Although downtown revitalization, innovative mixed-income redevelopment, and gentrification are reinvigorating deteriorated inner-city neighborhoods in cities across the country, too little attention is paid to declining middle-income neighborhoods such as Hickory Hill in Memphis, Tennessee. In the absence of interest from either urban pioneers or targeted government programs, these neighborhoods continue to decline, and poverty enclaves are recreated within once middle-class housing markets. The significance of declining middle-class neighborhoods is underscored by a comparison of 1970 and 2000 census data, where the percentage of middle-income neighborhoods among all neighborhoods in metropolitan areas declined from 58% to 41%. Urban policymakers often have neither a fundamental understanding of what is happening in these housing markets nor a strategy to advance them. The Memphis Neighborhood Housing Markets Modeling project (the Memphis Model) is addressing this information gap using Hickory Hill, a destabilizing community southeast of downtown Memphis, as a pilot community.

This brief discusses how the Memphis Model uses insights from the “information cycle” to conceptualize and implement local information systems that close the information gap for declining middle-income housing markets. New knowledge is mobilizing stakeholders and driving strategies to stabilize and restore Hickory Hill. Following a summary of the information cycle and an introduction to Hickory Hill and its housing market, this brief describes (1) data and collection issues encountered in generating and displaying neighborhood data; (2) the role of analytical tools in either enlightening or obscuring efforts to make sense of data; and (3) key issues encountered in turning information into action to advance neighborhood stabilization strategies. The brief introduces an alternative to the classic redlining paradigm for understanding transition and decline in neighborhood housing markets.
I. The Role of Information in the Memphis Housing Market

The process of transforming data into usable information for market actors is illustrated in Figure 1. This information cycle is composed of three essential parts:

1. data collection and reporting
2. conversion of data into meaningful information through analysis; and
3. transformation of information into actionable knowledge through analysis and dissemination of findings to critical actors.

In housing markets, the first step in the information cycle begins with the collection and reporting of data by a variety of actors, including mortgage lenders, government agencies, and taxing authorities. These data are collected for reasons that often have little to do with the entire transaction and, therefore, contain only partial information on specific transactions or their impact. The data collected on specific transactions are then analyzed to produce information for particular actors. For example, title companies research property transfers to establish clear title, real estate investors search foreclosure notices for investment opportunities, and elected officials search tax collection records to identify unrealized sources of revenue. These decisions do not require a comprehensive view of a housing market’s dynamics, and therefore the demand for integrated data from multiple sources is limited. It is for these reasons that data on housing transactions are often fragmented. Each of these pieces, however, is a rich source of neighborhood-level knowledge, sources that could be more fully used by community-based organizations or local policymakers to strengthen neighborhoods.

Currently, however, these rich local data are being integrated into national data systems in ways that are altering how housing transaction data are aggregated, accessed, and disseminated. With the use of major national aggregators, such as the Mortgage Electronic Registration Service (MERS), key transaction and parcel-level

Figure 1. The Information Cycle

Knowledge spurs action in urban markets

The Information Cycle maps how observations (data) are turned into actionable knowledge for urban market actors to use in decision making. Because each step is based on the previous phase, biases that occur in the left hand side of the cycle have a magnified effect on the knowledge and ultimately the action that is taken by market actors.
data³ are obscured or invisible to community-based organizations and even local policymakers who lack routine access to these national data systems.

The Memphis Model reveals the critical impact of each step in the information cycle in turning raw data into information on a neighborhood, identifies emerging issues in how information is being transformed, and demonstrates how community stakeholders can use information strategically to intervene appropriately in the housing market.

II. The Significance of Hickory Hill

Although real estate and financial analysts often refer to the “Memphis housing market” broadly, in reality, each of the city’s neighborhoods has attributes that warrant flexible policies and customized interventions.

A. Why Neighborhoods Are Important

Neighborhood housing markets are differentiated primarily by the extent to which they remain “neighborhoods of choice” for households with the know-how, resources, and commitment to maintain properties and sustain investment.⁶ When neighborhoods lose their appeal, they tend to decline and deteriorate. Understanding how that happens and what can be done to reverse course demands a fundamental grasp of neighborhood-specific sources of decline and situation-specific assets and opportunities that can be mobilized to reverse the course. Neighborhood-level interventions are effective only if the information on which they are based is valid and reliable. However, currently no well-established protocol exists for collecting and analyzing local housing information on different types of neighborhoods.

Urban policy experts know that cities such as Memphis, with high poverty rates and significant city-suburban income distinctions, have more than their share of highly deteriorated neighborhoods.⁷ When these neighborhoods offer architectural interest or a desirable location (or both), they may be gentrified or “re-gentrified” by “urban pioneers” and private investment, or leveled to make way for government-driven, mixed-income redevelopment such as HOPE VI.⁸ Absent these assets, however, very poor and highly deteriorated neighborhoods continue to elude urban planning solutions—as do a growing number of modest to moderately upscale, once-middle-class neighborhoods that are struggling to maintain themselves as neighborhoods of choice. Policymakers know even less about stabilizing and revitalizing these struggling neighborhoods. Hickory Hill is one such struggling community in southeast Memphis.⁹

As with other post–World War II communities, Hickory Hill grew from a series of suburban-style subdivisions. Although attractive, Hickory Hill offers little in the way of architectural significance, public spaces, or the types of amenities that attract young urbanites who are helping to revitalize downtown neighborhoods in Memphis and elsewhere. Communities such as Hickory Hill sustain themselves by remaining neighborhoods of choice for suburban-oriented young families.

If these once middle-class neighborhoods decline, two things happen. First, the distribution of central-city income becomes more bifurcated, with both obviously poor neighborhoods and, if central-city gentrification has been successful, enclaves of upper-middle-class professionals. Second, the fiscal health of the city declines because
middle-income neighborhoods such as Hickory Hill have historically been the backbone of the residential property tax base.

In Memphis, what is happening in Hickory Hill mirrors similar trends in a broad swath of neighborhoods that radiate, crescent-style, north and south from midtown Memphis beyond the Interstate 40 and Interstate 240 beltway. As goes Hickory Hill, so goes perhaps one-half of the city’s housing market and a significant slice of its tax base. Map 1 shows Hickory Hill’s location in relation to the city of Memphis, downtown and midtown neighborhoods inside the interstate beltway, and the inner-city HOPE VI sites.

**B. Transition in Hickory Hill**

The neighborhoods that compose the Hickory Hill community are home to more than 50,000 people and 20,000 housing units. Subdivision-style development began in the mid-1970s and continues on the fringes (and into unincorporated Shelby County) today. Hickory Hill was annexed by the city of Memphis in 1997 after an extended lawsuit brought by residents against the City. About one-half of the housing units are single-family homes, which nevertheless occupy about 80 percent of the territory. Single-family units were about 75 percent owner-occupied in 2000, down from about 95 percent owner-occupied in 1990. The area includes an extensive corridor of once upscale, low-rise apartment complexes, home in the early 1990s to young adult singles and young families with perhaps one child, with some empty nesters living in the more expensive units.

Comparison of 1990 and 2000 census data for Memphis reveals a set of neighborhoods in transition, by race, class, and ethnic composition. By 2000, poverty in inner-city census tracts in Memphis had eased, while in communities such as Hickory Hill, it had begun to concentrate. Map 2 shows single-family neighborhoods, apartment developments, and commercial arteries overlaid with information on the distribution of Section 8 Housing Choice Vouchers (a housing program for low-income families) and poverty rates (as indicated by percentages on the map). By 2000, census data reveal pockets of poverty in Hickory Hill’s once middle-class neighborhoods, especially in multifamily developments, where individuals relying on housing vouchers began to concentrate between
2000 and 2003. Families using vouchers are also evident by 2003 in single-family neighborhoods where poverty remained low but had been rising since 1990, when poor families were virtually absent. Nevertheless, Hickory Hill in 2000 remained well above citywide averages on educational attainment and income. Twenty percent more adults in Hickory Hill had a college degree than in the city as a whole, and median household income was $47,216, compared with $41,994 citywide.

Hickory Hill once had a fully developed and thriving retail sector, including several commercial arteries and the Hickory Ridge Mall, restaurants, movieplexes, and other entertainment. Today, the picture is quite different. Although retail amenities remain, vacancy rates have escalated to about 20 percent, leaving noticeable eyesores where entire shopping strips or big-box retailers have vacated or gone out of business.

