Neighborhood Reputation and Resident Sentiment in the Wake of the Las Vegas Foreclosure Crisis

Dr. Jeremy Pais* Dr. Christie D. Batson** Dr. Shannon M. Monnat**

*Department of Sociology University of Connecticut 344 Mansfield Rd. Unit 2068 Storrs, CT 06269-2068 Phone: 860-486-0391 E-mail: j.pais@uconn.edu

**Department of Sociology University of Nevada Las Vegas 4505 S. Maryland Parkway, Box 455033 Las Vegas, NV 89154-5033 Phone: (702) 895-0258 Fax: (702) 895-4800

April 2013

Word count (including notes & references): 9,194 Number of Tables: 3

Running Head: Neighborhood Reputation during a Crisis

Key Words: Disasters, Collective Efficacy, Neighborhood Change, Community Resiliency

Manuscript draft, please do not cite without author's permission. Direct all correspondence to Jeremy Pais via j.pais@uconn.edu.

Neighborhood Reputation and Resident Sentiment in the Wake of the Las Vegas Foreclosure Crisis

Abstract

This study examines how two major components of a neighborhood's reputation—perceived disorder and collective efficacy—shape individuals' sentiments toward their neighborhoods during a housing foreclosure crisis triggered by the Great Recession. Of central interest are whether neighborhood reputations are durable in the face of a crisis (*neighborhood resiliency hypothesis*) or whether neighborhood reputations are significantly altered during times of duress (*foreclosure crisis hypothesis*). To address this question, we use multilevel regression models with geo-coded individual-level data from the Las Vegas Metropolitan Area Social Survey (LVMASS) merged with data on census tract foreclosure rates. The results provide qualified support for both perspectives. First, neighborhood collective efficacy is strongly associated with how residents feel toward the quality of their neighborhood, and this relationship is unaltered by foreclosure rates. Second, perceived problems with neighborhood disorder is a weak determinant of resident sentiment once we account for the level of housing foreclosure in the neighborhood. The implications of this research for community resiliency in the wake of disaster are discussed.

Introduction

Neighborhood reputations are based on common perceptions of neighborhood disorder and common perceptions about a neighborhood's ability to cope with disorder (Sampson 2012). Once established, neighborhood reputations shape individual sentiments about neighborhood quality, guide residential mobility decisions (e.g., Lee, Oropesa, and Kanan 1994; Speare 1974), reinforce stigmas in urban communities and perpetuate urban spatial inequalities, influence growth machine politics (Baldassare and Protash. 1982; Temkin and Rohe 1996), and potentially affect the resiliency of a community in the wake of catastrophe (e.g., Hartigan 2009). Numerous studies examine the determinants that influence individual sentiments regarding neighborhood quality and residential satisfaction (e.g., Amerigo and Aragones 1997; Dassopoulos, Batson, Futrell, and Brents 2012; Galster and Hesser 1981; Grogan-Kaylor et al. 2006; Hipp 2009; Lovejoy, Handy, and Mokhtarian, 2010; Parkes, Kearns, and Atkinson 2002), but research on the dynamic processes that reinforce or alter the effects of a neighborhood's reputation on individual sentiments is absent from the literature.

This article contributes to an emerging area of urban community and disaster research by advancing a thesis that helps explain how neighborhood reputations function during crisis periods, when residents are forced to reassess the correspondence between objective circumstances and what is generally assumed to be the reputation of their neighborhood. The premise is that during times of community crisis—caused for example by natural disasters or sharp economic downturns—neighborhood reputations are more likely to be relied upon to guide the thoughts and actions of residents, and in the process, these reputations are apt to be altered in more favorable or less favorable ways as residents actively evaluate whether the purported reputation is living up to expectations. To examine this empirically, our study uses survey-based

data during the most recent housing foreclosure crisis to analyze how objective neighborhood circumstances, together with an area's purported reputation, influence an individuals' assessments of neighborhood quality.

More specifically, we focus on Las Vegas, Nevada, a strategic location to examine the relationships between housing foreclosure rates, neighborhood reputations, and individual assessments of neighborhood property values and assessments of overall neighborhood quality. As a result of the Great Recession, which officially began in December 2007 (Muro et al.2009), cities across the US are dealing with record high housing foreclosures, unemployment rates, and newfound urban distress. Following nearly 20 years of the nation's most rapid population growth and urban sprawl (CensusScope 2000), Las Vegas is among the most heavily impacted metropolitan areas in the country, experiencing a whirlwind of social and economic uncertainty stemming from the recession. Unemployment rates and home foreclosures are among the highest in the nation, social services are overburdened, and population growth has stagnated (Bureau of Labor Statistics 2011; Center for Business and Economic Research 2011). In the wake of a deep economic recession, as resident face difficult decisions and city planners and policy makers faced reduced budgets for community services, understanding the dynamic role of perceived neighborhood reputations in shaping residential satisfaction will open new ways of thinking about what manifests community resiliency.

Neighborhood Reputations: Disorder and Collective Efficacy

Neighborhoods are often the environment wherein residents develop identities, forge relationships with peers, and create meaning and coherence in their lives. A neighborhood's reputation—shared beliefs among residents about the positive or negative qualities of a residential area—can influence people's views about themselves and the broader community.

Neighborhoods with positive reputations are vital to the sustainability of healthy cities. When residents feel a sense of pride and satisfaction with their neighborhoods, they report a greater sense of attachment to the local community, higher overall life satisfaction, better mental and physical health, greater political participation, and are more likely to invest time and money in maintaining that positive image of the community (Adams, 1992; Hays & Kogl 2007, Sampson, Morenoff & Gannon-Rowley, 2002; Sirgy & Cornwell, 2002). Consequently, when residents are dissatisfied with their neighborhoods, they report a lower quality of life, are less invested in the community, and are more likely to engage in out-migration, which hinders long-term stability and reduces the capacity of a neighborhood to be resilient when challenges arise (Bolan, 1997; Oh, 2003; Sampson, 2003).

Residents' shared perceptions about various neighborhood qualities—e.g., convenient location, access to good schools, safe and friendly residents—provide the social basis of a reputation. There are, however, two general neighborhood characteristics that form the foundation of any neighborhood reputation. The first is whether residents jointly feel physical disorder is problematic (e.g., abandoned property, broken windows, crime, etc.), and the second are shared expectations of residents in the collective ability of the neighborhood to address problematic issues (Sampson 2012). Through the lens of social disorganization theory, researchers have long studied the effects of neighborhood structural characteristics and physical signs of disorder on crime rates (Hipp 2007; Kurbin and Wetizer 2003; Markowitz et al. 2001; Sampson and Groves 1989; Warner 2003), but an important distinction is warranted between objective observations of physical disorder (i.e., whether or not there is graffiti on the buildings and trash and litter on the streets) and *people's stated sentiments about whether those conditions are problematic*. The latter, people's shared evaluation of the problem, constitutes an important

aspect of a neighborhood's reputation.

According to Robert Sampson's seminal work on the stability and change of Chicago neighborhoods, "perceptions of disorder" are what "molds reputations, reinforces stigma, and influences the future trajectory of an area" (2012:123). The stability of perceived neighborhood disorder, independent from actual objective measures of disorder, greatly affects the character of a neighborhood over time. Sampson (2012:144-145) reports a nearly perfect correlation (r = .89) between prior perceptions of disorder (seven years earlier) and current perceptions of disorder—a clear signifier of the reputational durability of Chicago neighborhoods—and in predicting future neighborhood conditions (e.g., poverty levels, crime rates, and outmigration), perceived neighborhood disorder is at least as strong a predictor as prior (i.e., lagged) neighborhood conditions and other objective structural measures. In the case of crime, prior perceptions of disorder have greater influence on neighborhood satisfaction than the actual existence of such crime and disorder have disorder.

