Community Access to Nonprofit Social Services

By

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of
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Abstract

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Nonprofit organizations have an idealized role in American society, thought to provide respite from profit hungry businesses through voluntary generosity, and be more compassionate care-givers than public institutions. In an era where conventional wisdom prizes private enterprise over government action, nonprofit organizations are claiming a large role in delivering a variety of services, many of which were previously in the public domain. Yet the activities of the nonprofit sector are not coordinated in any meaningful way.

This paper considers the location of nonprofit social services and tests theory-driven hypotheses about the factors affecting aggregate levels of nonprofit social service activity. Nonprofit location is analyzed at the geographic scale of the neighborhood by measuring the total nonprofit expenditures located within a half-mile of a given census tract. Research shows that services located close to home are more likely to be used, and theory suggests that nonprofit activity should relate to greater needs and diversity measured at a community level. The financial resources available to a community to support nonprofit activity are also an important factor. The analysis also contrasts the findings between two metropolitan regions of San Francisco and Sacramento.

Results of this analysis confirm previously posited models of needs and resources, but disprove the demand heterogeneity concept at a small neighborhood scale. Instead, it shows that immigration, race, and regional context influence the level of nonprofit social

services available to particular communities. Nonprofit social services in Sacramento are poorly aligned to needs compared to San Francisco. These findings suggest that policy makers concerned with the coordination of social services in Sacramento should provide more expansion capital to service providers in that region.

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Introduction

Nonprofit organizations have an idealized role in American society, thought to provide respite from profit hungry businesses through voluntary generosity, and be more compassionate caregivers than public institutions. In an era when conventional wisdom prizes private enterprise over government action, nonprofit organizations are claiming a large role in delivering a variety of services, many of which were previously in the public domain. Yet the activities of the nonprofit sector are not coordinated in any meaningful way, and we have little evidence to determine how well the nonprofit sector measures up to our ideals. This research sets out to examine the responsiveness of the nonprofit sector by analyzing the geographic location of nonprofit activity relative to varying community needs and resources in metropolitan Northern California.

This research focuses on organizations providing human and social services, a subset of the entire nonprofit sector. Human and social services are playing an increasingly important role in providing welfare assistance, which has been shifting away from cash assistance and towards services as a result of welfare reform (Allard 2007b). Location is important for these nonprofits because clients must physically visit the offices of service providers, and previous research shows people are more likely to utilize services that are closer to their homes (Allard, Tolman & Rosen 2003, Kissane 2003). Because of the importance of proximity to human and social services, this analysis focuses on a small geographic scale, using census tracts to approximate neighborhoods or communities.

One expects nonprofit social service providers to be better situated to respond to low income, high need communities because their tax-exempt status lowers the cost of

business and allows them to charge lower fees to clients. The legal structures defining nonprofit organizations also encourage them to put their mission ahead of profit making. These conditions mean that nonprofits are, in many cases, more trustworthy than the private sector as providers of hard-to-measure services and public goods, particularly in situations where the funder is different from the recipient and cannot verify quality themselves. This applies currently where government is contracting to nonprofits to provide public services. Though for-profit firms are eligible to participate, they rarely do (Allard, 2007a).

The key theoretical concepts of interest in this dissertation derive from the seminal work of Burton Weisbrod's text *The Nonprofit Economy* (1988), which considered the role of nonprofit organizations in relation to private, for-profit firms and public, governmental agencies. Weisbrod argues that nonprofits fill a niche created by market failures of the private sector and government. Private sector market failures most commonly occur when potential clients or customers cannot afford a service or good on the open market, or when for-profit firms are not considered trustworthy to deliver certain services. According to Weisbrod, in this situation we would expect government to create public services to address needs that are unmet by private firms. However, government's response is moderated by the fact that public institutions are determined by majority will. Responding to market failures in diverse communities is problematic for public institutions because of demand heterogeneity, a multitude of demands that eludes majority support and leaves the service needs of the minority unresolved.

This is the sweet spot that nonprofit organizations are thought to occupy, trustworthy providers of goods and services for the diverse minority who cannot afford

and/or do not trust for-profit firms to provide. The demand heterogeneity concept suggests that nonprofit service providers would be more common in diverse communities (whether they are funded by private sources or public monies). The validity of the demand heterogeneity argument is particularly interesting for this research given the current demographic trends in California, where there is no single demographic majority in many communities. Therefore, the relationship between community diversity and the location of nonprofit social services is scrutinized here, with findings that contradict theoretical expectations.

There have been few empirical tests of the demand heterogeneity concept, particularly at the small scale of neighborhood. Most analyses that have focused on the relationship between diversity and nonprofit activity compared counties (Grønbjerg & Paarlberg, 2001), metropolitan areas (Corbin, 1999), states (Matsunaga & Yamauchi, 2004), or nation-states (James, 1987). The results from community-level analyses (Bielefeld & Murdoch, 2004) produced ambiguous findings and focused on activities other than social services. The analysis presented here shows that racial and economic diversity are not significant explanatory variables for explaining the variation of nonprofit social service activity in the neighborhoods studied. Instead, these services are more available to neighborhoods with greater proportions of Hispanic and Non-Hispanic African American residents.

The study area for this research encompasses two neighboring metropolitan regions (San Francisco and Sacramento) that constitute the urban portion of Northern California. They differ in terms of their development patterns – San Francisco is more urbanized and has been so for a long time. In contrast, while Sacramento has a long civic

history, it has only recently experienced significant population growth. Most of this growth in Sacramento is sprawling, suburban housing developed within the last 10 years, part of the third era of California's population growth (Kotkin & Frey, 2007). Though this research is a snapshot of a single moment, the contrasting histories of these two metropolitan areas provide some indication of how these dynamics play out over time.

The nonprofit sector dataset utilized for this research is the Core Files provided by the National Center for Charitable Statistics. A drawback of the Core Files is the lack of information about service areas. Because this dataset is based on Internal Revenue Service (IRS) tax filings, the only geographic location provided in the data is a single address from the Form 990, which could indicate a tax accountant's location rather than service location. While previous analyses have used the filing address as a location proxy (Bielefeld & Murdoch, 2004; Joassart-Marcelli & Wolch, 2003), the research presented here utilizes an innovative approach to enhancing the Core Files using internet research.

With this background in mind, there are three research questions driving this dissertation:

1. Are nonprofit social service providers likely to be present in high-need communities? Based on market failure theory, I hypothesize this to be true.
2. Controlling for need, are nonprofit social service providers more prevalent in diverse communities? Based on government failure theory and the demand heterogeneity concept, I hypothesize this to be true.
3. Do the answers to the first two questions vary between the San Francisco Bay Area and the Sacramento metropolitan area? I hypothesize that there is a

difference, and predict that services are less well aligned in the Sacramento region.

