



Measuring Community Development

An Emerging Approach to Quantifying Neighborhood Revitalization

EXECUTIVE SUMMARY

FOR DECADES, the effectiveness of community development has been much easier to gauge through firsthand observation than through any objective system of measurement. In concept, the objective measures that would indicate the health of a redeveloping neighborhood are many, and not especially controversial. The problem is that most of the data for these variables are scarce, infrequently produced, poorly maintained, expensive to obtain, inconsistent with one another, available only for a few years, or some combination of all of these.

Even in the rare cases when data are readily available, the units of analysis can be hard to define: Community development occurs block-by-block, with areas of concentration that don't necessarily track with planning districts, census tracts, historical neighborhood boundaries, or other standard units for collecting numbers. An overly simplified, imprecise, or compromised use of such numbers (as has happened from time to time in recent years) risks capturing too little or too much information — either understating or overwhelming the evidence of change in an area and of the precise role of community development in bringing that change about.

Yet community development corporations, or CDCs, are by now too widespread, accepted, and well established to continue without some objective system of measurement. To help fill the gap, the Chicago program of the Local Initiatives Support Corporation (LISC) asked the nonprofit research and policy organization MCIC to experiment with available sources of data on six Chicago neighborhoods. Three of the neighborhoods have well-established CDCs that participate in LISC's New Communities Initiative, a wide-ranging program of economic, physical, and social revitalization that includes efforts on security, community organizing, housing, retail activity, and employment, among other things. One of the six neighborhoods has had attention from two CDCs over the years, but with interruptions. Two others have had no appreciable community development investment.

MCIC compiled data to measure and compare change among these neighborhoods. It produced three types of measurement, all composed of readily obtainable statistics from local, state, and federal sources. One series measures long-term change, tracked by

decade from the 1970 Census to the most recent one in 2000. A second set of indicators measures community-development performance year by year, with composite indices that separately measure annual housing and business development in each neighborhood. A third measurement, called a Challenge Score, establishes a uniform way of measuring the extent of need or opportunity in each neighborhood at a given moment, in a way that permits comparisons between neighborhoods or between a single neighborhood and the whole city. Each of these indices can be calculated for whole neighborhoods or for individual census tracts within them, so that observers can see, for instance, whether the blocks where CDCs concentrated their activity performed better than adjoining areas without such concentration.

These first-generation calculations don't yet represent a definitive method of evaluating community development. But they are an important breakthrough in three ways: First, they capture many layers and aspects of community development with a relatively short list of measurements. CDCs work block-by-block, concentrating sometimes on the housing market, sometimes on stores or other businesses, often on both; but their effects eventually ripple through wider areas. Their achievements therefore need to be tallied both at the point of their intervention and in a wider area within each neighborhood. MCIC's indices measure residential and business growth so that they can be examined separately or side-by-side, and the numbers can be disaggregated down to very precise locations within each neighborhood.

Second, MCIC combines several sources of data into composite indices. Statistically, that approach helps to smooth over some of the erratic fluctuations that make it hard to interpret data on narrowly defined activities in small areas. (For example: In a single census tract, one new business may open in year X, and three new businesses in year Y. Is that a 300 percent surge, or just part of the normal ebb and flow of local commerce? Combining data on new-business licenses with business lending, as MCIC has done, leads to a more robust, more stable index.)

Third, the Challenge Score points a way toward measuring one of the more elusive aspects of community development: the baseline level of need and opportunity that distinguishes one neighborhood from another. Without the ability to quantify a neighborhood's starting-point, it becomes much harder to assess progress there — or at any rate, to assess it fairly. By developing a separate Challenge Score for housing and business development, this measurement also makes it possible to understand how and where CDCs concentrate their efforts, and to weigh the merits of those decisions.

MCIC's preliminary application of these techniques to the six neighborhoods produced encouraging evidence that areas with CDC activity experienced more positive change than areas without it. Those findings are described in more detail in this paper, and in MCIC's full report, titled *Community Development and Neighborhood Vitality: Impact Models That Track Change in Six Chicago Neighborhoods*. But intriguing as they are, the findings at this stage are less significant than the creation of usable, affordable, replicable measurements, which can now be refined further and tested elsewhere. There is, admittedly, considerably more work to be done to get these measurements right. Among

other things, it would be useful to know whether adding additional sources of data would improve the usefulness of the calculations without adding prohibitively to their cost or complexity. A second generation of these measurements still needs to be devised and tested, and more years of data-gathering are required to see how well the indices describe real change over time.

But MCIC's work establishes, at a minimum, that data on neighborhood health and the effects of community development can be compiled in a practical, meaningful way. And they can be interpreted in ways that lead to fair and useful conclusions. That is by itself reason enough to pursue the research and experimentation further, and to widen the discussion about how and where the lessons might be applied.



Measuring Community Development

An Emerging Approach to Quantifying Neighborhood Revitalization

JUDGING the effectiveness of community development — gauging its role in reversing economic decline, restoring order and social cohesion, and reviving an atmosphere of opportunity in poor and minority neighborhoods — has for decades been mostly a matter of anecdote and conjecture. Those can be persuasive devices: A stroll through sections of Boston’s Jamaica Plain, the Ohio City neighborhood of Cleveland, or San Diego’s Barrio Logan gives an unmistakable feel of transformation in progress. But most people never take such strolls. And sooner or later, it is reasonable to ask for something less subjective than mere impressions, and for standards of comparison between one place and another. Eventually, claims of success demand a confirmation of firm data. Achievements of this scale ought to be measurable.

In many cities, community development came of age in the 1990s, bolstered by 20 or more years of experience and experimentation, by a strong national economy, and by systems of support and investment that had brought sustained resources to urban neighborhoods. It was therefore reasonable to expect that the 2000 Census, combined with state and municipal data from the preceding years, might provide a trove of evidence for or against community development as a way to combat disinvestment and decay. Though the statistical picture is still sketchy, that kind of exploration has, in fact, begun to occur.

Yet progress has been slow, with many false starts. One reason is that any attempt to measure community development needs to strike an elusive balance between completeness and practicality. That is, researchers would have to gather enough different kinds of information to capture a sprawling, complicated reality and yet limit themselves to sources of data that are affordable, consistently available, and reliable. Like all complex adaptive systems, neighborhoods are constantly changing on many fronts, responding to multiple interacting forces from both inside and outside the community. It would be possible, but unhelpful, to imagine describing that reality with hundreds of data sources woven together in an exotic — and prohibitively expensive — model that few could use or even understand. (That approach would assume, against much evidence, that all the component sources of data were actually accurate and complete.) Conversely, it would be tempting to combine a couple of basic, dependable numbers into a simple calculation that would be easy to grasp and replicate, but of little practical relevance. Unfortunately, those two temptations underlie much of the past quantitative research into the effects of community development.