The second aspect of a neighborhood's reputation is *collective efficacy*. Collective efficacy is "the linkage of cohesion and mutual trust among residents with shared expectations for intervening in support of neighborhood social control" (Sampson 2012: 127). Neighborhood cohesion among residents is believed to be a local resource for organizing around problems when they occur (Morenoff, Sampson, and Raudenbush 2001; Kubrin and Weitzer 2003; Larsen et al. 2004). Prior work has shown, like perceived neighborhood disorder, that perceived social trust and neighboring is meaningful to residents in their assessments of neighborhood quality (Grogan-Kaylor et al. 2006; Parkes et al. 2002). Neighboring fosters mutual support and trust

among neighborhood residents (Sampson et al. 1989) and forming social ties helps foster attachments to an area (Austin and Baba 1990; Hipp and Perrin 2006; Kasarda and Janowitz 1974; Parkes et al. 2002; Sampson 1988, 1991). Neighborliness reflects attachment through various activities that range from helping a neighbor in need to organizing to address a collective neighborhood problem (Woldoff 2002). As residents participate in neighborhood activities, they develop a shared sense of community, and develop positive communal feelings (Ahlbrandt, 1984; Guest & Lee, 1983; Hunter and Suttles, 1972; Kasarda and Janowitz, 1974; Riger and Lavrakas, 1981).

Interestingly, these valued neighborhood characteristics associated with the idea of strong communal bonds and collective efficacy are not lost on the developers of contemporary master-planned communities (MPC). Developers of MPCs seek to enhance the marketability of their properties by providing amenities and design features that inscribe buyers with a sense of community. Knox (2008:99) keenly recognizes this ploy as a product "branding" process where developers artificially attempt to instill upon a neighborhood a positive "community" orientated reputation in order to sell buyers, not only on the quality of the homes, but on the quality of the entire community. According to Knox, it is very much an open question as to whether this type of development can produce authentic communities. Given that, over the past decade, Las Vegas has been one of the epicenters for these new community developments, it raises a valid question about the reliability and durability of a neighborhood's reputation when crises strike, especially if objective neighborhood characteristics begin challenging people's preconceived ideas. Thus, although the stability of a neighborhood's reputation typically exerts an inertia-type effect during settled periods, neighborhoods do change character, and understanding what facilitates these changes is an emerging area of research that this study seeks to advance.

Boom and Bust: Las Vegas and the Foreclosure Crisis

The Las Vegas metropolitan area led the nation in population growth during the 1990s at 66.3%, almost doubling the rate of population growth of second ranked Arizona (CensusScope, 2000). Population growth in the Las Vegas metropolitan region continued apace in the 2000s with roughly half a million people arriving between 2000 and 2007. Demographers estimate that the Las Vegas population will double again by 2040 (Lang, Sarynski, & Muro, 2008). In this context of population growth, transiency was also high. In 2000, Nevada ranked highest among all states in residential mobility, where 25% of the population had moved from another state to Nevada within the past five years. Between 2000 and 2004, Nevada had the highest domestic annual rate of net migration in the country (Perry 2006). As a result of such rapid population growth and concomitant economic boom, the Las Vegas housing market flourished between 1990 and 2006. With approximately 6,000 newcomers per month arriving in Las Vegas at the height of the boom, home prices reached all-time highs in 2006, and many residents moved into newly developed master-planned communities (see Knox 2008). The average median price of a single-family home was \$349,500 in January of 2007. Just four years later, following the economic bust and housing crisis, the median price of single-family homes in January 2011 was \$132,000 – an astonishing 62% decline (Greater Las Vegas Realtors Association, 2007, 2011). This is the largest decline of any metropolitan area in the United States (Community Resources Management Division 2010).

With the largest concentration of subprime mortgage originations in the country (Mayer and Pence 2008), the Las Vegas housing market was a ticking time bomb for a housing bust. Subprime mortgage products were designed to provide home ownership opportunities to the most credit-vulnerable buyers, including those with no established credit history, little documentation of income, and/or those with smaller down payments. In addition to subprime lending, mortgage companies also made it easier for current homeowners to refinance loans and withdraw cash from houses that had appreciated in value (Mayer and Pence 2008). As a result, since 2007, approximately 70,000 housing units have been foreclosed upon with nearly 6,000 new foreclosures occurring every quarter (Community Resources Management Division 2010). Up until 2006, Nevada had a very low loan delinquency rate, particularly among subprime borrowers. This was partly because borrowers in the robust Nevada housing market could often avoid foreclosure by quickly selling their homes to eager buyers (Immergluck 2010). However, between 2007 and 2010 the foreclosure rate in Nevada increased by about 3 percentage points a year (Community Resources Management Division 2010). Such rapid and chaotic economic stress raises important questions about the quality of life for Las Vegas residents in this recessionary climate. A region that was already fraught with problems, such as high residential transiency, tenuous social cohesion, sharp racial and ethnic inequalities, environmental problems, and poor social services, now faces an economic crisis that clearly exacerbates these problems.

Neighborhood Reputations during a Crisis

High foreclosure rates and the accumulation of real estate owned properties (REOs) have detrimental effects on neighborhoods (Apgar and Duda 2005; Immergluck and Smith 2006; Schuetz, Been, and Ellen 2008). In many neighborhoods, foreclosed homes are boarded up and vacant with unkempt yards and real-estate signage to indicate the neighborhood's diminished status. As a result, these properties create opportunities for criminal activity, discourage remaining residents from investing in their properties, potentially damage neighborhood social capital, and ultimately lower a neighborhood's perceived quality (Leonard and Murdoch 2009). These spillover effects result in neighborhood property devaluation as foreclosed homes typically sell at much lower prices and appreciate much more slowly than traditionally sold homes (Forgey, Rutherford, and VanBuskirk 1994; Pennington-Cross 2006). Based on data collected on foreclosures and single-family property transactions during the late-1990s in Chicago, Immergluck and Smith (2005) estimated that each foreclosure within a city block of a single-family home resulted in a 0.9%-1.4% decline in that property's housing value. Ordinarily foreclosures may pose a serious threat to neighborhood stability and community well-being, and during the Great Recession unprecedented levels of housing foreclosures have become an objective symbol of genuine neighborhood crisis.

Despite the potential effects of housing foreclosures on assessments of neighborhood quality and the remaking of a residential area's reputation, there is little known about how a metropolitan-wide foreclosure crisis affects individuals' perceptions of their neighborhoods. As with high levels of perceived neighborhood disorder and low levels of perceived collective efficacy, we can reasonably assume high levels of foreclosures will be negatively associated with individuals' assessments of neighborhood quality. Yet, new realities and new ways of life emerge during unsettled periods, and these changes can challenge old views and old perceptions (e.g., Swindler 1986; Elder 1974). To more fully understand the potential for change during these unsettled times, we focus this study on how objective neighborhood circumstances, like foreclosure rates, may alter the relationship between a neighborhood's reputation and individual perceptions. Neighborhood reputations are remarkably stable during non-crisis periods, and are highly predictive of future neighborhood change, even more highly predictive than objective measures of neighborhood conditions (as reported above). But, during a crisis period when objective neighborhood circumstances cannot be easily ignored, the salience of a neighborhood reputation might weaken and come to matter less in shaping people's perceptions. From this perspective, we expect foreclosure rates to attenuate the relationship between established neighborhood reputations and individual assessments of neighborhood quality and neighborhood property values (*foreclosure crisis hypothesis*).

Objective circumstances may carry greater significance during a crisis because residents are forced to evaluate the correspondence between the objective situation and what they thought they knew about their homes, investments, and neighbors. However, disaster research reminds us time and again that individuals, families, neighborhoods, and communities are quite resilient when crises strike. For example, it is typical for areas affected by natural disasters to rebound within a few years to achieve a full functional recovery in terms of returning to, or in some cases exceeding, pre-disaster levels of population, housing, and economic vitality (Cochrane 1975; Dacy and Kunreuther 1969; Douty 1977; Friesema et al. 1979; Geipel 1991; Haas et al. 1977; Pais and Elliott 2008; Wright et al. 1979). A surprisingly unexplored factor that is potentially a major facilitator of resiliency is a community's reputation, especially collective efficacy as people are much more likely to need to rely on others during a crisis. Positive neighborhood reputations might ward against high foreclosure rates in the first place, or as a crisis unfolds residents may filter the situation through their commonly shared beliefs about their community. Relying on preconceived beliefs for guidance during a crisis may produce the kinds of behaviors and outcomes consistent with the neighborhood's reputation. From this perspective, families and communities are more or less resilient because individuals respond to crises in ways that create a correspondence between reputation and reality. In support of this perspective, we expect neighborhood reputations-i.e., perceived disorder and perceived collective efficacy-to attenuate the relationships between the neighborhood foreclosure rates and individuals' assessments of neighborhood quality (neighborhood resiliency hypothesis).