All three questions are relevant to theory and also to public policy, because the US social safety net is increasingly made available through services (Allard 2007a), many of which are delivered by nonprofit agencies. Location also becomes more critical as poverty disperses to the suburbs and is no longer just an urban phenomenon (Berube 2007).

This dissertation approaches these research questions through linear regression analysis of IRS data about the nonprofit sector. Nonprofit locations are geocoded to link them to community demographics across the San Francisco and Sacramento metropolitan areas. Communities are defined as areas encompassing a one-half mile buffer around each census tract in the study region. Diversity is represented by measures of the proportion of foreign born residents in a community, and racial and economic heterogeneity. Diversity is conceptualized as one indicator of demand for nonprofit social services, in addition to factors like poverty and unemployment. The model also includes approximate measures of community resources to support nonprofits such as wealth and government expenditures. A dichotomous variable measures the significance of being in the San Francisco Bay Area. Lastly, I control for population density and land use.

Past analyses have experienced mixed results analyzing nonprofit sector data from the IRS in this manner. The precise meaning of the address listed in IRS files has never been scrutinized in the literature on nonprofit location. Previous research has acknowledged that a tax filing address may be a different administrative location from where services are delivered, yet has used that address to represent a service location (Joassart-Marcelli & Wolch, 2003; Bielefeld & Murdoch, 2004). This dissertation takes a

pragmatic approach by utilizing internet search engines and the websites of nonprofit social service providers to verify and correct addresses prior to linking them to communities through geocoding. This approach is a useful demonstration to the field, showing that there are efficient methods of collecting better address information. It also shows that many nonprofits are operating multiple service locations, which should be accounted for in spatial analysis like this.

Findings from this analysis show that nonprofit social service providers are available to many, but not all high need communities. Alignment between services and community needs is lower in outlying areas with more recent growth in population and needs. If we are to rely on nonprofits to deliver the services of the welfare state, policy makers and funders should consider structuring their funding with location in mind.

Literature Review

This literature review covers four topics that provide concepts and insights for a predictive model of the location of nonprofit social services. The first section establishes the relevance of this research by reviewing three developments in the social services field: the growing importance of nonprofit organizations in the provision of social services, particularly as contractors to government; a shift in federal welfare policy that has replaced cash assistance with targeted services delivered in person; and population growth in distant suburbs at greater distance from existing services targeted to cities.

The second section of this literature review considers theoretical explanations for the existence and development of the nonprofit sector, focusing on the three failures theories (Steinberg, 2006). These theories provide hypotheses about how the sector might be positioned in relation to different communities. The section concludes by reviewing related empirical research on the location of nonprofit organizations, testing concepts from the three failures theory.

The third section considers other studies of nonprofit location that are concerned with the locational equity of nonprofit services for purposes of policy analysis. Finally, in the last section, relevant concepts and insights from the population ecology field and the literature on agglomeration are also considered.

Trends and Change in Social Services and the Safety Net

Nonprofits have come to play a critical role in providing social services such as counseling, job placement, preventative health care, and specialized services for seniors, immigrants, and others. The prominence of nonprofits in this realm is due in part to increased funding by government in the 1960s as the sector helped fulfill the promises of

Great Society legislation by providing new social and health programs. In the 1970s, this trend continued as nonprofits developed drug and alcohol treatment programs, and other innovative community programs (Smith, 1998).

Smith (2002) and Salamon (2002) discuss some of the recent social and political trends that have affected the nonprofit social service sector. There have been increased demands for services such as day care, home health care, family counseling, and substance abuse treatment. Nonprofit community-based organizations, responding to local needs and trends, have received support from government for their work. Funding for social services has become available from multiple federal sources such as the Department of Housing and Urban Development, Department of Health and Human Services, and the Justice Department. Federal, state, and local government have also become more interested in neighborhood-oriented coordination of social service delivery.

Nonprofit organizations do not always view these policy changes in a positive light. In recent years increased contracting by government has been paired with regulatory changes that open up the process to for-profit firms and encourage participation by religious organizations (Smith, 2003). Thus while there is more potential revenue for nonprofits, deregulation has also created price competition. In an effort to instill more accountability and efficiency, government contracts may now require nonprofits to charge a fee for their services, for example third-party managed care agencies (Ryan, 1999). These changes are designed to expand consumer choice for the clients of government-subsidized social services. They also challenge nonprofit providers who have to adapt new methods of collecting revenues and attracting customers for their services.

Relations between government and nonprofits vary across different types of services, and over time. For example, in the realm of education there is often competition. Nonprofit primary schools are considered alternatives to public schools and therefore compete with public schools for students. This aspect of the dynamic is rooted in the idea that local citizens can address problems through their own associations and organizations, an idea attributed to Tocqueville's 19th century observations of civic action in America (Clemens, 2006). There are several ways for nonprofit schools to distinguish themselves from public schools. Nonprofits may epitomize certain cultural norms, as in parochial schools. In other cases they operate as innovators who demonstrate new ways of approaching problems. We see this innovative model in the urban charter-school movement, which has focused on increasing college readiness for kids in disadvantaged communities where public schools are not serving them well. Many charter schools emphasize local input and active parent involvement that contrasts with the typical public school experience that preceded the arrival of the charter school.

Smith and Gronberg (2006) observe that a competitive relationship between government and nonprofits often occurs in industries where government is the dominant service provider. In that context, nonprofit organizations represent local collective actions to demonstrate new strategies for doing things, sometimes combined with advocacy to change public policy. There are also times when public agencies contract with nonprofits to test a new method of service delivery. Government is restricted in its ability to experiment with new service delivery approaches because it is expected to treat citizens fairly and equally.

Overall, government continues to show a preference for contracting services instead of providing services directly (Austin, 2003), which in turn has also widened the array of different services provided by nonprofits. On a pragmatic level, there are several reasons for this preference. Managers of county health and human services agencies value the ability of community-based nonprofit organizations to reach populations that government cannot effectively reach due to language differences or attitudes towards public services (Matsunaga & Yamauchi, 2004; Rafter & Silverman, 2006). Nonprofits may have lower labor costs since employee unionization is less common than in the public sector. Nonprofits may be viewed as more cost-efficient than government agencies since nonprofits can access volunteer labor and charitable donations to augment public funding. Nonprofits are also less subject to rigid bureaucratic constraints (Kapur & Weisbrod, 2000).