The challenge in finding the right measurements is to create as simple and accessible a system as possible without losing the complexity with which real-world cities actually contend — the tangle of forces that determine the long-term fate of neighborhoods. That challenge is tough but not insurmountable. There is, in fact, progress to report: a preliminary model that can now be refined, tested, and adapted. As a result, there is cause for optimism and a basis for further exploration over the next few years, both in Chicago and elsewhere.

Signs of Measurable Effect

Toward the end of the 1990s, the Local Initiatives Support Corporation (LISC) began taking a fresh look at how to measure the results of neighborhood redevelopment. LISC is a national nonprofit institution that directs financing and technical expertise to community development organizations. It is the largest institution of this kind in the United States, founded in 1979 and now operating in 37 cities and 70 rural communities across the country. LISC's Chicago Program is among its earliest concentrated efforts to promote and strengthen an extensive network of CDCs in a single city. At the time this is written, LISC has supported 70 Chicago CDCs with a combination of grants, loans, and equity investments exceeding \$160 million in aggregate.

In 1998 LISC-Chicago set out to create a new prototype program called the New Communities Initiative, an effort to invest in a coordinated way in the many intertwined elements of community development: residential improvement, community cohesion and security, business development, and employment, among other things. To determine the effectiveness of the pilot program, and to make course corrections along the way, LISC needed a way of evaluating how much the initiative, and community development in general, were contributing to the revitalization of the participating neighborhoods.

Because the New Communities Initiative seeks to intervene in neighborhoods on more than one front, an evaluation would have to assess many kinds of outcomes — not just structures built or residents employed, but changes in the neighborhoods' quality of life, the economics, demographics, and social patterns that define community vitality. In other words, the evaluation would need to resemble the kind of complex quantitative study that observers of community development had been pursuing, with scant success, for many years.

Community	CDC
'New Communities' Participants	
Pilsen	The Resurrection Project (founded 1990)
Near West Side	Near West Side Community Development Corporation (founded 1988)
South Chicago	Southeast Chicago Development Commission (founded 1981)
Comparison Neighborhoods	
Woodlawn	The Woodlawn Organization (founded 1960) and the Woodlawn Preservation and Investment Corp. (founded 1987)
East Garfield Park	No sustained CDC activity
Englewood	No sustained CDC activity

To meet that challenge, LISC turned to the nonprofit research and consulting firm Metro Chicago Information Center (MCIC) for a multi-layered analysis of change in six Chicago neighborhoods. Three of the neighborhoods included sections of Chicago that were part of the New Communities Initiative and that had been the targets of prolonged activity by community development corporations, or CDCs: South Chicago, the Lower West Side

neighborhood of Pilsen, and the West Haven neighborhood, on the city's Near West Side. A fourth area, Woodlawn, had experienced intermittent work by at least two different CDCs, though with some gaps between them. And two other neighborhoods, used largely for comparison purposes, had seen little or no community development activity in these years: Englewood and East Garfield Park.

To measure what had happened in these communities, MCIC created two different kinds of indices, tracking change over the long and short term, respectively. The first, a Decennial Change Index, measured the broad sweep of neighborhood change over three decades, including years well before most of the CDCs started work. The second, an Annual Performance Index, measured year-by-year changes since the beginning of the New Communities Initiative in the three participating neighborhoods. The shorter-term data were sorted separately into a Business Index and a Residential Index, to capture the differences, if any, between the commercial and the residential economy of each place. To set a baseline for comparing annual changes in more recent years, at LISC's suggestion, MCIC also developed a set of Challenge Scores, showing how business and residential conditions in each neighborhood compared with those of the city as a whole in 1997.¹

The creation of the Challenge Score is a particularly significant step whose importance might be easy to overlook. By establishing a point-in-time comparison between each neighborhood and the city as a whole, the score makes it possible to determine which neighborhoods had greater disadvantages in housing or in business, and how the difficulties of each neighborhood stacked up against those of the other areas in the study. One of the chronic impediments to measuring CDC effectiveness (described further in the

¹ Citations and quotations from MCIC throughout this paper refer to *Community Development and Neighborhood Vitality: Impact Models That Track Change in Six Chicago Neighborhoods*, D. Garth Taylor, Ph.D., and Mari Gallagher, Metro Chicago Information Center, April, 2003. This report was part of a three-year study also supported by Dana Doan, Robert Frolick, Tim Frye, Greg Gernerer, John Jiang, Lolita Sereleas, Rong Zhang and Cheng Zhao.

next section of this paper) has been the complex question “compared to what?” A neighborhood’s performance can be compared with its own past, with the city as a whole, or with similar neighborhoods elsewhere. Each method has its strengths and weaknesses, but each can lead to a somewhat different answer. And in any case, the method and basis of comparison have posed any number of practical and philosophical problems. MCIC’s Challenge Score seeks to solve many of these by establishing a uniform measure of disadvantage — the *status quo ante*, in effect — that can be applied equally to a single neighborhood, other neighborhoods, or the whole city.

The results of all these calculations are encouraging though not yet definitive. They form, in effect, a first-generation model of how to quantify and assess community development and neighborhood transformation. The findings at this stage will be weighed and described in greater detail below, but these are some highlights:

1. In census tracts where community development activity was concentrated, the long-term Decennial Change Index was more positive over a 30-year period than in tracts without such activity. This was despite a steep decline and disinvestment in the early years of that period, often well before the start of the community development effort.
2. Even over a much shorter term — specifically the three years from 1997 to 1999 — areas with concentrated community development activity showed stronger improvement on certain Annual Performance measurements, such as business growth, than did other areas.
3. The kinds of short-term progress in any given neighborhood are related, not surprisingly, to the particular challenges that neighborhood faces, and are heavily influenced (or can even be overwhelmed) by citywide and regional economic phenomena like a booming housing market.

In the long run, MCIC concluded, “CDC activity makes a difference in the long-term progress of [census] tracts.” And in the shorter term, “the tracts with the best business performance as measured by our index tend to be the tracts that are the focus of CDC program activity.”

But the importance of MCIC’s work is not just that it has produced intriguing findings. More profoundly, it begins to suggest a way of untangling longstanding questions of how to measure community development’s effects, performance, opportunities, and limitations. Throughout its report, MCIC is careful to point out that the findings are far from proof positive of the effectiveness of community development. Yet the results are “strong enough to engage a serious conversation among scholars and theorists about continuing the effort to measure and analyze CDC impact.”