Data and Methods

Study Area: The data for this study come from the Las Vegas Metropolitan Areas Social Survey (LVMASS). LVMASS provides individual-level data gathered from respondents living in 22 neighborhoods in the Las Vegas metropolitan area of Clark County, Nevada in 2009. Clark County has a population of roughly 1.95 million people and is home to 72% of the population of Nevada (U.S. Census Bureau 2010). Our sample includes neighborhoods in each of the four distinct municipal jurisdictions composing the Las Vegas metropolitan area: eight in the City of Las Vegas, four in North Las Vegas, four in Henderson, and six in unincorporated Clark County. Our data on housing foreclosures came from the Housing and Urban Development (HUD) Neighborhood Stabilization Program (NSP) authorized under Title III of the Housing and Economic Recovery Act of 2008. The data provide the approximate number of *foreclosure starts* for all of 2007 and the first six months of 2008. We use these data to calculate the proximate foreclosure rates at the census tract level, matching the NSP data to the LVMASS survey data by census tract identifiers to create a multilevel data set of individual respondents clustered within Las Vegas neighborhoods.

Sampling Frame: For the LVMASS, we used a stratified cluster sampling design to ensure that our sample included neighborhoods with socioeconomic diversity. Using a stratified (by income quartiles) cluster sample, our study resulted in 22 distinct neighborhoods. Our primary goal was to capture neighborhood-level data from "naturally-occurring" neighborhoods that were geographically identified in the same way that most residents identify with their neighborhood. We diverge from studies that rely strictly on census-based boundary definitions and instead collected information from independent neighborhoods that lie within census tracts. In the fall of 2008, through extensive field work, we identified neighborhoods by key physical

characteristics within selected census tracts, including contiguous residences, interconnected sidewalks, common street signage, common spaces, common mailboxes, street accessibility, visual homogeneity of housing communities, and barriers separating housing areas such as gates, waterways, major thoroughfares and intersections.

For inclusion as a study neighborhood, we specified that there must be least 50 visibly occupied homes to avoid non-response and invalid addresses. Our final sampling frame of household addresses was compiled from the Clark County, Nevada Assessor's Office which maintains electronic records of all residential addresses. We then randomly selected a range of 40 to 125 addresses from the sampling frame in each neighborhood. The final study population included 1,680 households in 22 neighborhoods and resulted in 664 individual respondents and a 40% response rate¹. The household member with the most recent birthday and over the age of 18 was asked to complete the survey. After excluding cases with values missing on our key dependent variables, our final analytic sample for this study was 643 Las Vegas households. Among those that responded to the survey, there were no statistical differences along any of our observed independent variables between those with missingness on our dependent variables and those without missingness.

Survey Instrument: For this study, each household received a letter offering an incentive of a family day pass to a local nature, science, and botanical gardens attraction to participate in the study and a website address for a web-based survey or telephone number to complete the survey by phone. After exhausting the telephone and web-based responses, we used mailed surveys and door-to-door field surveys. The survey was made available in English and Spanish and administered by trained survey administrators.

¹ This is consistent with the response rate of the Phoenix Area Social Survey (Larsen et al. 2004).

Sample Characteristics

Table 2 shows descriptive statistics of the total sample. Residents in our sample have a mean age of 54 years old and an average length of residence in their neighborhood of 11.7 years. Our sample is 73% non-Hispanic white and 27% non-white. Most of our respondents were employed (93%) and homeowners (80%). Nearly 33% of our sample held at least a college degree, followed by 41% with some college education, and 26% with a high school degree or less. Our analytic sample characteristics differ slightly from 2010 population statistics of the Las Vegas metropolitan area (U.S. Census Bureau 2010). In addition to our sample being older and slightly more educated than the average resident, we also have more homeowners in our data. Because our random sampling methodology did not discriminate by housing type (single-family housing vs. multi-family housing), our sample returned very few places of multi-family housing. As a result, we have undersampled those most likely to be in renting situations and living in apartment complexes, including younger residents, those with lower incomes, and those with shorter residential tenure. These sampling disparities may bias results toward more established middle-class homeowners in the Las Vegas metropolitan area if controlling for demographic and socioeconomic characteristics do not fully capture attitudinal differences concerning neighborhoods between middle-class and working-class households.

Dependent Variables: The majority of our survey instruments were replicated from the Phoenix Area Social Survey (PASS), including our key dependent variables. The first dependent variable in the LVMASS comes from a survey question that captures the perceived quality of life in the neighborhood. Residents were asked to rate the *overall quality of life in their neighborhood* as "Very Good," "Fairly Good," Not Very Good," and "Not at all Good." Neighborhood Quality was coded 1(Not at all Good) to 4 (Very Good). The second dependent

variable comes from a four-point Likert scale that asks respondents to rate their satisfaction with the economic value of homes in the neighborhood. Specifically, respondents indicated whether they were "Very Satisfied," Somewhat Satisfied," "Somewhat Dissatisfied," or "Very Dissatisfied" with the economic value of the homes in their current neighborhood. We arrange the responses from the most negative response of 1 (Very Dissatisfied) to the most positive response of 4 (Very Satisfied). For the regression analyses we maintain the ordinal level of measurement of these variables.

Key Neighborhood-Level Independent Variables: First, from the 2008 NSP data, we assess census tract foreclosure rates from the number of new foreclosure starts that occurred between 6-18 months preceding the LVMASS. These are the first data since the Great Recession to allow scholars the opportunity to examine the relationships between neighborhood-level foreclosure rates and residential neighborhood sentiments. To test the reliability of HUD's estimated foreclosure rate at the local level, HUD asked the Federal Reserve to compare HUD's estimate to data the Federal Reserve had from Equifax showing the percent of households with credit scores that were delinquent on their mortgage payments 90-days or longer. Analysis by the Federal Reserve staff found that when comparing the HUD predicted county foreclosure rates to the Equifax county level rates of delinquencies, HUD's data and the Equifax data had high intrastate correlations. For the state of Nevada, the correlations were 0.88 (Department of Housing and Urban Development 2008). After merging the NSP data with LVMASS data, the average neighborhood foreclosure rate is 21.6%, which corresponds closely to the average foreclosure rate of 22% from the 345 census tracts reported for Las Vegas metropolitan from the NSP data.

Second, we construct a measure of neighborhood disorder from an index of five items asked in the LVMASS. We asked respondents whether vacant land, unsupervised teenagers, litter or trash, vacant houses, and graffiti in their neighborhoods are a big problem (coded 3), a little problem (coded 2), or not a problem (coded 1). The index ranged from 5 (Lowest Disorder) to 15 (Highest Disorder), is normally distributed, and has a Cronbach's alpha score of 0.74, indicating sufficient internal consistency among items. To create a neighborhood level measure we then calculated each neighborhood specific mean from this scaled index.

Third, our measure of collective efficacy or "neighborliness" was composed of five items that assessed respondents' evaluations of neighborly interactions. The items were: "I live in a close-knit neighborhood," "I can trust my neighbors," "My neighbors don't get along" (reverse coded to match the direction of the other items), "My neighbors' interests and concerns are important to me," and "If there were a serious problem in my neighborhood, the residents would get together to solve it." Responses ranged from strongly disagree to strongly agree. The index ranges from 5 (Least Neighborly) to 25 (Most Neighborly), is normally distributed, and has a Cronbach's alpha of .79. We calculated neighborhood specific means to create a neighborhood-level measure of collective efficacy for each of our 22 neighborhoods.