A development that increased the importance of the nonprofit social services field was welfare reform, embodied in the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. Key objectives achieved through this act include the creation of a work requirement for receiving welfare benefits, and reduction in the number of unwed parents and out-of-wedlock pregnancies (Allard 2007). Another key change with PRWORA relevant to nonprofit social service organizations was a shift from cash assistance, the “welfare check” provided by Aid to Families with Dependent Children (AFDC), to non-cash assistance. In fact, the majority of welfare assistance is now provided through an array of social services, funded by the agencies listed above and through block grant programs, but administered by nonprofit organizations. According to an analysis by Allard (2007), federal welfare dollars for cash assistance have declined by

44 percent in adjusted dollars, while funding for service programs has increased by almost the same proportion. Because services are not as portable as cash assistance, these changes can lead to lower benefits for low income and working poor residents. Micro level observational research about nonprofit service providers and the low income women they serve show how nonprofits are limited in their ability to substitute for the safety net (Edin & Lein, 1998).

Along with a mandate for services instead of cash assistance, responsibility for welfare administration was shifted to states, which also received considerable discretion in the way they reach the enrollment goals. In several states, including California, responsibility was further shifted to county government. Not only is there more funding targeted for services rather than cash, but local administrators are deciding how to allocate these resources. Since it is easier for a community-based nonprofit to approach their county human services administrator than to interact with a federal bureaucracy, these organizations stand to play a larger role in local social service systems after welfare reform.

A final trend providing a context for this research is the continued outwards migration of households to the suburban outskirts of metropolitan regions. Once reserved for middle- and upper-class families leaving cities, the suburbs are now home to larger proportions of poor residents, minorities, seniors, and new immigrants (Frey, 2001; Berube, 2007). Nonprofits are key providers of social services in general because the lack of profit incentive makes them trustworthier. There are reasons for concern about the social service systems in the suburbs. Newer communities lack a developed infrastructure of organizations and facilities. Allard (2004) compared access to social services in urban

centers to suburbs in Chicago, Los Angeles, and Washington DC. His analysis shows that poor populations in central cities have better access to social services. In established communities receiving new residents there is potential for a mismatch between available services and emerging community needs. According to Allard (2004), suburban areas included in his study where poverty rates increased between 1990 and 2000 were more isolated from social services than central city areas. Another concern in established suburbs undergoing population growth and/or changes is that existing organizations are typically staffed and governed by residents who have lived in the community for a long time. They can be slow to recognize and respond to changes in their community (LaFrance et al., 2006).

While the shift in service delivery may be viewed positively by those who prefer nonprofits as service providers, it also opens a host of questions given that efforts are "fragmented and atomized among the hundreds of thousands of separate nonprofit organizations" (Wolpert, 1993). Metropolitan regions are becoming more economically segregated, needy and wealthy areas are becoming more starkly divided, and the wealthy, resource-rich communities face little pressure to respond to demands beyond their municipal border (Swanstrom, Casey, Flack, & Dreier, 2004). These trends prompt us to question whether there are enough service providers in high-need communities in outlying suburbs. Observers who view nonprofits as businesses operating in the free market might argue that variations in service levels reflect community demand for services, particularly since the nonprofit sector is expected to be more responsive to local needs. The concern here is that in so far as nonprofits depend on very local funding sources such as city government and individual contributions, economic segregation may

deprive nonprofits of the necessary financing to provide low cost services to high-need communities.

There is a need to examine whether the shift of government contracting for social services to private organizations may also represent a shift away from equity in service availability. Equity in service access is a key concern for this dissertation, and this concern is reinforced by the trends discussed above: increasing government reliance on nonprofits to deliver services; a shift in the safety net from cash assistance to services; and the continued geographic dispersion of people and households in metropolitan regions.

The Role of Nonprofits

In order to discuss a theory of the nonprofit sector, we must step back and consider the defining traits of nonprofit organizations. Nonprofits are private firms, distinct from government agencies in the public sector. Therefore nonprofit organizations are not governed by the public, broadly defined. Instead, they are lead by founders, volunteers, staff, managers, and potentially a board of directors, depending upon the organization's size and sophistication. These organizations are granted a tax exemption by federal and state government because they abide by at least two significant conditions: (1) the organization is dedicated to a charitable mission, and (2) though it can earn money, the profits cannot be distributed to private individuals. The latter condition is commonly referred to as the "nondistribution constraint" (Hansmann, 1996). These characteristics make nonprofits particularly intriguing for economists, and by focusing on the unique role of nonprofits relative to for-profits and government, the field of

economics has provided the most comprehensive theory for understanding the actions and behavior of nonprofit organizations.

Burton Weisbrod's theory of the role of nonprofit organizations in a mixed economy (1988) is central to understanding all of the economic theories of the nonprofit sector, which are collectively referred to as "three failures theory" (Steinberg, 2007). Weisbrod suggests that the nonprofit sector exists in response to failures of the private sector (market failure) and the public sector (government failure) (Voluntary failure is the third type, discussed below). The theory posits nonprofit responses to each of these failures.

There are three major types of market failure. The first type of market failure is created by information inequalities that exist when a financier of services cannot verify the quality of services for themselves. Examples of this are when family members seek medical care for a loved one who is perhaps mentally ill and cannot be relied upon to communicate about the quality of care. Government contracting for social services also illustrates this dynamic. As Steinberg (2007) argues, government can respond to concerns about information by mandating disclosures and placing other regulations on trust-intensive industries. When regulation is unsuccessful, nonprofit actors are considered trustworthier and therefore they are often the preferred service providers in situations where the purchaser is different from the recipient of services. This alleviates a fear that a for-profit provider would skimp on the quality of care in order to maximize profits (Weisbrod 1988, Hansmann 1996). This is one reason why nonprofits dominate the human service field.

The second type of market failure results from the free-rider problem, the challenge of charging consumers for products or services that are public and diffuse in nature. This failure is one where the market would not meet the demand for diffuse public goods because for-profit firms do not respond unless there is potential for profit. Collective public goods such as basic research, environmental protection, aid to the poor, and national defense cannot be monetized sufficiently. Government steps in to provide many of these services, but the level of service may fall below the demands of some people. Nonprofit organizations solve this dilemma by using monies raised from donors to provide collective benefits for others "who do not help to finance the organization's activities" (Weisbrod 1988, 60). In the United States, public policy encourages these "collective-type" nonprofits by exempting them from taxes so long as the revenues are related to their charitable mission.

