by comparing the rate of growth in the net assets of corporations that made NMTC investments to the rate of growth in net assets of a similar group of corporations that did not make NMTC investments over time. Schwartz (1998) compares the mortgage and home repair lending of banks who have signed CRA agreements with those who have not.

When capital flow and economic output measures have been calculated, an economic development program can be measured on the ratio of tax credit or grant funding dollars per dollars of local economic activity that generates from them (Berube 2006). Beyond the levels of



investment, investment amounts can be studied across relevant firm and deal characteristics. For example, are there minimum or maximum transaction sizes that investors, particularly affiliated investors, are willing to support? And, how do transaction size restrictions shape which types of projects are initiated?

Economic development programs may encourage further investment in these communities either by attracting additional investment from existing sources or attracting new investors. In addition to measuring the level of investment resulting from an economic development program, it is important to consider who the investors in a program and locality are. Which types of institutions or individuals are represented? And were new investors (e.g., those who had not previously invested in community development finance) attracted to it because of the program? In a review of the NMTC program, GAO (2007b) measured these effects by surveying investors, who claimed that as a result of the program they increased their investment in low-income communities.

Merely demonstrating increased investment levels as a result of an economic development program is not sufficient for demonstrating success. The increased investment must generate positive project and community outcomes in a cost-effective manner. If new or additional investment has been realized, two important questions remain for analysis: Has a program stimulated additional investment in low-income communities above and beyond the program-linked financing—i.e. has the economic development program produced indirect and contingent outcomes (see Section IV) or leveraged other public or private financing (see Section V)? If investment patterns have produced greater capital flows to low-income communities, is this pattern sustainable (see Section V)?

Program Design and Operations

The scores of federal community and economic development programs initiated over the past decades have been designed in different ways. At the initial policy development stage of each there was likely consideration as to which approach (a) could best achieve desired objectives, (b) was legislatively and/or administratively most feasible, or (c) seemed most likely to correct program implementation problems previously encountered. Design variations have included:

- Use of categorical grants, block grants, repayable loans, nonrepayable loans, deregulation, tax abatements, or tax credits;
- Emphasis on primarily government action, leveraging private-sector involvement, or creating public-private partnerships;



- Accentuation of federally centralized administration or locally decentralized administration;
- Inclusion or exclusion of planning stages;
- Emphasis on regulatory compliance or deregulatory incentives;
- Allowance for single-purpose initiatives or multiple types of initiatives; and
- Programs that follow market demand, are counter-cyclical, or are triggered by market failure.

However designed, once a program is operational it can be evaluated empirically to ascertain whether its approach (some combination of the above) is optimal with respect to accomplishing desired objectives. Among other considerations, such “process” assessments include determination regarding whether a program is:

- Flexible or rigid in its administration;
- Simple or complex to carry out;
- Responsive or unresponsive to local considerations, needs or market demand;
- Rapid or slow to produce outputs and outcomes;
- Vulnerable to waste, fraud or abuse; and
- Susceptible to manipulation (“gaming”) that might produce undesired results.

During the formative years of a new program, process evaluation may involve primarily monitoring daily tasks (see Section II, Program Evaluation Concepts, above). Later, however, evaluation of program design and operations is often part of more comprehensive program evaluation. For example, apart from evaluation of its outcomes, Anderson observed that the Urban Renewal program required local agencies to use a complex and lengthy application process (evidenced by the program’s enormous operational manual—consisting of 25 sections and 82 chapters) and submit mountainous reporting forms. For this as well as other reasons, he argued that the program did not produce timely results, taking an average of 10 to 12 years to complete projects (Anderson, 1964).

Likewise, independent of evaluations of their outcomes, the CDBG and UDAG programs were evaluated with respect to their process and operations. CDBG, as compared to the predecessor Urban Renewal or Model Cities programs, was considered to have: afforded greater local flexibility and responsiveness to local need; provided greater administrative cost



savings as a result of more limited federal monitoring and oversight; and allowed localities to better anticipate future funding streams because of formula-based funding. At the same time, these features were criticized for making it easier to reduce federal funding levels over time, producing targeting distortions, de-emphasizing federal priorities, and contributing to waste, fraud and abuse (Finegold et al. 2004; GAO 2005; GAO 2006; Norcross 2007). And, UDAG, which (like Urban Renewal) required local applications to a federal agency, was considered to be less bureaucratically burdensome, more flexible, and more responsive to market timing (i.e., to opportunities when they arose), as well as to have completed projects on a more timely basis than Urban Renewal.

Authorization and reauthorization of community and economic development programs require substantial federal appropriations. As balanced budget considerations took on more legislative prominence during the 1990s, proponents of such programs tended to shift their legislative emphasis from “on-budget” to “off-budget”—the latter involving federal tax credits such as RTC, LIHTC, and NMTC rather than appropriated funds. Because these programs involve the federal tax code, however, numerous analysts observed, early on, that they were inherently complex and required very specialized legal and accounting expertise to implement. Even as compared to Urban Renewal and UDAG, which involved lengthy applications and a heavy reporting burden on the part of recipients and often involved complicated financing arrangements, the tax credit programs involve complex financial arrangements as well as elaborate IRS regulations—resulting in high transaction costs (Stegman 1991; Ferguson and Dickens, 1999, Abravanel and Johnson 2000; Iglesias and Lento 2005; and McClure 2000).

While some analysts emphasized tax credit program complexity, others anticipated that this would diminish over time as the programs aged, program rules became worked out and clearer, and practitioners became more familiar with them. According to Armistead (2005b), for example, those using the NMTC program for the first time in its early years, like those using LIHTCs in its infancy, had to spend substantial amounts of money to apply for and obtain allocations, set up the infrastructure to make investments and monitor compliance, and create appropriate structures at the transaction level—all of which required specialized and expensive accounting and legal assistance. Those structures involving leverage and the combination of RTCs and NMTCs were especially complicated. But, as with LIHTCs, Armistead anticipated that practitioners would be able to capitalize on their initial learning investments, thereby making the programs seem less complicated. Also, it is not always necessary for an organization promoting a community or economic development project to have to set up its own CDE to obtain an allocation of credits; it could seek and obtain project-level financing from an existing CDE that had the scale and financial strength to obtain an allocation and manage it (see also McClure 2000).



Beyond Assessing Program Activities

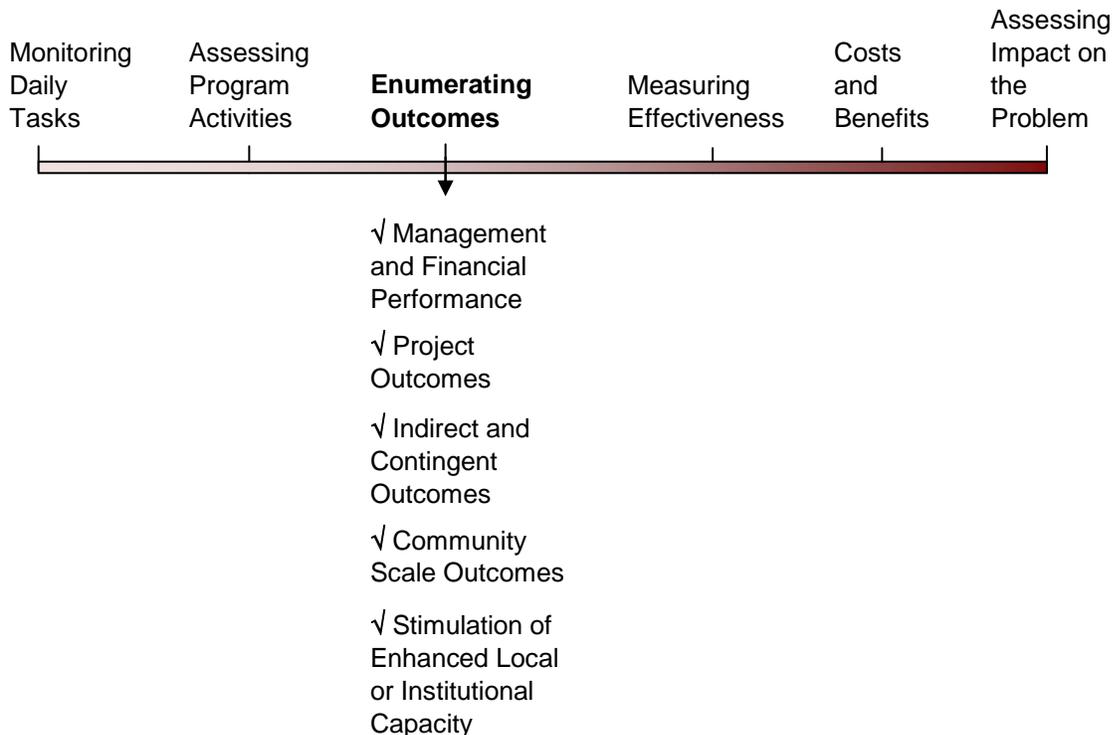
The NMTC program is beyond its formative stage where evaluation of program targeting, capital flows, and program design and operations would be done mainly to inform administrative issues and process-improvement recommendations. At the early stage, the presumption is that program activity issues need to be understood and, possibly, dealt with to ensure that the program will perform properly.

Now, almost ten years after the NMTC program was enacted, actual program performance can begin to be measured. Therefore, studies and reports involving enumeration of outcomes are discussed in Section IV, below. Even so, later-stage evaluations may also require the results of program activities assessments, such as those described above, to help explain and interpret program outcomes.



IV. ENUMERATING OUTCOMES

Studies and reports pertinent to enumerating the outcomes of community and economic development programs often address the topics of (a) recipients' management and financial performance (b) project outcomes, (c) indirect and contingent outcomes and (d) community scale outcomes, as well as (e) the possible stimulation of enhanced local/institutional capacity. Each of these topics is considered separately below, beginning with recipients' management and financial performance.



Recipients' Management and Financial Performance

Assessing the management and financial performance of entities undertaking community and economic development projects is generally a prelude to assessing the intermediate and longer-term results of those projects. The idea is that good project management and financially healthy projects are leading indications of successful project implementation and, subsequently, achievement of desired outcomes. To the contrary, failure to



achieve desired outcomes may, to some extent, be a function of deficient project management or lack of financial health on the part of managing entities.

A number of indicators have been used to evaluate the management capacity and financial health of community and economic development initiatives, including measures of program participation, project progress and status, project failures or terminations, business loan default rates, annual revenues, profits or losses, and net worth (see, for example, HUD 1982). Although the nomenclature varies by program, community and economic development programs generally encompass individual projects, investment recipients, and intermediary or implementing organizations. As such, therefore, management and financial performance can be examined at:

- **The project (deal or activity) level**—involving, for example, Qualified Low Income Community Investments (QLICIs) in the case of the NMTC program, housing developments in the case of the LIHTC program, activities in the case of the CDBG program, and projects in the case of the UDAG program.
- **The recipient-of-assistance level**—consisting, for example, of QALICBs in the case of the NMTC program, developers in the case of the LIHTC program, local community development agencies in the case of the UDAG program, and state and local agencies in the case of the CDBG program.
- **The public-entity or private-organization level, serving as financial intermediaries or implementers**—such as CDEs in the case of the NMTC program, intermediary organizations or syndicators in the case of the LIHTC program, and Coordinating Responsible Authorities (CoRAs) in the case of Renewal Communities and Empowerment Zones.

While these are important distinctions, it should be noted that the program evaluation literature is limited or inconsistent with respect to coverage of these management and financial performance levels.

Management experience and performance. Various studies have assessed the management experience and performance of community and economic development programs. For example, HUD evaluators assessed project-level management as part of a more comprehensive program evaluation of UDAG (HUD 1982). An important outcome indicator was the number of projects falling short (by 20 percent or more) on at least one anticipated objective. Explanation for such shortfalls, when observed, included project management and financial difficulties, which were separately assessed. Some of the projects that did not achieve all of their anticipated objectives suffered from weak administrative capacity on the part of the administering agency (the recipient of the assistance)—as indicated by how well organizational responsibilities for carrying out economic development activities were defined, whether the



agency had a staff skilled in the use of economic development tools, and whether there was a high level of cooperation between the local government and the private sector. Specifically, reasons for project shortfalls included initial overestimation of potential benefits as well as unforeseen financial difficulties. The latter tended to result from unanticipated changes in economic conditions, the risk inherent in some types of development, and project delays associated with administrative problems, changes in financing, or modifications in project scope.

At the recipient level, state and local agency management has been addressed with respect to program monitoring and oversight of the CDBG program—including the extent to which grantees provide adequate documentation that their economic development activities meet the program criteria established by HUD to safeguard against overly subsidizing private businesses (GAO 1994). In its study of the EZ/EC program, the GAO (2006) obtained detailed information on monitoring activities of state and local participants. It found that in the absence of clear federal guidance, state and local authorities applied guidelines from other programs or developed their own policies. Almost all of the states for which data were collected reported that they reviewed required audits, and most performed site visits. Most did not, however, maintain records showing the types of activities the designated communities undertook. Finally, experience and organizational objectives may also be important indicators of management capacity or performance. A survey of developers and owners of LIHTC-supported properties, for example, found that a large majority had substantial previous development experience before developing a tax-credit property. Although only three out of every 10 owner/developer respondents were nonprofit organizations, the majority indicated that financial as well as civic or social reasons motivated their development decisions (Abravanel and Johnson 2000).

At the intermediary level, one criterion evaluated by the CDFI Fund in awarding NMTC allocations is management capacity, since required reporting of transaction activity enables the Fund to monitor CDE compliance with NMTC regulations. A CDE has five years from the date of entering an allocation agreement to obtain qualified equity investments from its investors. It then has 12 months to place “substantially all” of the proceeds of the investment in QLICs (Bershadker et al. 2008). In their allocation agreements, CDEs commit to deploying a percentage of their investments to areas of higher distress. CDE performance with respect to obtaining and placing investments, the turnaround rate for deployment of credits, and the length of time it takes CDEs to initially identify and assemble a QLICI, are indicators of management performance.

Financial health. Studies have also focused on the financial health of projects and recipients. At the project or deal level, loan performance is a standard measure, as indicated by repayment, default, and delinquency rates. For example, a study of the California state loan guarantee program included two indicators of financial performance: the number and percentage of loans that went into default, and after-recovery losses as a percentage of the total



amount guaranteed (Bradshaw 2002). These presented an aggregate picture of the loan portfolio, allowing comparison to other loan guarantee programs such as the SBA 7(a) loan guarantee program, which was slightly less successful than the California program according to these indicators. Also, HUD's evaluation of UDAG (HUD 1982) noted that the real or threatened loss of benefits from some projects was due to problems related to failure to execute them as planned—including the serious problems of termination due to lack of private commitments, actual bankruptcy or closure, and the problems of cancellation of one or more project components, temporary financial difficulty or shrinkage, poor physical design, or major delays in completion. The evaluators found that about one in ten projects suffered from serious problems and a somewhat larger number exhibited less serious or potential problems.

At the recipient level, the performance of borrowers is important as a sign of profitable business operation, as a condition for creation and retention of job opportunities, and to ensure a continued flow of economic development funding. In a study of business lending by local community development agencies using CDBG and Section 108 funds, Walker, Abravanel, et al. (2002) examined the percent of borrowers who were still in business three years or more after loan origination, and compared these to the national average for all businesses—concluding that the survival rates were about the same. Other measures used were default rates and loans that were more than 90 days overdue.

The financial health of intermediaries, such as CDEs (in the case of the NMTC program) and CDFIs is a critical determinant of the long-term effects of programs. CDEs must maintain asset levels sufficient to meet operating and lending expenses. That is, CDEs must achieve sustainability, if not profitability, over time. Conversely, if CDEs are inefficient lenders or demand too great a return for their efforts, investors and borrowers will suffer. In the case of CDFI lending to small firms, Hollister (2007) recommended analyzing the small business credit scores of CDFI lending recipients to determine if such firms would have otherwise received loans from conventional lenders.

Several measures have been used to gauge the fiscal health of community banks, CDFIs, and CDEs (see, for example, Bershadker et. al. 2007, Seidman 2007, and Rubin 2006b). These include the amount of outstanding loans and investments and total assets. On a yearly basis, it is useful to determine revenues by source (e.g. from fees, interest) and total expenses. A summary indicator of the fiscal health of a CDE is the ratio of earned income to total expenses: too low a ratio of income to expenses may indicate that an organization's long-term sustainability is at risk; conversely, too high a ratio may indicate excessively priced loans or investments.

As with other lenders, CDEs can be assessed on the repayment performance of their loans by measuring late payments or defaults as a share of all lending. Late payments can be



judged by the ratio of the balance of loans outstanding that are 30, 60, 90, or more days past due to the balance of all outstanding loans.¹⁵ The share of lending currently under default can be similarly constructed as the amount charged off (for defaulted loans) or investments to total outstanding loans and investments.¹⁶ The loan loss reserve ratio measures a CDE's loan loss reserve (assets held in the event of losses) over all outstanding loans and investments.

Project Outcomes

The focus of this section is on project outcomes beyond managerial and financial performance—that is, intermediate and some longer-term outcomes that flow from specific projects supported by community or economic development initiatives. Note that the descriptions of various outcomes and how they are measured may apply equally to direct, indirect, contingent and community wide outcomes. This and subsequent sections review the literature pertaining to a range of potential outcomes of community and economic development programs and how they are measured. The outcomes are: employment; real estate construction and/or rehabilitation; business development; creation of services and amenities; infrastructure; beautification; and tax revenues.

A program like the NMTC intends to produce a variety of different type of outcomes. Toward that end, CDEs are allowed wide latitude with respect to the investments they can make, and are asked to report voluntarily the following types of information on what is expected from their projects:

- Number of jobs created;
- Capacity of community facilities; and
- Square feet of real estate developed or rehabilitated (Bershadker et al. 2008).

While not all-inclusive, this list provides some indication of what the CDFI Fund considers important and what it anticipates many NMTC projects will produce.

Employment. A commonly used measure of the success of community and economic development programs is the extent to which they create new jobs or retain existing jobs.¹⁷

¹⁵ This is called the portfolio-in-arrears ratio.

¹⁶ This is called the loan-loss ratio.

¹⁷ Buss and Yancer (1999) make the interesting observation that job creation targeted to poor people may be misunderstood in cost-benefit analyses. Because public funding for job creation programs derives from federal



Related to this is the efficiency of job creation/retention under one program or another, the quality of the jobs created or retained, and who benefits from such jobs. Analysts have approached these topics in various ways.

1. Job creation and retention. A fundamental question asked of many community and economic development programs is, how many jobs does it produce? Although a seemingly straightforward question, the answer depends, among other things, on:

- **How jobs are defined**—i.e., only as newly created jobs or also as jobs that are retained (prevented from being lost); only as low- or moderate-income jobs, or regardless of the pay scale or income characteristics of those who occupy them? And, how does one determine that a “retained” job was actually in danger of going away?
- **What is counted**—i.e., only actual jobs that have been created or retained or also projected (anticipated) jobs and/or estimated jobs (based on some model or formula); and, only full-time permanent jobs or also part-time permanent jobs, non-permanent construction jobs, or seasonal jobs?
- **How are they counted**—i.e., regardless of the number hours worked or in terms of full-time equivalent (FTE) positions based on number of hours worked?

An additional question, even more difficult to answer, is whether jobs result from a program or would have been created or retained in its absence.

The UDAG program was intended to stimulate private investment, jobs and tax revenues in distressed cities and urban counties. Since employment impacts were critical to its success, HUD attempted to evaluate its jobs outcomes after four years of UDAG implementation (HUD 1982). The focus was on the number of jobs created or retained, costs per job, and the extent to which jobs could be attributed to the program. Jobs were measured in terms of FTE positions, thereby accounting for the fact that some were full time and some were less than full time. Construction employment was separated from other jobs because these were primarily short-term. New permanent jobs were distinguished from retained jobs, and jobs for low- and moderate-income persons were distinguished from those for others.¹⁸ With respect to new permanent employment, the evaluators concluded that 77 percent of the jobs anticipated in initial grant agreements were actually being produced.

and/or state budgets whose amounts are fixed, increased appropriations for one program are likely to be accompanied by decreased appropriations for another, potentially leading to little change in the total number of jobs.