[Table 1 about here]

Control Variables: Previous studies indicate that homeownership and length of residence are important predictors of neighborhood attachment (Kasarda and Janowitz 1974; Sampson 1988; Adams 1992; Rice and Steel 2001; Lewicka 2005; Brown et al. 2004; Schieman 2009). Therefore, we included a dichotomous variable for homeownership (vs. renting) and a continuous variable for length of current residence in years. We also controlled for variables that approximate life-cycle stage and indicate socioeconomic status. *Age* is a continuous variable. *Race* is coded White (1) and Non-White (0). *Education* is categorized into "High School Degree or Less," (ref.) "Some College Education," and "College Degree or More." *Marital Status* was a binary variable indicating Married (1) vs. Non-Married (0). Finally, employment status was a dichotomous variable indicating whether the respondent was employed (0) vs. unemployed (0) at the time of survey completion. We find that roughly 7% of the sample was unemployed, which is consistent with the unemployment rate of 7.4% for Las Vegas reported in the 2007-2011 American Community Survey 5-year estimates (U.S. Census Bureau 2011). Additional descriptive statistics are provided in Table 2.

Analytic Approach: Multilevel methods are employed for this study to address the issueof non-independence caused by the clustering of residents within neighborhoods. Multilevel models address the issue of non-independence by appropriately adjusting the standard errors of the independent variables. More specifically, for this study we estimated several multilevel models for ordinal response variables. These multilevel ordinal logistic models assess the relationship between neighborhood foreclosure rates, neighborhood disorder, and neighborhood collective efficacy on individual sentiments regarding neighborhood quality and neighborhood property values. The specification of these multilevel ordinal logistic models maintains the proportional odds assumption required by ordinal logistic regression (Raudenbush and Bryk 2002:320). Importantly, by taking a multilevel approach, this study is also able to determine the proportion of variation in residents' sentiments that exists across neighborhoods, and we are then able to determine how much of that neighborhood-level variation is explained by our key independent variables.

The analysis proceeds in five steps. First, for both dependent variables a null model with no predictor variables is estimated to determine the amount of neighborhood-level variation in

16

residents' sentiments toward their neighborhoods. Second, we include individual-level control variables to minimize any conflating of the variance components that may be attributed to the compositional characteristics of the neighborhoods (e.g., socio-demographic characteristics). Third, we introduce into the model our measures of neighborhood reputation-perceived neighborhood disorder and collective efficacy-to (a) assess the total effect of neighborhood reputation on residents' neighborhood sentiments, and (b) determine how much neighborhood variation in the response variables are accounted for by the inclusion of neighborhood reputation (using the model with just individual-level control variables as the comparison model). Fourth, we remove the measures of neighborhood reputation and add neighborhood foreclosure rates into the model to assess the same questions for foreclosure rates as we did for neighborhood reputation. Finally, we estimate the complete model that includes all the individual-level control variables and our measures for neighborhood reputation and neighborhood foreclosure rates. The objective of this final model is to assess the direct impact of our key independent variables on neighborhood quality of life and residents' satisfaction with economic values of their homes. According to the foreclosure crisis hypothesis, where objective neighborhood circumstances come to outweigh neighborhood reputations in affecting peoples' sentiments about their neighborhoods, we expect foreclosure rates to attenuate the relationship between neighborhood reputation and residents' sentiments about quality of life and the economic value of their homes. Conversely, according to the neighborhood resiliency hypothesis, where a neighborhood's reputation provides guidance to resident's during periods of crisis, we expect neighborhood reputations to attenuate the relationship between foreclosure rates and residents' neighborhood sentiments.

Results

According to the descriptive statistics in Table 2, a majority of residents (84%) reported a fairly good or very good level of neighborhood quality despite the ongoing foreclosure crisis. Sentiments regarding neighborhood property values are also generally positive in that a slight majority (56%) report being either very satisfied or somewhat satisfied with current home values. Unfortunately, a baseline measure is unavailable to determine whether these reported satisfaction levels are below pre-recession levels. According the intraclass correlation coefficient (ICC) calculated from the null intercept only model (not shown), approximately 30% of the variation in the sentiments regarding neighborhood quality exits across neighborhoods, and approximately 8% of the variation in sentiments regarding home values exits across neighborhoods than across neighborhoods, which is likely to be the case when studying neighborhood effects within a single metropolitan area. Yet, there is sufficient between neighborhood variation for the primary objective of examining the relative role of neighborhood reputation versus neighborhood foreclosure rates in shaping individual-level sentiments.

[Table 2 about here]

Neighborhood reputations are reflected in shared individual perceptions regarding problematic issues in the area and whether there is a common held belief among residents in the collective ability of the neighborhood to address issues if problems arise. On average, neighborhood reputations in Las Vegas during the foreclosure crises are at a 50/50 level on both measures, as the overall means fall approximately halfway on the aggregated scale (e.g., ave. neighborhood disorder = 7.68; ave. collective efficacy = 13.04). This means that half of Las Vegas neighborhoods enjoy a generally positive reputation, whereas the other half generally has

poorer than average reputations. There is also noteworthy geographic variation in projected neighborhood foreclosure rates as the range of rates goes from a low of 15% to a high of nearly 30%. The bivariate correlation between the two components of neighborhood reputation—disorder and collective efficacy—and foreclosure rates are high (.809 and -.737, respectively), These correlations indicate a strong positive association of high levels of perceived neighborhood disorder and high foreclosure rates, and the strong negative association of low levels of perceived collective efficacy and high foreclosure rates. Note that collinearity is not a concern in the regression models as the variance inflation factor for the foreclosure rate (VIF = 3.45) is below even the modest cut point for concern (e.g., 4).

Table 3 provides the results from an analysis that disentangles the relative influence of neighborhood foreclosure rates and neighborhood reputation on individuals' sentiments regarding their neighborhood quality and neighborhood property values. The results from six multilevel ordinal regression models (three for each outcome) are presented in Table 3. The null models that contain only individual-level controls (not shown) provide the baseline variance components that are used for comparative purposes with the results that appear in Table 3. First, note that there are several individual-level effects that are generally robust throughout the analysis. More highly educated individuals are more critical of the quality of their neighborhood, whereas age is positively associated with an individual's satisfaction with the current property values. Homeownership is positively associated with neighborhood quality, although after conditioning on neighborhood reputation, homeownership fails to attain statistical significance. On the other hand, homeownership is negative associated with the satisfaction level of the neighborhood's property values, suggesting a greater level of insecurity homeowners feel about what is usually their most valuable financial asset. The neighborhood-level variances from the

models with only the individual-level controls are 1.004 for neighborhood quality and .200 for neighborhood property values. The respective intraclass correlation coefficients are .30 and .06, which are very similar to the ICCs from the intercept only models, meaning the compositional effects stemming from our set of individual characteristics is minimal.

[Table 3 about here]

Model 1a and Model 1b in Table 3 report the effects of neighborhood reputation on individual sentiments regarding the general quality of their neighborhoods and their satisfaction toward property values in the neighborhood before accounting for the foreclosure rate. The effects from perceived problems with neighborhood disorder and collective efficacy on assessments of neighborhood quality are strong and statistically significant beyond a 99.9% confidence level. For example, a one unit difference in perceived neighborhood disorder (i.e., nearly a standard deviation) is associated with a 32% [1- $(\exp^{(.391)} = .676)*100$] decline in the average resident's odds of reporting a "not very good" response toward neighborhood quality compared to a "fairly good" assessment. A one unit difference in collective efficacy is associated with a 38% [1- $(\exp^{(.321)} = 1.38)*100$] increase in the odds of reporting a positive response toward neighborhood quality compared to a negative assessment. The effect of collective efficacy is also strong when considering assessments of neighborhood property values in Model 1b. There a one unit difference in collective efficacy is associated with a 33% [1- $(exp^{(.285)} =$ 1.33)*100] increase in the odds of reporting being "somewhat satisfied" verses "somewhat dissatisfied' with neighborhood property values. The effect of perceived neighborhood disorder fails to attain statistical significance in Model 1b, suggesting a lesser role of perceived disorder on property assessments than collective efficacy. Considering these measures together, we can say that neighborhood reputation does a very good job of explaining neighborhood-level variation. The proportional reduction in neighborhood-level variance is 97% [(1.004-.030)/1.004)] for assessments of neighborhood quality, and 99.5% [(.200-.001)/.200] for neighborhood property values. Even when starting from modest intraclass correlation coefficients to begin with, the reduction in level-two variance attributed to neighborhood reputation is impressive.