The early years of Hickory Hill’s transition—from 1990 to 1993 when the intent to annex was announced—were characterized by an influx of middle-class black families. With annexation looming, the number of houses for sale by the mid-1990s peaked, prices stagnated, and the number of lower-income households rose as renters and as lower-income homeowners taking advantage of falling interest rates and reasonable housing prices moved in. What had been an 85 percent white and middle-class area of the county was, by 2000, 80 percent black and more socioeconomically diverse.

The rapid transition was in part a function of the housing stock and continued suburban development. Developers originally built moderately priced ranch and “split-bedroom” plans in Hickory Hill as “starter homes,” meant to be vacated by upwardly mobile homeowners in search of more square footage and more amenities in still newer subdivisions. In addition, annexation doubled property taxes, and newer developments “in the county” were marketed aggressively as properties with “no city taxes.”

Race-based dynamics also played a role. The pattern is more nuanced, however, than the blockbusting and panic selling associated with the early implementation of fair housing statutes. The volume of housing transactions during the 1990s does not appear to have been accelerated by such racially charged tactics, but that is not to say that race and racism were irrelevant. Even though the volume of sales did not accelerate, houses remained on the market for longer periods of time, and both old and new residents report racial steering by real estate agents.

Black residents report that Hickory Hill “opened up,” and that many moved from Whitehaven, the most well-established black middle-class community in Memphis, when crime there began to increase. White homebuyers, meanwhile, were being steered into still newer, rapidly expanding subdivisions in unincorporated Shelby County. After 2000, white attrition was followed by attrition of middle-class black families, who were also relocating to outlying subdivisions and were being
replaced by families of lesser means, including both black families and a growing Hispanic population. The Hispanic population includes both families and all-male households of immigrant workers. Estimates using public school enrollment data show Hickory Hill to be 10 to 15 percent Hispanic in 2006.

Even in the absence of blockbusting and panic selling, what happened in Hickory Hill attests to the continued significance of race to housing markets and the still formidable odds against socioeconomic stability in segregated neighborhoods. Understanding more about how these markets decline is a prerequisite to change, and it is fundamental for equalizing housing opportunity for residents of all racial and ethnic groups. The Memphis Model aspires to develop a new understanding of race dynamics in housing markets. An updated perspective is presented in Section VI of this brief.

III. Developing the “Memphis Model” in Hickory Hill

A. Data-driven Collaboration

The symptoms of neighborhood decline spurred action in Memphis to understand the causes of that decline. The University of Memphis was asked in 2002 by the city’s Division of Housing and Community Development to help develop a response to business leaders’ concerns about crime, retail vacancy, and perceived deterioration in Hickory Hill. The University of Memphis’ Center for Community Building and Neighborhood Action (CBANA) and the Center for Community Criminology and Research (C3R) partnered with the university’s Shared Urban Data System (SUDS) to produce a detailed Hickory Hill profile.

With SUDS, researchers are able to map and integrate neighborhood-level data (both parcel data and aggregate choropleth-style data) for ZIP codes, census tracts,
and census block groups. For example, demographic, housing, and crime data can be displayed together to identify clusters and other spatial patterns; target and customize interventions for hotspots; and generate hypotheses for longer-term multivariate analyses of neighborhood housing markets.

The Memphis Model used a four-pronged data collection protocol to capture information about the housing market: (1) parcel-level secondary data collection from public records; (2) parcel-level primary data collection using a “problem properties audit” for Hickory Hill; (3) analysis, coding, and integration into a property transaction database of parcel-level ownership and historical title data and other parcel- or household-level data associated with ownership; and (4) overlay of federal aggregate housing and demographic data with parcel-level data. See Appendix A for a detailed description of the data collection protocol.

In the case of Hickory Hill, the resulting community profile—with a strong emphasis on demographics, housing, and crime—stimulated discussion and collaboration among a broad group of stakeholders. Ultimately, the information spurred the establishment of Southeast Memphis Initiative SEMI), coordinated by CBANA and supported by a public-private seed grant. The grant enabled SEMI to hire a full-time community development specialist, who incorporated the Southeast Memphis Community Development Corporation (CDC) as a nonprofit spinoff of SEMI. SEMI continues to function as a multiagency, multi-organization, multistakeholder collaborative based on the comprehensive community initiative model.

B. Grassroots Perspectives and Priorities

The City of Memphis and the university took the lead in building a strong interagency collaboration and information base, and SEMI added to that by involving local residents. Both university-based and community leadership place a great deal of stock in qualitative observations, including the “indigenous knowledge” shared by residents and other community-based stakeholders in Hickory Hill. The significance of “bottom-up” participation cannot be overstated: sustained grassroots involvement lent essential context to statistical data generated by CBANA.

Grassroots participation is reinforced when university researchers listen and respond. For example, SEMI chose to focus exclusively for the first two years on housing and crime because the leadership of several community-based organizations and participants in the community “summit” convened at the start of the initiative identified both issues as priorities. Bottom-up participation is sustained through semi-annual “briefings,” where attendance ranges between 100 and 200 residents.

Although community data systems such as SUDS are best-known as repositories of quantitative data, they can also play a constructive role in making informal or tacit knowledge a more substantial part of policy analysis. By displaying and disseminating qualitative data using mapping tools, interview transcripts, and community-based web-logs, community data systems can use experiential perspectives to enrich quantitative findings.

C. From Neighborhood Knowledge to Urban Policy

Although the Memphis Model has been driven by an initial emphasis on housing markets, CBANA is extending lessons learned about the information cycle to citywide policy and other issue areas. For example, SEMI is contributing to citywide
discussion of housing issues ranging from anti-blight housing code enforcement to the strengths and weaknesses of affordable housing programs. Housing and Neighborhoods is the first fully developed domain for the emerging InfoWorks Memphis, a community and neighborhood indicators systems designed to track local standing and progress in 10 quality-of-life domains, including, for example, community safety and economic development. InfoWorks will include indicators for Hickory Hill, other Memphis neighborhoods, and the city as a whole. Figure 1 shows the linkages between information and action in the evolution of the Southeast Memphis Initiative.

IV. Opportunities and Challenges in Data Collection: Goodness-of-Fit

Two critical insights emerged from the Memphis Model about the information cycle. Although public records are a rich source of data, their primary function is something other than policy-oriented data analysis; likewise, new technologies for accessing and displaying public records are not being designed with policy analysis in mind. Conversion of data from local records into actionable knowledge requires an awareness of the “goodness-of-fit” between the data selected and how they are used for research purposes. The way public records are reported and disseminated can introduce misinformation and bias; at the very least it is both challenging and frustrating to attempt “real-time” monitoring of real estate transactions because public records require significant cross-checking, integration, and transformation. In other words, there is a basic goodness-of-fit problem in using existing public records to close the information gap.

As in cities and counties across the United States, public records for local housing markets in Memphis and Shelby County are reported and collected mainly to document specific transactions and investments. Although many local government agencies now use electronic files and online systems, this move has been driven largely by a desire for greater efficiency, not to illuminate the dynamics of housing markets. For example, web-based electronic access to warranty deeds (property transfers) and deeds of trust (mortgages) are designed primarily for title insurers (lawyers and title companies). These actors are typically interested in researching only one property at a time. Where list functions do exist, they tend to serve the needs of real estate agents and appraisers interested in, for example, sales and pricing trends by year. If electronic records systems included a list function for ”most recent mortgage,” post-purchase mortgages would become evident and are often high-interest refinance, cash-out, and debt consolidation loans, which are all signs of financial distress.

Goodness-of-fit issues also arise from new types of secondary data sources. Proprietary vendors of secondary-source data collect, summarize, consolidate, and prepare public records and transactional data for a particular audience. In doing so, important distinctions can be obscured by data omissions or collection errors as well as gross classification and query systems. Goodness-of-fit problems demonstrate the need for more deliberate approaches to collecting and analyzing community data where, for example, protocols for public records might be redesigned with policy-making in mind.
V. Moving from Data to Information: Combining Public Records, Proprietary Data Tools, and Insider Knowledge

No matter how robust, consistent, and comprehensive public records or other documentary sources of data might be, much information is often missing. This basic problem of goodness of fit is exacerbated by other, more specific impediments, including errors of omission, masking, selectivity, and the challenges of accessing insider knowledge, all of which have significant data analysis implications.