¹⁸ The former were defined as FTE positions that paid no more than 80 percent of the median income earned by all workers in a local market.



UDAG's efficiency as an economic development tool was measured by dividing the number of dollars spent by the number of jobs produced—i.e., the cost per job.¹⁹ This was calculated in three ways: the cost of each job originally anticipated; the cost of each job actually produced;²⁰ and the cost of each job produced after subtracting out those that would have occurred in the absence of a UDAG subsidy. This latter discounting for substitution was expressed as a percentage estimate and determined on a project-by-project basis, based on *post-hoc* examination of each project for the likelihood it would have occurred in the absence of the program (see Part V, Measuring Program Effectiveness—Substitution of Federal for Private or Other Public Investment). After discounting for jobs that were determined not to have required a UDAG subsidy, the average program cost per job was estimated to be \$11,570 (or \$4,400 higher than what had been originally anticipated). Costs varied by project type, job type, and community demographic characteristics. While comparisons with other programs were somewhat tenuous because of differences in program design and objectives as well as for data and/or methodological reasons, this cost-per-job amount appeared more favorable than that for the somewhat comparable EDA Business Development program.

Several studies of CDFIs have also assessed employment outcomes. Rubin (2006b) describes two studies conducted by LaPlante, in 1996 and 2004 that examined the impact of the Maine-based CDFI, Coastal Enterprises Incorporated (CEI). CEI targets community employment outcomes; it endeavors to increase the number of employment opportunities, especially good jobs, for women, low-income persons, refugees, and other dislocated persons (Hollister 2007). In the first study, LaPlante was able to estimate initial employment levels and was thus able to measure job growth. Job quality information (wages, skill level) was also obtained from the survey. To assess attribution of the CEI funding to job outcomes and also to take into account the possibility of displacement, LaPlante specifically asked the firms to relate the level of impact the CEI funding had on job creation, but Hollister (2007) notes that many analysts are extremely skeptical about the value of responses to such survey questions.

A second evaluation by LaPlante, in 2004, was a longitudinal study over a three-year period (1995–1999) using data from telephone and in-person surveys and state unemployment insurance records. Notably, wage growth was measured by tracking unemployment insurance records. In general, jobs created through CEI appeared to be of higher quality, with higher wages, more total hours, and faster wage growth (Rubin 2006b).

¹⁹ The evaluators also disaggregated costs per job created by job characteristics—blue collar, white collar, professional, managerial, clerical, craft-related, or service-oriented.

²⁰ In cases of completed projects these were actual jobs determined to have been created and, in cases of projections that were still being developed these were updated projections of jobs that were likely to be created.



A 1999 study examined employment outcomes of the CDFI, Enterprise Corporation of the Delta (ECD), using a series of surveys of ECD-financed firms between 1994 and 1997. The study compared the employment levels at different intervals to calculate steady-state FTE employment levels (Hollister 2007). As did HUD's UDAG evaluation (1982), the study provided separate estimates for jobs created and retained.

An assessment of the first round of EZ/ECs used establishment-level data to measure changes in economic activity in EZ areas before and after initiation of the zone programs. It compared employment growth for the same time periods to a designated comparison area within the same city to determine development impacts (Hebert et al. 2001). The establishment-level employment information was collected by the Dun & Bradstreet (D&B) organization, which serves as a private information clearinghouse. D&B files enable one to construct historical time series on employment in business establishments by census tract or by any aggregation of census tracts. The study found that job growth occurred in five of the six EZs and that, in four of the six, it outpaced job growth in contiguous areas.

In its study of EZ/ECs, the GAO also compared designated EZ and EC program areas with comparison areas and looked at changes over time (GAO 2006). GAO calculated changes in unemployment rates from 1990 to 2000 and the total number of jobs from 1995 to 2004 in designated EZs and ECs and in comparison areas. They observed that improvements in poverty, employment, and economic growth had occurred in the ECs and EZs, but their econometric analysis could not tie changes definitively to EZ designation.

The CDFI Fund collects "community impact" data, including job creation, on a voluntary basis. The measure used is the number of jobs created, as reported on transaction-level reports that CDEs submit to the Fund. CDEs can report on three types of jobs: those associated with the construction of a NMTC-financed real estate project; permanent jobs associated with a business receiving NMTC financed investment; and permanent jobs associated with businesses that are tenants of a NMTC financed real estate project (Berschadker et al. 2008). These data, of course, cover some but not all possible measures of job growth and do not address job benefits.

2. Job quality. Researchers have noted that evaluations should also address the quality of jobs created (Felsenstein and Persky 1999). Indicators of job quality include wage levels, opportunities for advancement, job skills or training provided, and benefits. Benefits can be measured by the percentage of employees offered health insurance, a pension plan, a savings plan, sick leave, tuition assistance or vacation time. For example, New Market Venture Capital Corporations (NMVCCs) are required to report to the SBA, for each of the companies in their portfolio, the percentage of employees provided with medical coverage and offered a pension plan other than Social Security, savings plan, or 401K plan (The Community Development



Venture Capital Alliance [CDVCA] 2006). An additional indicator related to employment benefits reported by NMVCCs is the percentage of equity ownership by low-income area residents (CDVCA 2006). Other wealth building benefits include whether jobs provide stock options, employee stock ownership, profit sharing, or bonuses.

With respect to job quality, Seidman (2007) proposes that recipients of NMTC funds should also consider how to improve traditionally low-wage jobs that often accompany the introduction of community services, such as grocery stores and credit unions, to neighborhoods. In a commentary on federal economic development programs, Markusen and Glasmeier (2008) point out that the current stress on short-term job creation in many programs comes at the expense of investment in human capital and “soft” infrastructure that is needed for long-term productivity and growth. Reese and Fasenfast (1997) also call for evaluations that incorporate broader social values using measures that go beyond employment and economic growth to include such concepts as economic empowerment and sustainable improvement in income levels.

3. Jobs beneficiaries. As indicated in our earlier discussion of targeting, programs vary with respect to their focus on outcomes for a particular location and outcomes for the *residents* of such a location. Immergluck notes that distinguishing among such strategic approaches is critical to developing outcome measures. For example, a place-based strategy aimed at improving the physical and economic vitality of a neighborhood may not differentiate between improved jobs and income for current residents and economic improvement via in-migration or out-migration (Immergluck 2008).

Depending on program goals, a number of evaluations have considered the proportion of jobs created that are filled by local residents rather than outsiders, and by targeted groups such as low-income or minority residents. As Bartik (2002) points out, evaluations should go beyond measuring increases in local business growth to the benefits for the public, including increased earnings of the unemployed and underemployed. Hollister (2007) cites Pacific Community Ventures (PCV), a community development venture capital fund, as a good example of measuring such “social dimensions of outcomes.” At the time, PCV reported on: the number of individuals hired as hourly employees at wages less than \$20 an hour who resided in low- to moderate-income zip code areas; average wages; percent of business offering various benefit packages; extent of skills training; and rate of retention and advancement.

In his discussion of evaluation efforts of CDFI intervention outcomes, Immergluck (2008) notes that it is difficult to target employment at the neighborhood level due to the geographic scale of labor markets. This difficulty arises from the fact that the benefits associated with employment may not directly transfer to residents of that neighborhood. Other factors to



consider when evaluating employment benefits include commuting patterns, opportunity for career advancement, and multiplier effects.

The availability of employee-level data provides opportunities for more detailed analyses. For example, in a case study of the impacts of chain supermarket development in the Philadelphia area, researchers with the Reinvestment Fund measured the extent to which urban supermarket employees lived in socioeconomically distressed communities and their proximity to their place of work (Goldstein et al. 2008). Using data provided by a supermarket chain, they were able to identify the census tract of residence for employees and found that those at three store locations lived in tracts with very low household incomes (less than 60 percent of Annual Median Income), high poverty rates (30 percent or more), or high unemployment rates (1.5 times national average). They concluded that urban supermarkets bring new job opportunities to residents in distressed communities but cautioned that, from a regional perspective, a new store does not necessarily create a net increase in the number of jobs. The study also (a) used the Public Use Microdata Sample (PUMS) from the U.S. Census Bureau to analyze employee wages and compare urban and suburban wages within the supermarket chain and (b) compared wages over time between urban and suburban stores. In both cases, the findings were positive—earnings and wage increases over time were comparable for stores in distressed areas and other store locations.

Another job quality factor is the effects of community and economic development programs on minority groups in distressed communities, if applicable. Mongkuo and Pammer (1994), for example, assessed the impact of a UDAG-targeted partnership development initiative on minority employment in Pittsburgh, PA. They hypothesized that minority employment would be affected by a number of factors, including the extent of public sector contribution to the investment, the location of the project, and the extent of participation of minority contractors. The researchers considered: the number of new permanent jobs minorities received; the ratio of private dollars to UDAG dollars spent; the ratios of public dollars per minority job; whether the project was located in the central city; the type of investment (commercial or industrial); and the percentage of project dollars awarded to minority firms. Using multiple regression analysis, they found that the targeted partnership projects had no significant impact on alleviating periodic or chronic unemployment of minority residents. They noted that market forces may dictate where the benefits of such programs go. If projects required skilled labor and these skills were lacking among minority residents of the city, this group might not be able to take advantage of economic opportunities that are created. Other studies of employment and ownership indicate that, for employment outcomes, it may be more important to consider business ownership than location, since minority firms are more likely to have more minority employees than non-minority-owned firms (Bates 1997; Gittell and Thompson 1999).



4. Program beneficiaries. Although a community or economic development program may be found to have created or retained quality jobs for desired categories of people at a reasonable cost, there is also a broader evaluation question: Do employment beneficiaries represent a *program's* primary beneficiaries? For example, the UDAG program was criticized by some as benefitting private-sector developers more so than low-income communities or persons (Barnekov and Hart 1993). This is, obviously, also a legitimate program evaluation concern when considering who benefits from employment or other types of project outcomes.

Real estate construction and rehabilitation. Real estate construction and rehabilitation (both commercial and residential) are major components of many community and economic development programs. The extent to which programs produce construction and rehabilitation outcomes has been assessed in various ways, often beginning with a basic accounting of outputs—i.e., the number of square feet developed or rehabilitated by a project. As with measurement of employment outputs and outcomes, some evaluators probe beyond these measures (depending on program goals) to consider types or uses of the real estate projects that have been developed, the locations of the projects, and who benefits (or suffers) from them. With respect to adverse effects, for example, real estate construction and rehabilitation projects have the potential for displacing existing residents and businesses (see the discussion under “Indirect and Contingent Outcomes” later in this section). Finally, a longer-term measure included in some evaluations is the effect of real estate projects on adjoining property values

1. Amount of construction and rehabilitation. A simple measure of change with respect to nonresidential real estate involves commercial property square footage. Voluntary reporting to the CDFI Fund on NMTC project outcomes includes the square footage of real estate developed or rehabilitated (Bershadker et al. 2008). However, more detailed measures that describe the type or purpose of the building constructed have been used in some studies, including the percentage of nonresidential versus residential construction and the percentage of new construction versus rehabilitation of existing stock. For example, given that the RTC has been available for both housing and nonresidential projects, Listokin, Listokin, and Lahr (1998) tracked the types of projects using RTC and found that about half of them were exclusively housing and another 20 to 30 percent were in the mixed-use/other category. The remainder consisted of commercial/office renovations.

In addition to measuring the number of housing units developed under the UDAG, HUD evaluators included a measure of the share of units that have been converted from other non-residential building types, such as schoolhouses or office buildings (HUD 1982). The CDFI Data Project (CDP) collects data on multifamily housing finance, but not all CDFIs report to the CDP. Prior to 2005, the CDP did not distinguish between the different types of housing-related activities. Multifamily and single family activities were combined in general “housing created,



housing renovated and housing assisted” categories. There was also no breakout between for-sale and rental properties. These limitations were addressed beginning with the 2005 data collection (Rubin 2006b).

2. Uses of construction and rehabilitation. In addition to enumerating the number of units of housing or square feet of space constructed or rehabilitated, evaluations of community and economic development programs consider the benefits they bring to a distressed community. HUD’s UDAG evaluation (HUD 1982) considered who benefits from two perspectives—whether the housing was located in deteriorated or transitional neighborhoods and whether the housing was targeted (or priced) for low- or moderate-income households. Rubin (2006b) reports that some CDFIs report on the number of units designated as affordable to low-income households (i.e., with rents capped at 30 percent of their incomes, which can be no greater than 80 percent of the area median), but notes that these figures tend to be projections rather than actual numbers. Relatively few CDFIs track the income or other characteristics of ultimate tenants. A useful measure of a program’s ability to address community need is the percentage of low- and moderate-income units developed as a fraction of the total units developed (Listokin et al. 1998).

Similar to employment success, housing success may be evaluated with respect to production costs. HUD’s UDAG evaluation found that because costs per housing unit varied widely from project to project and because of the very different kinds of housing activities undertaken, the average cost per unit of housing was not a useful measure (HUD 1982). Therefore, the evaluators compared anticipated and actual costs after discounting for substitution (units that would have been built or rehabilitated in the absence of the UDAG subsidy).

3. The effects of construction and rehabilitation on property values. Property values are often used as a proxy for measuring the neighborhood effects of community and economic development investments. With respect to residential property values, as aspects of quality of life (such as reduced crime rates and amenities) improve in the neighborhood, these improvements are capitalized in the prices of residential properties within that neighborhood and, thus, property values are expected to rise (Immergluck 2008; Galster, Tatian and Accordino 2006). It should be noted, however, that while property values are one of the most commonly used measures, they do have limitations. Immergluck cautions that property values may not incorporate the value of other neighborhood qualities such as social capital. Especially during speculative bubbles, property values may overestimate the value of the neighborhood (Immergluck 2008).

A number of studies illustrate that housing investment can have a positive, significant impact on neighboring property values near the investment site. In most cases, such studies are



not limited to property values, but consider property values as one indicator of neighborhood effects of community and economic development. Ding and Knapp (2003), for example, investigated the determinants of residential property values using data on home sales (1996–1997), housing investments (1991–1995), homeowner migration (1991–1995), and business establishments (1991–1995) for Cleveland, OH. Their findings show that investments in new housing had a positive impact on home property values. On the other hand, homeowner out-migration and growth in business establishments, except for social service establishments, had a negative impact on home property values. With regard to housing, they tested cumulative new housing investments at different distances (150 feet, 150–300 feet, and 300–500 feet) away from the site of housing sale and found that the effect of new housing investments decreased as the distance from the housing site increased.

Schill et al. (2002) studied the impact of New York City's Ten Year Plan on housing sale prices. The Plan, which began in 1985 and was still operational more than 14 years later, is the largest municipally supported housing production program in the United States. The program encompassed a variety of activities to stimulate housing production and rehabilitation, investing over \$5 billion and building or rehabilitating over 182,000 apartments and houses. One of the objectives of the Plan was to promote neighborhood revitalization, so housing production was concentrated in very distressed neighborhoods. The authors compared prices of properties in the micro-neighborhood (or ring) surrounding Plan sites with prices of comparable properties outside the ring, but still located in the same census tract. They found that the prices of homes within 500 feet of Plan units rose relative to those located beyond 500 feet.

In a later study of New York City rental housing rehabilitation, Ellen and Voicu (2006) used increases in neighboring property values to compare neighborhood impacts of city-supported rehabilitation of rental housing undertaken by nonprofits and similar investments in rental housing undertaken by for-profit developers. They compared prices of properties close to subsidized housing sites to property values of comparable properties located further away, but still within the same census tract, before and after completion of a subsidized project. They also tested whether impact varied by nonprofit or for-profit sector. Overall, they found that both nonprofit and for-profit rental housing rehabilitation projects resulted in significant increases in property values, and that impacts for both nonprofit and for-profit projects were larger closer to developments and faded with distance. The authors also found some evidence of more sustained effects over time for projects undertaken by nonprofit developers.

Galster, Tatian and Accordino (2006) point out that, ideally, indicators of neighborhood inputs and outcomes should be measured: frequently; over an extended time, both before and after the intervention; and at a small geographic scale. In their analysis of the impact of a localized economic development initiative, the Neighborhoods in Bloom (NiB) program (1998–2004), they were able to use data on property values (measured by single-family home prices)



that fit these three criteria. NiB concentrated CDBG, Home Investment Partnership, and LISC funds in only a few blocks in seven neighborhoods in Richmond, VA. The analysis included NiB target areas and selected comparison areas. Using statistical models, they compared differences in: (a) home prices between the target and comparison neighborhoods before and after the intervention and (b) the levels and trends in home prices between the target and comparison neighborhoods while controlling for coincident citywide trends.

Because TIF for public improvements relies on tax revenues collected from resulting increased property assessments, property values (both commercial and residential) are a key focus of TIF research.²¹ Several examples are as follows. Deborah Carroll (2008) studied the impact of TIF on business property values in Milwaukee, WI using parcel-level data from 1980 to 1999. In her econometric model, she defined property values specifically as the taxable assessed value. She concluded that public improvements as part of TIF strategies do positively impact business property values over time. Weber, Bhatta, and Merriman (2003) performed a similar study on mixed-use (residential and industrial) TIF districts located in Chicago using parcel-level data between 1976 and 2001. Anderson (1990) compared property value growth in cities which used TIF and those which did not use TIF in the state of Michigan and found that TIF had a positive effect on property value growth rates. And Byrne (2006) used assessed property values in Chicago-area TIF districts and census tract demographic characteristics to compare growth in TIF districts with overall growth and to examine the factors influencing property value growth within TIF districts. He found that TIF districts experience greater growth than their municipalities as a whole and that TIF also works well in the most blighted areas.

Studies comparing property values before and after investment in distressed neighborhoods to those in surrounding or selected comparison neighborhoods note the possibility that distressed neighborhoods may have lower property values to begin with and, thus, potentially show larger investment impacts (Ellen and Voicu 2006). In their study of the relationship between TIF designation and urban industrial property values, Weber et al. (2003) noted that property values may appreciate based on the expectation of future public investment in a kind of self-fulfilling prophecy cycle.

Business development. Many community and economic development programs, including NMTC, strive to increase business development. This may involve business start-ups or expansion of existing establishments. In addition to jobs created and retained, measures of

²¹ The details of Tax Increment Financing (TIF) legislation differ in each state, but generally, under TIF, a municipality is authorized to issue bonds to finance the construction of public facilities that are expected to precipitate new private investment within “blighted” or “underdeveloped” areas. Tax revenues collected from resulting increased property assessments are then used to pay off bond debt. The difference between the base property value and the new assessed value is the “tax increment.” (Gihring 2007, Dye and Merriman 2006, and Weber et al. 2003)



business activity include the number of establishments, the ratio of businesses to population, average receipts of businesses, and percent of businesses with paid employees. These numbers can be tracked over time, for a particular program, and for minority groups or other populations of interest, and compared to a period prior to program implementation, to other similar communities, or to national or regional benchmarks. One limitation that has been noted is the lack of data on business establishments by census tract—U.S. Census business establishment data are only available at the state, county, metropolitan area, and city levels (Gittell and Thompson 1999).

Services and amenities. Community services and amenities play a central role in many community and economic development programs. Some initiatives promote investment in amenities in order to stimulate growth and to attract new businesses and increased investment. Others, particularly the comprehensive community initiatives that emerged during the late 1980s and early 1990s, take a broader approach. Those efforts, funded by national or community foundations, sought to promote positive change in disadvantaged neighborhoods through holistic approaches that addressed physical, social, and economic conditions (Fulbright-Anderson 2006). Services and amenities include a variety of establishments and services, both nonprofit and for-profit. Potential outcomes include: access to quality public facilities (schools, health care, training centers, child care centers, etc.), access to grocery, banking, and other commercial/retail services, access to education (financial literacy, consumer education, entrepreneurial education), and access to financial products (bank accounts, payday loan alternatives, consumer, car, and multifamily loans, mortgages, equity financing). The CDFI Fund asks NMTC allocatees to report on the capacity of community facilities, identified as arts centers, child care facilities, educational facilities (usually charter schools); health care facilities; and “other” facilities. Capacity is reported as number of slots, student-seats, or patient capacity (Bershadker et al. 2008).

Researchers have also developed composite indicators of service availability. For example, Florida, Mellander, and Stolarick (2007) use the diversity of consumer service firms as a proxy for regional amenities. This variable reflects the number of service industries present within the metropolitan region that could be regarded as attractive to consumers. It is based on 2000 industry data from the U.S. Census Bureau.