Model 2a and Model 2b in Table 3 assess the relationship between foreclosure rates and assessments of neighborhood quality and neighborhood property values prior to adjusting for neighborhood reputation. As expected, the effects of foreclosure are negative and statistically significant. A one percentage point increase in a neighborhood's foreclosure rate is associated with a 22% decline in the average resident's assessment of the quality of their neighborhood and an 11% decline in the average resident's satisfaction with neighborhood property values. Foreclosure rates also explain neighborhood variation in resident's sentiments, but the explanatory power of foreclosure rates is not as impressive as it is for neighborhood reputation. Foreclosure rates account for 74% of the neighborhood variation in assessments of quality, but only 7% of the neighborhood variation in the assessments of property values.

The theoretical motivation for this study concerns the role of neighborhood reputation in shaping individual sentiments during a crisis period. One perspective advanced here suggests that the effects of neighborhood reputation may be largely filtered through objective neighborhood circumstances when a crisis strikes causing the effects of neighborhood reputation to be less salient than during ordinary times (e.g., see Sampson 2012). In support of this perspective, we should expect objective measures of neighborhood foreclosure during an economic crisis to significantly attenuate the effects of neighborhood reputation. According to the results in Model 3a and 3b in Table 3, we find rather limited support for this perspective.

When foreclosure rates are added to the model with the covariates for neighborhood reputation, the effect of neighborhood disorder attenuates by over a third (b = -.391 vs. b = -.250) when studying sentiments of neighborhood quality, and when considering assessments of property values, the attenuation effect of foreclosure on perceptions of neighborhood disorder are upwards of 88% of the initial effect [e.g., (-.056 + .007) / -.056]. However, several patterns in the results tamper these findings. First, although foreclosure rates do attenuate the effects of neighborhood disorder, the initial effect of disorder on property assessments is not statistically significant and the direct effect of foreclosure in Model 3b also fails to attain statistical significance. Second, the attenuation of collective efficacy after adjusting for foreclosure in both Model 3a and 3b is minimal.

Drawing on community recovery research following natural disasters, this study also posited an alternative hypothesis regarding the role of neighborhood reputations during a crisis. According to the disaster resiliency perspective, the relationship between foreclosure rates and the sentiments of residents may be largely attenuated once adjusting for neighborhood reputation because neighborhood reputations may act as a guide for residents during the crisis, in turn affecting peoples' responses to the crisis in ways that reflect with those reputations. This should be especially true of collective efficacy, as neighbors may be more likely to witness the kinds of behaviors that conform to their preconceived beliefs. According to Model 3a and 3b, we find fairly strong support for this perspective, as the foreclosure rate is notably attenuated in both models (-.245 vs. -.077 and -.116 vs. -.028); and rather impressively, the effect of collective efficacy remains robust and statistically significant at a high level (.321 vs. .301 and .285 vs. .278). Thus, collective beliefs about a neighborhood's ability to prevent and address problematic

issues appear to be a resounding aspect of a neighborhood's reputation that continues to shape individual sentiments during a crisis period.

Conclusion and Discussion

The way individuals respond as a collective during times of crisis can affect social change in both positive and negative ways. Yet, all too often the dynamic processes concerning how collective behaviors and shared beliefs—e.g., status reputations about groups, neighborhoods, communities, or even entire regions—operate during a catastrophe to affect change are left unexplored despite the potential consequences for recovery. This study improves our understanding of these dynamic processes by examining the role of neighborhood reputation in shaping the kinds of individual sentiments that are tied to community resiliency following a crisis—sentiments, for instance, that influence residential mobility choices, urban development plans, and resource distribution decisions that impact a neighborhood's standing long into the future.

We begin with a simple assumption that neighborhood reputations matter in the community, and that they matter especially during uncertain times when reputations are likely to be more heavily relied upon to guide residents. We then suggests that, in the process of coming to rely on preconceived beliefs to guide expectations about the future, residents are confronted with objective realities that force them to reevaluate and potentially remake in a new light these previously held beliefs. Central to this premise is whether a particular crisis creates a large enough disjuncture between the prior beliefs and new realities to significantly alter a neighborhood's reputation, or whether residents largely respond to the crisis in ways that minimize or maximize the potential harm by thinking and behaving in a manner consistent with the area's established reputation. These are not mutually exclusive possibilities, but these two

perspectives do lead to alternative hypotheses concerning the effects of neighborhood reputation on individual assessments of their residential areas. The former (*foreclosure crisis*) perspective suggests that commonly held beliefs about a neighborhood are affected by the realities of the crisis, and as a result, the reputational effects will wane once objective realities are felt. The latter (*neighborhood resiliency*) perspective, places more emphasis on the durability of a neighborhood's reputation by anticipating a robust correspondence between collective beliefs and individual sentiments, even after accounting for objective circumstances. To assess these possibilities, we conduct an empirical study of the housing foreclosure crisis in Las Vegas that was triggered by the Great Recession.

The findings from our study provide qualified support for both perspectives. First, we find that neighborhood collective efficacy—i.e., a major component of a neighborhood's reputation that is derived from beliefs about social trust among fellow neighbors—is a robust determinant of the sentiments residents feel toward the general quality of the neighborhood and their comfort with current property values in the neighborhood. Quite remarkably, a high degree of perceived collective efficacy during the foreclosure crisis continues to matter despite the fact that Las Vegas is one of the epicenters of the crisis and despite the fact that there is sufficient reason to be speculative about the authenticity of some of these newer "master-planned communities" in the area (e.g., Knox 2008). Thus, in support of the *neighborhood resiliency hypothesis*, collective efficacy seems to operate independently from the crisis to influence the thoughts and likely behaviors of residents. Perceived neighborhood disorder, on the other hand, is a far less robust determinant of the sentiments residents have toward their residential areas, especially concerning property values. Once we control for the neighborhood foreclosure rate, the effect of neighborhood disorder is greatly attenuated in both models. Thus, in support of the

foreclosure crisis hypothesis, we find that the objective realities presented by the foreclosure crisis do affect the importance resident's place on perceived levels of disorder when assessing, and perhaps reassessing, the quality of their neighborhoods. Together these findings highlight the importance of considering multiple dimensions of a neighborhood's reputation in a crisis situation when residents observe conditions that force them to reweight the value of different neighborhood characteristics.

The results of this study should be considered in light of several limitations. First, the LVMASS data are cross-sectional. As such, they represent a snapshot of residents' perceptions of neighborhood quality of life, satisfaction with the economic value of their homes, and attitudes toward neighborliness and collective efficacy during the midst of the Las Vegas foreclosure crisis. While the results of this research have demonstrated a robust link between housing foreclosures and residents' sentiments about their neighborhoods as well as evidence that neighborhood collective efficacy attenuates the relationship between housing foreclosure and residents' sentiments, these data do not allow us to argue that the foreclosure crisis that occurred during the Great Recession had a causal effect on Las Vegans' attitudes toward their neighborhoods. Second, although a strength of this study is our conceptualization of neighborhoods in a way that captures the immediate experiences of residential life by using natural neighborhood boundary measures instead of census tract definitions, this conceptualization also results in an inexact match between the LVMASS neighborhood data and the foreclosure data that are measured at the census tract level. Nevertheless, we believe that the neighborhood boundaries used in the LVMASS are close enough approximations to census tract boundaries such that the foreclosure rates used in this study are reliable indicators of LVMASS neighborhood foreclosures.