The final type of market failure occurs when for-profit firms price a good or service beyond the means of some people who want or need it, and can exclude nonpayers from consuming the good. Government may respond to this failure by mandating a level of services, though it is challenging to effectively enforce. This dynamic is currently evident in health care, where private insurers set rates too high for some people, and attempt to exclude others from coverage based on pre-existing conditions, resulting in unmet demand for health care amongst a portion of the population. In light of these remaining unmet demands, government can provide the good itself or provide subsidies to help people afford market prices. In many cases where subsidies have been employed, they are insufficient to interest for-profit firms, but

nonprofits can leverage their tax-exemption and perhaps private donations to operate in these market conditions.

In each of the market failures described above, there are ways that government can respond through direct provision, providing subsidies, or mandating service levels or disclosure. However, several of these responses are susceptible to government failure (Weisbrod, 1988), which makes up the second failure of the three-failure theories (Steinberg, 2006). Government failure in this instance is not a complete lack of services, but rather failure to provide at a level that satisfies high demanders, by definition a minority group in most cases. Each type of government failure provides an opportunity for the nonprofit sector to respond.

Government failure may result from insufficient level or quality of public services. The quality of public services is an issue particularly for a culturally diverse population. Weisbrod (1988) termed this a challenge of demand heterogeneity. Government is responsible for public, collective goods demanded by a majority of constituents. Diverse settings challenge government's ability to satisfy all needs equally because government targets the preferences of the median voter, which inevitably leaves some citizens unsatisfied because they seek a higher level of services or a greater variety or quality of goods (Corbin, 1999)[1]. A result of demand heterogeneity is that there is often some level of dissatisfaction with government services, which provides an opportunity for nonprofit organizations to fulfill these demands because the nonprofit's charitable mission makes them more trustworthy than for-profit firms. The importance of

[1] Theoretically, people in the minority who do not get the services or amenities they desire from government services could move to another community that better matches their preferences – this leads to a scenario of unlimited costless migration results in the "Tiebout equilibrium" where everyone has moved to communities of like-minded voters (Steinberg, 2006). Realistically though, such moves are expensive, and people form attachments to their communities which prevent this theoretical easy movement.

nonprofit service providers in meeting diverse demands that are beyond the capacity of government is a key insight from Weisbrod's theory.

The supplementary role of private schools, both religious and secular, is a good illustration of the challenges posed by demand heterogeneity. Religious schools respond to demand for a type of curriculum that government in the United States is constitutionally prohibited from including (constitutional restrictions are another cause of government failure). All private schools also address a demand for a higher level and/or quality of education than what is offered in public schools. James (1993) tests this hypothesis through an analysis of varying levels of enrollments in public or private schools in 50 different countries. The results of her study show that limited public spending on education creates a situation of "excess demand" amongst some citizens, who choose private education.

Priavte schools also serve as an example of the innovation role of nonprofit organizations, which can provide demonstration models to be adopted by government. The nonprofit sector is not strictly supplementary to the public sector, though this is the primary conceptualization offered by economic theories. There are also complementary and adversarial roles for nonprofit organizations (Young, 1998; Young, 2000). Examples of complementary activities are various contracting relationships that exist between nonprofits and government at multiple levels. Adversarial relationships exist where nonprofit organizations advocate for changes in public policy.

The market and government failures described thus far, both originally described by Weisbrod, are directly applicable to the study of factors that influence a nonprofit organizations location choice, and in the aggregate about how communities should differ

in their access to nonprofit services. Trust issues and information inequalities make nonprofit organizations key to the provision of social services that support emotional and physical development. In theoretical terms, government funding agencies are an example of a financier who cannot verify the quality of services with complete accuracy. Nonprofits are expected to be prevalent in the social service field because tax exemption provides a subsidy that enables them to serve people who cannot afford such services in the for-profit market. Recast in ecological terms, we hypothesize more nonprofit activity in communities with high needs and low incomes. The concept of demand heterogeneity, one reason for government failure, suggests that nonprofits will proliferate in fields or geographic communities with diverse demanders. Therefore we would predict that communities with greater diversity and poverty would have higher levels of nonprofit social service activity.

As discussed above, nonprofits are expected to respond to failures of the market and government based on their unique advantages. Nonprofits are considered more trustworthy firms because of the nondistribution constraint that is a condition of their tax exempt status, and because they are often founded or governed by high demanders, who have a stake in maintaining quality (Steinberg, 2006). This makes nonprofits well suited to providing services where the paying party is not able to judge the service quality for themselves. Tax exemption also provides an incentive for private donations, which subsidize the cost of services for the benefit of recipients who cannot afford to pay the full cost, referred to as cross-subsidization (James, 1983). Donations are less common to for-profit firms and government because people don't trust that their money will be used for the intended purpose (though nonprofits are also scrutinized about use of funds). In

some fields nonprofits may have a less cumbersome labor structure because they are less often unionized.

Voluntary failure in the nonprofit sector (Salamon, 1995) is the third failure alluded to in the term three-failures theory. Salamon's analysis showed that government funding comprised a significant and rising proportion of nonprofit revenues in the social service field. Salamon's work was motivated by policy proposals under consideration at the time which suggested that voluntary efforts of the nonprofit sector could replace reduced government services and which, in his view, failed to "recognize the interdependencies of governments and nonprofits" (Smith & Grønbjerg 2006). These interdependencies required that government remain engaged in service provision. Focusing on the increase in government contracting to nonprofit organizations for the provision of public goods in the 1960s and 1970s, Salamon argues that the notion of nonprofits supplementing "government failure" doesn't match the reality that government contracting has become the single most important form of support for human service nonprofits. This reality of funding sources confounds the theory of a private nonprofit response to provide services where government cannot. Rather, the growth of nonprofits in these realms is driven by public funding.

Salamon outlined four reasons for voluntary failure: philanthropic insufficiency, particularism, paternalism, and amatuerism. Philanthropic insufficiency occurs because nonprofits primarily rely on donations to cover the costs of subsidized services, which are often insufficient to match the scale of human service needs. This is most apparent during economic downturns, when nonprofits have faced the same revenue needs as government. If the nonprofit sector played a supplementary role, we would expect it to

fill in for declines in government services. Instead, nonprofits typically struggle as much as any other business or agency during an economic depression.

Philanthropic particularism is a problem when services are provided exclusively for particular members of the community, leaving service gaps for subgroups that cannot mobilize voluntary efforts (i.e. the "undeserving" poor). Philanthropic paternalism is preferences amongst wealthy donors for some services over others (i.e. operas instead of day-care centers). Finally, philanthropic amateurism refers to the quality of management and delivery of goods and services that can result from relying on voluntary efforts and a lack of resources to enable professionalization. In all of these cases, government funding of nonprofit charitable services can balance these failures.