Other recent efforts have measured amenities such as arts and culture and access to parks and outdoor recreation. Jackson et al. (2006) define cultural vitality as evidence of creating, disseminating, validating, and supporting arts and culture as a dimension of everyday life in communities. Their measurement framework considers: the presence of opportunities for cultural participation, cultural participation in its multiple dimensions, and support systems for cultural participation. Indicators include the number of art establishments per 1,000 population;



the number of arts nonprofits per 1,000 population; nonprofit community celebrations, festivals, fairs, and parades per 1,000 population; and artist jobs as a proportion of all employment.

An assessment of the community impacts of supermarket development undertaken by Goldstein et al. considered three possible impacts: improved real estate values, new investment, and lower consumer costs for food (2008). Combining cross-section and time series analysis, the study found that the event of a supermarket opening is associated with an increase in nearby home values, which is generally larger for properties that are not immediately adjacent to the new store. The study selected two specific supermarket projects and used regional input-output models²² to estimate the economic impacts (regional economic activity, employment and wages, and fiscal impacts on local government) associated with the direct investment in supermarket construction and operation. This required collecting direct expenditure data from two supermarkets. Both projects were found to have positive benefits for their counties but one had smaller impacts due to large construction expenditures of the project. Since data to directly assess the price effects of a new supermarket are not available, the study was not able to measure the impact on consumer prices. However, since there is research evidence that supermarkets provide both lower prices and a broader selection of products than do smaller grocery and convenience stores, an analysis of the number, type and size of food stores available to consumers in two communities indicated that the supermarket projects were in areas dominated by small food stores, so consumer choice and food prices were likely to have improved (Kaufman, et al. 1997).

Ding and Knapp (2003) looked at the effects of services and amenities on property values and found that new social services establishments (e.g., hospitals, legal clinics, and schools) in inner city Cleveland neighborhoods had a positive effect on housing prices, while new business establishments (e.g., manufacturing, personal services, retail, and wholesale) had negative effects on housing prices.

Access to bank accounts and other banking services, as well as financial education, is critical to success in the modern economy (Barr 2004), and some community and economic development programs have been directed towards such services. For example, NMTCs can be used for financial counseling and other services to low-income community businesses. The U.S. Department of the Treasury's First Account pilot initiative, launched in December 2001, provided a total of \$8.35 million to fund 15 projects seeking to bring an estimated 35,000 previously unbanked individuals into the banking system. Projects, most of which were awarded to credit

²² Input-output analysis is a method often used to estimate the impact of economic development investments. It involves use of multipliers based on a model of a regional economy (a number of which are available) to estimate the impacts of inputs such as dollars invested. Such analyses do not use actual job or earnings data to calculate outcomes, but rely on the assumptions in the economic model to estimate impacts.



unions and other nonprofits, focus on providing financial education and low cost electronic accounts to the unbanked. Some projects involve working with employers to expand banking access, and some funds were for capital expenditures on ATMs or new branches in low-income areas. While we are not aware of any evaluation of this program, Barr (2004) notes that, given its small scale, it will be difficult to determine from this pilot whether a given strategy is sustainable at scale.

Kolodinsky et al. (2002) designed a study to assess the impact of one CDFI, the Vermont Development Credit Union (VDCU), on its members and community. The mission of VDCU is to build and promote economic development by providing affordable capital and financial services to low-income and underserved individuals in Vermont. Using a combined qualitative (surveys, focus groups) and quantitative (VDCU's transaction database and member information) approach, the researchers found significant improvements in the following outcomes over a ten-year period: VDCU membership, deposits, total assets, and mortgage lending. In the surveys and focus groups, members reported improved money management (e.g., paying off debt, ability to save money, avoiding high interest credit cards), economic situation (creditworthiness, growth in savings), and setting future financial goals.

Public charter schools have recently been an active area for community and economic development because they may offer a way to increase access to quality public education but face obstacles to obtaining facilities financing. While charter schools are publicly funded, they are permitted by state law to operate independently of school districts. They receive funding for operations but usually are not provided with a facility and must find and finance one on their own. Banks and other traditional financial institutions have been hesitant about lending to charter schools because of their experimental nature and the risks associated with start-up ventures. In addition, many banks will not finance charter school buildings because their charters often run for fewer years than the mortgage loan; a typical example is a charter school with a five year charter seeking a 30 year loan. The Credit Enhancement for Charter School Facilities Program (CECSF), administered by the U.S. Department of Education under the No Child Left Behind Act, makes funding available to induce investment in charter school facilities. CDFIs have been the major recipients of this funding. Data compiled by the Charter Coalition shows that for every \$1 of federal funding, program grantees have raised \$8 of private capital (Donovan 2008). Although we are not aware of any evaluation that specifically addresses the community and economic development outcomes of charter schools, Donovan reports that CDFIs are finding that they are an effective tool for community development. They are disproportionately located in urban areas that are financially undeserved and they often redevelop underutilized or dilapidated buildings and convert them to useable, attractive spaces.

Listokin et al. (1998) point to the National Trust for Historic Preservation's Main Street Program as a source of amenities that can revitalize a downtown. "In an era of homogenized



businesses, malls, and office parks, older downtowns, with their compact assemblages of functions and their often unique merchandise and services, are yet another differentiating natural asset that can be capitalized on by communities trying to bolster their economies.” (p.453) The National Trust Main Street Center annually collects statistical information on economic activity in local Main Street programs nationwide.²³ These statistics are tracked from 1980 to December 2008 and reflect activity in more than 2,200 communities, and include:

- Dollars reinvested—i.e., the total amount of reinvestment in physical improvements from public and private sources;
- Average reinvestment per community;
- Net gain in businesses; and
- Net gain in jobs.

In sum, there are a wide range of amenities produced by community and economic development programs and different ways of measuring their outcomes. Especially noteworthy are the challenges in demonstrating the relationships between particular amenities and outcomes.

Infrastructure. Public investments in infrastructure—such as roads, streets, bridges, water treatment and distribution systems, waterways, airports, and mass transit—can enhance community and economic development by offering a locational advantage to businesses, either by increasing productivity or reducing factor costs (Eberts 1990). Deborah Carroll (2008), in her general discussion of TIF, makes the same point—i.e., that TIF policy is based on the premise that public infrastructure promotes private investment by reducing the cost of business relocation and expansion. This is not a universally held belief among development economists, however, as it has been theorized that infrastructure is not a cause, but a result of economic growth (Norcross 2007). Nevertheless, if infrastructure investment is a program objective, it is necessary to consider appropriate outcome measures.

Infrastructure can be measured using a monetary approach (measuring physical capital in monetary terms by adding up past investment) or an inventory approach (taking inventory of the quantity and quality of all pertinent structures and facilities). There is no single, consistent measurement standard used by researchers. Based on a review of the research on the relationship between public infrastructure investment and economic development, Eberts (1990)

²³ <http://www.preservationnation.org/main-street/about-main-street/reinvestment-statistics.html> (accessed 1/27/2010).



reports that studies show that public infrastructure investment significantly affects economic activity, but that the magnitudes of the effects are much less for public than for private capital. Also, in most cases, public and private capital are complements, not substitutes.

Studies that focus on particular infrastructure improvements, market sectors, and geographic areas offer opportunities to use unique data sets and variables. For example, Hicks (2006) examined the role of highway infrastructure and local property tax rates on the entrance timing and location of Wal-Mart stores in Indiana. He was able to use county-level data for all of Indiana's 92 counties and select the region's largest retailer for analysis. Hicks found that there is a significant positive association between highway construction and retail agglomeration in non-MSA counties.

Beautification. The process of making visual improvements to a neighborhood (e.g. improving street fronts and removing graffiti, litter, trash) can be seen as perhaps the physical marker of three historic ideals of spatially targeted community and economic development efforts (Thomson 2008). These are:

- **Preservation**, which seeks to curb the decline of an area by retaining and strengthening physical structures (along with existing residents, businesses).
- **Redevelopment**, which is an effort to transform a distressed area into a newer, more economically vibrant region, and often requires demolition and construction of new physical structures (along with the displacement of residents).
- **Revitalization**, which endeavors to reverse an area's decline and employs both preservationist and redevelopment approaches.

Examples of economic development programs that implement these strategies—transforming the physical appearance of a community to assist in transforming the economic vitality of that community—include the RTC, LIHTC, Urban Renewal, and HOPE VI programs, among others.

In considering ways to improve the efficiency of strategic, geographical targeting in community and economic development programs, Thomson suggests that the process of beautification may have a positive multiplier effect on the community. This refers to “an externality that is evident when the output of the publicly supported intervention (e.g., home repair) causes others to replicate the output (i.e., repair their homes) using private resources.” (Thomson 2008, 639) Listokin et al. (1998) describe the multiplier effect that occurred in conjunction with historic upgrading efforts, as neighboring properties adjacent to the historic areas also enjoyed rehabilitation.

Whalley (1988) studied the multiplier effect of housing rehabilitation loans and grants (\$13,000 average) within Neighborhood Strategy Areas (NSA) in Minneapolis from 1979–1981.



The NSA program, funded through federal CDBG dollars, included beautification initiatives like the “Fix and Paint” grant program dedicated to exterior improvements. Whalley conducted a survey of households that had received housing rehabilitation assistance from the Minneapolis Community Development Agency (MCDA), asking each to explain their repair activities. All of the households resided in units that were located within the NSA established boundaries, and information was available on housing conditions before and after the renovation as well as each household’s actual investment response after receiving funding. The citywide results indicate that nearly one-half of maintenance repairs were stimulated by public funding and, further, that one-third of additional improvement repairs funded privately by homeowners would not have occurred without the public funding. The program had the greatest impact (highest participation rates, highest rates of further private investment, lowest displacement) in “transitional fringe areas”—neighborhoods that were neither the most blighted nor that contained the best housing. As further evidence in favor of the use of beautification as a revitalization vehicle, Whalley also suggests that visual deterioration imparts negative influences on the neighborhood. There tends to be disinvestment in areas adjacent to abandoned buildings, as the abandoned units lower the perceived return of investment in the immediate area. She calls this process, “abandonment-decay cycles,” which affects both residential and commercial investment (p. 59).

The literature supports the fact that physical appearance affects homeowners’ perceptions of neighborhood conditions. Residents’ perceptions with regard to their neighborhood have been used in numerous studies as a qualitative component of the overall evaluation of the impact of neighborhood development programs (see, for example, HUD 2003 and GAO 2006).

Tax revenues. Tax revenues generated by community and economic development programs can include sales taxes, payroll taxes, and income taxes paid by individuals employed as a result of a project, as well as corporate and property taxes paid by businesses supported by the project. Tax revenues have been used in cost-benefit analyses and estimates of taxpayers’ return on investment. In a critique of such an approach used by Miller in an evaluation of the Kentucky Highland Investment Corporation (KHIC), Hollister (2007) notes that relevant measures of benefits should be derived from impact measures, not outcome measures. He contends that one has to take into account the degree to which a job attributed to the KHIC is truly a net new job, otherwise the employment may just be displacing employment that would have occurred in the absence of KHIC activity. Similarly, the tax revenues from corporate and property taxes will only be net increases to the degree that there is no displacement of other corporate and property taxes. Beyond such measurement concerns, Hollister is of the opinion that increased tax revenues should not count as benefits at all since they were not one of the goals of the KHIC development initiative. “If this were the government’s goal, it might find that investing in a golf course in a large urban area offers far better returns.” (p. 287) The



government, he asserts, invests in a CDFI such as KHIC because it believes KHIC can be an effective tool for creating new employment opportunities in a low-income region, and that these new jobs can benefit low- and moderate-income households in the area. The relevant benefit to measure, therefore, is the dollar benefit to lower-income households in the region as a result of KHIC's intervention.

HUD's evaluation of UDAG (1982) did not discredit tax revenue as a measure of economic development performance since increasing the local tax base can help to alleviate a community's distress, which was one of the objectives of the program. The evaluation started with initial estimates of projected tax revenues for cities at the time of grant award and compared those to reports of tax revenues generated since that time. Several measures were used. The first presented local taxes generated as a percent of anticipated tax revenues, both with and without discounting for substitution. Property and nonproperty taxes were considered. A second measure was the total amount of local taxes generated for each UDAG dollar expended, again comparing actual taxes generated to projected taxes, both with and without discounting for substitution. A third measure applied the effective tax rate of a city to the value of all private investment in its UDAG projects. These estimates were then compared with projected tax revenues. This method assumes that taxes on projects would be levied at the average rate prevailing in the city. Estimates using this method were about twice as much as the projected tax revenues for the projects, leading to the conclusion that, in addition to the large number of UDAG projects receiving formal tax abatement, informal tax abatement might have occurred as well, providing further evidence that distressed cities desired to retain or attract economic activity.

Bradshaw (2002) also included tax revenues in his assessment of the contribution of small business loan guarantees to economic development. His focus was on state tax revenues. For firms that received loan guarantees, he included the sales tax on capital expenditures, the sales tax on increased rental sales by firms, taxes on business profits, personal income taxes on payroll, and unemployment and payroll taxes. This required a number of assumptions, such as the proportion of loan funds spent on taxable purchases, increases in sales volume, taxable profits, and percent of increased payroll that would be subject to state income tax. In particular, the profitability of the businesses is not known because proprietary data are not available on how much of the payroll went to newly hired workers.

Indirect and Contingent Outcomes

Beyond the community and economic development program outcomes discussed above there may be other types of place- or people-based outcomes that are only indirectly connected to program investments. These could be triggered by the anticipation or realization of program



outcomes, and can be positive or negative. On the positive side, for example, are: non-program-sponsored activities or investments influenced by, but not directly related to, program investments; and new personal opportunities or business activities not associated with, but in some way linked to, program investments. Included on the negative side are personal or business dislocations, relocations, or losses that result from the outcomes of program investments. Indirect and contingent outcomes may be intended or unintended, on- or off-site, occur in the near or longer term, and enhance or diminish project and program direct benefits.

Drawing from the economic development literature, Redburn et al. (1984) identify several issues that should be included in an evaluation of economic development programs, including:

- **Spin-offs**—to what extent, if at all, does the investment spill over to influence private investment in other projects within the intended area or targeted population?
- **Leakage**—to what extent, if at all, do benefits “leak” away from the intended targeted beneficiaries to benefit other areas or people?
- **Unintended consequences**—are there identifiable outcomes that were not anticipated—good or bad?

Positive effects/spinoffs. Some community and economic development programs are explicitly intended to have positive spillover effects while others may be observed to have them. Historic preservation and revitalization efforts, for example, have been studied by Listokin and his colleagues who note that such efforts can, among other things, lead to economic growth via heritage tourism (Listokin et al., 1998). They use an input-output model to estimate the indirect multiplier effects of historic preservation for the State of New Jersey in fiscal year 1997. Inputs included expenditures on goods and services related to historic preservation activity, and outputs included employment, tax revenues, and income and wealth added. Using their model, the total economic impacts from \$688 million of federal money, and \$433 million of state money, were 38,678 jobs, \$1,145 million in income, \$1.6 billion in GDP, and \$535 million in tax revenues (Listokin 1998).

HUD’s evaluation of UDAG examined investment activity not located on a UDAG site but that followed announcement of UDAG projects and showed evidence that it was influenced by a UDAG award (HUD 1982). The evaluators distinguished among: actual spin-offs under way when data were collected; expected spin-offs for which specific plans existed but had not yet occurred; and potential investment that seemed likely as a result of the installation of infrastructure in support of a UDAG project that could also benefit other investors; or because a UDAG investment had a positive impact on the investment climate of the community in which it



was sited. They observed actual or expected spin-off investment in 48 percent of UDAG projects and the creation of potential for further investment in an additional 7 percent of them.

HOPE VI offers an example of a program involving place-based targeting that is intended to generate positive spillover. Created by Congress in 1992 to address the deteriorating conditions plaguing some of the nation's public housing developments, the program sought to improve conditions through the physical revitalization of such developments. It allowed Public Housing Authorities (PHAs) to demolish decaying buildings and start from scratch, building new complexes on the same site. But the program evolved into more than a bricks-and-mortar endeavor; becoming a means of promoting significant social change in public housing complexes and their surrounding areas. PHAs were charged with deconcentrating poverty and encouraging the development of mixed-income communities on the public housing footprint. They were required to describe the expected local impact of proposed redevelopment and had to include as part of an application "neighborhood indicators of obsolescence." In theory, the physical and demographic transformation of blighted public housing complexes was intended to have positive spillover benefits on surrounding neighborhoods and help catalyze additional development (Zielenbach, 2003). According to Zielenbach, however,

(T)hese improvements rarely take place immediately and may not happen at all. Whether, when, and to what extent they occur depends on a range of factors, including the scope and concentration of development activity. These benefits are not easily documented, and advocates and practitioners have typically relied on anecdotal evidence, not data, to evaluate this type of impact.²⁴ (2004, p. 8)

Several studies have used property sales data to assess the spillover effects of housing production or community development initiatives. One of them involves New York City's municipally supported housing production program—the Ten-Year Capital Plan. As discussed above ("Effects of Construction and Rehabilitation on Property Values"), the Plan's massive construction and rehabilitation investments were concentrated in the City's poorest neighborhoods, which had experienced significant abandonment and arson during the 1960s and 1970s. Shill et al. (2002) examined whether the program had spillover effects beyond the program's housing production outputs. Using a hedonic regression model that explained property sale price as a function of structural characteristics (such as lot size and building age), they looked at the prices of homes located within 500 feet of Plan units and compared them to those located beyond 500 feet but within the same census tract. Given that the former rose

²⁴ Notwithstanding this situation, Zielenbach encourages community development organizations to attempt to calculate the value of important impacts by assessing physical improvements to the property in question, examine the condition of the surrounding properties, measure changes in area property values, track new private investment, and gauge changes in crime rates. (2004, p. 9)



relative to the latter, they concluded that the Plan had large positive spillover effects on distressed inner-city neighborhoods, contributing to their revitalization.

A second study involving property sales prices, by Ellen and Voicu (2006), compared for-profit and nonprofit housing investments to see if there were differences with respect to their neighborhood spillover benefits. Using increases in property value estimated from a difference-in-difference specification of a hedonic regression model, they studied the impacts of 43,000 units of New York City supported housing completed in the 1980s and 1990s—involving nearly 300,000 individual sales. They concluded that both for-profit and nonprofit projects generate significant positive spillover effects, but that the impact of nonprofit housing remains stable over time, whereas the effect of for-profit housing declines slightly with time. They also concluded that while large for-profit and nonprofit developments deliver similar benefits, in the case of small projects, the for-profit developments generate greater impacts than the nonprofit developments.

Adverse effects. Among the undesired or undesirable effects of community and economic development programs are displacement (relocations and dislocations) of households or businesses as well as unfair competition between program-supported and other business, services or investments.

Anderson reported that as of the early 1960s well over a million and a half persons had been involved in federal urban renewal projects (Anderson 1964). Many of them were evicted and forcibly displaced. And, of those displaced, many did not receive compensation, had to pay higher rents, or were unable to pay rents charged for alternate housing. The net effect, he concluded, was that the program, perversely, aggravated the housing problem for low-income groups while helping to alleviate it for high-income groups. Writing in 1964, Anderson estimated that the program could displace approximately four million persons by 1972 as well as displacing many small business firms. All the while, he concluded, a typical urban renewal project was expected to take 12 years to complete—leaving land vacant for much of that time.

The HOPE VI program, involving the demolition of distressed public housing and construction (in many instances) of mixed-income and mixed-tenure housing, has also resulted in some adverse household dislocation. A HOPE VI Tracking Study concluded that 40 percent of study respondents who had been relocated to new neighborhoods reported problems paying rent and utilities, and about half said they were having difficulty affording enough food (Buron et al. 2002). Former residents who moved to private market housing faced the most serious challenges paying rent or utilities, doubling up with other families, moving multiple times since relocating, and losing their social ties and support systems. However, the same study also found that residents ended up in better neighborhoods, with lower rates of poverty and crime, and that these changes resulted in improved mental health.