That is, by itself, a significant breakthrough in a long and often frustrating debate over several related questions: Can the health of a community be measured? Is one neighborhood’s well-being statistically comparable to that of another neighborhood, given different physical, social, and economic patterns and challenges? Can trends in a single neighborhood be isolated and studied, apart from the confusing effects of wider

economic and demographic forces? Can the overall return on public and private investment in a neighborhood be calculated in a way that reasonable observers would support?

Why data pose so many problems, and how the problems might be solved

“The challenge of any model to measure CDC impact,” MCIC wrote, “is to obtain data that is high-quality, low-cost, available on a consistent, regular, and geographically appropriate basis, and relevant — not only in terms of measuring CDC outcomes, but also relevant across multiple neighborhood ‘types.’ ” The quality, cost, and availability of data have proven prohibitively hard to manage in most places. For example, the quality of U.S. Census data is indisputably high and the numbers are available at low cost. But even when those numbers are still fresh enough to be useful (a period considerably shorter than the ten years between censuses), they capture only some of the most relevant information: incomes and housing occupancy, for example, but not most business activity, government services, or social dynamics. For these latter categories of information, researchers usually have to rely on state or municipal databases of uneven quality, or on survey research that can be too expensive to be practical.

In concept, the kinds of state and local data that would indicate success or failure in community development are mostly uncontroversial, though they form a long list: measures of economic activity (including business loans, consumer loans, employment, bank deposits, building permits, and many others); social stability (like crime data, membership in community and recreational organizations, attendance at religious institutions, rates of volunteerism, voting, parental participation in schools, and so on), and personal opportunity (graduation rates, performance in school, postsecondary study). Some CDC leaders might point out that these variables still don’t capture intangibles like community confidence or feelings of ownership and enfranchisement. But most would support some combination of these measurements as a fair tally of what they are trying to achieve and what residents generally want from a community.

Yet even when data exist to measure such things, the numbers are often maintained irregularly, by different authorities using incompatible technologies or systems of classification, with varying levels of care, accuracy, and historical archiving from one database to the next. Among dozens of statistical sources that MCIC considered for its research — from federal, state, county, city, and commercial databases — many were disqualified because of unbridgeable gaps in the data, levels of aggregation that can’t be broken down by neighborhood, high costs of access, or inconsistent methods of collection from place to place. “Community change,” as MCIC explained, “often happens one block at a time. Aggregated ‘data dumps’ on large geographic areas mask the story of what is really happening.” To get a picture that is both accurate and meaningful, MCIC had to find data that could be analyzed and compared block-by-block — to “drill down,” as they put it, to a single census tract, group of blocks, or even a street address. The scarcity of data that meet these criteria has defeated attempts at similar analyses in other cities.

Further, urban neighborhoods are influenced by many factors, each producing effects that respond differently to different kinds of measurements and different systems of data

collection. For example, it is possible, especially in the short term, for home-ownership rates to rise while property values fall, for poverty and employment rates to rise at the same time, or for sales-tax receipts and commercial vacancies to climb in tandem. In those circumstances, are conditions improving, worsening, or staying the same? Look only at one or two figures, especially in isolation, and the answers may be misleading, inconclusive, or simply wrong. But combine several variables, or track them over a longer period, or both, and the picture may start to come clearer.

That, however, raises the problem of getting consistent information over time. Even when the same data sets are available over several years (a rarity in many government archives), experts disagree about how long a time period makes a reasonable basis for judgment. Are three years enough? Five? Ten? Not surprisingly, MCIC researchers found a more pronounced difference between CDC neighborhoods and comparison areas when they looked at long-term data series. Many elements of neighborhood revitalization take decades, not months or years, to accomplish. In fact, one of the chief advantages of community development, as proponents usually describe them, is that CDCs persevere over many years, compounding the effects of development after development, gradually enlarging circles of collaboration and investment, and changing the underlying psychology of urban markets. Once community development programs have built some momentum, it may be possible to measure change in two- or three-year increments. Until then, measurable change will be slower, subtler, and more easily overwhelmed by outside forces.

Finally comes the ever-vexing question of causation. As MCIC put it:

If CDCs make a difference, there should be measurable patterns of change, and distinctions should be seen between places with and without CDC activity. However, the existence of a pattern does not prove cause and effect. In other words, the results might not be due to CDC activity, since there could be other, correlated causes at work. ... CDCs, in fact, try to capitalize on the pre-existing amenities and resources already available or directed to their neighborhoods.

It is rare for any social-science research to prove causation to every observer's satisfaction. Community-development research, for the reasons MCIC describes, will always be open to more dispute even than many other branches of the social sciences. Still, it would seem reasonable to surmise, when CDC neighborhoods routinely outperform other comparable areas, that something significant is under way. Even if there is not yet an indisputable way to prove causation and to impute a firm value to the contribution of CDC efforts, it is useful and important to know that community development matters — that it can accomplish desirable things that do not otherwise happen. That, in effect, is what MCIC has begun to do.

Solutions, Part I: Measuring 'Difference of Change' in Different Ways

The MCIC analysis does not solve all these problems, but it deals with them in a way that is affordable and comparatively easy to replicate year after year, neighborhood by

neighborhood. That is crucial, since measuring CDC performance is important not just for big, after-the-fact evaluations or academic studies, but for the effective management of CDCs in real time. Even with slightly imperfect measurements, it is surely valuable to have a system of reckoning that can tell managers *today* whether this or that line of work is yielding results, and how well such work compares with other kinds of effort. That is at least as important as a system that richly traces the long-term currents of community transformation, but takes ten years and a new federal census to complete.

MCIC has therefore devised two different approaches, each with its own type of index — one set measured in decades, the other in single years — to meet both kinds of need. Both are based on a “difference of change” approach to the data — asking, in effect, whether changes in condition over time are significantly different in Place A from those in Place B, given comparable starting-points in the two places. The researchers have identified data, especially on housing and business activity, that are available and reliable over time, even though some other desirable sources of data ultimately proved too hard to get, too expensive, or simply flawed.