A. Errors of Omission

In Hickory Hill, the community wished to understand neighborhood trends in mortgage foreclosure and develop anti-foreclosure intervention strategies. Public “notice of foreclosure” announcements were a logical place to begin. Tennessee law requires that notices be published in an appropriate newspaper of record, with a full address, including ZIP code. Proprietary services (in Memphis and many other cities) make this information available online, including a search function that queries the database by ZIP codes. The typical customer for this service is an investor looking for a "short sale" on a threatened foreclosure (a pre-foreclosure sale agreed to by the lender that recoups an acceptable amount of the loan), or an investor who frequents foreclosure auctions. CBANA used this data to document foreclosure notices by ZIP code for Hickory Hill and then citywide.

A problem surfaced, however, when tracking substitute trustee deeds by ZIP code in the online database. Substitute trustee deeds document completed foreclosures, as opposed to short sales or other mitigation solutions, or where foreclosure is temporarily averted by filing for bankruptcy. When CBANA compared the volume of notifications of foreclosure for Hickory Hill with the volume of substitute trustee deeds, the data seemed to show that nearly two-thirds of threatened foreclosures were not carried through within a calendar year. However, after taking a holistic approach and analyzing these data in conjunction with additional information about the community, this was not the case.

CBANA eventually learned that ZIP codes were missing for about one-third of the substitute trustee deeds countywide. Addresses with missing ZIP codes were not calculated for ZIP code queries, so that neighborhood-level analysis of completed foreclosures based on ZIP codes was highly misleading in Hickory Hill and elsewhere. To correct for this error of omission, CBANA ordered comprehensive address-level data for Shelby County directly from the online service. It mapped individual addresses, tabulated revised summary data for ZIP codes, and recalculated the number of substitute trustee deeds and final foreclosures.

It also became clear that online queries were returning not only substitute trustee deeds, but substitute trustee appointments, a step in the process that caused some foreclosed single properties to be counted twice. This double counting further undermined the usefulness of online

Foreclosure lost in the system for 8 years.
queries in estimating finalized foreclosures, confirming that only the comprehensive address-level data would deliver complete and accurate information.

This type of problem with public data can undermine accurate detection and analysis of issues or encourage inappropriate interventions. For example, a community might be misled into thinking that late-term foreclosure mitigation is effective more than one-half the time and that successful mitigation strategies should be identified and replicated. Before ZIP code omissions became evident, for example, CBANA designed a foreclosure mitigation protocol for Hickory Hill triggered by published notifications of foreclosure. Once CBANA resolved the errors of omission and analyzed more detailed transactional data, the policy emphasis changed. The “Wealth Builders” intervention (see Section VII), designed to mitigate foreclosure, now triggers outreach and intervention for mortgages deemed at risk for foreclosure, not just impending foreclosures. The new strategy is based squarely on new ways of collecting and analyzing data.

**B. Data Transparency**

A second critical way in which data reporting and collection can compromise analysis is *data transparency* in real estate records. For example, substitute trustee deeds include information on the foreclosing lender. However, these records increasingly list attorneys or MERS as the forecloser. When attorneys are named, the foreclosing lender can be determined by delving more deeply into paper records. However, when MERS is named, it is impossible for a neighborhood group to determine the originator of the loan.

The growth of MERS in the housing finance industry is an interesting example of how new information systems can simultaneously provide better analytic tools for some players, while masking information for others. MERS is being embraced by the housing finance industry, including government backers and regulators, because of its promise to seamlessly track mortgage discounting, securitizing, and the overall disposition of mortgages and mortgage-related securities. The federal Department of Housing and Urban Development (HUD), for example, tracks its own Federal Housing Administration (FHA) mortgages. By monitoring originator data, the agency can determine how often originators foreclose. For this reason, federal agencies have bestowed a stamp of approval on MERS. For their purposes, data are more accessible through this tracking system. However, for local neighborhood action, the MERS system masks ownership and lending patterns because public records have been recast as private and proprietary information.

As new transaction systems similar to MERS are implemented, policymakers and others should consider their impact on the ability of local neighborhood groups to discern patterns of change. Depriving neighborhood groups and their research partners of information was not the objective of the MERS system. However, its unintended consequence is to make data on neighborhoods less available locally and less publicly accessible.

**C. Data Selectivity**

Despite the problems with data reporting and collection, local data are often superior to other data sources frequently used to support housing policy. For example, by comparing analyses using local, parcel-level data sets with nationally generated data sets
on the Memphis market, CBANA has determined that the data in many national housing market analyses are inappropriately generalized beyond their original use.

An example is the discrepancy between locally accessed foreclosure data (substitute trustee deeds) and a recent analysis by the Federal Reserve Bank of St. Louis using data from the proprietary Loan Performance Asset Backed Securities (LP ABS) database. The LP ABS analysis suggested that foreclosures in Memphis rise and fall parallel with the state of Tennessee and the nation, and have been on the downswing since 2002. CBANA analysis using local, parcel-level data shows that foreclosures in Memphis have increased, independent of swings in the national economy. Figures 2 and 3 illustrate the difference in trends attributable to the LP ABS and local public records.

The discrepancy likely stems from the selectivity of the LP ABS database, which is based on reports from lenders on “securitized” subprime loans. These loans account for about 60 percent of the subprime portfolio. The database does not include loans sold on the secondary market to government-sponsored enterprises Fannie Mae, Freddie Mac, or Ginnie Mae, or guaranteed by HUD. The LP ABS database is an excellent source of information on the performance of asset-backed subprime loans. It is not, however, the most appropriate source of meaningful information about the universe of foreclosures in local housing markets.

The LP ABS data frame foreclosures as a cyclical response to the ups and downs in the national economy and implies a macroeconomic resolution. The local data suggest a different, localized market dynamic and imply a need for different solutions. Neighborhood groups hoping to use information to determine the appropriate intervention and stabilization strategy should be especially attentive to how selective "Despite the problems with data reporting and collection...local, parcel-level data are often superior to other data sources frequently used to support housing policy."
reporting and collection can influence how problems are framed and policy interventions designed.

Interestingly, and more theoretically, the discrepancy between the two databases suggests different patterns of performance for loans involving the government and loans packaged for the private securities market; this information may itself be useful for understanding disinvestment in declining middle-income communities such as Hickory Hill.

D. Insider Knowledge

Data are transformed into meaningful information only when analysts have a context within which to interpret and understand data. The difference between a simple data set and the knowledge a decisionmaker or community advocate at the local level must have to develop a robust housing stabilization strategy often depends on tacit knowledge and perspectives accessible only through insiders. In Memphis, collaboration with residents, real estate agents, and lenders is an essential complement to quantitative data.

Key neighborhood informants can offer essential insider knowledge where there is little or no readily available data. For example, few process disclosure requirements exist for mortgage brokering or real estate appraisals in the state of Tennessee. Knowledge of the players and the patterns comes almost exclusively from real estate agents and lenders, who have day-to-day familiarity with brokers and appraisers, their business practices, and the dynamics of the marketplace.

Because CBANA is well integrated into Hickory Hill through SEMI and the Southeast Memphis CDC, it has ongoing access to insider information, much of which
is simply unavailable through public records. Information on mortgage brokers, real estate agents, and appraisers, for example, is absent from documents filed with the Register of Deeds. Real estate agents and others note that potential homebuyers are typically showing up to meet listing agents “with mortgage brokers in tow,” and that brokers are not uncommonly paired with appraisers. This important insider knowledge has led CBANA to consider new ways of interpreting data and asking new questions. The next section describes how such information is used to power the analysis component of the information cycle, providing local neighborhood groups the ability to reframe the context in which neighborhood disinvestment has come to be understood.

VI. From Information to Actionable Knowledge: Analysis and Issue Framing

Despite their limitations, public records drive most parcel-based systems and are critical to local housing market analysis. The format for reporting and collecting administrative data is often driven by regulatory requirements, perhaps no more clearly than in the Home Mortgage Disclosure Act (HMDA).

HMDA data have been effectively used to track lending patterns and to mitigate against racial discrimination in lending and redlining in predominantly minority neighborhoods. Historically, redlining meant geographically bounded disinvestment; lenders withdrew from neighborhoods where racial transition was expected to reduce property values and increase mortgage risk. However, patterns observed in Memphis suggest that this historical view of redlining no longer captures the dynamics of neighborhood housing markets in communities such as Hickory Hill.

This is not to say that HMDA data are no longer useful. However, the questions that have traditionally been asked of the data no longer generate the most meaningful answers. Interpretations of disinvestment that rely on racial disparity in HMDA-reported loan originations do not begin to grapple with the new set of questions introduced by changes in mortgage lending during the past five to ten years. Is less racial and geographic disparity in loan originations an unmitigated measure of success? Or might high rates of foreclosure in neighborhoods such as Hickory Hill be a result of an undesirable form of “predatory greenlining,” where minority buyers and neighborhoods are flush with high-cost lending? HMDA data cannot tell the story in isolation.