HUD's UDAG evaluation observed that 45 percent of the projects examined had secondary impacts on off-site existing businesses; while the majority of them were positive, some business activity was negatively affected by UDAG projects (HUD 1982). The negative effects involved businesses directly competing with those supported by UDAG funds. Business displacement was observed in 25 percent of the projects studied; in 25 percent of these, the effects were negative. Household relocation was generally not involved in UDAG projects—approximately one-quarter of which were located on urban renewal sites that had been cleared at an earlier date.

Community Level Outcomes

Some community and economic development programs have very broad, community level goals—such as alleviating poverty, increasing the educational attainment of children, improving family well-being, or community renewal. Those that are place-based, such as comprehensive community initiatives, are wide-ranging in programmatic scope and generally involve social and economic, as well as physical development, strategies. Such initiatives are likely to require the long-term development of individual and organizational capacities, including the establishment of inter-connections among individuals and organizations (Auspos and Kubisch 2004).

Achievement of broad, community level goals may not be possible until well after a particular program activity or project is completed and, possibly, only in conjunction with other activities and projects. And, whether they are achievable at all depends in part on the size of the community and economic development investments that are made relative to the size and complexity of the places in which they occur. This section discusses several studies that address community level outcomes, including those focusing on neighborhood effects and outcomes that seem more extensive than those covered above.

Scale and critical mass. The scale of a project or investment refers to total dollar value or size of the project relative to the magnitude of the problem being addressed or size of the geographic area served. In discussing CDFIs, Hollister (2007) points out that funders and other proponents may have unrealistic expectations about the magnitude of change that these institutions are likely to achieve from their investment activities because their assets, and thus the investments they can make, are relatively small. He states, “to expect CDFIs to have a measureable, sizeable effect on the degree of poverty in a given area is unrealistic.” (265). Immergluck also notes that, when trying to measure the effects resulting from commercial, small business lending and business development financial institutions, evaluation is complicated because many commercial-related initiatives do not spatially target small-area geographies. “At



larger geographies, the lack of relative density is unlikely to allow for the discernment of geographic impacts.” (2008, 90)

Two studies provide support for the notion that investment size thresholds are important for achieving positive neighborhood outcomes. Galster, et al. (2004) conducted a study of the impact of CDBG investments in a large sample of census tracts spanning 17 cities, using data from 1994 to 1999. The measure of neighborhood CDBG spending was the annual program expenditure amount, by tract, from 1994 through 1996, specifying a three year lag between investment and measurement of cumulative changes in outcome indicators. Focusing on three neighborhood outcome indicators—mean number of businesses; mean percentage of loans approved; and mean loan amount—there was no consistent association between spending and indicators of subsequent neighborhood change unless CDBG spending was sufficiently spatially targeted such that it exceeded a particular threshold relative to the number of poor residents. Above-threshold CDBG spending was found to produce significant neighborhood improvement, even in areas of highly concentrated neighborhood poverty. Likewise, in a study of the “Neighborhood in Bloom” program (a revitalization strategy in Richmond, VA), Galster et al. (2006, 457) posed the question, “Once public investments in an area reach some minimum threshold, do they leverage substantial private resources?” The answer was that the greatest impacts occurred when public investments over five years (1998/99–2003/4) exceeded \$21,000 per block, on average.

Measuring community level or neighborhood effects. Hollister and Hill (1995) point out that community wide initiatives present particular problems in defining the major outcome measures that should be the focus of an evaluation. Traditional outcome measures—such as level of employment, rates of earnings, student test scores, school dropout rates and crime rates—may not be the primary outcome measures for such initiatives or may not show detectable effects in the short term. In addition, there are some outcome measures that are not used traditionally but that may be of interest, such as measures of institutional change or organizational capacity.

Ideally, community level effects of an investment or program intervention would be determined by regular tracking of a set of indicators that are both reliable and derive from readily available data. In their work, Galster, Hayes, and Johnson (2005) identified a set of indicators that were strong proxies for dominant neighborhood outcomes. Based on a large amount of publicly available (e.g., Home Mortgage Disclosure Act, census) data and regularly-updated, relatively affordable private (e.g., Dunn and Bradstreet) data on five cities, they performed multivariate factor analysis on a large number of indicators to develop a list of proxies that were both robust and free from statistical problems of multicollinearity. They identified six key neighborhood dimensions: social disadvantage, housing tenure and type, prestige, business and employment, crime, and housing vacancy. The study built upon an earlier study by Walker,



Hayes, et al. (2002) to develop indicators of neighborhood quality of life suitable for an assessment of CDBG impacts. It had suggested a variety of robust neighborhood quality indicators for which changes over time could be measured—including census data indicators (e.g., demographic, housing, education, and employment), administrative data indicators (e.g., welfare and food stamp usage, crime rates), and generic data indicators (e.g., mortgage approvals, loan amounts, number of businesses, sales volume), and neighborhood dimension indices such as social disadvantage, housing type and tenure, prestige, business and employment, crime, housing vacancy rate.

Zielenbach (2003) used both quantitative and qualitative information to examine the ability of public housing communities that were redeveloped under HOPE VI to effect economic improvement in their surrounding communities. Using several quantitative indicators to document improving neighborhood conditions—crime rates, residents' education levels, income, and employment rates—he found evidence of increased private investment in such communities, including increased commercial and residential lending. However, he noted that HOPE VI was only one of many forces operating in these neighborhoods and it is not possible to determine the relative importance of any one factor to improving community conditions or to discerning causality. Based on in-depth qualitative research in two HOPE VI communities to further address these questions, he observed that HOPE VI developments played important roles in helping to change conditions in their neighborhoods, with the characteristics of each project helping to determine the extent of the spillover affects. But, he cautioned against expecting too much in the way of neighborhood change from any single program, stating, “Very few initiatives (if any) can address the range of issues affecting neighborhood conditions, yet policymakers (and, to a lesser extent, practitioners) continue to expect wide-ranging results from essentially targeted programs.” (73)

Eventually, at least, many community and economic development programs attempt to increase social mobility and the educational levels of low- or moderate-income community residents. Since educational outcomes may not be measurable until long after an evaluation ends, school quality is one intermediate outcome that has been used. Black (1999), for example, used housing prices to infer the value parents place on school quality. She compared houses in the same school districts that were located in close proximity to one another but happened to be on opposite sides of elementary school-attendance borders, which determine the elementary school residents attend. The houses should, therefore, have similar neighborhood characteristics and only differ in the elementary school attendance district. She found that parents do value school quality—i.e., they are willing to pay 2.5 percent more for a 5 percent increase in test scores. Black suggests that this approach can be used to estimate the financial benefit to parents of children who are provided access to better quality schools and to



estimate the value of better quality schools, not only to parents, but to all homeowners in a community.

More recently, Deng (2007) used school quality to compare LIHTC units and voucher units in six metropolitan housing markets. The study measures the quality of the public elementary school closest to children living in assisted housing units. School quality is measured on the basis of test and performance scores provided by state education departments. A majority of both LIHTC family units and voucher family units were found to be located proximate to low-quality schools, indicating that neither vouchers nor LIHTC are able to provide quality education to low-income children. However, the study does find a higher likelihood for voucher tenants, as compared to LIHTC tenants, to escape poverty stricken neighborhoods and avoid the worst quality schools. The likelihood varies from one metropolitan area to another, often due to both program choices and local market environments.

Stimulation of Enhanced Local or Institutional Capacity

One way community or economic development programs are able to achieve benefits, in addition to that resulting from particular projects, is through enhancement of local or institutional capacity to do community and economic development—going beyond any particular project's outcomes, as discussed above. Capacity enhancement might, in fact, be an explicit goal of a program but, even if not, would constitute a program bonus. An evaluation issue, then, is the extent to which, if at all, activities undertaken in the course of a program result in added local government or intermediary institutional capacity to undertake future activities. This might be in the form of newly developed or enhanced: knowledge, expertise or relationships; citizen involvement, participation and engagement; or mission.

Knowledge, expertise and relationships. Local governments or intermediary organizations can draw on various tools to stimulate and support community and economic development, including grant programs, tax credits, special purpose bonds, loan pools, revolving loan funds, financial incentives such as tax abatements, and technical assistance to businesses. Effective use of them generally requires government agencies or organizations to have staff with specialized knowledge and expertise as well as good working relationships between the public and private (for-profit and nonprofit) sectors. Some researchers have focused on the extent to which community or economic development programs have resulted in enhancement of such knowledge, expertise or relationships.

HUD's evaluation of UDAG (HUD 1982) viewed local government capacity to use economic development tools as a function of: organizational arrangements; professional staff; and constructive or cooperative relationships between government officials and the private



sector. Based on these criteria, the evaluators classified the administrative capacity of each of the localities they studied as “strong,” “moderate,” or “weak,” observing that metropolitan cities were more likely than small cities to have strong administrative capacity. They concluded that UDAG sometimes strengthened local governments’ administrative capacity by creating new offices or staff to deal with economic development, encouraging the first use of a “new” economic development tool such as local or state bond issues, or motivating the government to take a lead role in negotiating a land development deal. UDAG was estimated to have had an impact on local capacity that ranged from “some” to “major” in slightly more than 40 percent of both metropolitan and small cities; that meant, however, that in the majority of cases it had little or no effect on local government administrative capacity.

In addition to government agencies there are many intermediary organizations and financial institutions—such as CDCs, CDFIs, and community banks—that play a role in community and economic development. For example, Rubin (2007) notes that community development loan funds often serve as: policy advocates on behalf of low-income communities; innovators demonstrating to conventional financial institutions the viability of the market; intermediaries that bring together various sources of capital to make projects and programs possible; and direct providers of financial products, services, and education. Since their origins in the 1960s and early 1970s, CDFIs have evolved from organizations seeking to provide an alternative to mainstream financial institutions that failed to serve minority and lower-income individuals and communities, to active partners with those institutions in support of community and economic development. The federal government has played an important role in the formation and development of these alternative financial institutions. Through the CRA, the federal government incentivizes large depository institutions to capitalize CDFIs. In addition, through the CDFI Fund, the federal government provides technical assistance and funding. Over the last several decades this has required such institutions to expand their financial and technological expertise as well as their ability to monitor and adapt to market changes (Rubin 2007). According to Berry et al., “Today development finance organizations are fluent in the language of business and command more and better resources to achieve their mission” (2007, 1).

In addition to expanding specialized knowledge and expertise, some programs have explicitly attempted to encourage the building of relationships between the public and private sectors as a way to enhance local community and economic development capacity. The EZ/EC program, for example, relies heavily on engagement with nonprofit and private partners. An interim assessment of the program by Hebert et al. (2001) observed that creating and maintaining such partnerships required significant time and effort to balance disparities of power, access, capacity, and resources.



Citizen involvement, participation and engagement. A potential outcome of any community and economic development program is the nature and extent of the citizen involvement, participation, and engagement it produces—whether as an explicit program objective or as a byproduct.

O'Connor (1999) notes that it was the progressive era of the 1930s that laid the foundation for community development policy. Citizen and resident participation was idealized during that era, especially to promote autonomy and self-sufficiency. Examples of models of indigenous control from that time include the Chicago Area Project, an anti-delinquency project governed by a neighborhood council of residents, and the grassroots network that formed the Labor Housing Conference. Often, however, citizen participation remained only an ideal as economic development planning in cities and at the federal level tended to cater to local business and real estate interests.

Recent federal community and economic development programs—including CDBG, EZ/EC and MMTC—have statutory or regulatory requirements that address citizen input or representation. Some studies have focused on the extent of, and issues related to, citizen involvement, a few of which are noted below.

With respect to the CDBG program, Wang and Van Loo (1998) recorded the participation ratios between 1994 and 1996 in public hearings in communities within the jurisdiction of their planning agency. They found that public turnout at hearings was low, attributed to procedural elements of the CDBG application that required little more than a public hearing notice. For the most part, residents were given little advance notice and most applications were already well developed, such that residents had little say in influencing proposed projects.

The federal EZ/EC program required citizen participation including involvement in the strategic planning process, membership on the governance board or the boards of community-based organizations represented on the governance board, or through personal ties with members of the governing body or with EZ/EC program staff. In an interim assessment of the program, Hebert et al. (2001) found that the federal requirements increased opportunities for residents and community organizations to be involved in the decision making process, but that participation generally dropped off over time—decreasing from the strategic-planning stage to the program-implementation stage. Wang and Van Loo (1998) served as planners in a Mississippi region whose communities were the beneficiaries of both CDBG and EZ/EC funds. Documenting citizen participation in both programs, they found resident involvement to be greater in the latter, which they attributed to HUD and USDA requirements relating to involvement and empowerment of residents (including low-income persons) in the planning process.



The NMTC program encourages low-income community participation by mandating resident representation on any CDE advisory or governing board. However, concerns have been expressed about the extent of resident influence and authority in NMTC investment decisions. Marketed as an investment program instead of a social assistance program, investors may have more input than community residents on the types of projects pursued in order to guarantee a positive rate of return (Forbes 2006).

Mission. Capacity to undertake community or economic development projects may also depend on a sponsor's or intermediary organization's mission to the extent it influences the types of investments made or populations served. Likewise, the existence and capacity of mission-driven organizations in a community may affect the types and levels of investment in that community.

With respect to the NMTC program, the question has arisen as to whether there is an appropriate balance between tax credit allocations to profit motivated versus mission-driven CDEs.²⁵ As Armistead (2005b) notes, the question presumes that there may be important differences between the types of investments made by CDEs with for profit parents as opposed to those that are mission-driven. For example, mission driven CDEs might be more likely to invest in nonprofit businesses such as child care centers and charter schools; the most distressed neighborhoods; small or very difficult deals; or deals that require a high degree of neighborhood input and involvement. Anecdotal data reviewed by Armistead on projects initiated from the first two allocation rounds of the program did not indicate any such bias based on CDE type.

The above concern is not unique to NMTCs. An assessment of LIHTC properties found marked differences in the economic demographics of residents and the location of properties depending on project sponsor-type (Buron et al. 2000). For-profit sponsors tended to own properties whose residents had higher poverty rates than their neighborhoods, whereas nonprofit sponsors, on average, owned properties with lower poverty rates than their neighborhoods. This is explained by the fact that properties owned by non profit sponsors were much more likely to be in extremely low poverty neighborhoods than properties owned by for profit sponsors. The propensity for nonprofit-owned properties to be located within higher-poverty neighborhoods supports their development objectives for community revitalization. It is assumed that for-profit properties that follow more traditional business models would tend to locate in a wide range of neighborhoods based on profit opportunities.

²⁵ Based on the structure of their parent organizations, CDEs are generally classified as: for-profit (e.g., banks); mission-driven (e.g., non-profit CDCs, CDFIs); or public (e.g., city governments, state economic development authorities).

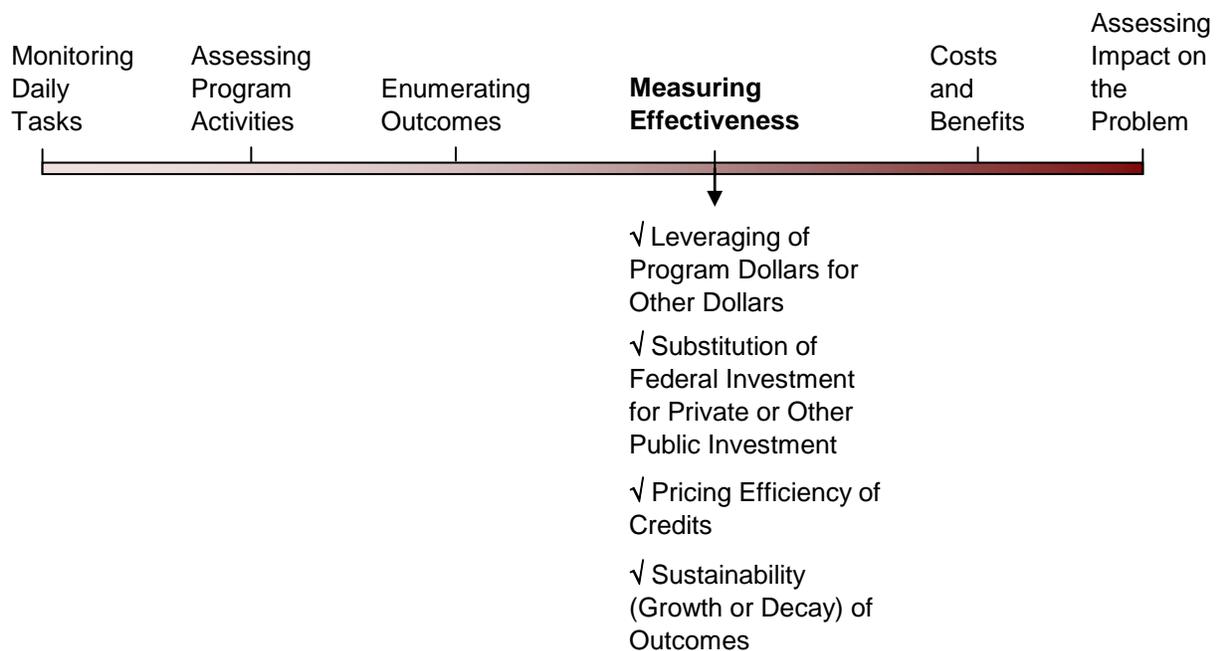


As noted earlier, disparities between nonprofit and for-profit developers is also reported by Ellen and Voicu (2006) in their study of the sectoral differences in the impact of rental housing rehabilitation on neighboring residential property values. Nonprofit developers were more likely than for profit developers to rehabilitate units that exhibited higher levels of distress or were formerly abandoned and vacant. They also were more likely to develop housing for special needs populations. However, in the case of small projects, for-profit developments generated greater impacts than their nonprofit counterparts, which may reflect the capacity constraints often faced by smaller nonprofits.



V. MEASURING EFFECTIVENESS

Studies and reports pertinent to measuring the effectiveness of community and economic development programs often address the issues of (a) leveraging of program dollars for other dollars, (b) substitution of public for private investment, (c) the pricing efficiency of credits, and (d) the sustainability (growth or decay) of outcomes. Each of these issues is considered separately below.



Leveraging of Program Dollars for Other Dollars

An important program effectiveness question is whether community or economic development funds are used to leverage additional investment—i.e., where one source of funds attracts or stimulates other sources in a single project (GAO 2007b) or, more broadly, where multiple sources of funds (including federal, state, local, philanthropic and private) are combined (Quercia, Rohe, and Levy 2000). In the latter case, program funds may or may not be the lynchpin, or critical component necessary, for a deal to come together. Leveraging can occur at the institutional level, where an entity pools funds from multiple sources to finance a portfolio of projects, or at the project level.



Leveraging can be a useful tool for financing community and economic investments, attracting investors, spreading risk, promoting partnerships, and building organization capacity. Investment structures that combine equity resources with debt can attract investors who are unable to make equity investments (Seidman 2007; Armistead 2005b). Leverage structures can also reduce risk for an investor (GAO 2007a). Within leveraged structures, federal funds are often used to finance the riskiest part of a project. In the NMTC program, for example, tax credits provide not only necessary additional funding but also funding at a lower rate than the alternative of market rate loans (for that level of risk) (Lundquist 2006). As a result, leveraging is generally viewed positively by both government officials and private investors, and leverage measures are often included in performance assessments (GAO 2008).

Historically, the economic development process has leveraged funding from multiple sources, using both public and private investment. Leveraging is used differently in different programs and has evolved over time. The redevelopment process within the Urban Renewal movement (1949–1974) attempted to alleviate the coordination problem in the development of distressed areas by combining under the auspices of one locally sponsored development project: infrastructure investment, community services, tax credits, and access to credit. Within this process, public and private investors were bound by contractual agreements (Simon 2001).

Beginning with the Carter administration, federal economic development policy has increasingly emphasized a strategy of investing small amounts of public money to leverage larger amounts of private money (Redburn 1984). Some programs, like HOPE VI, LIHTC, and CDBG, do not have statutory or regulatory leveraging requirements, though leveraging does occur in them. Other programs have such requirements; for example, in the HOME program states and communities must provide a match of at least 25 percent of the federal funding. Similarly, the UDAG program included the ratio of total private investment to total public dollars among the selection criteria in awarding grants (Redburn 1984).