Next, MCIC combined more than one line of comparable data into composite indices, rather than just examining each indicator separately year by year or decade by decade. The benefits of using these composite indices will be explained momentarily. But first, these are the sources of data that make up each type of index and the baseline Challenge Score:

Decennial Change Index: Indicators of long-term dynamics

Statistic	Source	Concept
Adjusted Family Income	U.S. Census for 1970, 1980, 1990, and 2000	Buying Power; Disposable Income
Number of Owner-Occupied Homes	U.S. Census, same years	Neighborhood Confidence; Climate of Investment
Population	U.S. Census, same years	Neighborhood Confidence; Commercial Vitality; Size of Market
Employment in the Neighborhood	Illinois Department of Economic Security, in 1972, 1981, 1990, 1999	Neighborhood Confidence; Commercial Vitality; Size of Market

First, for each decade, MCIC took the last three measurements and divided each one by the comparable number from ten years earlier. So in Pilsen, for example, there were 2,456 owner-occupied dwellings in 1980 and 2,575 ten years earlier. The ratio of 1980 to 1970 for owner-occupancy is therefore .96. The neighborhood population was 37,808 in 1980 and 37,622 in 1970, so the ratio is very close to 1.0, meaning no significant change. There were 30,070 employed people in 1970 and 27,117 in 1980. The ratio is .73 — meaning that employment in 1980 was 73 percent of what it had been in 1970, a 27 percent decline.

To describe the change in family incomes, an extra step is needed, to adjust for inflation and other citywide trends. Here, MCIC took the median adjusted family

income for each decade, divided it by the same number from the previous decade, and then divided that ratio by the corresponding ratio for the whole city of Chicago. The extra step has the effect of netting out the effects of citywide income shifts, including inflation. So in Pilsen, median family incomes in 1980 were 1.67 times what they had been in 1970 ($\$13,868 \div \$8,313$). Citywide, 1980 median incomes were 2.8 times what they had been ten years earlier. So the ratio of Pilsen's decennial change to that of the city as a whole was $1.67 \div 2.80 = .59$

The complete Decennial Change Index for each decade is the average of all these ratios. In Pilsen's case, that would be $(.96 + 1.0 + .73 + .59) \div 4 = .82$. A result of 1.0 would have meant that, on balance, conditions had not changed appreciably. A score higher than 1.0 would have signaled an improvement. As it happened, Pilsen scored .82 in 1980, meaning that overall conditions had declined in the 1970s by roughly 18 percent.

Annual Performance Index: Residential

Statistic	Source	Concept
Home-Purchase Loans per 1,000 Households	FFIEC ² — Home Mortgage Disclosure Act (HMDA) raw data for 1997 and annually thereafter	Resident Investment/Commitment to Neighborhood
Low- or Moderate-Income Borrowers per 1,000 Households	HMDA raw data, same years	Economic Participation by Lower-Income Households/Economic Equity
Home Improvement Loans per 1,000 Households	HMDA raw data, same years	Resident Investment/Physical Improvement
Price of Home Purchase on Average Tract, Per \$10,000	Multiple Listing Service of Northern Illinois, same years	Resident Investment/Property Value

To calculate the Residential Performance Index for any given year, MCIC added all four numbers together for each neighborhood. For example, across all of Chicago in 1997, for every 1,000 households there were 11.5 home-purchase loans; 25.6 low- or moderate-income borrowers; and ten home-improvement loans. The median home purchase price was \$13,300 — which comes to 13.3 when the price is divided by \$10,000. The Residential Performance Index for the entire city is therefore $26.9 + 25.6 + 10 + 13.3 = 75.8$. The same calculation for Pilsen yielded 51.1.

² The Federal Financial Institutions Examination Council (FFIEC) sets uniform standards and reporting forms for the five main regulatory agencies that oversee U.S. financial institutions: the Federal Reserve, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Comptroller of the Currency, and the Office of Thrift Supervision. The Home Mortgage Disclosure Act requires financial institutions to report mortgage and home improvement loans and applications every year. The Community Reinvestment Act requires lenders to report data on small business, small farm, and community development lending. Both sets of data are published annually by the FFIEC.

Annual Performance Index: Business

Statistic	Source	Concept
Small Business Loans Per Census Tract	FFIEC — Community Reinvestment Act Aggregate and Disclosure Reports for 1997 and thereafter	Business Investment/ Small Business Activity
New Business Start-ups Per Tract	Illinois Department of Commerce and Community Affairs, same years	Business Investment/ New Activity

The process for calculating the Business Performance Index is the same as for the Residential Performance Index: Each neighborhood's data for the year — two component numbers, in this case — are added together. In 1997, there were 15.8 small-business loans per census tract citywide, and 5.7 new business start-ups per tract, so the citywide Business Performance Index is 21.5. Pilsen's sum that year was 17.4.

Challenge Score: Gauging the Strengths or Deficits

To set a baseline for measuring change, and to track needs and opportunities from one place to another, MCIC calculated a Residential Challenge Score and a Business Challenge Score using all of the same sources of data as in the two Annual Performance Indices, plus one additional component: the number of new building permits for residences and businesses, respectively. (The building-permit numbers would have been included in the Performance Indices as well, but there were defects in the city's data for 1999.)

To calculate the two Challenge Scores for each neighborhood, MCIC took the 1997 Performance Indices for each neighborhood, added the building-permit data, and then divided the result by the corresponding number for Chicago as a whole. Thus, for the whole city of Chicago in 1997, the Residential Performance Index calculated above was 75.8. The corresponding number for Pilsen was 51.1. Adding in new residential building permits per 1,000 households increases these numbers to 89.1 and 57.5, respectively.³ So the ratio of Pilsen to the whole city is $57.5 \div 89.1 = .64$. A Residential Challenge Score of 0.64 means, in effect, that Pilsen's residential market was less than two-thirds as strong as that of the city as a whole in 1997.

The effect of these scores is to express each neighborhood's business and housing performance in 1997 as a percentage of the whole city's. An index of 1.0 would

³ The addition of the building-permit data complicates the calculation somewhat, but the additional information is important enough to justify the extra step. Building permits show both investment and physical improvement in a neighborhood, thus capturing two essential elements of revitalization in a single number. It's unfortunate that these data aren't consistently reliable for use in the annual Performance Indices — but that is a good example of the kinds of problems researchers routinely encounter in trying to compile such measurements from government databases.

show that the neighborhood performed exactly as well as did the entire city. More than 1.0 would be a superior performance, and less would show a deficit. In effect, then, the Challenge Index shows each neighborhood's condition in 1997 — the starting year for the annual Performance Indices — in comparison with Chicago's overall condition. Pilsen's residential challenge, at 0.64 was therefore greater than that of the Near West Side (with a score of 0.9) or South Chicago (which scored above the citywide average, at 1.1). Performing this calculation separately for housing and business conditions helps to determine whether the neighborhood's greatest problems were in housing or business or both, and the depth or severity of those problems relative to conditions across the entire city.