A shortcoming of the three failures theory is that, like all economic theories, it relies on a rational actor who weighs costs versus benefits and consistently chooses the service provider that maximizes benefits within the context of all the discussed concerns (i.e. trust, incomplete information, etc.). An alternative to the three failures theories is institutional theory in the field of sociology (DiMaggio & Anheier, 1990). The institutional perspective emphasizes ideology, cultural norms, government policy and key historical decisions in explaining the role of nonprofit organizations.

The influence of ideology and cultural norms is apparent in the beliefs held by society about which activities and functions are viewed as appropriate for nonprofit versus for-profit firms. These beliefs are certainly subject to change over time, as evidenced by the gains of for-profits in market share of the health services field (Schlesinger & Gray, 2006). There were also some recent attempts by for-profit firms to

gain government contracts in social services and workforce development, though those efforts were not widely successful.

Government policy and legal decisions can also make a particular activity better suited to the nonprofit sector. The most obvious demonstration of how policy and law shape the role of the nonprofit sector can be seen in the way that federal and state exemptions influence many of the decisions and opportunities for nonprofits. Overall, the ability of nonprofit organizations to operate in a field dominated by government is largely shaped by policies that determine which activities are open to provision by nonprofits.

Many of the empirical tests of three failure theories lead researchers to propose various qualifications of the theories that are grounded in the institutional perspective. Though voluntary failure is categorized by Steinberg (2006) as aligned with economic theories, it also clearly reflects insights from the institutional perspective. For example, the amount of contracting between government and nonprofit is determined by political decisions about the role of government as service provider. Schlesinger and Gray (2006) argue that the location of for-profit hospitals is predicted at a state level by the amount of government financial support available for different health services. This illustrates rational economic behavior on the part of the firms, but fed by government policies that are a reflection of cultural norms and public ideology. Proponents of reduced government services are influenced by ideology rather than concern about responding to citizen demand.

Despite these shortcomings, the three failures theories have remained a dominant and compelling perspective in the literature. The theories have significant face validity – they are a good fit for many examples of the nonprofit sector in everyday life. These

theories are also useful as a source of testable hypotheses. Indeed, there are many examples in the literature of researchers conducting empirical tests for key concepts of the three failures theories. Research about market failures tends to look at the prevalence of for-profit versus nonprofit firms across subsectors of various industries. Of greater interest for this research are studies that test the relevance and validity of government failure, which often focus on explaining variation in the size of nonprofit sectors across localities. Demand heterogeneity is a central concept explored in many of the studies discussed in the next section. In this regard, many of these studies are relevant tests of the three failures theories.

Prior Research on Nonprofit Locations

Corbin juxtaposed the concepts of demand heterogeneity and social cohesion to explain the varying numbers of nonprofit social service providers across US metropolitan areas (1999). The importance of demand heterogeneity is based on Weisbrod (1988) and measured through both religious and racial diversity. Corbin's analysis is therefore a direct test of the government failure theory (Matsunaga & Yamauchi, 2004). Diverse demands in a region are expected to fuel the formation of more nonprofits that can respond to limitations of government provision. Corbin's study includes a measure of social cohesion, which is a unique factor that no other study has replicated. Social cohesion is posited as a necessary antecedent to group formation, and is thought to grow from social homogeneity, measured by the density of churches and congregations in each metropolitan area. In Corbin's analysis, a greater number of churches and congregations signified greater social cohesion. Through a regression analysis that controlled for poverty, personal income, and philanthropic culture, Corbin found that both diversity and

social cohesion contribute positively to the size of the nonprofit sector at a metropolitan region level.

This analysis of social cohesion is interesting but not convincing. Social cohesion is thought to support the formation of a greater number of nonprofit organizations because of shared social values and bonds that unite people as a group. Theoretically this is an interesting argument, but social cohesion is not operationalized well in this study. The variable used to measure cohesion, density of churches and congregations, actually seems to be another measure of diversity because a community with a greater density of churches would be more atomized with people following a variety of religious beliefs. A more valid measure of social cohesion would address participation or strength of the social ties within the congregation.

Measuring nonprofit activity at a city level, Joassart-Marcelli and Wolch (2003) analyzed the spatial distribution of nonprofit social service providers in Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. Overall, they found that nonprofit resources were most likely to be found in older, wealthier cities, centrally located and with higher levels of public expenditures. This conforms to the work of Grønbjerg & Paarlberg (2001) in Indiana, who found “that larger communities are likely to have a fuller complement of major, highly formalized institutions than smaller ones” (p. 582). Based on these research findings, the authors conclude that the nonprofit sector is not truly responsive to needs the way that government can be. Rather, the ability of nonprofits to provide services where needs exist is limited by the availability of local revenue sources. This observation about government funding supports the voluntary

failure theory of nonprofit activity, suggesting that "public aid is often necessary to stimulate nonprofit activity" (Joassart-Marcelli & Wolch, 2003, p.87).

In a paper testing the government failure theory, Matsunaga and Yamauchi (2004) reviewed several empirical studies about factors that affect the size of nonprofit sectors across counties, states, or nations. All of the papers reviewed include a proxy measure of demand heterogeneity. While most of the papers used number of nonprofits for the dependent variable size of the local nonprofit sector, there were a variety of proxies for demand heterogeneity, including race, religion, poverty, education levels, and unemployment. The latter three measures actually reflect social need rather than heterogeneity, but Matsunaga and Yamauchi do not make this criticism. Instead the authors argue that many of the models in previous papers were misspecified because they were missing a measure of government expenditure, which they say are required to qualify the research as a true test of government failure.

Having determined that misspecified models are to blame for inconsistent findings about demand heterogeneity, Matsunaga and Yamauchi (2004) propose and test their own panel data analysis of nonprofit sector size across American states between 1992 and 1997. Their findings support government failure theory and illustrate the importance of including a measure of government financing, but the authors also note their mixed success in specifying racial demand heterogeneity for the model.

Bielefeld and his colleagues studied nonprofit geography in relation to neighborhood demographics (1997), using GIS and multivariate regression to link the location of social services, health services, and education to census tract level socioeconomic variables of income, age, and race. This analysis considered three

nonprofit fields, social services, health services, and education. It also included measures of heterogeneity by income, age and race. Finally, the analysis incorporated measures of distance of nonprofit organizations from the census block unit, their primary unit of analysis. The research found that nonprofits were likely to be located in census tracts with an older, wealthier population, with higher proportions of nonwhite residents, and with greater racial heterogeneity. The models were tested at a scale of 1-5 miles and showed that the effects were strongest at close distance, suggesting that location is important, not arbitrary. These findings support the demand heterogeneity concept measured three different ways.