The mismatch between the historical redlining paradigm and the patterns of neighborhood change evident in neighborhood-level and parcel-level analysis demonstrate a profound way in which data can contribute to an ill-framed analytical agenda. Knowing which questions to ask of the data during analysis is just as important as which data are reported and collected.

A. From Redlining to Greenlining: The Emergence of a “Foreclosure-Tolerant” and “Foreclosure-Driven” Housing Market

The Community Reinvestment Act (CRA) and HMDA data analysis have traditionally posed questions about the volume of lending in minority and low-income neighborhoods and about racial disparities in approval rates. Success for the CRA is minimizing racial and geographic disparity in lending. Generally speaking, high approval rates and high-volume lending in neighborhoods that might have been redlined in the past are touted as evidence of CRA effectiveness. On the basis of traditional interpretations of
HMDA data, Hickory Hill is a success story: despite racial transition, the community is characterized by both high-volume and high-approval lending.

Yet, a different picture emerges when questions are reframed and HMDA data are combined with other data from public records and the property transactional database. Local retail banks originated only about 20 percent of home purchase loans in 2002, and the rates had declined to 10 percent by 2004. High-volume, out-of-town, subprime lenders accounted for approximately one-third of all home purchase loans in 2002, and by 2004 they accounted for nearly one-half. The remainder originated from a wide range of smaller, out-of-town, primarily subprime lenders. HMDA data also report significant subprime home equity and refinance activity, which is reflected in the chain-of-title searches by CBANA, which uncover a high proportion of cash-out refinance transactions.

After synthesizing the data on the volume of home purchases, total mortgage origins (including purchase loans and home equity or refinance loans), and foreclosures with insights from insiders, CBANA identified two emergent patterns in the Hickory Hill housing market. First, recent lending seemed more foreclosure-tolerant than foreclosure adverse, meaning that profitability is less dependant on due diligence and risk avoidance than on high-volume, fee-driven lending. Deregulation and innovation in mortgage markets mean that originators rarely maintain their own loan portfolios, and that brokers have even less at stake than originators. This shifts the relation between due diligence, risk, and profitability. In the words of one critic, once mortgages are packaged and sold on the secondary market, brokers and originators no longer have “skin in the game.” In the Hickory Hill market, evidence points to the emergence of a new subculture of brokers and lenders for whom long-term investment is irrelevant.

The second pattern characterizes the local housing marketing as foreclosure-driven, where up to one-half of neighborhood housing activity revolves around foreclosed property. Linking foreclosures and foreclosure sales data with visual surveys of property conditions in Hickory Hill shows that investors are often more disposed toward short-term profitability than longer-term maintenance and investment. Foreclosure tolerance feeds the foreclosure rate, which attracts a second subculture of investors attempting to cash in on neighborhood distress. Some investors buy low and “flip” properties as soon as possible. Others convert properties to the rental market for tax advantages and short-term profitability. In Memphis, HUD fair market rents from Section 8 housing vouchers guarantee a dependable cash stream and are relatively generous compared with market rents.

Figure 4 tracks home sales, mortgage volume, and foreclosure notifications in Hickory Hill from 2000 to 2004. HMDA data for Hickory Hill show that the high volume of loans relative to home sales is associated with high volume refinance and home equity lending. In addition, data collected for the property transaction database reveal a strong association between refinance loans, cash-out terms, and subprime specialty lenders. In other words, classical disinvestment (withdrawal of credit) has been replaced by high volume, specialized lending. The high ratio of foreclosure-
sure notifications to property sales suggests that classical disinvestment is not the only way to undermine a neighborhood housing market. Indeed, high-volume lending appears remarkably “foreclosure-tolerant.”

Data from Southeast Memphis reveals one foreclosure notification for every two property transfers in Hickory Hill and nearby ZIP codes in 2004. Taking into account foreclosure-driven short sales and actual foreclosure sales and mitigations that avoid foreclosure, it is safe to estimate that 40 to 50 percent of property transfers in Hickory Hill involve homeowners threatened with foreclosure and buyers taking advantage of distress sales. The property transaction database is designed to document these patterns more definitively.

Insights on how foreclosure-tolerant and foreclosure-driven markets may work come from several sources. CBANA’s research on substitute trustee deeds reveals that at least 40 percent of foreclosures in Hickory Hill involve properties acquired by Fannie Mae, Freddie Mac, or HUD. That is, originator risk has already been neutralized. Another 30 percent were spread very thinly among mainly subprime and out-of-town lenders. With risk of questionable loans spread widely, any given mortgage company may be well within its tolerance for loan default, especially if risk is further diluted through securitization. Only 10 percent of foreclosures could be attributed to local retail banks, with another 20 percent from lenders who could not be identified because the trail was masked in

Figure 4. Southeast Memphis Real Estate Transactions 2000–2004

Source: Shelby County Register of Deeds and Memphis Daily News

Foreclosure in planned unit development with 75 percent foreclosure rate.
the MERS recording system. A great deal more is to be learned about these patterns, especially which institutions are behind originations packaged for Fannie Mae, Freddie Mac, or guaranteed by HUD.

CBANA also finds a clear association between a foreclosure-tolerant and foreclosure-driven housing market and the physical deterioration in Hickory Hill. The property transaction database includes a subset of problem properties identified through a block-by-block visual survey. These properties are characterized by serial refinancing with escalating cash-outs and highly suspicious trading among investment partners, with escalating appraisals and walk-away defaults.

With what has been learned and what is yet to be learned, the Memphis Model is using information to better understand the “perfect storm” in Hickory Hill—a combination of targeting by predatory lenders, profiteering by a largely unregulated mortgage brokering industry, and short-term profit-taking by investors. Predatory greenlining and wealth-stripping are replacing the classical redlining paradigm, with its emphasis on neighborhood disinvestment, as a frame for better understanding market failure in urban neighborhoods.24

With this new paradigm, the next logical question is what can be done about predatory greenlining and wealth-stripping. Clearly, high foreclosure rates in Hickory Hill are more than a local manifestation of national macroeconomic conditions. Preliminary analysis for Hickory Hill identified five neighborhood-specific types of foreclosure, each with its own implications for intervention.

Future analysis will estimate the contribution of each type to the foreclosure-tolerant, foreclosure-driven market. This will help public policy organizations such as SEMI to customize and target interventions to specific types of homebuyers and homeowners, while also advocating for appropriate regulatory and legislative reform.

The core types for predatory greenlining include:

1. High-risk loans extended to marginal buyers, where loan terms are difficult to meet under the best of circumstances
2. “Upside-down” loans, where progressive home-equity and refinancing deals strip equity, resulting in debt greater than the value of the home and encourage default to “get out from under” remaining debt
3. Overextended or short-term investors, inspired by aggressive “get rich through real-estate” marketing
4. Investor fraud, where default may be part of a deliberate scheme involving fraudulent appraisals and buying or selling partnerships
5. A “critical event” foreclosure, in which an unexpected event such as unemployment, death, or divorce forces default. This type stands apart from the others.
VII. Taking Action: Provisional Knowledge and the Role of Collaborative Market-Actor Partnerships

Closing the information gap for housing markets in neighborhoods requires more than better data and reframing issues. Using knowledge to change markets requires that information be regularly revisited and refined in a feedback loop that links information with appropriate market actors. For this reason, the concept of an “information cycle” is useful. Creating actionable knowledge requires new audiences, who themselves introduce new insider knowledge—that is, new data—to the efforts. The broader the collaboration, the more one’s understanding of linking information with action is authenticated. Collaboration and the strategic interventions that follow are not the end of the process, but an ongoing step in the information cycle, where problem-solving strategies are always provisional and open to new data.

A. Turning Actionable Knowledge into Action: Systematic Understanding Tied to Implementation

To further refine an understanding of housing markets in transitional neighborhoods, and to create actionable knowledge for neighborhood advocates, CBANA created a working typology for mortgage foreclosures in Hickory Hill and other declining middle-income communities. Each type would present a different chain of events and suggest the need for different anti-foreclosure interventions. The focus in Hickory Hill is on two interrelated types: the growing presence of marginal buyers at high risk for default and their involvement in unfavorable refinancing transactions that increase the risk for default.