The composition of the Challenge Score, at least as much as that of the other measurements, calls for further thought and discussion. Among other things, it does not include a measure of racial or demographic shifts — a crucial factor in the fortunes of several Chicago neighborhoods. In any case, MCIC's initial formulation points a way toward numerically summarizing the complexity of a community and its needs, and provides a simple platform on which to build.

Why an Index Is Better than Individual Statistics: Combining numbers in these ways helps to ease some of the fluctuations and contradictions among different sources of data that can make comparisons difficult over time or between places. In small units of analysis like census tracts, a very small change — one or two houses, a few loans, one new business — can look like a giant leap in percentage terms. “From a data analysis perspective,” MCIC explains, “analyzing patterns of small, cumulative change can be a nightmare.” Aggregating small phenomena into larger indices builds a larger baseline from which to measure change, and thus smoothes out some of the erratic peaks and troughs that would otherwise make the data hard to interpret.

The blending of several measures also makes it possible to compare neighborhoods whose economies work in slightly different ways. For example, if one neighborhood benefits from a network of informal personal lending, as sometimes happens in immigrant communities, it might score high on start-ups but low on commercial loans. Another neighborhood may have a more active local business lender and strong borrowers, but fewer new businesses. In a combined score, both neighborhoods will have their strengths reflected, and the combined measurement can be tracked over time to see which one (if either) brought about the greatest long-term result. If either variable were considered on its own, the two neighborhoods might well have appeared impossible to compare, or one of them might have been judged a failure.

Setting a Baseline for Comparison: The importance of the Challenge Score is hard to overstate, not just as a technical accomplishment but as a guidepost for a real understanding of the issues. Past attempts to measure the effect of community development have foundered on many obstacles, among them a concern that homogenized standards might be misapplied to neighborhoods in different circumstances, combating different problems, and starting with significantly different advantages or disadvantages. One solution to this problem is inherent in the “difference of change”

approach to the data. In that method, one neighborhood's percentage of owner-occupied housing is not compared with the same percentage in another neighborhood; rather, the comparison is between the two neighborhoods' *rate of change* in home-ownership. The unit of measurement is progress, not absolute numbers.

Still, rates of progress are partly a function of initial condition. Neighborhood A might outperform B in its rate of new mortgage and home-repair lending, and that is a useful fact to know. But if B was facing a more profound housing challenge at the starting line — few home lenders, low rates of home-ownership, high incidence of vacancy and disrepair — *any* subsequent progress might be a sign of success. That, too, is important to know, and the two kinds of information are equally important to understanding the effect of community development. And that is what the Challenge Score is meant to address.

Researchers may differ on the particular composition of any of these indices, or on the methods by which they are applied and compared. That is all to the good. In fact, MCIC expressly welcomes such a discussion in its report. The point is not that this study has resolved the statistical issues for all time, but that it has made a credible, replicable *start* — and most remarkably, has come to some helpful and encouraging conclusions in the process.

Solutions, Part II: Using the Indices and Reaching Conclusions

From their initial application of these indices, as we described earlier, MCIC concluded that census tracts with sustained CDC programs have had more favorable long-term change than other, comparable tracts. (The study itself deserves a full, careful reading. This description is necessarily a brief summary.) The researchers were able to make this determination because they began with a detailed mapping exercise, plotting the precise location of each community development project in each neighborhood, with information from on-site interviews, reviews of official records, and a firsthand survey of every block in each neighborhood. The result is a series of geo-coded maps showing the distribution of projects over 30 years or more, and comparing census tracts where such activity is concentrated with other tracts in the same areas. Most CDCs serve a target area that is smaller than the official neighborhood boundaries used by the city's Department of Planning and Development and other government agencies. And in some cases, CDCs further concentrate their investment in subsets of the target area. Consequently, the mapping and geo-coding are essential for distinguishing the actual centers of community development from other areas that may share an official designation but not much else.

Applying the calculations to these more narrowly defined areas, the benefits of community development were observable not only over the decades in the Decennial Change Index, but in some cases also in the shorter, year-by-year analysis. In housing performance, the annual effect of CDC efforts was not clearly detectable in the late '90s, partly because the Chicago housing market was uncommonly strong in these years in virtually every neighborhood. MCIC could find “no consistent pattern between the change in the Residential Performance Index and whether tracts were located inside or outside” the community development target areas. Nonetheless, in MCIC's longer, three-decade index, residential indicators were positive and correlated with CDC activity.

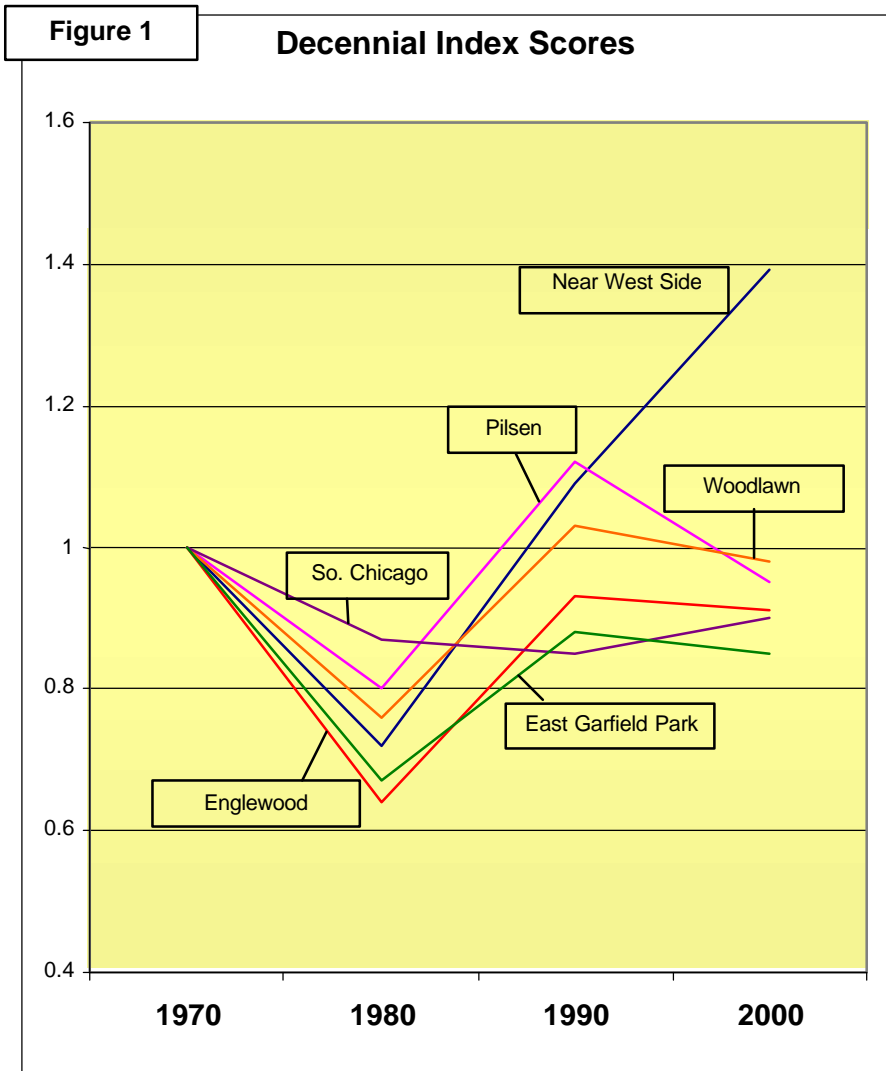
In business activity the connection between CDC effort and an area’s year-to-year performance was more pronounced. Not only did areas in the New Communities Initiative show “the best business performance as measured by our index,” according to MCIC, but at the start of the study period, the census tracts with New Communities activity had actually been among the weakest business environments within those neighborhoods. In other words, CDC activity not only was connected with measurable improvement, but it was concentrated in areas of measurably greater need. This last conclusion was possible primarily because of the creation of the Challenge Score, which can pinpoint the type and level of need in each place — census tract by census tract.