Although these data do not allow us to examine aggregate neighborhood amenities, we suspect that some neighborhoods may be more protected from economic distress and report less negative neighborhood experiences than others. Future research should explore whether master planned communities (MPC) and/or gated communities have been buffered from the negative effects of housing foreclosures. If these communities are commodified in ways that shield them from property value decline (Le Goix and Vesselinov 2012) through Conditions, Covenants, and Restrictions (CCRs) for example, then they might also be shielded from neighborhood quality decline during an economic downturn. On the other hand, to the extent that MPCs produce a housing price premium, the effects of major boom-and-bust cycles may be especially pronounced in these neighborhoods. Future research should explore these possibilities.

References

- Ahlbrandt, Roger S. (1984). Neighborhoods, *People, and Community*. New York: Plenum Press.
- Adams, Richard E. 1992. "Is happiness a home in the suburbs?: the influence of urban versus suburban neighborhoods on psychological health." *Journal of Community Psychology* 20:353–372.
- Amerigo, Maria and Juan Ignacio Aragones. 1997. "A theoretical and methodological approach to the study of residential satisfaction." *Journal of Environmental Psychology* 17:47-57.
- Apgar, William C. and Mark Duda. 2005. Collateral Damage: The Municipal Impact of Today's Mortgage Foreclosure Boom. Minneapolis, MN: Homeownership Preservation Foundation. Accessed June 15, 2012 at (<u>http://www.995hope.org/wp-</u> <u>content/uploads/2011/07/Apgar_Duda_Study_Short_Version.pdf</u>.)
- Austin, D. Mark.and Yoko Baba. 1990. "Social Determinants of Neighborhood Attachment." Sociological Spectrum 10, 59-78.
- Baba, Toko and D. Mark Austin. 1989. "Neighborhood Environmental Satisfaction, Victimization, and Social Participation as Determinants of Perceived Neighborhood Safety." *Environment & Behavior* 21(6):763-80.
- Baldassare, Mark, and William Protash. 1982. "Growth Controls, Population Growth, and Community Satisfaction." *American Sociological Review* 47(3):339–346.
- Bolan, Marc. 1997. "The Mobility Experience and Neighborhood Attachment." *Demography* 34(2):225-237.
- Borer, Michael I. 2006. "The Location of Culture: The Urban Culturalist Perspective." *City & Community* 5:2 173-197.
- Brown, Barbara B., Douglas D. Perkins and Graham Brown. 2004. "Incivilities, Place attachment and Crime: Block and Individual Effects." *Journal of Environmental Psychology* 24:359-371.
- Bureau of Labor Statistics. 2012. United States Department of Labor, State Unemployment. UDL-12-0553, March 30, 2012.
- Campbell, Karen E. and Barrett A. Lee. 1992. "Sources of Personal Neighbor Networks: Social, Integration, Need, or Time?" *Social Forces* 70: 1077-1100.
- CensusScope. (2000). United States population growth ranking. Retrieved October 15, 2010, from http://www.censusscope.org/us/rank_popl_growth.html

- Community Resources Management Division. 2010. "Clark County And North Las Vegas Substantial Amendment To The Fy 2010 Action Plan For Housing And Community Development Neighborhood Stabilization Program 3." Grant application. Clark County, Nevada. <u>http://www.clarkcountynv.gov/Depts/admin_services/comresmgmt/Documents/NSP/NSP</u> <u>3ApplicationFinal.pdf</u>
- Connerly, Charles E., and Robert W. Marans. 1985. "Comparing two Global Measures of Perceived Neighborhood Quality." *Social Indicators Research* 17(1):29-47.
- Dassapoulos, Andrea, Christie D. Batson, Robert Futrell, and Barbara G. Brents. 2012. "Neighborhood Connections, Physical Disorder and Neighborhood Satisfaction in Las Vegas." *Urban Affairs Review* 48: 571-600.
- Dassopoulos, Andrea, and Shannon M. Monnat. 2011. "Do Perceptions of Social Cohesion, Social Support, and Social Control Mediate the Effects of Local Community Participation on Neighborhood Satisfaction?" *Environment and Behavior* 43(4):546-565.
- Department of Housing and Urban Development. 2008. Neighborhood Stabilization Program: Methodology and Data Dictionary for HUD provided Data. http://www.huduser.org/portal/datasets/nsp_foreclosure_data.html
- Elder, Glen H., Jr. 1974. *Children of the Great Depression: Social change in life experience*. Chicago, IL: University of Chicago Press.
- Fisher, K. John and Fuzhong Li. 2004. "A Community-Based Walking Trail to Improve Neighborhood Quality of Life in Older Adults: A Multilevel Analysis." *Annals of Behavioral Medicine* 28(3):186-94.
- Forgey, Fred, Ronald C. Rutherford, and Michael L. VanBuskirk. 1994. "Effect of Foreclosure Status on Residential Selling Price." *Journal of Real Estate Research* 9:313-18.
- Fried, Marc. 1982. "Residential Attachment: Sources of Residential and Community Satisfaction." *Journal of Social Issues* 38, 107-119.
- Friesema, H. Paul, J. Caporaso, G. Goldstein, R. Lineberry and R. McMcleary. 1977. *Community Impacts of Natural Disasters*. Northwestern University Press.
- Galster, George C. 1987. Homeowners and Neighborhood Reinvestment. Duke University Press.
- Galster, George. C., and G. W. Hesser. 1981. "Residential Satisfaction: Compositional and Contextual Correlates." *Environment and Behavior* 13(6):735-758.
- Grannis, Rick. 1998. "The Importance of Trivial Streets: Residential Streets and Residential Segregation." *The American Journal of Sociology* 103: 1530-1564.

- Greater Las Vegas Association of Realtors. 2007. "January 2007 Statistics." Greater Las Vegas Association of Realtors web site. http://www.lasvegasrealtor.com/files/mediastats/2007_01_Jan.pdf
- Greater Las Vegas Association of Realtors. 2010. "December 2010 Statistics." Greater Las Vegas Association of Realtors web site. http://www.lasvegasrealtor.com/files/mediastats/2010 12 Dec.pdf
- Greer, Scott A. (1962). The Emerging City: Myth and Reality. New York: Free Press.
- Grogan-Kaylor, Andrew, Michael Woolley, Carol Mowbray, Thomas M. Reischl, Megan
 Gilster, Rebecca Karb, Peter MacFarlane, Larry Gant, and Katherine Alaimo. 2006.
 "Predictors of Neighborhood Satisfaction." *Journal of Community Practice* 14(4):27-50.
- Guest, Avery M. and Barret.A. Lee. 1983. "Sentiment and Evaluation as Ecological Variables." Sociological Perspectives 26:159-184.
- Haas, J. Eugene, Robert W. Kates and Martyn J.Bowden. 1977. *Reconstruction Following a Disaster*. MIT Press.
- Harcourt, Bernard E. 2001. Illusion of Order: The False Promise of Broken Windows Policing. Cambridge, MA: Harvard University Press.
- Harris, David R. 2001. "Why are Whites and Blacks Averse to Black Neighbors?" *Social Science Research* 30(1):100-16.
- Hartigan, Nicholas. 2009. "No One Leaves: Community Mobilization as a Response to the Foreclosure Crisis in Massachusetts." *Harvard Civil Rights-Civil Liberties Law Review* 45:181-204.
- Hartnagel, Timothy F. 1979. "The Perceptions of Fear or Crime: Implications for Neighborhood Cohesion, Social Activity, and Community Affect." *Social Forces* 58(1):176-93.
- Hays, R. Allen and Alexandra Kogl. (2007). "Neighborhood Attachment, Social Capital Building, And Political Participation: A Case Study Of Low- And Moderate-Income Residents Of Waterloo, Iowa." *Journal Of Urban Affairs*, 29 (2), 181–205.
- Hipp, John R. 2010. "What is the 'Neighborhood' in Neighborhood Satisfaction?" *Urban Studies* 47(12): 2517-2536.
- Hipp, John R., 2009 "Specifying the Determinants of Neighborhood Satisfaction: A Robust Assessment in 24 Metropolitan Areas." *Social Forces* 88:395-424.
- Hipp, John R. and Andrew J. Perrin. 2006. "Nested Loyalties: Local Networks' Effects on Neighbourhood and Community Cohesion." *Urban Studies* 43, 2503.