A later analysis by Bielefeld and Murdoch (2004) built upon this research by adding an ecological factor of proximity to competing nonprofit and for-profit service providers. The study posited that the density of similar nonprofits and for-profit firms would influence nonprofit location over and above community demographics. The authors augment NCCS and census data with a listing of for-profit firms purchased from Dun & Bradstreet. The study found that needs and resources explained most of the spatial differences in service provision, but proximity of other providers was also significant.

Their data covered six metropolitan areas - Boston, Dallas/Ft. Worth, Minneapolis/St. Paul, Pittsburgh, Portland, and San Diego. This large, heterogeneous assortment of cities was chosen for study ostensibly because the cities varied on a number of factors thought to be relevant to explaining variances in nonprofit sector size. The broad array of study sites gives the appearance of data sifting, sorting through a large dataset in hopes that something of import will shake out. Unfortunately, in assembling

such a large and varied dataset - presumably to reach more generalizable conclusions - the authors overlook findings that confound rather than conform to their model.

For example, this study contains an interesting finding that is given only passing attention by Bielefeld and Murdoch. The authors ran separate regression models for each metropolitan area and found that the need and resource variables were significant in most of the models. Boston was an exception to these findings - though it had the most nonprofit service providers, it was a poor fit for their model. The article does not discuss this anomaly, but Boston is also an older area in the Northeast and has a more dense development pattern compared to the other cities, suggesting that the urbanization of a region impacts the density of nonprofit services. This dissertation will include a regional comparison in order to test Bielefeld and Murdoch's finding and potentially explain it.

Most recently, Peck (2008) analyzed the proximity of anti-poverty-serving nonprofit organizations in relation to neighborhood poverty at the census tract level. Based on both descriptive and multivariate analysis, Peck finds that the nonprofit organizations locate in tracts of higher poverty. This research demonstrates a unique measure of nonprofit accessibility that takes account of nearby organizations and distance friction, or the ease of movement across the study area. However, the multivariate findings reported in this study are fairly weak, with adjusted r-square measures under 0.2 and no clear pattern of significant variables. This may be due to the parsimony of the regression model used, which does not include measures of demand heterogeneity or government funding, making it a more strictly empirical rather than theoretical analysis of nonprofit sector size.

An additional problem with Peck's analysis is the selection of organizations, which borrows directly from the method used by Joassart-Marcelli and Wolch (2003) of choosing an overly broad swath of NTEE codes. Furthermore, Peck takes the time to correct a portion of the organizations listing PO Box addresses, yet does not deal with the administrative headquarters issue by investigating other dispersed service locations. Peck defends these choices largely by referring to Joassart-Marcelli and Wolch (2003), who made similar assumptions. This is unfortunate because, as this dissertation demonstrates, it is possible to markedly improve address accuracy for large organizations with scattered service locations at minimal cost to the researcher.

Many of these studies are concerned about nonprofit location as a proxy for the availability of services in particular communities. However, many of the studies relied only on IRS data (i.e. Grønbjerg & Paarlberg, 2002; Joassart-Marcelli & Wolch, 2003; Bielefeld & Murdoch, 2004), which tends to collect administrative office locations rather than locations of service delivery. This dissertation attempts to efficiently research service addresses for organizations in IRS data through internet searches.

Location Equity and Nonprofit Services

In addition to these theoretical tests, there is another body of research that is concerned with public policy decisions relating to the equitable distribution of services and resources for residents. In a review of public sector facility location theory, DeVerteuil (2000) discusses some key distinctions relevant to public services and which also apply to the quasi-public types of services often delivered by nonprofit organizations, particularly where they are a major provider of government-contracted services. The key problem for locating these services is "balancing financial efficiency

with… public equity“ (DeVerteuil, 2000, p. 48). Location equity would require that nonprofit service providers be sited so as to maximize their availability to clients, who we assume to be people who cannot afford private services from for-profit providers. Many of the empirical tests below use location equity to test the fit of nonprofit service locations.

This is important to study because the location decisions of nonprofit services are not centrally coordinated – they result from decisions by many independent voluntary organizations (Wolpert, Seley, & Motta-Moss, 2004). Under these conditions, we cannot expect the spatial distribution of service providers to mirror the distribution of those who need their services, but this goal is still a useful yardstick. As Wolpert et al. argue, "the vital question becomes how well provision of services is achieved despite the fragmented and voluntary nature of the nonprofit sector" (2004, p 34).

Researchers from the Center on Nonprofits and Philanthropy at the Urban Institute mapped community-based groups in several communities in the Rust Belt and on the East Coast (Twombly & De Vita, 2000). The researchers augmented the NCCS data file with information from United Way grantees, the Unified Arts Database (also provided by the Urban Institute), Yellow Pages listings, and grantees of the foundation funding their study. In their work on Philadelphia, Twombly and De Vita (2000) found an agglomeration pattern, with nonprofits clustered in the central business district and therefore not equally present in all neighborhoods with potential needs.

In their report comparing the spatial distribution of the nonprofit sector by neighborhood, members of the New York City Nonprofits Project used a "goodness of fit" scale to compare the availability of services in the city (Wolpert et al., 2004). They

broke the analysis out by type of services provided, which allowed them to consider types of organization in the context of their likely client population (i.e. location of immigrant service providers relative to the number of foreign born residents in each neighborhood). This research reached two important findings about the fit between services and communities. First, in almost every category, most low-income neighborhoods and areas of concentrated poverty had a good supply of nonprofit social services. On the other hand, high-income neighborhoods also have an abundance of nonprofit services relative to their (presumably lesser) need. Of the categories analyzed, hospitals are the most abundant in high-income neighborhoods, relative to the distribution of need for emergency room services.

The findings of Wolpert et al. (2004) may not be generalizable because of the unique context of New York City, which is part of the most dense metropolitan area in the country and so has much less distance between social classes than is true in most other American cities. In his work focusing on Los Angeles, Chicago, and Washington DC, Allard (2004) examines the distribution of nonprofit and government social service providers relative to poverty rates at the census tract level. This empirical study is motivated by the observation that "the changing geography of poverty over the last ten years… has a number of implications for the provision of social services to low-income persons" (Allard, 2004, 2). Allard's study compares access to social services for central city versus suburban residents and finds central city areas have both greater need and greater access, which supports the findings of Wolpert et al. (2004). Allard concludes that suburban areas experiencing future increases in poverty may lack sufficient services for populations in need.