To understand how the MCIC approach can work in practice, it’s helpful to look individually at the various types of measurement in the study and at how each kind of indicator describes the effects of community development neighborhood-by-neighborhood.

The Decennial Change Index: A measure of long-term trends

All the areas in the MCIC study suffered severe declines in the 1970s, and three of them

continued to worsen in the ’80s and ’90s. To begin with, MCIC looked at changes in the whole planning areas as traditionally defined in city records, not strictly in the CDCs’ target areas, which are typically smaller and more strategically defined than the traditional boundaries. Figure 1, left, shows the percentage changes in the index decade by decade in these broad areas. Results smaller than 1 are rates of decline, greater than 1 are rates of improvement. Of the three broad areas in LISC’s New Communities Initiative, Pilsen and the Near West Side began to change direction after hitting a low in 1980. South Chicago, on the other hand, was hit hard by the loss of steel-related



manufacturing jobs that began in the 1970s and continued to depress the neighborhood thereafter. The neighborhood, as MCIC puts it, “probably hit rock bottom with the closing of the South Steel Works in 1992,” and thus the effect of community development there would need to be seen in light of the overwhelming economic drag presented by that loss.

Among the three comparison neighborhoods, Woodlawn (which benefited from periods of community development activity in these years) effectively held steady after 1980. The two other comparison areas — Englewood and East Garfield Park, with little or no consistent community development — continued heading steeply downward.

MCIC was then able to look within these traditionally defined neighborhoods, zeroing in on the specific sections where CDCs invested or developed projects. Using a Geographic Information System and extensive firsthand research in each neighborhood, researchers identified community development projects in each census tract, and sorted the tracts that contained such projects from those with few or none. That is where the index demonstrates its greatest utility. Working at this finer level, MCIC was able to conclude that “tracts that stabilized or improved tended to be areas where CDC activities were recorded most frequently.” The specific results are:

Community Areas	% of Tracts with Significant CDC Activity	Difference in Index Score Between Tracts with and without CDC Activity
Pilsen	75%	3.6%
South Chicago	60%	-1.3%
Near West Side	44%	3.1%
Woodlawn	42%	5.1%
Englewood	29%	-0.6%
East Garfield Park	16%	-0.3%

In short, with the exception of the economically besieged South Chicago area, community development appears to have made a pronounced difference in the immediate vicinity of its work, and at least a measurable difference throughout its whole neighborhood. The differences involved — ranging from 3 to 5 percent in neighborhoods with significant CDC activity — might not seem dramatic. But it’s important to recognize (a) that these effects are cumulative over time, and may therefore promise further compounding of benefits, and (b) that the measurements begin well before CDCs started working, and thus include years of untreated decline.

Challenge Scores: Pinpointing the type and level of hardship

In looking at nearer-term data, MCIC concentrated on “a much more targeted set of measures and a finer-grained, year-by-year analysis of impact.” As a starting point for that examination, researchers first established a composite measure of the level of difficulty that a neighborhood presents to those who hope to revitalize it. The resulting Challenge Scores are based on much the same data with which MCIC went on to track year-to-year progress. As with these annual measures, figures on the initial challenge were broken down into two categories: business and residential. In each case, the

Challenge Score is the ratio of neighborhood data for 1997 to those of the city as a whole — thus showing how close each neighborhood’s condition came to the citywide norm at that point.

The Business Challenge Score combines data on small business loans, new business start-ups, and new commercial building permits, all of which are available by census tract. (MCIC was unable to include new commercial building permits in the later year-by-year performance computation, because those data, from the Chicago Department of Buildings, proved unreliable for 1999. The Performance Index is therefore based solely on loans and start-ups.) The Residential Challenge Score combines data on home-purchase loans, home improvement loans, and low- or moderate-income borrowers, all per 1,000 households, and home purchase prices per \$10,000 (so that an average sale price of \$133,000 would yield a score of 13.3). For the city as a whole, this is how the business and residential components stack up:

Chicago Business Performance	1997
Small business loans per census tract	15.8
New business start-ups per tract	5.7
New commercial building permits	13.3
BUSINESS PERFORMANCE (sum)	34.8
Chicago Residential Performance	1997
Home purchase loans per 1,000 HH	26.9
Home improvement loans per 1,000 HH	10.0
Low/mod-income borrowers per 1,000 HH	25.6
Home purchase price per \$10,000	13.3
RESIDENTIAL PERFORMANCE (sum)	75.8

Using these numbers as the denominator, and each neighborhood’s data as the numerator, MCIC calculated these levels of challenge for the three neighborhoods participating in LISC’s New Communities Initiative:

Community	Business Challenge Score	Residential Challenge Score
Pilsen	0.50	0.65
South Chicago	0.45	1.06
Near West Side	1.19	0.85

A score of 1.0 would mean that the neighborhood’s business or residential condition exactly mirrors the citywide average by these measures. A level higher than 1.0 means the neighborhood outperformed the city as a whole in 1997 — as the Near West Side did in business development and South Chicago did in the residential market, though both exceeded the city average by very small margins. The distance below 1.0 indicates the level at which the neighborhood fell behind the city average. By that measure, South Chicago’s business score reflects the deepest challenge, as does Pilsen’s residential score.