The NMTC program does not have statutory or regulatory leveraging requirements but does encourage the combining of funds from federal credits with other private and public sources by selecting applicants who propose greater leveraging. Also, since its inception, the program has been used in conjunction with other federal tax credits. Many commercial real estate projects have twinned historic rehabilitation tax credits with NMTCs to attract investors (Armistead 2005b). These federal credits may be additive; for example, when RTCs are combined with NMTCs so that both the NMTC yield and overall investment yield are greater.

The 2005 Gulf Opportunity (GO) Zone Act serves as an example of leveraged public funding. The Act was passed to encourage further investment in areas that had been affected by hurricanes Katrina and Rita. It authorized the states of Alabama, Louisiana, and Mississippi



to issue tax benefits (tax-exempt bonds) and it also allocates additional federal tax credits, including NMTCs, LIHTCs, RTCs, and Section 179 financing to these areas.

Measures of leveraging. While there are several different ways to calculate leveraging, the most common involve ratios measuring the relative share of program or public investments to dollars leveraged. It is important to be clear about what sources of funds are included in the calculation; many programs have not sufficiently disclosed their methods in calculating leveraging ratios, which makes interpretation and comparison difficult (GAO 2008). While the specific formulation will differ across programs, evaluators primarily rely on a combination of three differently constructed ratios to measure leveraging in economic and community programs (GAO 2008; Walker, Abravanel et al. 2002). They are

- The ratio of all other funds to program funds;
- The ratio of all nonfederal funds to federal funds; and
- The ratio of all private to public funds.

Individual projects can be assessed by these ratios and the ratios can be summed to assess entire programs.

Leverage ratios have been estimated for several community and economic development programs. HUD's UDAG evaluation, for example, determined that, disregarding any private investment that would have occurred without a UDAG subsidy, the program leveraged an average of 5.5 private dollars for each UDAG dollar—a small decrease from the 6.3 private dollars that were originally anticipated at the time communities were awarded UDAG grants (HUD 1982). For the Section 108 program, the Urban Institute determined that the leverage ratio was \$.95 in private spending to \$1.00 in public funding (Walker, Abravanel, et al. 2002). GAO (2008) calculated the ratio of private to public funds in the HOME program as \$.62 to \$1.00, and \$.67 to \$1.00 for the HOPE VI program (GAO 2008).²⁶ The CDFI Fund recently estimated CDE investment to total project investment, NMTC investment to total capital

²⁶ In a prior report, GAO had estimated that public housing authorities expected to leverage, for every dollar received in HOPE VI revitalization grants (awarded through FY 2001) an additional \$1.85 in funds from other sources. The report noted, however, that HUD considered the amount of leveraging to be slightly higher because it treated as "leveraged" both HOPE VI grant funds competitively awarded by HUD for the demolition of public housing units and other public housing capital funds that housing authorities would have received from HUD even in the absence of the HOPE VI revitalization grants. On the other hand, HUD did not treat funds that grantees receive through the LIHTC program as federal funds. GAO's analysis of the HOPE VI mixed-finance proposals HUD approved through FY 2001 indicated that, when LIHTC is included, 79 percent of the budgeted funds were from federal sources while the remaining 21 percent were from private (12%) and state and local government (9%) sources (GAO 2002b, 4).



investment, and federal tax revenues foregone to total project investment for 80 percent of projects undertaken through 2006 (Bershadker et al. 2007). The Fund reported that:

- CDE investments comprised less than one-third (28.1 percent) of total project investments;
- Each \$1 of NMTC investment supports, on average, a total of \$3.56 in total project costs; and
- Every \$1 of federal tax revenue foregone as a result of the NMTC program is estimated to induce over \$14 of investments.

In general, a higher ratio, representing greater leveraging, is considered to be a good use of public funds, but leveraging may also be associated with inefficiencies resulting from differing application and reporting deadlines for various funding sources. Furthermore, too high a leverage ratio, where a small proportion of total project funding consists of program funds, may suggest that the project would likely have proceeded without the program funds—indicative of substitution of public for private investment (see below).

Finally, it is not clear how leverage ratios should be interpreted when comparing projects or programs because they reflect, partly, the circumstance of a development such as the location or the availability of potential investors (GAO 2007a). As Redburn (1984) pointed out, cross-program comparisons must be done very carefully to account for differences in program design and objectives. All or most of the costs in some programs are intended to be covered by federal, state, or local governments, resulting in lower leverage ratios; in others, however, such as UDAG, the intent is to provide the smallest amount of public funds needed relative to other (especially private) funds, resulting in higher leverage ratios.

Substitution of Federal Investment for Private or Other Public Investment

Legislators, budget and management analysts, and evaluators often want to know whether federal program funds are the primary impetus for achieving program objectives or merely substituting for other funding sources that are available to accomplish the same objectives. This interest is premised on the notion that the effectiveness of federal programs is lessened when either resources are used for projects that could or would have proceeded as a result of other investments or when programs provide more subsidy than is necessary to accomplish their objectives. According to Redburn et al, “When public funds are merely substituted for private funds in this fashion, no real public benefits have been created and public resources have been wasted.” (1984, 126)



Substitution occurs in federal community or economic development programs when federal funds are used to pay for some portion of a community or economic development project that either the private sector or state or local governments would have paid for in the absence of the program. If the funds are essential for a project to be initiated or completed, there is no substitution; put another way, “but for” the federal program the project would not have occurred. Recognizing, however, that community and economic development projects are oftentimes location- and scope-sensitive, this but-for test needs to take into account whether a similar project would have occurred at about the same time, in about the same place, and at about the same scale were it not for the program investment. A more nuanced approach involves not only whether there is substitution but, if so, how much. Some basic distinctions are as follows:

- **Full substitution** is where a federal program investment (subsidy) substitutes completely for other private or nonfederal public investment possibilities that could or would have been used;
- **Partial substitution** is where a federal program investment (subsidy) substitutes for only a portion of other investment possibilities; and
- **Duplication or excessive subsidy** is where more federal program investment—either from a single program or in combination with other federal programs—is provided than is needed to accomplish an objective.

Federal community and economic development programs vary with respect to their legislative or regulatory provisions pertaining to substitution. Formal nonsubstitution requirements are central to some programs but not to others.

The CDBG program generally does not require that state or local government grantees consider whether uses of CDBG funds substitute for other public or private dollars. Such uses, nevertheless, must comply with OMB Circular A-87, which establishes principles and standards for determining the costs for federal awards (including grants) to state and local governments.²⁷ Because such costs must be “reasonable and necessary,” it is conceivable that use of CDBG funds when private funds are available might be deemed unnecessary. There are two cases, however, where a formal substitution determination is required. For public services programs, CDBG funds cannot supplant state or local government funds that have been previously used to pay for the same activity within the last 12 months.²⁸ And the public benefit standards for

²⁷ Circular A-87, Cost Principles for State, Local and Indian Tribal Governments, was issued by OMB in 1968, reissued in 1974 and 1981 (with coverage extended to Indian tribal governments), and significantly revised in 1995. In 2005 it was incorporated into Title 2 of the *Code of Federal Regulations* (2 CFR), Subtitle A, Chapter II, Part 225.

²⁸ Rule 570.201.



economic development programs require that CDBG funds cannot be used to reduce the amount of nonfederal funds for an activity.²⁹

UDAG program authorizing legislation contained a provision requiring that UDAG funds not substitute for or replace other nonfederal funds, and that a formal determination be made that a project would not occur “but for” a UDAG award.³⁰ In essence, the program was intended to be used only when it could be demonstrated that it was a necessary catalyst or inducement for economic development.

SBA business loan programs are required by law to serve only borrowers who otherwise would not be able to secure loans from another source.³¹ This means that no financial assistance is to be extended if an applicant can obtain credit from nonfederal sources on reasonable terms and conditions. The latter take into consideration prevailing rates and terms in the community in or near where an applicant conducts business—for similar purposes and periods of time (SBA 2000). SBA loans, therefore, cannot substitute for similar credit that could be obtained through other means.

LIHTC administrative guidelines issued by HUD require the U.S. Department of the Treasury’s credit allocating agencies—generally state housing finance agencies—to adhere to a set of rules when allocating tax credits to LIHTC projects that will also receive additional subsidies from HUD. Known as the “subsidy layering rule,” a minimum contribution to the development is mandated from each credit recipient to ensure that no more tax credits are awarded to any project than are necessary to fully finance it (McClure 2000).

The NMTC program has no legislative or regulatory requirements related to substitution of a federal subsidy for other available investment resources. Program rules provide considerable flexibility as to what kinds of investments are made and what their scope, purposes, and desired impacts should be. Although the CDFI Fund formally certifies CDEs and competitively awards NMTC allocations to a portion of them, it does not review individual projects or become involved in underwriting decisions. Those responsibilities reside with individual CDEs and their investors, who consider which investments are made, the need for NMTCs in these projects, and prospective project impacts. This flexibility means that, except for compliance with core CDFI Fund and Internal Revenue Service (IRS) regulations, there is no single standard that determines whether a project is the best choice for the use of tax credits or

²⁹ Rule 570.209 and Appendix A.

³⁰ Wyder Amendment, P.L. 96-153, Section 104, Housing and Community Development Act of 1974.

³¹ 15 U.S.C. §636(a).



whether the credits were essential to the project's initiation. That notwithstanding, the program's competitive allocation process, mandatory allocation agreements, use of distress criteria, and system of reporting are all designed to encourage the funding of projects that would not have proceeded in some form but for the tax credits (Armistead 2005a).

Assessing whether (or the extent to which) a federal community or economic development program substitutes for other sources of funds is the equivalent of doing an impact evaluation—i.e., one that focuses on whether a particular program *caused* certain outcomes to occur (Armistead 2005b; Rubin 2006b). In this instance, however, the focus is not on outcomes such as job creation, business development, etc., but on whether a project that might produce those types of outcomes would have occurred in the absence of a community or economic development program. And, inasmuch as any rigorous effort to evaluate impacts ideally requires some type of experimental or quasi-experimental design that incorporates pre- and post-measurement and comparison of “treatment” and “control” groups, a thorough substitution evaluation would require a comparable effort. As such, it seems widely recognized among community and economic development practitioners and researchers that evaluation of substitution is extremely difficult.

For studying substitution, experimental or random assignment studies are generally impractical given the nature of many types of community and economic development programs. An alternative approach—involving “naturally occurring” experiments—compares pairs of projects similar in all respects (such as their type, attributes, location, timing, and scale) except for receipt or nonreceipt of program subsidies. The presumption is that if comparable projects not receiving a subsidy are initiated and completed, those receiving them did not need them.

Several issues arise with respect to studying substitution using matched pairs of comparable projects. For one thing, for many types of community and economic development projects it is not always possible to identify appropriate comparables. For another, it may not be possible to obtain the kinds of information about comparable projects that are not recipients of a program subsidy since such information is often proprietary. In addition, knowing whether a project would have proceeded absent a subsidy is not simply a *post-hoc* program evaluation challenge, it may also be a practical challenge to those involved in attempting to initiate a project. When financing packages are being assembled for some community and economic ventures, for example, even the principals may not know with any certainty what is likely to happen if a particular subsidy were not available. In many instances, although not always, the timing and circumstances associated with such projects make it infeasible to explore alternate sources of financing, especially in complex transactions involving multiple investments where each may be contingent on the others. *Post hoc* determination of substitution, therefore, can be especially problematic.



Among the community and economic development programs discussed above, UDAG had the most explicit statutory mandate not to substitute for private or other public funds or be used in cases where private investment in projects was not otherwise contingent on a UDAG subsidy. As such, when HUD conducted its 1982 evaluation of the program, considerable effort was expended to find a practical way to assess the extent to which substitution was occurring—in light of the methodological challenges identified above (HUD 1982). The approach consisted of a combination of extensive fieldwork on, and independent expert analysis of, a sample of 80 projects selected to be representative of the program as a whole. It is described below in some detail because it represents a model that can be considered for evaluating substitution in the NMTC program.

The fieldwork for the UDAG evaluation involved conducting detailed, on-site discussions with those directly involved in putting together each of the sampled projects (including private developers, lenders, and city officials), reviewing site histories and market conditions, examining other economic development activities in the surrounding area, and considering the intentions and long-term economic interests of the primary project actors. A triangulation process, in which the answers of various parties were compared, provided an opportunity to discover discrepancies and probe for differences of opinion. The expert analysis portion consisted of convening an independent panel of finance, accounting, legal and development practitioners who were not associated with any of the projects or communities in which they occurred, and seeking their considered judgment as to whether substitution occurred based on the information collected. Examples of issues they considered are: the length of time sites had been available; the market value of the land; surrounding land uses; the value of possible alternative sites for a project; previous investor interest; the availability of alternate financing or alternate sites; and the prospective profitability of an investment compared to similar investments.

The evaluators concluded that in 64 percent of the projects, UDAG funds were definitely needed to stimulate the private investment and benefits that resulted. In contrast, UDAG was needed for stimulating only a portion of the private investment in 13 percent of the projects and unnecessary for stimulating any of the private investment in eight percent.³² Based on these findings, the evaluators estimated that the amount of unnecessary UDAG funds awarded to projects, program-wide, was equal to one dollar for every six expended, and used these findings to adjust or “discount” the value of the benefits attributed to the program—i.e., amount of private investment leveraged, number of new permanent and temporary jobs created and retained, amount of tax revenues generated, number of rehabilitated housing units produced, and amount of assistance to households for improving housing units. Projects that involved partial

³² The evidence was inconclusive for the remaining 15 percent.



substitution included those where, without UDAG, portions of the project or a scaled-down portion of the project could have been completed. Projects that showed evidence of full substitution included those that had agreements to receive full funding from private investors if a federal subsidy were not forthcoming or where a project was determined, after the fact, to have been financially feasible absent UDAG. Projects that did not show any evidence of substitution included those whose sites had extremely high development costs, where there was a legitimate financing gap, where there was a need for public improvements to allow private investment to occur, and where private investment was especially risky.

Pricing Efficiency of Credits

In the project outcomes section of this review, we presented efficiency measures like the price of job creation and the price per square foot of real estate produced. However, there is another measure of program efficiency that, while pertaining to all economic and community development programs regardless of their structure, is especially important to measure in relation to tax credit programs. Unlike the direct allocations of grant programs or the guaranty amounts of loan guaranty programs, these tax credit programs have an added level of complexity that requires additional evaluation: the efficiency of the pricing of the credits. In tax credit programs (like RTC, LIHTC, and NMTC), the federal government forgoes revenues, which intermediaries or developers sell to investors. The pricing of the tax credits is obviously linked with the results a program is able to achieve, in that the pricing determines the level of funds available to make loans and investments. Therefore, the prices paid for these credits constitute a critical programmatic output.

It might be expected that one dollar of credits would be priced at one dollar of investment but, for several reasons, that is not always the case. The reasons broadly fall into two categories: programmatic design and market forces.

Programmatic design. Variations in the design of community and economic development programs affect the pricing of credits as these impinge on investor transaction and reporting costs, the risks of recapture, the manner in which investments are defined, and tax code regulations. The issue concerns trade offs in that certain program-design regulations may decrease the price investors are willing to pay for credits, yet be necessary to accomplish other program objectives—such as targeting to needy persons or places, or preventing over-subsidization.

Any community or economic development project done with or without a subsidy requires developers and other key players to incur costs. A successful program should aim to reduce the amount of additional costs attributed to its sponsored projects, such as transaction



costs that are the result of program design and that will rise with program complexity. Such costs include the specialized legal, tax, and compliance monitoring necessary to support projects. And, prior to receiving funds, there is the cost of applying for an allocation. Measuring transaction costs as a share of project size is a meaningful indicator of program design and efficacy. This measure may vary with the size of allocation and the transaction costs, and will be less per project as intermediaries reach economies of scale. An additional measure of efficiency is the administrative cost per number of applications processed, which speaks to the efficiency of applicants.

Beyond transaction costs, a number of other programmatic considerations may affect the pricing efficiency of tax credits. For instance, with increased risk of recapture of their investment, investors will be less willing to pay for credits, resulting in lower prices. In this regard, to ensure that borrowers receive patient capital, the NMTC program requires a seven-year forbearance period where investors relinquish the rights to foreclose on any investments. Further, CDEs must invest “substantially all” of the funds they receive for the tax credits or they, and investors, face the risk of having investments entirely recaptured. The LIHTC program has recapture risks for investors as well, though they are less than under the NMTC program.

The regulations governing community and economic development programs also determine what constitutes an investment and, therefore, what share of it is eligible to be returned to investors. For example, in the LIHTC program, the total cost of development available for credits does not include the costs of land purchase. In the RTC program, the costs of rehabilitating the property alone constitute the basis from which credits can be applied. Taxing mechanisms also affect pricing. In the NMTC program, investors are taxed capital gains at the end of the period, which decreases the value to them of the credits. Conversely, in the LIHTC program, investors are allowed to deduct the expenses of operating the development, meaning their value can exceed one dollar per credit.

Market forces. Market forces also affect the pricing of tax credits in community and economic development programs. In addition to the program design reasons described above, demand for the credits is influenced by the type of individuals and institutions eligible for and incentivized to purchase credits; the extent to which these institutions are profitable and hold tax liabilities and are therefore interested in credits; the development of syndication and a secondary market for credits; and the risk of interest rate changes over the life course of these investments. Supply of credits is determined primarily by the legislative process, and has varied over time.

Evaluating pricing efficiency. The above design and market factors have played out in the prices investors are willing to pay for tax credits, which have proven quite variable across programs and over time. The LIHTC program, for example, has seen significant change in the



pricing of credits since it was established in 1987. In the early years the credits sold for \$.40 to \$.50 on the dollar, but with the corporatization of the program's investors in the 1990s, prices rose to \$.65, increasing upwards of \$.77 in the late 1990s and early 2000s with the entrance of CRA and GSE goal-motivated investors (Eriksen 2007, Smith 2002). Likewise, while initially lower, as the program matured, the perceived present value of the NMTC credit to investors is recognized as roughly 70 to 80 percent of the amount of credits (Armistead 2005b).

A summative programmatic output measure for evaluating the pricing efficiency of tax credits is the amount of equity or debt financing received by a project per tax credit, the investment-credit ratio. While the measure is easy to calculate, it is harder to interpret. Important questions are:

- At what level is a program efficient?
- How do evaluators gauge the tradeoffs to efficiency that result from program regulations like targeting and recapture?
- What is the appropriate comparison?

Smith (2002) offers five potential bases for comparison of the efficiency of a tax credit program: perfection, where each tax credit dollar would translate into one dollar of investment; a government grant and the costs associated with direct allocation of funds; private capital that has been induced by regulation to invest in community or economic development projects; other tax credit programs; or the same program over time. Indeed, to assess a tax credit program's pricing efficiency, the ratio of investment amount to credit amount should likely be judged against several of these bases, not just one.

Beyond the investment-credit ratio, other investment profitability measures are of interest in program evaluation. First is the rate of return that investors receive, and how these rates depend on type of investment or type of investor. Additionally, evaluators can calculate the pricing of tax credits by estimating the rate at which investors discount an individual project's future tax credit allocations relative to a less risky security of comparable maturity. One measure is the yield spread between an investor's return under a tax credit program and their alternative return on a 10-year Treasury bond during the month of the transaction (Eriksen 2007; Smith 2002).

Sustainability (Growth or Decay) of Outcomes

As quoted in Section II, above, Redburn et al. reasonably assert that a publicly funded economic development stimulus should be expected to leverage long-lasting or multiplying



gains for the economic welfare of an area and its people (Redburn et al. 1984, 119–20). Such gains, at minimum, should be sustained over time. Unfortunately, though, and despite many decades of community and economic development programs, there is not much objective evidence in the literature as to how well programs do in the long run—with respect to either areas or people. Undoubtedly, this is partially due to the methodological difficulties of rigorously measuring short-term impacts (i.e., the outcomes of a program *as compared to what would have happened in its absence*), much less long-term impacts (Immergluck 2008). Oddly enough, it also may be due to disinterest in the issue on the part of policy makers, in light of what Margaret Dewar considers the bureaucratic and political imperatives motivating such programs. In answering the question, “Why do state and local economic development programs cause so little economic development?” she observes:

Economic development programs are not designed and implemented in ways that can achieve their goals, principally because of important political forces. Administrators must run a program to garner support of legislators, a governor, and opinion leaders for program survival. State and locally elected officials need economic development programs to deliver quick, visible projects in their efforts to solve their districts’ economic problems, manage business climate politics, and achieve other aims. Achieving implicit goals means that programs only occasionally undertake activities likely to achieve explicit aims. (Dewar, 1998, 68–87)

Whatever the reasons for a paucity of research demonstrating the long-term benefits of specific community and economic development projects, the sustainability issue cannot be ignored; it is a legitimate, albeit seldom studied, program evaluation concern. Apart from the subject of project spillovers or contingent effects is the basic question of whether any short-term outcomes that are observed (be they job creation or retention, physical revitalization, businesses start up or expansion, enhanced institutional capacity to promote community or economic development, or whatever) are still evident years later. At minimum, therefore, built into program evaluation design should be the opportunity to track and revisit projects in the out years to determine if they remain stable, grow, or decay, with time.