Working with a diverse group of partners, each of whom brings unique perspectives, interests, priorities, and resources, CBANA developed a conceptual intervention to both reduce foreclosures and create a data-rich understanding of the local housing market to drive market-specific interventions for declining neighborhoods. With much input from partners, CBANA envisioned three potential interventions:

- Educating and creating incentives for prospective buyers to make more informed choices
- Changing the way real estate agents, brokers, and lenders do business
- Introducing mitigation options for homeowners experiencing mortgage-related distress (delinquency, default, and foreclosure)

Ultimately, a comprehensive community initiative requires a full complement of approaches and many implementation partners. CBANA designed a short-term, experimental prevention and mitigation strategy to learn more about existing vulnerable homeowners and how they had been drawn into the market. CBANA and SEMI partnered with the Southeast Memphis CDC, the Memphis DEBTS Collaborative (an interagency working group supporting financial education initiatives countywide), the HUD Memphis field office, United Housing (certified housing counseling), and Memphis Area Legal Services (housing counseling and legal assistance if appropriate) to deliver a foreclosure prevention and mitigation initiative called Wealth Builders. Wealth Builders is a data collection protocol, a problem-solving intervention, and an outcome evaluation.
B. Continuous Improvement Through Feedback Loops

Significantly, Wealth Builders establishes a feedback loop in the information cycle. With seed funding from a local foundation, the program delivers prevention and mitigation interventions and tests the effectiveness of those interventions by randomly assigning individuals to a group that receives the intervention or to a “control” group that does not.

On the prevention side, the CDC and the Memphis DEBTS Collaborative work with real estate agents or use targeted mailing lists (from public records) to deliver time-of-purchase information on foreclosure prevention and contact information should a financial problem develop. The second component of the intervention occurs when public records reveal suspicious refinancing (e.g., new cash-out loans that are bigger than the original mortgage) or second lien mortgages within two years of the original purchase. Wealth Builders works through the buyer’s real estate agent or sends a mailing that urges the homeowner to call HUD-certified counselors at United Housing or Memphis Area Legal Services. The third component, the late-term foreclosure mitigation effort, occurs when lenders publish notices of foreclosure in the *Memphis Daily News* or the *Memphis Business Journal*, which starts the clock on the 30-day period to the courthouse auction. One-half of the homeowners in the second and third components also receive a follow-up phone call from either a cooperating real estate agent or the Southeast Memphis CDC, encouraging them to contact the collaborating housing counselors.

HUD reports that fewer than one-half of homeowners respond to delinquency-related correspondence from financial institutions, and that HUD-sponsored mitigation services have especially poor uptake in Memphis. By mailing delinquency mitigation literature from United Housing, and not from the lender, it is assumed that the mailing will be perceived as less threatening to the consumer and may elicit greater response. The follow-up phone call represents an even more intensive effort to overcome homeowner fear and inertia.

Random assignment to conditions at each of the three intervention points tests the extent to which both homeowner participation and reduced foreclosures vary with the timing (prevention, early stage indicators, or published notice of foreclosure) and intensity of the outreach (mail or real-estate agent contact; follow-up or no follow-up.) Prevention and mitigation interventions traditionally rely on a high degree of homeowner initiative, with disappointing results. Outreach is labor intensive and potentially expensive, and thus it is important to know when in the process outreach is most effective, and what makes it effective.

In this mitigation initiative, CBANA’s role is to collect data from public records on home sales, refinancing, second lien activity, notice of foreclosure, and final foreclosures, to both identify participants and assign them to the experimental or control condition for each stage of the intervention. CBANA also tracks the results of the intervention. CBANA enters all new purchases in Hickory Hill into a database with as much information as is available from public records. For new buyers assigned to the prevention condition, the CDC identifies buyers whose real estate agents are cooperating with the intervention, and documents agents’ contacts and delivery of immediate post-purchase information. If no cooperating real estate agent exists, United Housing mails information. Alternatively, CBANA randomly assigns the case to the control group and receives no information at all.
At stages two and three, CBANA identifies suspicious refinancing and second lien activity or published foreclosure notifications; enters new cases into the database (or new information on transactions entering the database in stage one); and assigns a condition (no action, mailing, or mailing/follow-up phone call from real estate agents or the CDC). The CDC asks those who take advantage of mitigation counseling to complete a survey for more background information. Results are entered into the tracking database.25

The purpose of this tracking function is to determine which component of the mitigation strategy is most effective and to set the stage for a longer-term strategy. For example, should cooperating real estate agents produce better outcomes than mailings, this positive finding offers unique leverage with the Memphis Area Association of Realtors in enlisting their cooperation (and possibly financial support). If labor-intensive, follow-up phone calls prove demonstrably better than mailings only, Wealth Builders could use this information to leverage collaboration with servicing lenders to reinforce existing efforts to avoid foreclosure.

The biggest challenge to developing mitigation strategies is the short window of opportunity between published foreclosure notifications and the foreclosure. Tennessee is a nonjudicial foreclosure state, and a public auction on the courthouse steps is scheduled for 30 days from the initial published notification date. In the absence of mitigation efforts in which the foreclosing lender is a party, only a bankruptcy filing can put the auction and foreclosure on hold. Clearly, interventions with homeowners who have 30-, 60-, and even 90-day delinquencies stand to be more successful than attempting to intervene in the 30-day window.

Accessing delinquency information, however, raises confidentiality issues that lenders are reticent to address. The provisional knowledge, however, that interventions at stage two (suspicious refinancing and second liens) yield better outcomes than foreclosure mitigation efforts at the published notification stage could be persuasive for some lenders. Suspicious refinancing and second lien activity is an imperfect indicator of mortgage distress, but provisional knowledge from this indicator may be the only way to move lenders to share actual data that could result in earlier intervention and the most positive outcomes. In other words, provisional data and information from the initial intervention can leverage new knowledge, which is made possible only by acting on a provisional understanding of the foreclosure-tolerant and foreclosure-driven housing market in Hickory Hill.

The Wealth Builders intervention is complemented by related anti-foreclosure and housing preservation efforts in which CBANA, the Southeast Memphis CDC, and other partners are working together to frame and disseminate findings and stimulate creative problem-solving.

C. The Role of Collaboration

The Memphis Model is more than a data collection protocol; it also depends on deliberate, systematic, and sustained links between community partners. Collaboration functions at two phases in the information cycle: upfront, in the data collection phase, and during the intervention phase. During the data collection stage, collaboration facilitates timely access to both agency-controlled data and valuable insider knowledge.26 On the intervention side, where information is turned into actionable knowledge, collaborative problem-solving frames issues and disseminates information
to multiple stakeholders, brings diverse perspectives to the design of interventions, and leverages resources to maximize interventions.

Collaboration, however, is not without its pitfalls. It is important to understand that when diverse stakeholders bring their own perspectives to the table, no single perspective, or established problem-solving strategy, will be a “magic bullet.” Collaboration works best when all stakeholders learn to think beyond their own experience and programs. At its best, collaboration yields more than the sum of its parts. In CBANA’s experience, collaboration benefits from the common language and shared frameworks that emerge when stakeholders deliberately and systematically confront the information gap from the outset.

This process builds a new, more synergistic understanding that often challenges established agendas and programs. In an environment in which collaboration is increasingly essential to confront weak markets, expand affordable housing opportunities, and sustain (or recreate) neighborhoods of choice, a process such as this introduces a new activism to the more traditional approach to university-based research. At the same time, the collaboration between the university, through SUDS, and CBANA introduces a new role beyond that of data intermediary.

The key to success in these collaborations is that an organization be “brought in” not simply to provide data, but to play an active role in convening partners, designing interventions, and mobilizing assets. Two of the projects outlined in Appendix B, including Wealth Builders and the Problem Properties Collaborative, involve CBANA as a convening partner.

VIII. Conclusion

The housing strategy to which CBANA and the Memphis Model are contributing in Hickory Hill can help to illuminate housing market issues for transitional neighborhoods citywide. The systematic application of data and information has helped to increase the power and precision of the local housing strategy. Applying this strategy to local housing markets underscores the usefulness of both public records and insider knowledge in the data collection and reporting component of the cycle. However, goodness-of-fit issues remain between public records and the questions that local housing market research must pose. Public records are typically designed to support legal transactions and investment decisions and do not alone answer the questions posed by policy analysts or neighborhood advocates. Goodness-of-fit arises as well when public records omit certain useful data, or when electronic databases that make records more accessible use selection criteria best suited for proprietary users. Given gaps in public records, insider knowledge is an indispensable part of the data collection and reporting component of the information cycle.