Hughes, Michael L. 2006. "Affect, Meaning and Quality of Life." Social Forces 85(2):611-629.

- Hunter, A. J. and Suttles, G. D. (1972). "The Expanded Community Of Limited Liability." Pp.44-81 in *The Social Construction of Communities*, edited by Gerald D. Suttles. Chicago: University of Chicago Press.
- Immergluck, Daniel. 2010. "Neighborhoods in the Wake of the Debacle: Intrametropolitan Patterns of Foreclosed Properties." *Urban Affairs Review* 46(1):3-36.
- Immergluck, Dan and Geoff Smith. 2006. "The External Cost of Foreclosure: The Impact of Single-Family Mortgage Foreclosures on Property Values." *Housing Policy Debate* 17: 57-79.
- Immergluck, Dan and Geoff Smith. 2005. "Measuring the effects of subprime lending on neighborhood foreclosures: evidence from Chicago." Urban Affairs Review 40(3):362-389.
- Jagun, Adedokun, Diane R. Brown, Norweeta G. Milburn, and Lawrence E. Gary. 1990. "Residential Satisfaction and Socioeconomic Housing Characteristics of Urban Black Adults." *Journal of Black Studies* 21(1):40-51.
- Kasarda, John D. and Morris Janowitz. 1974. "Community Attachment in Mass Society." *American Sociological Review* 39(3):328-339.
- Kruger, Daniel J. 2008. "Verifying the Operational Definition of Neighborhood for the Psychosocial Impact of Structural Deterioration." *Journal of Community Psychology* 36:53–60.
- Kubrin, Charis E. and Ronald Weitzer. 2003. "New directions in social disorganization theory." Journal of Research in Crime and Delinquency 40:374-402
- Lang, Robert E., Andrea Sarzynski, and Mark Muro. 2008. "Mountain megas: America's newest metropolitan places and a federal partnership to help them prosper" Pp. 64 in *Metropolitan Policy Program*. Washington D.C.: The Brookings Institution.
- Lang, Robert E. and LeFurgy, Jennifer B. (2007). Boomburbs: The Rise of America's Accidential Cities. Washington D.C. Brookings Institution Press.
- Lang, Robert E. and Karen Danielson. 2007. "Gated Communities in America: Walling out the World." *Housing Policy Debate* 8: 867- 899.
- Larsen, Larissa, Sharon Harlan, Bob Bolin, Ed Hackett, Diane Hope, Andrew Kirby, Amy Nelson, Tom r. Rex, and Shaphard Wolf. 2004. "Bonding and Bridging: Understanding the Relationship between Social Capital and Civic Action." *Journal of Planning Education and Research* 23, 64-77.

- Lee, Barrett A., Karen E. Campbell and Oscar Miller. 1991. "Racial Differences in Urban Neighboring." *Sociological Forum* 6:3):525-50.
- Lee, Barrett A., R. S. Oropesa, and James W. Kanan. 1994. "Neighborhood Context and Residential Mobility." *Demography* 31(2):249–270.
- Leonard, Tammy and James C. Murdoch. 2009. "The Neighborhood Effects of Foreclosures." *Journal of Geographical Systems* 11: 317-322.
- Lewicka, Maria. (2008). "What makes neighborhood different from home and city? Effects of place scale on place attachment." *Journal of Environmental Psychology*, 30 (1): 35-51.
- Le Goix, Renaud, and Elena Vesselinov. 2012. "Gated Communities and House Prices: Suburban Change in Southern California, 1980–2008." *International Journal of Urban and Regional Research*. EarlyView. Retrieved May 8, 2012 (http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2427.2012.01139.x/abstract).
- Lin, Zhenguo, Eric Rosenblatt, and Vincent W. Yao. 2009. "Spillover effects of Foreclosures on Neighborhood Property Values." *Journal of Real Estate Finance and Economics* 38: 387-407.
- Lovejoy, Kristin, Susan Handy, and Patricia Mokhtarian. 2010. "Neighborhood satisfaction in suburban versus traditional environments: An evaluation of contributing characteristics in eight California neighborhoods." *Landscape and Urban Planning* 97: 37-48.
- Low, Setha. 2003. *Behind the Gates: Life, Security and the Pursuit of Happiness*. New York: Routledge
- Lu, Max. 1999. "Determinants of Residential Satisfaction: Ordered Logit vs. Regression Models." *Growth and Change* 30(2):264-87.
- Mayer, Chris and Karen Pence. 2008. "Subprime Mortgages: What, Where, and to Whom?" Finance and Economics discussion Series, Federal Reserve Board, Washington D.C.
- McHugh, Kevin E., Patrician Gober, and Neil Reid. 1990. "Determinants of Short- and Long-Term Mobility Expectations for Home Owners and Renters." *Demography* 27(1):81-95.
- Morenoff, J.D., R.J. Sampson, and S.W. Raudenbush. 2001. "Neighborhood inequality, collective efficacy, and the spatial dynamics of homicide." *Criminology* 39: 517-560.
- Molloy, Raven, Christopher Smith, and Abigail Wozniak. 2010. "Internal Migration in the U.S.: Updated Facts and Recent Trends." Working Paper, http://www.nd.edu/~awaggone/papers/migration-msw.pdf

Muro, Mark, Jonathan Rothwell, Robert E. Lang, and Alec Friedhoff. 2009. "Mountain Monitor:

Tracking Economic Recession and Recovery in the Intermountain West's Metropolitan Areas." Las Vegas, NV: Brookings Mountain West.

- Nation, Maury, Timothy Fortney, and Abraham Wandersman. 2010. "Race, place, and neighboring: social ties among neighbors in urban, suburban, and rural contexts." *Environment and Behavior* 42: 581.
- Oh, Joong-Hwan., 2003. "Social bonds and the migration intentions of elderly and urban residents: the mediating effect of residential satisfaction." *Population Research and Policy Review* 22:127-146.
- Pais, Jeremy and James R. Elliott. 2008. Place as Recovery Machines: Vulnerability and Neighbohood Change after Major Hurricanes. *Social Forces* 86(4):1415-1453.
- Parkes, Alison, Ade Kearns, and Rowland Atkinson. 2002. "What Makes People Dissatisfied with their Neighborhoods?" *Urban Studies* 39(13):2413-2438.
- Perry, Marc J. 2006. "Domestic Net Migration in the United States: 2000 to 2004." Current Population Reports, United States Census Bureau. P25-1135.
- Pennington-Cross, Anthony. 2006. "The Value of Foreclosed Property." *Journal of Real Estate Research* 29\8:193-214.
- Raudenbush, Stephen W. and Anthony S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*, 2nd edition. Thousand Oaks, CA: Sage Publications.
- RealtyTrac. 2011. "2010 Foreclosure Activity Down in Hardest Hit Markets but Increases in 72 Percent of Major Metros." Press Release. Retrieved Feb 9, 2013 via <u>http://www.realtytrac.com/content/press-releases/2010-year-end-us-metro-foreclosure-report-6317</u>.
- Riger, Stephanie and Paul J. Lavrakas. 1981. "Community Ties: Patterns of Attachment and Social Interaction in Urban Neighborhoods." *American Journal of Community Psychology* 9, 55-66.
- Ross, Catherine and John Mirowsky. 1999. "Disorder and Decay: The Concept and Measurement of Perceived Neighborhood Disorder." *Urban Affairs Review* 34: 412-432.
- Sampson, Robert J., Jeffrey Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing 'Neighborhood Effects': Social Processes and New Direction in Research." *Annual Review of Sociology* 28:443-478.
- Sampson, Robert J. and Raudenbush, Stephen W. 1999. Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods. *American Journal of* Sociology 105(3):603-51.