With this information as background, the neighborhoods' subsequent performance in 1998 and 1999 takes on additional meaning.

Annual Performance Indices: A key to short-term impact

The Performance Index is based on the same data sources as the Challenge Score (with the exception of commercial construction data, as explained above). But instead of comparing each neighborhood with the whole city, the indices measure performance by tracking neighborhood performance year by year and computing the rate of change. Here is how MCIC's calculations come out for the three neighborhoods in the New Communities Initiative and for the city as a whole:

Business Index	1997	1998	1999	Rate of Change
Pilsen	11.8	12.6	10.6	-2.4%
Near West Side	28.5	35.0	32.4	2.8%
South Chicago	07.5	07.3	09.8	5.8%
City of Chicago	21.5	21.8	23.7	2.1%
Residential Index	1997	1998	1999	Rate of Change
Pilsen	47.0	49.4	47.6	0.3%
Near West Side	55.6	74.3	139.9	20.0%
South Chicago	77.2	84.1	86.8	2.5%
City of Chicago	75.8	90.0	102.2	6.5%

Performance in business development, when compared with initial challenge, presents interesting contrasts among the three neighborhoods. In South Chicago, where the business challenge was greatest, the CDC has in fact directed significant resources to business development. The group could infer, from the data on this brief period, that its efforts are having some beneficial effect: Although South Chicago's overall business index is still very low by citywide standards, its rate of change is the most positive of the three neighborhoods studied, and more than double that of the city.

In the Near West Side, where the Business Challenge Score showed little difference from the citywide average, business performance was strong and steady, and the neighborhood actually outperformed the city writ large. Here, the effect of CDC effort in particular is harder to tell; some of the strength in this measurement may be the effect of growth begetting growth. Pilsen is the outlier in this index: Its Business Challenge Score suggested deep problems, and those problems actually grew slightly worse in the third year of this period — a year of overall strength in the Chicago market.

MCIC then looked at individual developments in each census tract — a separate, finer-grained analysis that locates CDC activity on geo-coded maps, and correlates that activity with annual and decennial changes. In that analysis, data in all three neighborhoods showed that business performance was greater in the census tracts where CDCs concentrated their program activity under the New Communities Initiative. These were also, the researchers note, the tracts with the greatest need for business assistance, as measured by the Challenge Score.

On residential performance, Chicago's overall market was robust, and home purchase prices particularly swelled in these years (to almost \$200,000, from \$133,000). The strength of this market touched every neighborhood in the study. It was so great, in fact, that MCIC was unable to find any consistent difference between the residential performance within CDC target areas and those outside. Although the Near West Side was clearly the star among the three neighborhoods by this measurement, improvements in housing were distributed throughout the neighborhood, including parts of the Near West Side that are not included in the CDC's narrower target area. In fact, increases in housing performance were greater outside the CDC's target boundaries than inside them — partly because the CDC intentionally focused on the weaker areas.

In Pilsen, however, where housing development was a key part of the CDC's program, and where the Residential Challenge Score was especially low (35 percent below the citywide benchmark in 1997), the CDC's targeting did appear to make a difference. Although the rate of change was low for the neighborhood as a whole, the census tracts on which the CDC concentrated did see a higher rate of improvement than the neighborhood's other tracts (1.2 percent, compared with 0.2 percent) — even though the original Challenge Score was nearly identical for the tracts inside and outside the CDC's target area. Whether these numbers indicate a strategic achievement or merely a statistical glitch is too soon to tell, given that they are based on a very short period and deeply depressed conditions. The CDC in Pilsen, The Resurrection Project, is also the youngest of the CDCs in this study, having begun work in 1990. A few more years' observation may tell more of a story here.

These short-term findings, interesting as they are, give only a general hint of the potential of MCIC's measurements, which can only improve as more years are added to the analysis. Three years of calculations don't yet provide a reliable gauge of actual success or failure in small areas like census tracts or neighborhoods. The reason is that annual numbers are unstable, even when many of their idiosyncrasies are smoothed over with composite indices. The influence of outside forces, large but random events, and even small flaws in the data can sometimes give a false impression of pronounced change, or can obscure real change with superficial fluctuations. Three years is not enough time to firmly distinguish real trends from ambient noise. But even with that caveat, the trends now visible in MCIC's numbers suggest an ability to read some short-term changes, and with a longer series of data, they should provide an even clearer, more reliable method in a few years' time.

Combining and Interpreting the Measurements

Each of these sets of data measure somewhat different things or view reality from a different angle. They are not reducible to a single "grade" or an overall verdict on success or failure. Whether such a simple, up-or-down calculation is ever possible remains to be determined. Yet MCIC's brief list of indices can be laid side-by-side — in fact, they should be — to gain a general impression of short- and long-term developments in each place. To see how the pieces fit together, consider the mix of data in each of the three New Communities neighborhoods:

In *Pilsen*, the challenge in both business and residential redevelopment is formidable, compared not only with the city as a whole but with the other two neighborhoods. Yet the long-term picture suggests that the worst years in the neighborhood may have passed. The Decennial Index shows a slight decline in conditions during the 1990s — a discouraging sign combined with the poor Challenge Score — but the CDC had just begun work in those years, and its emphasis on residential improvement may be paying off. Although the Residential Performance Index shows only slight improvement (lower than the citywide norm), the census tracts in which The Resurrection Project has concentrated its efforts seem to be responding, and a wider improvement could show up in the next few years' data. On business development, where the Challenge Score also shows acute need, signs are not yet hopeful.

In the *Near West Side*, the long-term trend is markedly positive, with a particularly strong turnaround in the 1990s. Both business and residential performance have been strong in the area in recent years, but the Residential Challenge Score suggests a continuing need for effort in housing. The CDC's concentration has appropriately been in the area's northwestern corner, a section of more sluggish performance where the business challenge is well below the neighborhood and citywide averages.

In *South Chicago*, both the long-term trend and the business challenges are daunting. Encouragingly, the bright spot appears to be in an area of work on which the CDC has concentrated: business development, especially in the commercial areas toward the south end of the neighborhood. Still, the improvements have thus far been relatively small, against continuing hostile forces in the larger economy. At a minimum, it seems that community development may be reducing the harmful effects of these larger forces and, especially in business development, may be reversing them here and there. In residential growth, conditions more nearly track those of the city as a whole, and are changing for the better.