Perhaps most important for data reporting and collection is the issue of data transparency in public housing records. The Mortgage Electronic Registration Service increasingly affords transactional anonymity. Government agencies that back MERS thus far have shown little concern that it replaces the names of actual buyers, sellers, and lenders in public records. The Memphis experience, however, demonstrates how MERS can subvert community efforts to collect and analyze valid data to reverse neighborhood decline.

The Memphis Model also demonstrates the importance of framing an issue during data analysis. In this case, the model used local data sources to develop a new
The systematic application of the information cycle paradigm to inform local action has substantially increased the power and precision of CBANA’s approach.

explanation—predatory greenlining—for transition and decline in neighborhood housing markets. Contrary to conventional expectations for due diligence and “good loans,” predatory greenlining has a high tolerance for default and foreclosure. Greenlining appears to thrive not only on foreclosure-tolerant lending, where profitability is vested in upfront fees and risk passed along to the secondary market, but in foreclosure-driven sales. It appears, for example, that foreclosures in Hickory Hill are accounting for 40 to 50 percent of all property sales.

Just as important, the Memphis Model illustrates the importance of provisional knowledge and how collaboration among market actors—residents, consumers, private-sector actors, government agencies, nonprofit organizations, and researchers—lends the diversity of perspectives critical to transforming information into actionable knowledge. Provisional knowledge can be used to drive additional data collection and analysis, while collaboration enables broader access to information and takes advantage of specialized networks to disseminate information and implement action strategies.

Finally, CBANA’s role in the Southeast Memphis Initiative shifts university research from data collection and analysis at the front end of the information cycle to co-creator of actionable knowledge. When data collection and analysis remain the province of one group of actors (researchers) and experiential knowledge the province of another (practitioners and residents), the gap between information and actionable knowledge is less likely to be bridged. It is important to understand that the Memphis Model is as much about bridge-building and a new role for the university as it is about information technology and research.

Acknowledgements
The author would like to thank Pari Sabety and Alyssa Stewart Lee for their ongoing input and encouragement, as well as Brian Nagendra of the Urban Markets Initiative, for helping to bring this brief to fruition. In Memphis, our work would be impossible without the tireless energy of Beanie Self, Executive Director of the South East Memphis CDC and Clark & Clark for their substantial start-up funding for the CDC. CBANA staff Tk Buchanan and John D. Smith and chain-of-title research coordinator Janine Heiner provide continuing support for data collection and database maintenance. The Assisi Foundation and the Rise Foundation earn special thanks for support of the WealthBuilders anti-foreclosure intervention.

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"The systematic application of the information cycle paradigm to inform local action has substantially increased the power and precision of CBANA's approach."
Appendix A. The Memphis Model Data Collection Protocol

1. **Parcel-level data collection from public and agency records** maintained by the Shelby County Tax Assessor (parcel description and ownership); County Trustee (tax collections); Register of Deeds (property transfers, mortgages, and foreclosures); the Memphis Housing Authority and Division of Housing and Community Development (housing vouchers; down payment assistance, and housing code violations); the federal Department of Housing and Urban Development (project-based assisted housing); and the Tennessee Housing Development Agency (Low Income Housing Tax Credit projects).

   Data are accessed through agency websites or proprietary systems offering enhanced search functions, such as the Memphis Daily News or Courthouse Retrieval Systems. Address-level crime data can also be entered for special purposes. Parcel data are mapped to display parcel-level information, or aggregated to document patterns in neighborhood housing markets by ZIP code.1 Aggregated neighborhood-level data links with parcel-based data in the Neighborhood Housing Markets database, a relational database that is still being refined with the UMI’s commitment to scalability in mind.

2. **The analysis, coding, and integration of parcel level ownership and historical chain-of-title data from the Register of Deeds and other parcel/household-level data associated with ownership and property transactions (e.g. tax delinquency, liens, bankruptcies, evictions) for selected properties.** The Property Transaction Database (PTD) links with other parcel-level and aggregated data in the Neighborhood Housing Markets database to document detailed parcel-level information for specific housing markets. See Appendix B for more information on the PTD data elements.

   The PTD uses chain-of-title analysis to create variables such as “evidence of flipping,” “evidence of over-appraisal,” and “cash-out refinancing.” In the Memphis Model, an experienced title attorney coded these variables and is developing a protocol (on the basis of designated “markers” in the title search) that can be applied by non-experts. In the first round of data collection for the PTD, the focus was on problem properties identified in the Hickory Hill problem properties audit. Beginning in 2006, every single family property transaction (transfers, mortgage-related loans, and foreclosures) is being identified in real time for Hickory Hill and three other neighborhoods. The real-time transaction generates a record, which triggers a chain of title search to document historical patterns. Real-time transactions drive the WealthBuilders anti-foreclosure intervention in Hickory Hill; comparison among the diverse neighborhoods will be used to inform local policy.

3. **Parcel-level data collection using CBANA’s neighborhood survey and “problem properties audit.”** Documents property conditions for designated properties in selected neighborhoods. Parcel-level data on problem properties links with aggregated neighborhood-level data in the Neighborhood Housing Markets database. See Appendix C for detail on the problem properties audit form.

   More than 600 problem properties have been identified for Hickory Hill. The audit is designed to document in highly concrete terms the outcomes of market dynamics identified for Hickory Hill and other neighborhoods. Beyond Hickory Hill, resident volunteers and student assistants have been trained to perform the audit. The Neighborhood Housing Markets database includes complete audits for eight Memphis communities. Findings from the problem properties database are driving the activities of the Problem Properties Collaborative (PPC), in which CBANA participates as a founding partner. Appendix D describes the Problem Properties Collaborative and other CBANA projects that use information to drive change in Memphis.

4. **Finally, aggregate data from secondary sources are connected to locally generated parcel-level data through the Neighborhood Housing Markets database.** Data from federal sources, such as demographic data from Census, Home Mortgage Disclosure Act data on lending, Earned Income Tax Credit take-up data from the Internal Revenue Service, and other data available at the census trace or ZIP Code level provide additional context.1

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1 The Urban Markets Initiative of the Brookings Institution is also supporting a cross-site project coordinated by the Urban Institute’s National Neighborhood Indicators Partnership (NNIP). Six NNIP cities are involved in the initiative to maximize the information value of parcel level, GIS-mappable data. CBANA and Memphis are an NNIP partner and will be working with the Urban Institute and individual sites to refine the protocol and technology. Consistent with NNIP partnership, CBANA’s housing and neighborhood data are evolving into a more expansive community and neighborhood indicators system—InfoWorks Memphis—which will go online in late 2006.
## Appendix B. Property Transfer Database: From Survey to Chain of Title

| Basic Property Information | • Neighborhood Code  
|                            | • Property Type  
|                            | • Address  
|                            | • ZIP Code  
|                            | • Census Tract/Block Group  
|                            | • Parcel ID  
|                            | • Condition of Property  
|                            | • Year Built  
|                            | • Year Information Entered/Updated  |
| Current Ownership          | • Owner  
|                            | • Owner Address  
|                            | • Years in Title  
|                            | • Owner Type  
|                            | • Total Shelby County Properties Owned  
|                            | • Total Neighborhood Properties Owned  
|                            | • Total Properties in Problem Properties Database  |
| Ownership History          | • All Previous Owners  
|                            | • Their Addresses  
|                            | • Years in Each Title  
|                            | • Owner Type for Each  
|                            | • Total Shelby County Properties Owned by Each  |
| Purchase and Financing     | • Deed Numbers and Types  
| (Collected for Each       | • Purchase Price on Transfer Deeds  
| Deed Recorded)            | • Assessor's Most Proximate Appraisal  
|                            | • Percent Difference (price v. appraisal)  
|                            | • Purchase Mortgage Lien(s) Amount  
|                            | • Purchase Mortgage Originator  
|                            | • Estimated Down Payment  
|                            | • Lender(s) with Current Liens  |
| Tax Status                 | • Tax Assessment  
|                            | • Last Year Taxes Paid  
|                            | • Amount Due  
|                            | • Evidence of Reduced Tax Assessment  
|                            | • Owner at Time of Reassessment  
|                            | • Year and Percentage Change  |
| Market Vulnerability       | • History as Investment Property?  
|                            | • Name/Year Most Recent Investor (if not current)  
|                            | • Total Shelby County Properties this Owner  
|                            | • Total Neighborhood Properties this Owner  
|                            | • Total Problem Properties Identified this Owner  
|                            | • Evidence of Property Flipping/most recent year  
|                            | • Evidence of Over-Appraisal/most recent year  
|                            | • Prior Foreclosure in Title/most recent year  
|                            | • Predatory Loan Markers/most recent year  
|                            | • Assumed Mortgage/most recent year  
|                            | • Multiple Refinancing/most recent year  
|                            | • Cash-out Refinance/most recent year  
|                            | • Title Secured Bail Bond/most recent year  
|                            | • Divorce settlement/most recent year  
|                            | • Probate/most recent year  
|                            | • Bankruptcy/most recent year  
|                            | • Evictions/most recent year  |
### PROBLEM PROPERTY AUDIT

**Neighborhood** ___________________________ **Date** __________

**Surveyor Name** ___________________________ **Phone** __________

**Target Address** ___________________________________________

(if no visible address, list addresses to right & left of property if possible)

**Block Condition Summary**
- [ ] One problem property on an otherwise healthy block
- [ ] Small cluster of problem properties in an otherwise stable neighborhood
- [ ] Large cluster of problem properties in an otherwise stable neighborhood
- [ ] Multiple problem properties throughout an unstable neighborhood
- [ ] Other (explain)

Please use the back of this form for details of the problem or any other pertinent text.