In his more recent study of access to social services Allard (2007) has also used a comparative "Service Accessibility Score" to analyze the relative amount of social services available to communities in three cities (Los Angeles, Chicago, & Washington DC) and four high-poverty rural areas (New Mexico, Kentucky, Georgia, & the California/Oregon border). The scores compare services available with population in poverty. Scores greater than 1.0 indicate that a community (represented by a census tract) has access to more services than the metropolitan mean community, while a score less than 1.0 has access to relatively fewer services in comparison to the surrounding metropolitan region. In this research Allard found that whether urban or rural, poor communities have less access to services than the metropolitan average, and he argues therefore that there is a spatial mismatch between social service programs and communities in need. This research included both public and privately provided services, and does not discuss whether the spatial mismatch is consistent across the type of provider.

None of the previous articles attempt to examine or substantiate how location and proximity affects the likelihood that someone obtains services. One exception is an article by Allard, Tolman, and Rosen (2003), which provides empirical evidence that greater spatial proximity to services increases the likelihood that welfare recipients will receive services. The research links a survey of female welfare recipients about service utilization with a multi-source database of mental health and substance abuse providers in the Detroit metropolitan area. Their analysis shows that, controlling for individual characteristics, survey respondents living closer to service providers were more likely to

utilize services. Unfortunately, this is one of the few studies that have tested the relationship between proximity and service utilization.

The quantitative approach utilized by all of these studies does not consider other factors that influence individuals' access to services. Allard's multi-region survey study (2007) is an exception because it did ask representatives of service organizations to list barriers to social service recipients receiving services. Transportation was high on the list, but other barriers included conflicts with work, lack of childcare, and perceived stigma. Stigma is also cited as a barrier by Kissane (2003) in her study of poor women in Philadelphia. Kissane discovered several reasons why her interview subjects neglected local social service providers – unawareness about service locations within their community, avoiding unsafe locations, scheduling and cost, administrative hassles, perceived lack of need, and stigma as mentioned.

Population Ecology and Agglomeration

Though testing population ecology and agglomeration theories is beyond the scope of the current research, it is useful also to review these two major location theories from sociology and economics, which provide some general insights and concepts that are generally relevant to explaining the pattern of nonprofit service activity across communities and regions. As Baum and Haverman (1997) show in their study of Manhattan hotel locations, contrasting the two theories provides interesting insights about each perspective. In sociology, the concept of population ecology defined by Hannan and Freeman (1988) focuses on populations of organizations and environmental constraints that these organizations face. Key constraints in population ecology are competition from other organizations and resource availability, i.e. raw materials, labor, equipment, etc.

This theory developed in reponse to the adaptation perspective in economics, which expects that organizations adapt to enviromental demands. The population ecology perspective questioned whether organizations are effective at adapting.

Population ecology's focus on environmental factors highlights the importance of location choice for nonprofits. "Ecological analysis is appropriate when organizations are subject to strong inertial pressures and face changeable, uncertain environments" (Hannan and Freeman 1988, 13). Population ecology is relevant to this study because there are several inertial pressures at play in the nonprofit sector, particularly the importance of an organization's mission and the limited sources of expansion capital that nonprofits can access to finance adapation and growth. These inertial pressures heighten the importance of environmental factors. Geographic location is important because the environmental constraints exist in physical space – it is not easy or simple to move an organization once established in a location.

Historical identity may act as another constraint for community-based nonprofit organizations. For example, many community-based nonprofits form in response to a community need at a given moment in time. The response may take the form of youth programs to prevent gang activities, job placement programs, or food pantries. Community development corporations (CDCs) are known for running all three types of programs and more. As a community improves, the demand for a local CDCs services may diminish. In fact, many of the neighborhoods that CDCs focused on in the 1980s are changing rapidly due to gentrification. Yet the organization's mission and identity is often tied to the location, and serves to constrain the organization's location choices.

Organizational ecology also presents the concept of competition for resources, which argues for dispersion as organizations with similar services each seek locations that provide a discreet set of resources with a minimum amount of competition. The result of the competition, in ecological terms, would be equilibrium where a group of organizations coexist in space with sufficient unique resources to support their activities.

Economists and urban planners have also been interested in the location and density of businesses, but in contrast to population ecology, they have focused on the tendency of firms to cluster in regions, the concept of agglomeration. A popular example of agglomeration is the proliferation of technology firms in Silicon Valley. The clustering of restaurants and hotels in particular parts of any city also illustrates agglomeration. Whereas organizational ecology is focused on competition for resources and other constraints in location decision-making, economists have focused on opportunities presented by agglomeration, which is contrary to the expectation that firms should locate relatively far apart to avoid direct competition for resources. In fact, there are many benefits to agglomeration (Baum & Haveman, 1997). An agglomeration of businesses or nonprofit social service providers demonstrates demand for a product or service in a given location, which is important in situations where demand is otherwise uncertain. Agglomeration also provides convenience for customers or clients by reducing travel and search costs, and also can provide access to important infrastructure. Finally, it provides proximity to labor and potential collaborations, which are more frequent amongst nonprofit organizations.

Agglomeration can also be the result of constraints such as land availability. Land use zoning would exclude service providers from some residential neighborhoods,

particularly in suburban areas. Political pressures from local residents opposed to having social service providers as neighbors would exclude certain neighborhoods from consideration. The high cost of land and buildings in wealthy neighborhoods also serves to direct nonprofits away from those communities. All of these constraints suggest a reactive agglomeration of nonprofit social services.

Considered together, organization ecology and agglomeration provide numerous factors relevant to explaining location factors affecting nonprofit social service providers, the net affect of which suggest an ecology of geographically concentrated organizations. Many nonprofit social service providers are tied to serving residents of particular counties by virtue of receiving government funding from those counties. Also, most nonprofit social service providers are small – only a quarter of the organizations included in this study have annual revenues over $1 million. Therefore one would expect multiple small firms in communities with high demands. There are also trends toward one-stop service centers and other shared space arrangements that suggest more agglomeration amongst nonprofit social service providers (Austin, 2003).

Conclusion

Spatial analysis of the nonprofit sector is developing now because new data sets and technologies have made it possible, but existing research on this topic is not well integrated with theory on the development and organization of the nonprofit sector. This reflects a lack of breadth in research results that would allow generalization or better connection to a theory of nonprofit service location. The literature review shows that only a few researchers have analyzed the spatial distribution of the nonprofit sector. This work has focused on comparing locations across cities (Joassart-Marcelli & Wolch, 2003) and

across neighborhoods within cities (Bielefeld, Murdoch, & Waddell 1997; Bielefeld & Murdoch, 2004; Seley, Wolpert, Motta-Moss, 2004).