- Sampson, Robert J. 2004. "Seeing Disorder: Neighborhood Stigma and the Social Construction of 'Broken Windows.' "*Social Psychology Quarterly* 67(4):319-42.
- Sampson, Robert J. 2003. "The Neighborhood Context of Well-being." *Perspectives in Biology and Medicine* 46(3):S53-S64.
- Sampson, Robert J. 1988. "Local Friendship Ties And Community Attachment In Mass Society: AMultilevel Systemic Model." *American Sociological Review* 53(5):766-779.
- Sampson, Robert J. 1991. "Linking Micro- and Macro-Level Dimensions of Community Social Organization." *Social Forces* 70(1):43-64.
- Schuetz, Jenny, Vicki Been, and Ingrid Gould Ellen. 2008. "Neighborhood Effects of Concentrated Mortgage Foreclosures." *Journal of Housing Economics* 17(4):306-19.
- Sirgy, M. Joseph and Terri Cornwell. 2002. "How neighborhood features affect quality of life." *Social Indicators Research* 59:79-114.
- Skjaeveland, Oddvar, Tommy Garling, and John G. Maeland. 1996. "A Multidimensional Measure of Neighboring." *American Journal of Community Psychology* 24:413-435.
- Skogan, Wesley. 1986. "Fear of Crime and Neighborhood Change." *Crime and Justice* 8:203-229.
- ___. 1990. *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods.* New York: Free Press.
- Skogan, W. G. and Maxfield, M. G. 1981. *Coping with Crime: Individual and Neighborhood Reactions*. Beverly Hills, CA: Sage.
- Speare, Alden Jr. (1974). "Residential Satisfaction as an Intervening Variable in Residential Mobility." *Demography* 11(2), 173-188.
- Swidler, A. 1986. "Culture in Action: Symbols and Strategies." *American Sociological Review* 273–286.
- Taylor, Ralph B. 2001. Breaking Away From Broken Windows: Baltimore Neighborhoods and the Nationwide Fight Against Crime, Grime, Fear, and Decline. Boulder: Westview.
- Taylor, Ralph B. 1996. "Neighborhood responses to disorder and local attachments: The systemic model of attachment, social disorganization, and neighborhood use value." *Sociological Forum* 11: 41-74.
- Temkin, Kenneth and William Rohe. 1996. "Neighborhood Change and Urban Policy." *Journal* of Planning Education and Research 15(3):159-170.

U.S. Census Bureau. 2010. American Community Survey, 1-year estimates; using American Fact Finder http://factfinder.census.gov; September 29, 2011.

U.S Census Bureau. 2011. American Community Survey, 5-year estimates. Washington, DC: U.S Department of Commerce. Retrieved February 18, 2013 via http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y http://retrieved-pages/productview.xhtml?pid=ACS_11_5Y

- U.S. Department of Commerce. 1994. Geographic areas reference manual. 10-1.
- Wilson, William J. 1987. The Truly Disadvantaged: Inner city, the underclass, and public police. Chicago: University of Chicago Press.
- Woldoff, Rachael A. 2002. "Effects of Local Stressors on Neighborhood Attachment." *Social Forces.* 81(1):87-116.
- Wright, James D., and Peter Rossi. 1981. Social Science and Natural Hazards. Apt Books.

Collective Efficacy (alpha= .79)	Mean ¹	SD
I live in a close-knit neighborhood	3.05	1.16
If there were a serious problem in my neighborhood the residents would get together to solve it	2.66	1.09
My neighbors interests and concerns are important to me	2.59	0.95
I can trust my neighbors	2.42	1.08
My Neighbors don't get along (reverse coded)	2.33	0.89
Neighborhood Disorder (alpha= .74)	Mean ²	SD
Unsupervised teenagers	1.65	0.71
Litter or trash	1.64	0.72
Vacant houses	1.55	0.68
Graffiti	1.49	0.66
Vacant land	1.35	0.58

Table 1. Individual Level Mean Scores for the Scaled Items from the Las VegasMetropolitan Social Survey (2009)

(1) Items range from 1 to 5: Strongly Disagree; Disagree; Neither; Agree; Strongly Agree

(2) Items range from 1 to 3: Not a Problem; Little problem; Big problem

Neighborhood Level (N=22); Dependent Variables	<u>, marviauar Level (N=045)</u> Mean	SD
Neighborhood Quality	Wican	50
Very Good	0.30	
Fairly Good	0.54	
Not very Good	0.12	
Not at all Good	0.03	
Neighborhood Property Values	0.05	
Very Satisfied	0.21	
Somewhat Satisfied	0.35	
Somewhat Dissatisfied	0.25	
Very Dissatisfied	0.19	
Independent Variables		
Neighborhood Level		
Neighborhood Disorder	7.68	1.26
Collective Efficacy	13.04	1.69
Census Tract Foreclosure Rate	21.60	3.63
Individual Level		
Marital Status		
Other Status	0.44	
Married or Living with Partner	0.56	
Race		
White, non Hispanic	0.73	
Non White	0.27	
Age	54.13	16.70
Education		
H.S. or Less	0.26	
Some College	0.41	
College Degree or more	0.33	
Employment Status		
Employed	0.93	
Unemployed	0.07	
Years Lived at Current Residence	11.67	9.48
Housing Status		
Own	0.80	
Rent	0.20	

Table 2. Descriptive Statistics from the Las Vegas Metropolitan Social Survey (2009),
Neighborhood Level (N=22); Individual Level (N=643)

	Neig	hborhood Qu	<u>ality</u>	Neighbor	hood Proper	ty Values
	Model 1a	Model2a	Model 3a	Model 1b	Model 2b	Model 3b
Independent Variables	b/(se)	b/(se)	b/(se)	b/(se)	b/(se)	b/(se)
Neighborhood Level						
Neighborhood Disorder	391 ***		250*	056		007
	(.092)		(.099)	(.089)		(.108)
Collective Efficacy	.321 ***		.301 ***	.285 ***		.278***
	(.076)		(.072)	(.071)		(.076)
Foreclosure Rate		245 ***	077*		116***	028
		(.032)	(.037)		(.024)	(.031)
Individual Level						
Married or with Partner (ref=other)	213	148	201	147	098	142
	(.167)	(.171)	(.165)	(.143)	(.155)	(.144)
Non-Hispanic White (ref=other)	081	120	105	340	335	345
	(.197)	(.209)	(.198)	(.195)	(.190)	(.195)
Age	002	.000	003	.018**	.020**	.017 **
	(.008)	(.008)	(.008)	(.006)	(.006)	(.006)
Education (ref= H.S. or less)						
Some College	264*	266*	269 *	172	143	177
-	(.131)	(.122)	(.133)	(.182)	(.184)	(.183)
College Degree or more	471 **	565 ***	511***	.049	.049	.028
	(.140)	(.141)	(.144)	(.168)	(.185)	(.176)
Unemployed (ref=Employed)	263	153	223	.330	.305	.349
	(.309)	(.304)	(.313)	(.240)	(.231)	(.238)
Years at Current Residence	014	006	009	003	.000	001
	(.010)	(.010)	(.009)	(.008)	(.009)	(.009)
Homeown (ref=rent)	.342	.432**	.338	604 **	514*	604 **

	(.205)	(.161)	(.186)	(.226)	(.214)	(.222)
Thresholds						
Not at all Good / Very Dissatisfied	-11.424 ***	-9.214 ***	-11.750***	-5.658***	-3.709***	-5.798***
	(1.049)	(.976)	(.986)	(.918)	(.751)	(.947)
Not Very Good / Somewhat Dissatisfied	-9.688 ***	-7.469***	-10.015 ***	-4.339***	-2.397**	-4.477 ***
	(1.048)	(.958)	(.985)	(.867)	(.708)	(.894)
Fairly Good / Somewhat Satisfied	-6.660***	-4.439***	-6.991 ***	-2.634**	709	-2.771**
	(.985)	(.910)	(.911)	(.856)	(.709)	(.876)
Very Good / Very Satisfied (ref.)						
Neighborhood Variance	.030	.265	.010	.001	.060	.001
AIC	1255	1271	1253	1695	1709	1696
N Individual Level	643	643	643	643	643	643
N Neighborhood Level	22	22	22	22	22	22

*p < .05; **p < .01; *** p < .001 (two-tail)