VI. CONCLUSION

Numerous programs administered by scores of federal, state and local government entities support community and economic development through grants, loans, loan guarantees, tax credits, and other means. This review of the literature pertaining to such efforts was intended to inform evaluation of the NMTC program—the most recent major federal government initiative aimed at promoting development in underserved and lower-income communities. As such, it identified key program evaluation concepts, questions, methods and measures as well as highlighted significant challenges inherent in evaluating community and economic development programs.

The studies and reports that have been done on community and economic development programs over the last half century are uneven with respect to motivations, interests and foci. Evaluation issues have not been the same from program to program or over time with respect to comprehensiveness, approaches, methodologies or metrics. Consistent assessment, therefore, is somewhat problematic when it comes to concluding which programs are more efficient or effective than others. That notwithstanding, the literature is impressive with respect to both its volume and breath. It offers guidance regarding issues that are important to address in evaluating any program, such as NMTCs, as well as advice related to the likely difficulties of obtaining certain kinds of evidence. In addition, then, to helping identify evaluation questions, methods, data and standards, the literature contributes to establishing realistic expectations as to what can be learned empirically about community and economic development programs.

Based on the review, three issue clusters emerge as particularly appropriate for evaluation to be done at this stage in the evolution of the NMTC program. These clusters do not follow precisely from the program evaluation continuum discussed above, but are closely related to it. They consist of: assessing program activities; measuring financial and management performance, effectiveness and efficiency; and assessing outcomes.

Assessing program activities. An important subject for NMTC evaluation involves assessment of program activities like targeting and capital flows. These are priority issues because they relate directly to the stated program goal of encouraging capital investment in low-income communities. With respect to targeting, the literature suggests that community and economic development programs vary not only in how targeting is defined and measured but also in the extent to which it is an explicit program goal and programs are designed to accomplish it. A relevant question involving the NMTC program, therefore, is how its design and operations (for example, the fact that CDE allocatees are selected by the federal government while projects are selected by the CDEs) affect targeting to low-income communities and



persons. With respect to capital flows, the literature calls attention to both the difficulty of measuring changes in local investment levels over time and of attributing investment changes to a particular community or economic development program. Analysis of the latter is often precluded by lack of comprehensive data at a small enough geographic level, the small scale of many community and economic development projects relative to the area of interest, and the challenge of establishing an appropriate counterfactual.

Measuring financial and management performance, effectiveness and efficiency.

Beyond assessment of program activities, the literature makes clear that a crucial, although complex set of evaluation issues relevant to the NMTC program concerns measurement of project (i.e., investment) financial and management performance, effectiveness (such as whether projects leverage additional, especially private, financing), and efficiency (such as the pricing of tax credits). Many studies of community and economic development programs deal with issues related to project financing and program costs as measures of program success (or failure). Interestingly, these are not always related to project results. There is limited evidence in the literature tying intermediary financial and management performance to outcomes, often because of constraints related to project scale, critical mass, and timeframe for evaluation.

Assessing outcomes. There is no denying the importance of evaluating project outcomes (i.e., the events and conditions that follow a community or economic development program intervention); these can be direct, indirect, or contingent, and can focus on a project or on the neighborhood or community in which a project is undertaken. However, given the variety of outcome possibilities for community and economic development programs, the short-term focus of many studies, and the high cost of obtaining certain kinds of outcome metrics, outcome assessment has not been a constant in program evaluations. Too often, emphasis has been on whether and how projects are initiated and completed as opposed to their results. This is a deficiency in the literature that needs to be addressed, and a lesson with respect to priorities for evaluating the NMTC program.

Some community and economic development programs are single purpose (such as those that provide venture capital for small business start ups) while others, like the NMTC program, are multi-purpose. For the latter, outcome possibilities are many. They include, for example, those related to: generating employment; supporting physical development; creating housing opportunities; constructing public or community service facilities; financing business development; supporting industrial, commercial retail, or mixed-use enterprises; or stimulating enhanced local or institutional community and economic development capacity. For programs with many types of outcome possibilities, there is no single outcome metric that applies across the board.



Even for programs or projects where primarily one particular result may be of interest, there are likely to be different approaches to measuring that outcome—some of which may be more useful and meaningful than others. In some cases secondary data are readily available while, in others, new data need to be collected. And, outcomes will differ with respect to how easy they are to quantify. If stimulation of enhanced local or institutional community and economic development capacity is an outcome of interest, for example, measurement may be somewhat subjective—involving indicators like increases in organizational knowledge or extent and nature of citizen involvement.

Other outcome measurement issues follow from the literature, such as the question of which aspects of an outcome should be considered. With respect to employment outcomes, for example, should the metric consist simply of the number of jobs created (or retained) or whether such jobs are: full-time or part-time; permanent or temporary; targeted to previously unemployed persons or not; involve benefits or not; encourage upward mobility or not; or go to low-income persons or not?

There is often interest in whether project investments generate broader (either neighborhood- or community-level) outcomes such as general improvement in economic status and quality of life, enhancement of local or institutional capacity, or leveraged additional community-level investment. The literature suggests, however, that identifying such outcomes may require a time frame of possibly ten years following project-completion to detect any such outcomes. The issue this raises is that other circumstances apart from a single project investment may be responsible for these broader outcomes, and it becomes difficult to establish the relationship between the project investment and longer-term outcomes. Also, individual program investments may not achieve sufficient critical mass—relative to the size of a neighborhood or community—to have a measurable impact. As such, measurement of neighborhood- or community-level outcomes may not be possible until well after a particular program activity or project is completed and, even then, may not always be possible.

There is additionally the question of whether outcomes—be they project, neighborhood or community level—occur only in the short term or extend over a longer period of time. The literature suggests a reasonable expectation with respect to community and economic development programs that investments should not only be needed to accomplish desirable objectives but also be sustainable. Hardly any program evaluation, however, has assessed long-term project, neighborhood, or community level outcomes associated with such programs, constituting a significant gap with respect to judging the effectiveness of these investments.

A fundamental, albeit particularly challenging evaluation question involves whether outcomes, however measured, are caused by a program—i.e., whether they would have happened had a program investment not been made. This is an impact—or cause and effect—



matter, which the literature indicates is especially difficult to demonstrate with respect to many community and economic development programs.

Finally, a key issue, often raised in the literature more theoretically than empirically, is whether community and economic development program investments are necessary for projects to come to fruition—even where (as is the case for the NMTC program) this is not an explicit requirement. As discussed earlier in this paper, substitution of public for private financing (or of financing through one program as opposed to others) is very difficult to analyze. It is equivalent to doing an impact study—i.e., requiring knowledge of what would have happened in the absence of a program investment. Research difficulties aside, an optimal community and economic development investment is one that is needed to bring a project to fruition as well as one that results in good outcomes. Otherwise, scarce public resources are wasted when either good outcomes do not occur or when a project would otherwise have come to fruition without a program investment.

A worthy objective of community and economic development program evaluations is to demonstrate, or at least consider with as much evidence as possible, how frequently program

Four Possibilities Involving the Relationship between Projects' Need for Community and Economic Development Program Investments and their Outcomes		Are a community and economic development program's investments needed for projects to come to fruition?	
		Yes	No
Are projects' outcomes positive?	Yes	1	2
	No	3	4

investments are needed for projects to come to fruition and also to result in good outcomes. The matrix to the left depicts need for program investments, on the one hand, and good project outcomes, on the other—considering them to be conceptually distinct. Cell 1 constitutes the best

possible condition. Less desirable are programs whose projects result in good outcomes that did not require program investments (cell 2) or those with bad project outcomes that did (cell 3). Finally, the worst situation is where a program's projects neither required program investments to come to fruition nor resulted in good outcomes (cell 4).

Summary. Serious, rigorous program evaluations are necessary to understanding whether community and economic development programs work and which ones work better than others. They are, however, often difficult and costly to undertake. Even with substantial resources the ability to answer certain questions remains problematic. Consequently, each evaluation must consider what issues policy makers, program administrators, and the general public consider worth addressing and, for those, what kinds of methods, evidence and



standards should be applied. This review of the literature offers guidance with respect to all of these matters.



LIST OF ACRONYMS

CBA	Community Benefit Agreement
CDBG	Community Development Block Grant
CDE	Community Development Entity
CDFI	Community Development Financial Institution
CRA	Community Reinvestment Act
EDA	Economic Development Administration, U.S. Department of Commerce
EZ/EC	Enterprise Zone/Enterprise Community
FTE	Full-time equivalent
GAO	U.S. Government Accountability Office
HMDA	Home Mortgage Disclosure Act
HOME	HOME Investment Partnerships Program
HRTC	Historic Rehabilitation Tax Credit (also known as RTC)
HUD	U.S. Department of Housing and Urban Development
LIC	Low-Income Communities
LIHTC	Low Income Housing Tax Credit
NMTC	New Markets Tax Credit
QALICB	Qualified Active Low Income Businesses
QCT	Qualified Census Tract
QEI	Qualified Equity Investments
QLICI	Qualified Low Income Community Investments
RTC	Rehabilitation Tax Credit (also know as HRTC)
SBA	Small Business Association
TIF	Tax Increment Financing
UDAG	Urban Development Action Grant
USDA	U.S. Department of Agriculture



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APPENDIX

Review of Selected Literature

Appendix: Review of Selected Literature

Study	Objective/Questions	Data	Methods	Findings and Limitations
Anderson, John E. 1990. "Tax Increment Financing: Municipal Adoption and Growth." <i>National Tax Journal</i> 43(2): 155-163.	Is there a relationship between a city or municipality's adoption of TIF plans and the growth of property tax base?	Michigan Department of Treasury data on TIF activity in Michigan from 1985-1986	Probit model to estimate effect of TIF on property value growth	Found evidence that the average property value growth for cities with TIF plans was lower than that of cities without TIF plans. <i>Limitations: Study is restricted to cities in Michigan and there is sample selection bias with respect to cities that use TIF.</i>
Armistead, P. Jefferson. 2005a. "Community Perspective: Is the NMTC Making a Difference in Low-income Communities?" Federal Reserve Bank of San Francisco Community Development Investment Review 1(1):15-20.	Are the tax credits being used for projects that would have been done without it? Is the targeting too broad and does it give short shift to rural areas? Does the program's tilt toward real estate limit its effectiveness as a tool for revitalizing low-income communities? Are tax credits being allocated disproportionately to for-profit CDEs at the expense of mission-driven organizations?	Case studies 26 interviews with participants in the NMTC program (10/2004 - 9/2005) CDFI Funds' application CDFI Funds' data report Formal evaluation and interview results from Armistead's previous reports	Provides a review of NMTC and uses administrative data and other secondary sources, such as CDFI CDS data, NMTC progress reports, and GAO reports.	Overall, community development practitioners responded that NMTC was effective in providing financing to projects that would not have been feasible otherwise. The competitive allocation process seems to be working in terms of targeting funds to communities of high economic distress, despite "low-income communities" being defined too broadly. Three concerns are the small number of allocations to rural communities, NMTC's favorability of real estate investments because of recapture provisions, and that projects located in rural areas may be too small to apply for NMTC financing.
Armistead, P. Jefferson. 2005b. "New Markets Tax Credits: Issues and Opportunities." Brooklyn, NY: Pratt Center. http://www.pcced.org/sites/default/files/publications/PrattCenter_nmct-report.pdf	What is the NMTC program and what issues have arisen in its early implementation? Issues include real estate bias, "but for" question, complexity of the NMTC process, geographic distribution of credits, and types of CDEs, potential bias, and reauthorization.	Case studies and interviews	Descriptive study	NMTCs have been used with "but for" projects. Found evidence of strong competition for credits. CDEs have been successful in attracting investment, and investing in a wide range of projects, in low-income high need communities and "but for" projects. The NMTC allocation and finance processes are complex and require significant overhead and transactional costs. Smaller organizations with smaller projects may have to seek financing from a larger scale CDE that can apply for NMTC credits. Decrease in use of NMTC in rural areas may be tied to the difficulty of doing small deals. There has been an increase in real estate investments mainly because of its recapture provisions. There are concerns around the role of the CDE parent (for-profit vs. mission driven) but so far, both types of parents invest in both for- and nonprofit GALICBs.
Barnekov, Timothy and Douglas Hart. 1993. "The Changing Nature of US Urban Policy Evaluation: The Case of the Urban Development Action Grant." <i>Urban Studies</i> 30(9): 1469-1483.	Why did UDAG end if the two government-sponsored studies at the time presented the program favorably? Why has there been a decline in policy evaluation?	Previous evaluations of the UDAG program by HUD and GAO	UDAG case study	HUD study found no significant substitution of public for private dollars (64% of 80 projects). Twenty-one percent of projects had some substitution. 5.5 private dollars were invested per UDAG dollar (which is above the 2.5/1 ratio requirement). By 1988, 350,000 jobs were created for the 1,329 completed projects, and minority jobs totaled 76.52%. The GAO study found 92% of expected new permanent jobs were realized, and 91% of low- or moderate-income jobs expected were realized. Accurate information about impact is important in evaluation but difficult to obtain, and difficulties in assessing UDAG were more ideological than methodological.
Bartik, Timothy, and Richard Bingham. 1997. "Can Economic Development Programs Be Evaluated?" In <i>Dilemmas of Urban Economic Development: Issues in Theory and Practice</i> , edited by Richard Bingham and Robert Mier. California (246-277). Thousand Oaks, CA: Sage Publications.	Can economic development programs be evaluated?	N/A	Theoretical, with a review of various economic development evaluations with a focus on program outcomes and impacts.	Yes, economic development programs can be evaluated. Program evaluation should be viewed as a continuum with six levels of evaluation. An evaluation must measure effectiveness or assess the impact of a program. A good quantitative evaluation requires having comparable unassisted communities or firms which can be used along with a qualitative survey of assisted firms.
Berube, Alan. 2006. "Using the Earned Income Tax Credit to Stimulate Local Economies." <i>Living Cities Policy Series</i> 2.	What are the benefits that families/communities could receive if the full potential of the EITC were realized?	N/A	Literature review	San Antonio estimates that every EITC dollar generates \$1.58 in local economic activity, and \$37,000 creates one permanent job. Baltimore finds approx \$600,000 in local income and property tax revenues generated from EITC. It's possible the credit's impact is even greater since 15-25% of eligible taxpayers fail to claim EITC.
Black, Sandra. 1999. "Do Better Schools Matter? Parental Valuation of Elementary Education." <i>The Quarterly Journal of Economics</i> 114(2): 577-599.	What value do parents place on school quality?	Sample of 22,679 single-family homes from within 39 school districts that contain at least two elementary schools with overlapping grades and with no intradistrict school choice Purchase and sales data from 1993-1995 in Middlesex, Essex, and Norfolk counties in Massachusetts Fourth grade Massachusetts Educational Assessment Program (MEAP) test scores for 1988, 1990, and 1992	A hedonic price function that uses a set of boundary dummies instead of the vector of observed characteristics.	Parents are willing to pay 2.5% more per 5% increase in test scores, which means that if there is a one-point increase in the standardized test scores in Massachusetts, housing values in the state could increase by approximately \$70 million. <i>Limitations: Study is restricted to Massachusetts.</i>
Bolton, Roger. 1992. "Place Prosperity vs. People Prosperity: Revisited. An Old Issue with a New Angle." <i>Urban Studies</i> 29(2): 185-200.	Examines the debate between place-based and people-based strategies.	Existing literature	Literature review	There is concern regarding "sense of place" due to new economic theories related to household production, fairness, and community values; however, it remains an "intangible capital that is part of forming regional and local identity."

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Study	Objective/Questions	Data	Methods	Findings and Limitations
Bradshaw, Ted K. 2002. "The Contribution of Small Business Loan Guarantees to Economic Development." <i>Economic Development Quarterly</i> 16(4): 360-369.	What are the effects of the small business loan guarantee program in California?	Information provided to California Trade and Commerce Agency by eight financial development corporations that administer loan guarantee program Annual firm data	Descriptive statistics	Program increased employment in firms receiving loan guarantees by 40% (27% nonagricultural firms) and increased state tax revenues by \$25.5 million (only \$13 million spent on program). Loan-receiving firms had 2% default rate. <i>Limitations: Only presents averages and does not have a control group.</i>
Buron, Larry, Sandra Nolden, Kathleen Heintz, and Julie Stewart. 2000. "Assessment of the Economic and Social Characteristics of LIHTC Residents and Neighborhoods." Cambridge, MA: ABI Associates.	What are the characteristics of LIHTC residents and neighborhoods? Who is served by LIHTC and what is the relationship between project and neighborhood characteristics?	39 LIHTC properties in service from 1992-1994 in Boston, Kansas City, Miami, Milwaukee, and Oakland	Field visits, interviews with site managers and owners of the properties, and a telephone survey of property residents	The program was adequately targeted to needy individuals and properties were constructed in low-income, high-poverty neighborhoods, typically within cities, comprising a high proportion of minority residents that were already dominated by rental units. Study also found differences in the economic demographics of residents and the location of properties depending on project sponsor-type. Many families were Section 8 recipients but compared to non-LIHTC Section 8 recipients, LIHTC residents were more likely to have higher incomes and less likely to be on welfare.
Byrne, Paul F. 2006. "Determinants of Property Value Growth for Tax Increment Financing Districts." <i>Economic Development Quarterly</i> 20(4): 317-329.	What are the characteristics of TIF and TIF districts and how do they influence growth?	Equalized assessed values (EAVs) of properties within Chicago-area TIF districts Census demographic characteristics (1983, 1993)	Regressions measuring TIF growth in certain municipalities	Property value growth in a particular district is strongest when it is a young district. TIF works well in the areas that are most blighted.
Carroll, Deborah A. 2008. "Tax Increment Financing and Property Value: An Examination of Business Property Using Panel Data." <i>Urban Affairs Review</i> 43(4): 520-552.	Does TIF have any effect on business property values over time?	Parcel-level data on business (manufacturing, commercial, mixed use) properties in Milwaukee from 1990-1999	Regression on log of business property value from 1990-1999	TIF implementation is more likely to occur in areas that are expected to have little potential for property value growth, since without TIF, there would be no incentives to develop there.
Cohen-Cole, Ethan. 2008. "Credit Card Redlining." Federal Reserve Bank of Boston Working Paper No. 08-108-1.	Do black neighborhoods have less access to consumer lending than white areas, when community attributes are controlled for?	Credit history records from a major credit bureau Census	Controlling for socioeconomic attributes of place, Cohen-Cole tests whether the racial composition of a neighborhood influences the availability of credit. Uses instrumental variables to test whether supply or demand drives these differences	Residents in black areas receive less access to consumer lending, controlling for personal and place related attributes. This phenomenon is driven by the decisions of credit card issuers (supply) rather than demand.
Crane, Randall, and Michael Marville. 2008. "People or Place: Revisiting the Who versus the Where of Urban Development." <i>Land Lines</i> 20(3): 2-7.	Are place-based or people-based approaches better?	Uniform Crime Reports Existing literature	Existing literature Literature review and overview of the debate surrounding people vs. place	People-based programs tend to be better when the focus is on the individual (i.e. for the labor market). However, the article points out that place-based strategies are still needed since much of poverty is spatially tied.
Deng, Lan. 2007. "Comparing the Effects of Housing Vouchers and Low-Income Housing Tax Credits on Neighborhood Integration and School Quality." <i>Journal of Planning and Education Research</i> 27(1): 20-35.	What is the cost-effectiveness of the LIHTC compared to vouchers? Under what market conditions are supply-based LIHTCs more cost-effective than demand-based vouchers?	Development subsidies of new construction LIHTC projects with and without a 20-year voucher cost in Boston, New York, San Jose, Atlanta, Cleveland, and Miami Existing literature	Literature review Cost-effectiveness ratios	In general, LIHTC was more expensive than vouchers with the premium varying based upon the payment standard and local housing market. When assuming that there is a payment standard of 100% fair market rent, the premium for LIHTC is 2% for San Jose, 12% for Miami, 50% for Cleveland, 75% for New York, 115% for Boston, and 133% in Atlanta. Regional variation in the price of vouchers can be affected by local market conditions and local program administration.
Ding, Chengri and Gerit-Jan Knaap. 2003. "Property Values in Inner-City Neighborhoods: The Effects of Homeownership, Housing Investment, and Economic Development." <i>Housing Policy Debate</i> 13(4): 701-728.	What are the determinants of property values in Cleveland? What are the effects of neighborhood revitalization strategies that emphasize homeownership, investment in new housing, and economic development on neighborhoods at the zip code level?	Cleveland MSA single family home sales in 1996 and 1997 Investments in new housing from 1991-1995 Homeowner migration between 1991 and 1995 Number of business establishments from 1991-1995	Hedonic equation. Examine spatial variables and how neighborhood variables and housing prices interact using GIS	New housing investments have a positive impact on housing values, particularly for housing in close proximity to the new housing. On the other hand, housing prices are negatively affected by homeowner out-migration and an increase in the number of businesses. Social service business establishments did not have a negative effect however. Caution that the inappropriate mixing of land uses should be avoided. <i>Limitation: Study does not account for homeowner migration from one metropolitan area to another. It also does not account for changes in homeownership resulting from first-time homebuyers.</i>
Edelberg, Wendy Marianna. 2007. "Racial Dispersion in Consumer Credit Interest Rates." FEDS Working Paper No. 2007-20.	Are loans to minorities more expensive than loans to whites, when controlling for the price of lending to the lender?	Survey of Consumer Finances (1989 to 2004).	Empirically tests whether race is a statistically significant factor in explaining interest rates, controlling for other loan characteristics, risk of default, and other financial costs to the lender.	After controlling for the cost of financing to the borrower, study finds that prior to 1995, minorities received loans at higher interest rates than whites. Post 1995, rates are comparable for the two races, controlling for the cost of financing.
Eggers, Frederick. 2007. "Research to Develop a Community Needs Index." Washington, DC: U.S. Department of Housing and Urban Development.	Develop a single-value index of community needs	American Communities Survey Census Economic censuses USPS vacancy surveys Home Mortgage Disclosure Act FBI Uniform Crime Report Bureau of Labor Statistics Local Area Unemployment Statistics	Analysis of data from 472 cities (235 principal, 137 suburban) from or around 2005 Regression analysis Factor analysis	Identifies problems related to community needs, 26 indicators that address these problems, and three broad community needs areas that these indicators fall into <ul style="list-style-type: none"> Needs associated with poverty and structural problems (Factor 1) Needs associated with immigration and lack of affordable housing (Factor 2). Needs arising from limited economic prospects (Factor 3). Report did not find reason to use one index over another. It examines a way to compare community needs over time and to measure fiscal capacity. <i>Limitation: Focus is on needs assessment—very few useful metrics for assessing effectiveness of development programs.</i>