#### Property Type
- [ ] Vacant Lot
- [ ] Park, Playground (write name below)
- [ ] Single Family House
- [ ] Duplex, Triplex or Quad
- [ ] Apartment (write name below)
- [ ] Commercial/Retail
- [ ] Special Use* (write name below)

*Includes schools, churches, community centers, group homes, daycares, libraries, etc.

#### Condition of Primary Structure

**Occupancy:**
- [ ] Occupied
- [ ] Vacant

**If Known:**
- [ ] Owner-Occupied
- [ ] Renter-Occupied
- [ ] Structure OK (environmental problem)
- [ ] Needs minor to moderate repair
- [ ] Needs major repair or possible demolition
- [ ] Posted “Do Not Occupy” by C.E.
- [ ] Open to Casual Entry
- [ ] Partially Boarded up
- [ ] Boarded up and secure

#### Crime & Safety

- [ ] Squatters
- [ ] Public consumption of drugs or alcohol
- [ ] Prostitution
- [ ] Group loitering
- [ ] Tenants who physically or verbally threaten or harass neighbors or pedestrians
- [ ] Chop shop or other suspicious/inappropriate commercial activity

- [ ] Graffiti sprayed on exterior walls
- [ ] Drug dealing
- [ ] Panhandling
- [ ] Animals restrained in front yard to threaten pedestrians
- [ ] Bars on Doors and Windows
- [ ] Steady stream of “drive-thru” or pedestrian traffic

#### Structural Problems

<table>
<thead>
<tr>
<th>ROOF</th>
<th>ENVIRONMENTAL PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Sagging, sinking, out of square</td>
<td>☐ Absence of grass, ground cover or alternative landscaping</td>
</tr>
<tr>
<td>☐ Shingles missing or cracked</td>
<td>☐ Erosion</td>
</tr>
<tr>
<td>☐ Eaves Rotting</td>
<td>☐ Drainage problem</td>
</tr>
<tr>
<td>☐ Could not observe</td>
<td>☐ Weeds, overgrowth</td>
</tr>
</tbody>
</table>

#### Foundations

<table>
<thead>
<tr>
<th>FOUNDATION</th>
<th>GROUND LITTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Major cracks</td>
<td>☐ Minor accumulation of litter</td>
</tr>
<tr>
<td>☐ Minor cracks or crumbling</td>
<td>☐ Major accumulation of litter</td>
</tr>
<tr>
<td>☐ Could not observe</td>
<td>☐ Dumpsite for junk/garbage</td>
</tr>
</tbody>
</table>

#### Exterior Walls

<table>
<thead>
<tr>
<th>EXTERIOR WALLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Sloping outside walls</td>
</tr>
<tr>
<td>☐ Missing siding, bricks or other material</td>
</tr>
<tr>
<td>☐ Porches, awnings separating from building, tailing, or rotting</td>
</tr>
<tr>
<td>☐ Paint, trim peeling</td>
</tr>
<tr>
<td>☐ Could not observe</td>
</tr>
</tbody>
</table>

#### Comments

__________________________
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### Appendix D. CBANA-UMI-Related Partnerships and Interventions

<table>
<thead>
<tr>
<th>Project</th>
<th>Activities</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WealthBuilders Foreclosure Intervention Project</strong></td>
<td>• CBANA designed and coordinates project&lt;br&gt;• Tracks property transfers, mortgage lending, and foreclosures in Hickory Hill in real time&lt;br&gt;• Targets high risk sales for point of purchase foreclosure prevention education&lt;br&gt;• High-risk refinancing triggers outreach and pre-foreclosure intervention with targeted homeowners&lt;br&gt;• Notice of foreclosure triggers late-term outreach and foreclosure mitigation for targeted homeowners&lt;br&gt;• Voluntary background interview/survey documents pathways to foreclosure&lt;br&gt;• Experimental design tracks efficacy of different kinds of outreach and outcomes for prevention, pre-foreclosure intervention, and mitigation compared to controls at each stage</td>
<td>• Southeast Memphis CDC&lt;br&gt;• Coordinates outreach/referral and homeowner background survey/interview&lt;br&gt;• Memphis DEBTS Collaborative (an inter-agency working group providing information, technical assistance, and educational materials to promote financial literacy)&lt;br&gt;• wrote grant for local foundation funding&lt;br&gt;• provides educational materials&lt;br&gt;• links with cooperating real estate agents for point-of-purchase prevention and outreach for intervention and mitigation&lt;br&gt;• United Housing&lt;br&gt;• Intervention and mitigation&lt;br&gt;• Memphis Area Legal Services&lt;br&gt;• Intervention and mitigation&lt;br&gt;• litigation in selected cases</td>
</tr>
<tr>
<td><strong>Anti-Predatory Lending Coalition</strong></td>
<td>• CBANA’s research on mortgage lending and foreclosures helps drive activities&lt;br&gt;• Public and consumer education events and materials&lt;br&gt;• Legislative reform and policy advocacy&lt;br&gt;• Drafted and passed Tennessee Home Loan Protection Act of 2006, an anti-predatory lending bill modeled on Center for Responsible Lending/ North Carolina law&lt;br&gt;• Inventory of resources to support implementation of Protection Act&lt;br&gt;• Monitoring newly implemented state-wide registration system for mortgage brokers and alternative financial services providers&lt;br&gt;• Best practices research on alternative financial services providers to support next major legislative initiative</td>
<td>• Memphis Area Legal Services&lt;br&gt;• Liaison with North Carolina Center for Responsible Lending&lt;br&gt;• Coordinated case studies and testimonial evidence&lt;br&gt;• Drafted legislation and negotiated with lawmakers and lobbyists&lt;br&gt;• Memphis chapter and Tennessee NAACP&lt;br&gt;• Political networking and outreach with General Assembly&lt;br&gt;• Memphis Area Association of Realtors&lt;br&gt;• Political networking and lobbying&lt;br&gt;• United Housing&lt;br&gt;• Logistical support for coalition meetings and activities&lt;br&gt;• Memphis DEBTS Collaborative&lt;br&gt;• Educational materials, logistical support, networking support with political stakeholders&lt;br&gt;• Federal Reserve Bank&lt;br&gt;• Educational support&lt;br&gt;• Many other coalition partners, including local bankers, developers, and realtors</td>
</tr>
<tr>
<td><strong>Problem Properties Collaborative</strong></td>
<td>• CBANA research on code enforcement and the impact of problem properties on neighborhoods supports organizational credibility and helps drive strategic agenda&lt;br&gt;• Problem Properties Audit documents neighborhood conditions&lt;br&gt;• Problem properties component of Neighborhood Housing Markets database identifies patterns for referral to Memphis Police Department’s Blue CRUSH (Crime Reduction Using Statistical History) nuisance abatement initiative&lt;br&gt;• Audit, best practice, and advocacy training for CDCs and neighborhood associations&lt;br&gt;• Organizational support for collaborative members taking complaints to appropriate agencies&lt;br&gt;• Design, implementation, and evaluation of pilot anti-blight projects at the neighborhood level&lt;br&gt;• Best practices research and advocacy with the city’s Joint Task Force on Code Enforcement&lt;br&gt;• Best practices research, draft assistance, and strategic support for receivership legislation&lt;br&gt;• Introduced in 2006; withdrawn for re-introduction in 2007</td>
<td>• Founding partners include Memphis Community Development Partnership (technical assistance intermediary), Community Development Council of Greater Memphis (trade association for CDCs), and CBANA&lt;br&gt;• Linkage with National Vacant Properties Campaign for technical assistance&lt;br&gt;• Linkage with Center for Community Criminology and Research to overlay problem properties with crime data&lt;br&gt;• Partnership with Memphis Police Department Blue CRUSH for targeting hotspot properties and neighborhood concentrations&lt;br&gt;• Participants in monthly meetings include over forty CDCs and neighborhood associations to date</td>
</tr>
</tbody>
</table>
Endnotes

1. The Memphis Neighborhood Housing Markets Modeling project is a pilot site for the Urban Markets Initiative of the Brookings Institution.