Performance and Measurement in a National Context

After three decades or more of community-led redevelopment efforts, it is more than reasonable for funders and investors to ask for hard data on how (or whether) their investment is paying off. That request is arguably even more reasonable in Chicago than in other places, given the long, broad history of community development here. Only a handful of other cities in the country — New York, Boston, and Cleveland come to mind — have had as much experience with CDCs. And not surprisingly, the search is on in all those places for some way of gauging, quantitatively, what the experience has wrought.

Community development organizations have generally welcomed the question — not only because they believe that they have been effective, and that evidence will confirm that belief, but also because they are already more diligent about some aspects of quantitative accountability than are many other areas of public policy and philanthropy. Both out of necessity and out of pride in their work, CDCs already keep and publish detailed information about their real-estate production, the amount of money invested in their neighborhoods, and income levels of the people they serve. Admittedly, these are measurements more of input than impact — they describe effort and dollars expended,

services rendered, and buildings produced, but not necessarily markets changed or lives transformed.

City neighborhoods and their micro-economies pose any number of obstacles to those kinds of outcome measurements. Urban communities are the creatures of many forces — some of them regional, national, and even global — that constantly interact with, and sometimes undermine, the policy decisions of cities and neighborhood institutions. Amid all these complicating influences, sorting out the specific effect of local organizations and investments can amount to listening for a whisper in a whirlwind of noise.

It is also tempting to overstate or oversimplify the few conclusions about neighborhood health that can be drawn easily. One example comes from a recent *New York Times* story on the South Bronx, among the most famous cases of neighborhood transformation in the United States. Describing an “onslaught of statistical misery” in the area, the *Times* zeroed in on some deeply discouraging data:

The South Bronx is part of the poorest congressional district in the country. Unemployment is nearly 20 percent. More than half the children in the district live in poverty, according to the South Bronx Overall Economic Development Corporation [a CDC]. Half the population relies on public assistance. A third of the households earn less than \$10,000 a year.⁴

The South Bronx remains, without question, a poor neighborhood. Population is at least two-thirds lower than its half-million-person peak in the 1950s. But a few other relevant statistics apparently didn’t fit the *Times*’ catalogue of “statistical misery”: property values, commercial and residential occupancy, new construction and major renovations, and home-ownership are all sharply higher. Crime, as in all of New York City, is profoundly lower and staying that way. Given that poor people will always live in New York, and given that they are unlikely to occupy a proportionate share of the baroque condominiums on Park Avenue or the leafy single-family enclaves of Forest Hills, Queens, there will always be some neighborhoods where poverty is disproportionately high. The community development challenge for such neighborhoods is therefore not to find a way to drive the poor families out — a policy no one ever contemplated in the South Bronx and most New Yorkers would denounce. Nor is it to usher all poor families into the middle class — a much more appealing goal, but an elusive one. The challenge, in this case, was whether the South Bronx could become a stable, pleasant, and convenient place to live while still welcoming poor families. That is, in fact, precisely what CDCs have accomplished there. And that is why their story is justly well known.

Still, the *Times*’ data are not wrong. And even if they are fairly weighed against the more positive data on the South Bronx, the picture that emerges can be confusing. The same confusion applies, in varying ways, to most community development neighborhoods. That is all the more true when, as in Pilsen and South Chicago, major economic and

⁴ Alan Feuer, “Washing ‘South’ Out of Bronx Mouths,” *The New York Times*, July 23, 2003, p. B-6.

demographic shifts are still under way, making it hard to “freeze-frame” the neighborhoods’ development long enough to take a reliable measurement. In the midst of such complexity, some observers have been inclined to dismiss any search for a short list of consistent indicators of success as simplistic and inescapably misleading.

Yet some amount of simplicity, brevity, and consistency are worthy goals. And not all simple measurements of community change are altogether misleading. One fairly straightforward example is property values. In an attempt to measure the broad effect of community development in Cleveland, the OMG Center for Collaborative Learning performed a simple regression comparing increases in neighborhood property values with total investment in community development in that neighborhood over ten years. Despite considerable variation from place to place, which is to be expected, OMG found a statistically significant relationship: On average, \$1 million invested in neighborhood redevelopment led to a roughly 5 percent increase in property values above the average increase citywide.⁵

There are many limitations to this finding. Among other things, it does not explain the variation from one community development neighborhood to the next: Why does Neighborhood A lie well above the regression line and Neighborhood B well below it? Nor does it separate manageable, desirable increases in property values from the kind of runaway gentrification that most CDCs try to avoid. It’s a gross measure, and a rough one. But it captures a crucial indicator of people’s confidence in their neighborhood — what an average person is willing to pay to live there — and it shows that *something* important and measurable has been reaped from the considerable public and private investment in Cleveland CDCs.

All these debates and attempts at measurement amount to little more than laboratory experiments at this stage, and much of the best thinking on the subject is still in its infancy. That is why MCIC’s contribution is so important. It is both richer and subtler than most of the work now under way, and yet it respects the limitations of cost and person-power that determine whether any measurement system will be realistic. MCIC’s data are useful and relevant, and its methods are replicable. The conclusions they lead to are still complicated — which may be curable to some extent, but may also be an accurate reflection of a confusing reality. The particular databases and calculations in MCIC’s models are open to debate and refinement. But the imperfections, whatever they may be, rest on a fundamental accomplishment that is unique, important, and worth improving.

Conclusion: Looking Ahead

“Now that we know what ballpark we are in,” MCIC writes in a concluding reflection on its findings,

⁵ The OMG Center for Collaborative Learning, “A Decade of Development,” The Cleveland Foundation, The Gund Foundation, and The Mandel Foundation, January 2001, pp. 11-13.

we can explore ways to sharpen the analysis with a more extensive research design having more conditioning variables to model tract and neighborhood differences that might be correlated with CDC activity, more impact measures of the extensiveness and timing of CDC program input, and even a more wide-ranging consideration of outcome variables to include more subtle measures of community deliberation and well-being.

The future of this approach to the data, the way it may be varied or enriched, and the uses to which it may be put — all of these are important not only to Chicago but to community development as a whole. It is a fair bet that standards developed in Chicago will be studied, modified, and replicated in other cities with similar kinds of neighborhoods and development organizations. Sooner or later, Chicagoans will want to use such standards to compare their experience with that of other cities, and vice versa. For all these reasons, the possibilities opened up by MCIC's initial work would benefit from wider review, critique, and further experimentation, both in Chicago and nationally.

In short, this would be a good moment — well before the work is ready for a confident, broader application — for practitioners, funders, and observers of community development to weigh in and help envision the eventual shape and use of these techniques.

“Chicago is one of the most studied cities in America,” writes MCIC. “We know a great deal about its context and dynamics. Study of the impact of CDCs contributes to that understanding, even if the process is different elsewhere.”