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Study	Objective/Questions	Data	Methods	Findings and Limitations
Ellen, Ingrid Gould and Ioan Voicu. 2006. "Nonprofit Housing and Neighborhood Spillovers." <i>Journal of Policy Analysis and Management</i> 25(1): 35-52.	What are neighborhood spillover effects of city-supported rental housing undertaken by nonprofit and for-profit developers? Do projects developed by nonprofit developers generate different neighborhood spillover effects than those developed by for-profit firms?	New York City's Department of Housing Preservation and Development data on all housing built or renovated under the city's Ten Year Capital Plan and other publicly supported projects completed since 1976. Data set includes location at the tax lot or block level, date project completed, type of building, number of units built or rehabilitated, program name, new construction or rehabilitation, and owner or tenant occupied.	Heedonic regression model that explains the sales price of property as a function of its structural characteristics (such as lot size and building age) and its neighborhood surroundings. Compares the prices of properties that are close to subsidized housing sites to prices of comparable properties that are further away from the housing site but still in the same census tract. Compares magnitude of differences before and after completion of the subsidized project. The difference in differences is the measure of project impact on neighborhoods.	Both nonprofit and for-profit projects generated significant positive spillover effects. Nonprofits appear to have worked in somewhat more disadvantaged neighborhoods as well as more distressed pockets in these communities. Some evidence that neighborhood spillover effects are somewhat more sustained over time when projects are undertaken by nonprofit developers. But, in smaller projects, for-profits generated more neighborhood benefits. <i>Limitations:</i> Study is limited to New York City and is focused on a single housing outcome—magnitude of neighborhood spillover effect as measured by property values; did not address costs of the projects, only benefits.
Eriksen, Michael D. 2007. "Neighborhoods, Risk, and the Value of Low-Income Housing Tax Credits." At the revise and resubmit stage at the <i>Journal of Urban Economics</i> .	To what extent do investors value the LIHTC subsidy?	Project-level data series from state administrative records of LIHTC secondary market transactions in California between 1999 and 2005 containing 969 projects for a total of 26,563 housing units with a total building cost of \$4 billion 10 year U.S. Treasury bond rate historical series compiled by the Federal Reserve Bank of St. Louis	Summary statistics and nonlinear least squares using Marquadt's modified Newton-Raphson algorithm	Based on a project-level sample of transactions in California, it was found that one dollar of a LIHTC credit on average trades for \$1.70, suggesting that LIHTC investors are exposed to substantial risk that may vary based on neighborhood attributes and project-specific features. <i>Limitations:</i> Study is limited to LIHTC properties constructed in California from 1999-2005; therefore, results from different locations and over different time periods may vary. Also, the study does not attempt to decompose the contribution of each type of risk or individual project characteristic to the overall discount taken by investors on tax credits associated with LIHTC properties.*
Forbes, Jennifer. 2006. "Using Economic Development Programs as Tools For Urban Revitalization: A Comparison of Empowerment Zones and New Markets Tax Credits." <i>University of Illinois Law Review</i> 2006: 177-204.	To what extent do Empowerment Zones/Enterprise Communities and the New Markets Tax Credits rely on tax incentives as a way to revitalize communities?	Existing literature	Literature review	Two economic development programs are theoretically different because EZEC is a "place-based people" program while NMTC is "pure place strategy". The programs do not provide "sustainable social change" and for the most part benefit private interests. Efforts should focus more on the human-capital development of inner-city residents.
Galster, George, Chris Hayes, and Jennifer Johnson. 2005. "Identifying Robust, Parsimonious Neighborhood Indicators." <i>Journal of Planning Education and Research</i> 24:265-280.	What are some neighborhood indicators that can track multiple dimensions of neighborhood conditions using inexpensive and annually updated information that does not require a great deal of technical expertise?	U.S. 1990 Census data City Administrative data HMDA data 1993-1999 DataQuick, Inc. property assessor data for single-family home sales prices Dunn and Bradstreet employment and firm data	Exploratory factor analysis for 1993-94 and 1998-1999 Regression analysis to identify "robust, parsimonious indicators"	Identified four indicators: 1. Approval rate of home purchase mortgage loan applications (two-year average) 2. Number of home purchase mortgage loan applications (two-year annual average) 3. Median dollar amount of home purchase mortgage loans originated over two years 4. Number of businesses <i>Limitation:</i> Study did not analyze an exhaustive set of indicators but chose to focus only on a specific set. It also did not attempt to incorporate the objective and subjective aspects of neighborhoods. HMDA data, while readily available, are only available for those census tracts where there is mortgage lending by HMDA-reporting institutions.
Galster, George, Peter Talan, and John Accorino. 2006. "Targeting Investments for Neighborhood Revitalization." <i>Journal of the American Planning Association</i> 72(4): 457-474.	How should public resources be allocated? To what extent do public investments leverage private funding?	A database of 15,989 single-family home sales from 1990-2003 and their property characteristics, 629 of these sales occurred in target areas.	Analyzed the impact of the Neighborhoods in Bloom program (Richmond LISC), which concentrated CDBG and Home Investment Partnership funds on only a few blocks in seven neighborhoods in Richmond. Adjusted interrupted time series Multiple regression model Used baseline levels created from citywide levels (such as citywide increases in housing prices) to measure the changes within the targeted neighborhoods. Geocoded individual property tax records and conducted robustness tests.	The appreciation in housing prices was greater for neighborhoods that were targeted with funding (as compared to the control neighborhoods). Housing price appreciation was greatest when public investment was on average more than \$21,000 per block over the course of five years. <i>Limitations:</i> Duplication of this study would be difficult since this type of analysis was largely dependent on the effectiveness of the coordinated planning efforts led by the city of Richmond and Richmond LISC. The study is also limited in that home price is the only indicator used to evaluate community revitalization success.
Galster, George, Kenneth Temkin, Chris Walker and Noah Sawyer. 2004. "Measuring the Impacts of Community Development Initiatives: A New Application of the Adjusted Interrupted Time-Series Method." <i>Evaluation Review</i> 28(6): 502-538.	Has CDBG spending made a difference in the pace and/or direction of economic and social change in low-income neighborhoods? Does neighborhood context and spatial concentration affect this change?	HUD CDBG neighborhood expenditure records for 17 cities: Boston, Cleveland, Indianapolis, Oakland (CA), Providence (RI), Columbus (OH), Fort Lauderdale (FL), Houston, Portland (OR), Birmingham (AL), Charlotte (NC), Denver, Los Angeles, Long Beach (CA), Milwaukee, Tulsa (OK), and Washington, DC 1990 Census data HMDA data from 1993-1994 and 1998-1999	Regression analysis of CDBG spending from 1994-1996 Multivariate statistical tests using various outcome indicators Disaggregated CDBG expenditures by type and then searched for minimum thresholds of expenditures. Tested the sensitivity of the relationship between CDBG spending and neighborhood changes in various neighborhood and city economic situations	Found a statistical relationship between CDBG spending from 1994-1996 and changes in home purchase mortgage approval rates, the median amount of the home purchase loans originated, and the number of businesses. There was no consistent statistical relationship between CDBG spending and changes in neighborhood indicators unless CDBG spending exceeded a "threshold of the sample mean expenditure and is measured relative to the number of poor residents." The relationship between CDBG spending and changes in neighborhood indicators is affected by the trajectory that the neighborhood was on prior to the spending and the state of the local economy.

Appendix: Review of Selected Literature

Study	Objective/Questions	Data	Methods	Findings and Limitations
Greenbaum, Robert T. 2004. "Siting It Right. Do States Target Economic Distress when Designating Enterprise Zones?" <i>Economic Development Quarterly</i> 18(1): 67-80.	Looks at the 10 states implementing enterprise zone programs and their decision to target certain distressed areas as zones and not designate other areas of distress.	Enterprise zone data provided by individual states and HUD, and U.S. 1980 Decennial Census STF3a data at the U.S. Postal Service ZIP code level ZIP code-level information on 10 state (including District of Columbia) enterprise zone programs designated between 1983-1994 State program goals, incentives and eligibility criteria supplemented with HUD data	Descriptive statistics Probit regressions	Areas with a smaller employment base or fewer employment opportunities are less likely to be targeted. If housing characteristics are used as a criteria for identifying an empowerment zone, areas with more physical distress than population distress would be targeted. Other indicators such as population density, housing market, area demographics, and neighboring area characteristics can be used to help predict zone location. As a whole, the ZIP codes that became zones were not as distressed as they were in 1970 compared to those that did not become zones (control).
Hebert, Scott, Avis Vidal, Greg Mills, Franklin James, and Debbie Gruenstein. 2001. "Interim Assessment of the Empowerment Zones and Enterprise Communities Program: A Progress Report." Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.	To what extent does the EZ/EC program create jobs/economic opportunity in these regions? How have the economic and social well-being of zone residents been affected? At what costs are such outcomes being achieved?	Dun and Bradstreet's comprehensive database of business establishments Annual performance reports submitted by first-round EZ/EC to HUD	National analysis: Time series analysis of business activity indicators and telephone surveys of zone businesses. Local site analysis: An in-depth study of all six urban EZs and a sample of twelve other sites	Found evidence of job growth in five out of six EZs. Business/workforce development activities were widespread across 18 EZ/EC study sites and extensive private and state/local government resources were leveraged as part of EZ/EC initiative activities.
Hicks, Michael J. "Transportation Infrastructure, Retail Clustering, and Local Public Finance: Evidence from Wal-Mart's Expansion." 2006. Federal Reserve Bank of St. Louis Regional Economic Development 2 (2): 100-114.	What roles do transportation infrastructure and property tax rates play in retail agglomeration in Indiana?	Data from Wal-Mart on store openings by county and whether the stores are still operating. Data on retail establishments with more than 100 employees and retail employment from U.S. Census Bureau's County Business Patterns, 1988 to 2005. Infrastructure data from U.S. Department of Transportation, Office of Freight Management Freight Analysis Framework. Tax data from Indiana Department of Revenue.	A time-series cross-sectional model of Indiana's 92 counties from 1988 through 2003 is used to estimate the impact that highway infrastructure, property taxes, and big box competition have in creating regional agglomerations. The model is tested on the full data set and on a rural-only set of the data.	In the state as a whole, property tax rates and highway infrastructure do not play a role in retail agglomeration; in non-MSA counties alone, the effect of property tax rates is modest. Highway infrastructure also has an effect on retail inequality in the non-MSA regions of Indiana. The presence of a highway leads to about a 10 percent increase in the relative share of retail employment in a county. The per capita big box variable had no effect on retail agglomeration. <i>Limitations: Study is limited to Indiana from 1988 to 2003, where the only regional variation in tax structure is property tax rate. Results may differ in jurisdictions with other location determining tax instruments.</i>
Hollister, Robinson G. 2007. "Measuring the Impact of Community Development Financial Institutions' Activities." in <i>Financing Low-Income Communities: Models, Obstacles, and Future Directions</i> , edited by Julia Soss Rubin (265-310). New York, NY: Russell Sage Foundation.	How have others tried to evaluate the impacts of CDFIs and what are some methods of evaluation?	Existing literature and methodologies	Reviews evaluation methodologies and examples of evaluations of CDFIs.	In impact evaluation, it is important to distinguish between outcomes and impacts--impacts should only be used when there is a causal link. This can sometimes be proved using random assignment experiments. Evaluations shouldn't use the term "social rate of return on investment" because it gets confused with the financial rate of return. Evaluations should incorporate "sensitivity analysis" (taking a cost/benefit and seeing how it changes based on different assumptions).
Howland, Marie and Ted Miller. 1990. "UDAG Grants to Rural Areas: A Program that Works." <i>Economic Development Quarterly</i> 4(2): 128-136.	Have rural UDAG programs had success in job creation, in local businesses, and federal cost per manufacturing job?	HUD records Phone survey of local government officials involved in UDAG	Phone survey of officials in 169 rural communities (for 101 of the projects, individuals at private firms were interviewed). Questions were related to project location, share of output going to each location, source of material inputs, types of services purchased, location of suppliers, and about linked business opened or expanded.	Overall, there was very little raw material produced for local markets and many officials interviewed reported that no raw materials are local. Some services are purchased locally, but the majority are not. The types of manufacturers that are attracted to rural areas are those needing low-skill labor. The study also found that there were low costs for rural job creation. <i>Limitations: Study only looks at pre-1994 manufacturing projects, and in many cases interviewees couldn't report on some of the questions.</i>
Immergluck, Daniel. 1999. "Neighborhoods, Race, and Capital: The Effects of Residential Change on Commercial Investment Patterns." <i>Urban Affairs Review</i> 34(3): 397-411.	How does neighborhood residential change affect commercial investment?	Chicago Department of Buildings' data on building permits for commercial and industrial buildings from 1979-1981 and 1989-1991 for 75 of the city's 77 official community areas, excluding the two business districts	Spatial econometrics	Changes in neighborhood racial and ethnic compositions impact commercial investment flows. Increases in the percentage of blacks and/or Hispanics have a negative effect on commercial investment.
Kolodinsky, Jane, Caryl Stewart, Antonia Bullard. 2002. "Measuring Impact of Community Development Programs: The Vermont Development Credit Union." <i>Consumer Interests Annual</i> 47(1): 1-7.	What is the effect of the Vermont Development Credit Union, a CDFI, on its members and the community?	One-question survey to VDCU members Two focus groups Database that tracks VDCU members over time	A relational database in MS Access was used to combine the results of the surveys and focus groups, transactional system, and manual systems. Conducted longitudinal and cross-section analysis.	The study uses a model of impact evaluation where impact is divided into three levels: Tertiary, Secondary, and Primary, based upon the input, throughput, or output being evaluated. VDCU experienced an increase in membership, total assets, deposits, affordable mortgage and individual development lending. The member surveys overall found that VDCU membership helped improve members' lives. At the time of publication of this study, there were not yet any preliminary findings related to impact.
Listokin, David, Barbara Listokin, and Michael Lahr. 1998. "Contributions of Historic Preservation to Housing and Economic Development." <i>Housing Policy Debate</i> 9(3): 431-478.	What is beneficial about historic preservation with respect to economic development? What needs to be changed?	Historical overview of historic preservation legislation, historic register listings, composition of construction activity	Discussions about rehabilitation, housing, heritage tourism and downtown revitalization	Historic preservation is a powerful tool for housing/economic development.
Lundquist, Scott, Sonnenschein Nath & Rosenthal, and Robert J. Wasserman. 2006. "Calculating the Value of the New Markets Tax Credit." U.S. Bank Community." <i>NMTC Monthly Report</i> 5(10): 1-4.	Is the NMTC credit as shallow of a subsidy as it appears?	N/A	Examines how two loan types would perform in various situations and the effect on the GALLIB and investor. Loan A is a market-rate loan that corresponds to the return of the investment without NMTC credits and loan B is an interest-only subordinate loan that corresponds to the return provided via NMTC.	The benefit of NMTC exceeds the "39% over 7 years" subsidy value by allowing for businesses to obtain lower market rates than they would otherwise be charged for projects with high risk.