4. The Mortgage Electronic Registration Service (MERS) is a proprietary database system for tracking property ownership and other property transactions. Developed with support from the federal government to streamline and integrate transaction data from various sources, MERS includes data on lenders, insurers, property owners, securitizers, and others involved in transactions. MERS contracts with users to record transactional documents, while becoming the agent of record when documents are filed with local agencies such as the register of deeds. The identity of market actors is retained inside the database and can be tracked by subscribers such as Fannie Mae or HUD, but local records no longer retain information on individual and institutional actors' transactions.

5. Parcel-level data are available for residential lots and other land and properties with a legal description and “parcel identification” number assigned by a tax assessor or other legal entity. Parcels typically have discrete street addresses and can be mapped using address points or using “shape files” that capture the physical dimensions of the legally defined parcel.


7. The poverty rate for Memphis has ranged between 20% and 23% since 1990.

8. HOPE VI, the U.S. Housing and Urban Development’s approach to replacing public housing developments with mixed-income redevelopment financed primarily or largely through public funding, has been implemented in four different sites in Memphis. All four public housing developments were near downtown, where neighborhood redevelopment complements commercial redevelopment. Relocation and Section 8 housing voucher data document the migration and reclustering of former public housing residents and assisted households in Hickory Hill and other communities where zoning encouraged concentrations of large multi-family apartment complexes.

9. Much of the research on declining neighborhoods features pre-WWII development in northern industrial cities and older, inner-ring suburbs. We do not believe that the decline of newer, postwar, suburban-style neighborhoods is restricted to the South. Hickory Hill very much resembles neighborhoods in “edge cities” and second-ring suburbs across the country, where analysis from the Living Cities series documents demographic and economic transitions similar to those characterizing Hickory Hill.

10. The number of vouchers doubled again between 2003 and 2005, largely in response to relocation strategies associated with HOPE VI redevelopment near downtown Memphis. HOPE VI sites are located on Map 1.

11. From a visual survey conducted on behalf of Clark & Clark, a major commercial-office enterprise with interests in Hickory Hill. Some commercial analysts have begun to question whether Memphis is overbuilt in retail and office space. Hickory Hill is on the edge of the city in the part of the county that is growing most rapidly. Some retailers simply moved one or two miles farther east to take advantage of a shifting population center, leaving behind vacancies that may be associated as much with suburban sprawl as with demographic changes in Hickory Hill.

12. Memphis, not unlike most Southern cities, has a strong and vocal anti-tax movement, despite having among the lowest property taxes in the country and no state income tax.

13. Choropleth maps are two-dimensional maps (e.g., displaying location and number of sales) that represent data values by filling map areas with combinations of patterns and color. Each pattern or color represents a value or range of values.

14. For more information on SUDS, see www.memphis.edu/SUDS.

15. See, for example, Anne C. Kubisch and others, Voices from the Field II: Reflections on Comprehensive Community Change (Washington: Aspen Institute, 2002).

16. Foreclosures may be headed off by pre-foreclosure sales involving marginally legitimate tactics on the part of “save” specialists. Steve Tripoli and Elizabeth Renuart, “Dreams Foreclosed: The Rampant Theft of Americans’ Homes Through Equity-Stripping Foreclosure Scams” (Boston: National Consumer Law Center, 2005). CBANA is attempting to use the Property Transaction Database to document this pattern.

17. Tennessee is a nonjudicial foreclosure state.

18. Transparency problems also occur when substitute trustee deeds name Fannie Mae, Freddie Mac, or HUD as the forecloser rather than the foreclosing lender. Tracking backward to the foreclosing lender (or at least the servicer) is possible by delving deeper into the chain of title, but the proprietary systems have apparently not found a ready market for this type of data.

19. Federal agencies do not, however, routinely disseminate locally relevant data extractions to local community groups or policymakers who might be in the best position to contextualize the issues.

20. With MERS and other systems (such as the Loan Performance Asset Backed Securities database discussed in the next section) as an indicator of where technology is headed, information technology driven by the private sector will likely have an increasingly profound effect on public data. At the same time, it is by no means clear that public and nonprofit stakeholders—including those in the community development and urban markets movements—are even aware of these data sources, let alone how to use them or whether to support or question their proliferation. The National Infrastructure for Community Statistics program by Urban Markets Initiative is bringing together users and potential users to help make better use of both public and proprietary data.
21. Securitized loans are commercial real estate loans that are pooled with other similar loans and sold as securities.

22. Our analysis will be enhanced by new HMDA (2004) data on subprime loans, in which the unit of analysis is the loan, rather than a summary characterization of lenders based on the preponderance (51 percent) of their loans.

23. From public comments by the local representative of a well-known national purchaser of subprime loans.


25. CBANA is seeking additional support to offer an incentive for completing the background survey, which includes more information than would ordinarily be sought in the course of a mitigation plan. For example, the survey includes questions about the involvement of mortgage brokers in the original financing or the process by which homeowners became involved with companies offering second mortgages or debt consolidation refinancing loans.

26. Although much of the data CBANA uses is available in public and administrative records, some data access—such as access to addresses for housing choice vouchers, down-payment assistance, and crime data—relies on negotiated understanding and ongoing relationships. Negotiation might include respect for tenant and homeowner privacy, which would require point, as opposed to parcel, mapping and which would preclude disseminating a list of addresses. CBANA’s access and use of crime data, which allow for extensive mapping, follow from project-based partnerships that have evolved over the past eight years.

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### ABOUT THE PROJECT TEAM

**The Center for Community Building and Neighborhood Action and the Shared Urban Data System**

The Memphis Neighborhood Housing Markets Modeling project was designed and implemented by the Center for Community Building and Neighborhood Action (CBANA) in the School of Urban Affairs and Public Policy at the University of Memphis, with support from the Urban Markets Initiative of the Brookings Institution. CBANA, established in 2003, is both a research and outreach center, offering research, evaluation, and technical assistance on housing, neighborhoods, and related community development issues to government agencies, nonprofit, and community-based organizations. CBANA developed the “Memphis Model” to demonstrate how the deliberate application of information cycle thinking can transform university-based research into the kind of actionable knowledge that drives change in urban communities. CBANA works closely with the school’s Shared Urban Data System (SUDS) which began in 2002 and went online in 2004. SUDS is an information intermediary, providing a platform for a growing number of data sets of importance to the community, ranging from criminal justice statistics to early childhood data. SUDS displays and integrates data from diverse sources for both research and public dissemination, and has established partnerships to facilitate access to publicly accessible data. For example, in conjunction with the school’s Center for Community Criminology and Research, SUDS hosts detailed data from the Memphis Police Department. By virtue of its partnership with SUDS, CBANA can access crime data and map and analyze the relationships between the geographic distribution of crime and neighborhood housing market indicators. SUDS also uses parcel-level shape files obtained from the Shelby County tax assessor, complemented by other geographic information systems data, such as infrastructure shape files provided by Memphis Light Gas and Water and aerial photograph footprints contributed by the Memphis Shelby County Office of Planning and Development.
Living Cities: The National Community Development Initiative is the founding funder for the Urban Markets Initiative. Living Cities is a partnership of leading foundations, financial institutions, nonprofit organizations, and the federal government committed to improving the vitality of cities and urban communities.

The Urban Markets Initiative (UMI) at the Brookings Institution Metropolitan Policy Program aims to improve the quality of the information available on urban communities and use it to unleash the full power of those markets while connecting them to the economic mainstream.

The Urban Markets Initiative invests in pilot projects and scalable models like the Memphis Model to demonstrate how interventions in the information cycle can facilitate urban markets. Learn more about these projects and the Urban Markets Initiative at www.brookings.edu/metro/umi/pilotprojects.htm