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Study	Objective/Questions	Data	Methods	Findings and Limitations
Mongkko, Maurice and William J. Pammer, Jr. 1994. "The Impact of Targeted Partnership Grants on Minority Employment." <i>Review of Black Political Economy</i> 22(3): 19-29.	Are UDAG benefits diverted through the ecological fallacy or through benefit capitalization?	Completed projects undertaken in Pittsburgh Primary Metropolitan Statistical Area (PMSA) from program's inception (1978) to 1999. 44 out of 76 projects were sampled.	Linear regression to test the effects of private/public leveraging, location and type of investment on minority employment.	Leveraging private investment through use of UDAG funds is not a significant determinant of minority employment. UDAG dollars are negatively correlated with permanent minority jobs and the more the central city is targeted for assistance, the less likely minority employment will increase. <i>Limitations: Study is limited to 44 projects in Pittsburgh; results may vary in different areas.</i>
National Community Reinvestment Coalition (NCRC). 2007. "Access to Capital and Credit for Small Businesses in Appalachia." Washington, DC: Appalachian Regional Commission.	Considers the impact on small business lending in Appalachia of a number of economic changes, such as consolidation in the banking industry and the growing use of credit scoring in small business lending.	Publicly available data on CRA small business lending. CRA exams of banks and thrifts located in Appalachia in 2003. U.S. Census data on population demographics. Dun and Bradstreet data on business demographics and credit scores. Branch and deposit data from FDIC web site. SBA 7(a) data. Data on alternative financial institutions from public agencies, ARC, and CDFI trade associations.	Descriptive analysis of economic conditions, business demographics, and small business lending trends of the Appalachian region compared to the United States overall. Analysis of lending patterns of small/mid-size banks and loans with government backing in Appalachia. Regression analysis testing the influence of bank consolidation, credit scoring, the number of branches, minority population share, median household income, metropolitan and distressed county status, and small business firm size in three econometric models to analyze lending outcomes for all lenders, mid-size banks, and SBA lenders. Descriptive assessment of the impact of the CRA on community development lending for affordable housing and small business in Appalachia.	Overall, banks have committed substantial amounts of community development financing to the Appalachian region and are responding well to the credit needs of Appalachian small business and minority communities. Mid-size banks were particularly responsive to small businesses in lower income and rural communities. CRA has had a substantial impact on leveraging increases in community development lending and investing in Appalachia. Small business lending was higher where the minority population was higher on a county level. Small business lending is less accessible in nonmetro counties and counties experiencing economic distress. Small businesses (revenues under \$1 million) and businesses in low and moderate income communities experience the least access to credit. <i>Limitations: Future studies need to measure more recent effects of changes in federal programs and banking regulation as well as globalization.</i>
Oakley, Deirdre. 2008. "Locational Patterns of Low Income Housing Tax Credit Developments: A Sociospatial Analysis of Four Metropolitan Areas." <i>Urban Affairs Review</i> 43: 599-629.	Examines neighborhood characteristics and spatial patterns of Low-Income Housing Tax-Credit (LIHTC) developments in four metropolitan areas.	Focus on Atlanta, Chicago, Los Angeles, and New York City. U.S. 2000 Census data at the census tract level. U.S. Department of Housing and Urban Development LIHTC database.	Sociospatial analysis Descriptive analysis Exploratory Spatial Data Analysis	Compared to other low-income housing policy programs, LIHTC has been "more successful than other programs at locating developments in less disadvantaged neighborhoods but not as successful at avoiding geographic concentrations associated with these other low-income housing programs." LIHTC projects also helped increase nearby LIHTC development.
Richardson, Todd. 2005. "CDBG Formula Targeting to Community Development Need." Washington, DC: U.S. Department of Housing and Urban Development.	What is the impact of introducing OMB's new definitions for metropolitan areas? How well does the CDBG formula allocate funds toward needs? What are some alternatives? Places vs. people?	Census 2000 data CDBG needs formula	Regression analysis of many factors used in CDBG formula	CDBG formula targets more funds to the most needy grantees relative to the least needy grantees; the average amount of funds being allocated to the most needy decreased with the introduction of the new 2000 census data, but increased for the least needy grantees. <i>Limitations: Focuses on the formula deriving community development need, rather than effects of CDBGs</i>
Rubin, Julia S. 2006b. "What Do We Know? Research on Outcomes and Impacts in the CDFI Field." White paper prepared for the John D. and Catherine T. MacArthur Foundation.	What is known about CDFI activities, outputs, and outcomes with regard to small business, consumer, multifamily housing, and community facilities? What changes are happening in these sectors, the policy environment, market and institutional context?	Existing literature	Literature review	There is a lack of literature on CDFI activities. The CDFI Data Project (CDP) is one of the best resources for information on CDFIs. Outputs are completed CDFI program activities—events, conditions that result from CDFI activity. Impact has rarely been shown by the research due to the difficulty of measuring a counterfactual. CDFI Roles: 1. Community Facilities Financing 2. Small Business Financing—Business Development Loan Funds (BDLF)—short, medium term loans, technical assistance, equity, "near-equity capital". CDVCS—invest in small business, tech assistance 3. Multi-Family Housing Finance -acquisition/predevelopment loan that lets the sponsor gain control of the property and covers preconstruction costs. -predevelopment grants—zero-interest loan that covers the preliminary non-construction costs of a project. (21) -mini-pems—mortgages with terms of up to ten years with regular principal and interest payments (12) -pooled investments and tax credits -leveraging private funds, linked deposits—a guarantee to keep a certain amount in a low-interest bearing account in the bank that grants the loan for a project -technical assistance 4. Consumer Finance -credit counseling, financial planning, homebuyer education, tax preparation

Appendix: Review of Selected Literature

Study	Objective/Questions	Data	Methods	Findings and Limitations
Schill, Michael, Ingrid Gould Ellen, Amy Ellen Schwartz, and Ioan Voicu. 2002. "Revitalizing Inner-City Neighborhoods: New York City's Ten Year Plan." <i>Housing Policy Debate</i> 13(3): 529-566.	What was the impact of New York City's Ten-Year Plan and the programs used to implement it on the sales prices of homes in surrounding neighborhoods?	HPD housing investment data Sample of 293,756 sales transaction prices from 1,612 census tracts for apartment buildings, condominium apartments, and single-family homes from 1980-1999 that were located within 48 community districts where more than 100 Ten-Year Plan units were developed that were either new construction or a rehabilitation of occupied in rem buildings or vacant buildings. In rem is a legal term describing the power a court may exercise over property. Taxpayers who owe certain past property tax debt may be involved in in rem foreclosure and lose ownership. Through this process, New York City acquired and operated a large stock of multi-family rental properties. Data on building characteristics from the Real Property Assessment Database Existing literature	Hedonic regression model of a property sale price as a function of its structural characteristics and neighborhood surroundings Literature review	The Ten-Year Plan had a positive impact on neighborhoods. Home prices rose both within 500ft of ten-year plan units and units in the same census tract located further than 500ft. Ten-Year Plan investments were predominantly targeted in the poorest communities. <i>Limitations: Did not empirically demonstrate the benefit of production programs over housing vouchers with regard to spillover effects. Also, results may have been different in states with different economic and demographic circumstances.</i>
Seidman, Ellen. 2007. "The New Markets Tax Credit: A Valuable Tool for Economic Development." New York, NY: Living Cities.	How can cities use NMTC to attract investment?	CDFI CIIS Impact Data NMTC progress report	Surveys of CDEs, statistical analysis of CDFI fund data,	NMTCs' flexibility can allow for their use in a variety of vehicles (equity, debt, grants) that can promote investment in low-income communities. Given the flexibility of the application of the NMTC, cities can best utilize NMTCs by using them to attract investments that match their existing development priorities (job training, workforce housing and affordability, environmentally friendly construction, recreation, cultural, educational and other community services programs). Cities can also use NMTCs in conjunction with their own local funds and tax advantages to promote investment. 1. The CDFI Fund has focused the NMTC on low-income neighborhoods using •The Allocation Application •Application Rating and Rankings procedure •Allocation Agreement •CIIS data 2. Cities can focus the NMTC toward their goals: •Making use of their knowledge of the LIHTC and familiarity with the entities that use it. Many of these entities are also working with the NMTC and would welcome city overtures. •Cities can fund local CDEs to conduct market research necessary to file a successful application •Cities can broker investments between local mission-oriented CDEs and non-local recipients of NMTC. SBA borrowers were more likely to be women-owned, minority-owned, or start-up firms than comparable firms receiving conventional financing. Loan amounts to these types of firms were substantially greater under the SBA programs than conventional small business loans.
Temkin, Kenneth, and Brett Theodos. 2008a. "Competitive and Special Competitive Opportunity Gap Analysis of the 7(a) and 504 Programs." Washington, DC: The Urban Institute.	What share of small businesses face capital gaps and what are the characteristics of those businesses?	Administrative data from the Small Business Administration (SBA) Survey of Small Business Finances data	Compares firms receiving SBA guaranteed loans with firms receiving conventional loans along key owner and business characteristics, interest rates and loan terms. Measures market penetration of SBA programs.	
Temkin, Kenneth, and Brett Theodos. 2008b. "The Deventure Small Business Investment Company Program: A Comparative Analysis of Investment Patterns with Private Venture Capital Equity." Washington, DC: The Urban Institute.	Does the SBA Deventure Small Business Investment Company (SBIC) program duplicate private venture capital funds, or does the program fund small businesses who cannot typically access private venture capital?	Administrative data from the Small Business Administration (SBA) Venture capital information from Thomson Financial VentureXpert data	Compare firms receiving SBA Deventure SBIC financing with those receiving private venture capital financing along three domains: investment size, type of industry, and location of investment.	Deventure SBIC investments are very different from those made by comparable private venture capital funds. Deventure SBIC investments are smaller than private investments, not as concentrated in technology firms, and less geographically concentrated in traditional venture capital areas.
The Reinvestment Fund. "Access to Supermarkets in Inner-City Communities." Philadelphia, PA: The Reinvestment Fund. Reinvestment Policy Brief 5. http://www.rfund.com .	Why is there a lack of supermarkets in distressed urban areas and how do different financing strategies impact the difference in operating costs when locating a supermarket in a lower/moderate-income urban location vs. higher-income suburban area? What impact can supermarkets have in urban and underserved areas?	Browns ShopRite start-up and ongoing costs, residential location of employees, wage levels, turnover, and shopping patterns of the chain's customers.	Case study assessing operating cost differentials, comparing different financing strategies, and an analysis of impacts of financing supermarket development.	Supermarkets placed in underserved areas increase consumer choice, may serve as retail employment anchors, provide a better variety of healthy food, and create a net increase in employment for surrounding communities, employees and customers reside in close proximity to the stores where they shop with employees typically residing in distressed areas, and employee wage levels have a positive trajectory and are comparable to others in the industry.

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Study	Objective/Questions	Data	Methods	Findings and Limitations
Thomson, Dale E. 2008. "Strategic, Geographic Targeting of Housing and Community Development Resources." <i>Urban Affairs Review</i> 43(5):629-662.	Critical examination of strategic, geographic targeting (SGT), and allocation models for improving efficiency in community development programs	Existing literature	Literature review	Although SGT can be adopted primarily to address high-need areas, as defined by income and physical deterioration, when program efficiency is the goal, the areas with highest need are not the optimal targets. However, SGT can improve a community's ability to address need over the long term if it is included in a comprehensive program.
U.S. Department of Housing and Urban Development, Division of Policy Studies. 1992. "An Impact Evaluation of the Urban Development Action Grant Program." Washington, DC: Government Printing Office.	Addresses issues of evaluation substitution, impacts, distribution of funds to intended cities, and the local economic development capacity.	Literature review On-site data collection of a stratified random sample of 80 UDAG projects located in 70 cities and 29 states UDAG computerized database Review of UDAG application process	Projects that were at or near completion were intentionally overrepresented in the sample. Spent an average of two days at each site conducting project inspections and meetings/discussions with developers, lenders, city development officials, and others. First-hand information was obtained on site history, market conditions, other economic development activities in the area, intentions and long-term economic interests of major project actors.	Full substitution observed in 8% (680) of projects, partial substitution in 13% (1080) of projects, 15% of projects lacked sufficient evidence to determine substitution effect, and 64% of projects had no evidence of substitution (likely due to extraordinary site development costs, genuine financing gap, necessity of public improvements to allow private investment to occur, high risk). UDAG fell short of new permanent job creation by 23% at this time. UDAG fell short of tax revenue goals due to substitution effects. Small city projects more likely to produce spin-off effects compared to metropolitan ones (neighborhood projects more likely than industrial projects to have actual or planned spin-off activity). Many projects have positive or negative effects on local business, some necessitate current business and housing relocation.
U.S. Government Accountability Office. 2006. "Empowerment Zone and Enterprise Community Program: Improvements Occurred in Communities, but the Effect of the Program Is Unclear." No. 06-727. Washington, DC: General Accountability Office.	How effective is the EZ/EC program?	Survey data Qualitative observation	Site visits to all 11 Round 1 EZs and 2 of the 95 ECs to interview stakeholders between 2004 and 2006 E-mail survey to officials	Round 1 EZs/ECs used grant funds to implement a wide range of activities and many have received grant extensions. EZs/ECs showed some improvements, but analysis did not definitively link them to the program. <i>Limitations: The program's data are sparse</i>
US Government Accountability Office 2007b. "New Markets Tax Credit Appears to Increase Investment by Investors in Low-Income Communities but Opportunities Exist to Better Monitor Compliance." GAO-07-296. Washington, DC: General Accountability Office.	Does the NMTC increase investment by investors in low-income communities?	Tax return data from 1997-2004 CDFI Fund data	Econometrics model to assess effectiveness Stratified random sample of taxpayers (NMTC and non-NMTC investors), and a fixed effects regression.	Banks/corporations had relatively large net assets, and individual investors had higher than average incomes than other taxpayers. Funds have been shifted: 64% of investors reported increasing their investment budget for low-income communities due to NMTC. Moreover, corporate investors are not increasing their overall level of investment to partake in NMTC, but rather shifting funds from other uses into low-income communities. The number and amount of investments in low-income communities have been increasing, however, the average expected return on NMTC investments has declined. This may be due to the fact that investors' knowledge of NMTC has increased and their perception of the risk involved with these investments have also declined. Does not claim causality between the program and increased investment, but simply an association. <i>Limitations: Study does not cover the full range of NMTC transactions or have data for total liabilities, asset holdings, credit claims/amounts to be claimed, and NMTC corporate investors' industry. Limited to analyzing investors choosing to participate in the survey. Investors may be biased because they benefit from the credit and want to ensure its continuation. Statistical models may fail to detect the effect of small investments on a larger corporations' asset levels.</i>
U.S. Government Accountability Office. 2007a. "Leveraging Federal Funds for Housing, Community, and Economic Development." GAO-07-769R. Washington, DC: Government Accountability Office.	To what extent do selected HUD and Treasury community development programs leverage other investments from private or other governmental sources?	Administrative data from selected HUD (CDBG, HOME, HOPE VI) and Treasury (CDFI, LHTC, NMTC) community development programs.	Constructs three leverage measures for each program, where available: ratio of other funds to program funds, ratio of non-federal funds to federal funds, and the ratio of private funds to public funds.	Leverage ratios vary widely across the HUD and Treasury community development programs. These ratios are not collected or presented in a manner that clearly describes what is being calculated.
Walker, Christopher, Martin Abravanel, Patrick Boxall, Roger Kornendi, Kenneth Temkin, and Marsha Toksozich. 2002. <i>Public Sector Loans to Private-Sector Businesses: An Assessment of HUD-Supported Local Economic Development Lending Activities</i> . Washington, DC: US Department of Housing and Urban Development.	Report on scope, nature, and results of local government third-party lending using CDBG, Section 108, and EDI/BEDI What is the potential for secondary market for HUD-supported third-party loans.	51 high-loan volume communities, with 50% of total loan volume 976 loans, \$659 m. of total \$727m. Telephone interviews with CD administrators in 460 cities, 11 states Telephone interviews with 234 of 750 surviving businesses (31%)	Analyzes data for CDBG third party lending originated between 1996 and 1999, and Section 108 lending originated between 1994-1999.	About \$2.2 million of HUD funding was used by local and state governments to make economic development loans to private businesses during the second half of the 1990s. The nation's most populated and distressed cities and urban counties accounted for the preponderance of this use of HUD funds. Examination of nearly 1,000 loan files maintained by 51 of the most active community users of the Community Development Block Grant (CDBG) and Section 108 programs for economic development lending purposes indicates that the loan programs created jobs and leveraged private investment in poor neighborhoods at costs that were comparable to those of other federal government programs, although the loans had higher default rates than those of private-sector lenders. The study concludes that new money could be raised by states and localities for economic development purposes by selling such loans on a secondary market, without undermining the policy goals of the federal programs that fund them, and that HUD could encourage such secondary market sales by accumulating and disseminating information about loan performance and setting standards for loan underwriting, servicing, and documentation.

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Study	Objective/Questions	Data	Methods	Findings and Limitations
Walker, Christopher, Chris Hayes, George Galster, Patrick Bokvall, and Jennifer Johnson. 2002. The Impact of CDBG Spending on Urban Neighborhoods. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.	What are the effects of CDBG expenditures on neighborhood change? Can reasonable performance standards be devised so that the process is relatively simple to replicate?	Geocoded CDBG expenditures Census tract demographic data/administrative data for 17 cities from 1994 to 1999 Neighborhood indicators Generic business/financial data Home price/mortgage data	Uses a regression model to identify CDBG investment thresholds, establishes performance standards based on statistical analysis of relationship between CDBG spending and neighborhood outcomes, and uses factor analysis to develop weighted indicators. Conduct a field investigation of 6 of the 17 cities to check validity of standards	Residential mortgage lending activity and business/employment are two good indicators for measuring some dimensions of neighborhood quality. There is a positive correlation between CDBG spending and neighborhood quality improvement. <i>Limitations: Study does not reflect a nationally representative sample of jurisdictions and does not account for effects of other public investments (including earlier CDBG funds).</i>
Wang, Fahui, and Joseph A. Van Loo. 1998. "Citizen Participation in the North Delta Mississippi Community Development Block Grants, Empowerment Zones and Enterprise Communities." <i>Planning Practice & Research</i> 13 (4): 443-451.	To what extent do poor people in seven counties in the North Delta Mississippi participate in CDBG and EZ/EC programs? How does this compare to citizens in wealthier communities and what explains this difference?	Northern Delta demographics Participation rates by county and location based on public hearing sign-in sheets and participation at community meetings	Literature review Recorded the participation ratios in CDBG public hearings in communities (1994-1996) using averages and t-tests to compare the two program turnouts	Citizen participation in the North Delta Mississippi Enterprise Community (NDMEC) meetings was greater than in CDBG meetings. Participation was greater in areas with lower per capita income. Attributed higher participation in EZ/EC to HUD and USDA requirements relating to involvement and empowerment of residents (including low-income persons) in the planning process. <i>Limitations: Study was limited to the North Delta Mississippi, which has mostly low-income communities; the study lacked data on participant demographics, and the study was limited to CDBG and EZ/EC programs, which limits the applicability of the results to other programs.</i>
Weber, Rachel, Saurav Div Ghata, and David Memman. 2003. "Does Tax Increment Financing Raise Urban Industrial Property Values?" <i>Urban Studies</i> 40(10): 2001-2021.	Did tax increment financing raise industrial property values in mixed-use (residential and industrial) TIF districts in Chicago from 1976 and 2001?	Literature review Parcel level data on industrial properties in Chicago Sales prices of 1,709 industrial property parcels and sold between 1976 and 2001 Data on 154 vacant industrial parcels sold between January 1999 and March 2002	Multinomial logit model	Property location in an industrial TIF district did not increase property value regardless of whether or not the property was vacant or improved. Property values for properties located in a mixed-use TIF district either stayed the same or increased. The author suggests that property values may appreciate based on the expectation of future public investment and warns that property values should not be the only indicator used to evaluate TIF.
Whalley, Diane. 1988. "Neighborhood Variations in Moderate Housing Rehabilitation Program Impacts: An Accounting Model of Housing Quality Change." <i>Economic Geography</i> 64(1): 45-61.	What quantitative model can be used to evaluate the multiplier effect of housing rehabilitation loans and grants within Neighborhood Strategy Areas (NSA) in Minneapolis from 1979 to 1981? Specifically, what are the effects of the program on housing quality and is public capital substituting or stimulating private investment?	Housing rehabilitation data from designated neighborhood improvement areas in Minneapolis from June 1987 to December 1981	Construct an analytical model by adapting an accounting model of housing quality and including probability parameters that test for the "interdependencies" between public and private investment. Surveyed households receiving housing rehabilitation assistance about their repair activities	Found interdependence between public and private investment in maintenance. The program had the greatest impact (highest participation rates, highest rates of further private investment, lowest displacement) in "transitional fringe areas"—neighborhoods that were neither the most blighted nor that contained the best housing. Suggests that visual deterioration imparts negative influences on a neighborhood.
Zelenbach, Sean. 2003. "Catalyzing Community Development: HOPE VI and Neighborhood Revitalization." <i>Journal of Affordable Housing and Community Development Law</i> 13(1): 40-80.	Advice on how to define and measure community impact, how impact differs from causality, and useful data sources.	N/A	Case study, own observations	Declining resources have increased the use of objective impact measures by funders to evaluate projects. Standard measures of quantity do not capture socioeconomic benefits and can unfairly imply causality. To help determine appropriate measures of impact, an organization should identify a goal, determine how to identify if the goal is reached, and determine how its efforts will contribute to reaching the goal. Elements of a successful community development project include: project financing, "project management, the local economy, community support, [and] co-existing development." Funders need to understand some impacts can't be contributed to a specific action and are often outside an organization's control. To assess the impact of a housing development, the lender should ask questions about who the population is that they will be serving, whether or not the housing will provide social and economic improvements, and what other services will be provided. There are three major organizational sustainability issues: (1) will a lender's investment in a project create financial and social benefits, (2) will the investment be returned in full and on schedule, and (3) to what extent will earned revenues cover operational costs? <i>Limitations: Study focused primarily on evaluating the impact of housing development.</i>