This dissertation contributes to the growing body of evidence about the location of the nonprofit sector and community access to nonprofit social services. There is a need more evidence about the location of nonprofit organizations across a variety of metropolitan areas to provide a base for coherent theory on the issue. This research questions whether such a theory should be based on the dominant “three failures” perspective. In addition to theoretical concerns, given the importance of nonprofit organizations in the provision of public services, this research is also relevant to policymakers concerned with the spatial distribution of supportive services.

Data and Methodology

This research is a secondary analysis of existing data from two sources, nonprofit organization tax filings to the Internal Revenue Service (IRS) and community socioeconomic data from the US Census Bureau. The analysis consists of several regression equations to test a model suggesting that community-level nonprofit activity is a function of three factors: the level of social needs in the community, the resources available in the community to provide services, and additional control variables. The following equation represents this model:

Nonprofit activity=f(demands, resources, controls).

This model is analyzed using ordinary least squares (OLS) regression to test how a theory-driven set of community factors relates to nonprofit activity. Two measures of nonprofit activity are compared, and unexpected results related to the demand concept prompt several additional regressions. This chapter explains the procedure for acquiring the data and constructing the research data set.

Constructing a Measure of Nonprofit Activity

Previous studies of the size and scope of the nonprofit sector have used various methods for measuring and analyzing nonprofit activity within or across communities. The scale of measurement has varied from entire regions such as metropolitan areas (Corbin, 1999), to counties (Grønbjerg & Paarlberg, 2001), cities (Joassart-Marcelli & Wolch, 2003), and census tracts (Bielefeld, Murdoch & Waddell, 1997). Over time, the geographic unit used has generally gotten smaller as richer and more precise data sets of nonprofit organizations have become available. This dissertation utilizes a modified census tract geography.

Several studies use only a count of the number of organizations as their indicator of nonprofit activity. Joassart-Marcelli & Wolch (2003) point out that a simple count of the number of organizations does not tell us enough about the amount of services provided. Ideally, we would want to know the different types of services offered by nonprofit organizations, and the number of clients served weekly, monthly, or annually. Unfortunately, this type of detail about service activities is not available in any comprehensive manner. Therefore Joassart-Marcelli & Wolch argue for using a measure of total nonprofit expenditures as a proxy for service levels, which is readily available in the IRS data, to provide a more accurate representation of the level of nonprofit activity in a community. Total nonprofit expenditures were also used by Matsunaga and Yamauchi (2004) and Peck (2008) to represent levels of nonprofit activity.

A final aspect to consider in defining and measuring nonprofit activity is the type of nonprofits or their field of activity. Some studies have considered the entire nonprofit sector (Grønbjerg & Paarlberg, 2001), but this is a very diverse array of activities that includes groups involved in the arts, advocacy, providing aid to animals, promoting businesses, and a diverse array of social services. The current study focuses on a subset of the last group, direct service providers, because these organizations involved in implementing the service-based safety net that is increasingly important in the wake of welfare reform (Allard, 2007a). It is also assumed that these organizations are more location-sensitive because their work requires personal interaction with clients.

The dependent measure of community-level nonprofit activity used in this dissertation was based on listings of nonprofit organizations available in the Public Charities Core File maintained by the National Center for Charitable Statistics (NCCS) at

the Urban Institute, circa 2000. The Public Charities Core File contains detailed financial information for organizations that file annual tax returns with the IRS (Form 990) and are exempt under Internal Revenue Code section 501(c)(3). This data excludes nonprofits with annual revenues under $25,000 because they are not required to file annually with the IRS. In addition, some smaller organizations that file irregularly despite earning more than $25,000 in annual revenues are also excluded.

Grønbjerg and Paarlberg (2002) use the appearance of an organization in various databases to signify the formality and capability of nonprofit organizations. The Core File is considered a measure of the formal nonprofit sector, comprised of organizations of sufficient size and with enough administrative infrastructure to insure that official filings and documentation is updated in a timely manner. In contrast, the nonprofit organizations and other groups which may operate in a community but do not appear in administrative records are referred to as informal organizations. Informal organizations are not considered relevant to this dissertation because, due to their lack of paid staff, they are assumed not to be major service providers.

As with any administrative dataset used for research purposes, there are shortcomings to the Form 990 data that bear mentioning. First, the data may under represent the nonprofit population because some organizations that are large enough to be required to file annually do not do so. Large organizations may also be excluded if they submit their tax returns late. NCCS attempts to minimize this problem when they compile the annual files by retaining adjacent year tax filings for organizations that are believed to be late filers rather than deceased. In the 2000 Core File, approximately 25% of the financial data for organizations listed is actually from their 1999 tax filings. This is

problematic to the extent that nonprofit expenditures fluctuate significantly from year to year, for example if a major grant starts or ends. None of these issues are thought to bias the overall dataset in a particular direction, but they remain measurement concerns.

In addition to an organization's street address the core file also contains financial data from the organizations' tax form (expenditures, revenues, etc.), and an activity classification based on the National Taxonomy of Exempt Entities (NTEE). The NTEE coding system is a three-digit hierarchical coding system analogous to the North American Industry Classification System (NAICS) used by the US Bureau of Labor Statistics. An organization's NTEE code is assigned by the IRS and reviewed by NCCS. Organizations involved in several different activities are assigned an NTEE based on the activity commanding the greatest proportion of their financial resources. The NTEE code system is used in this study to identify social service organizations of interest.

Relevant activities are scattered throughout the NTEE codes, and there is little consensus in the literature on which codes best apply to the term "social service." In line with the literature (Joassart-Marcelli & Wolch, 2003; National Center for Charitable Statistics, 2004; Seley, Wolpert, Motta-Moss, 2004) this research considers nonprofit social service providers to be organizations working in health care (NTEE Code E, excluding hospitals and 'health support' organizations like blood banks), mental health and crisis intervention (F), and a broad group of human service fields including crime and legal related (I); employment (J); food, agriculture, and nutrition (K); public safety (M); youth development (O); and human services (P). Within these broad categories, selection of organizations focused on nonprofits likely to provide direct services to clients. The resulting list contained 3,758 organizations spread across the 13 study counties.

Previous research on nonprofit location has questioned the accuracy of tax filing addresses in this data to approximate service areas (Joassart-Marcelli & Wolch, 2003). The tax filing address does not always correspond to the location where services are delivered, for several reasons. For large organizations the tax filing address may be an administrative headquarters. Many small nonprofits use post office boxes for their filing address, or sometimes list the tax preparer's address. Despite these ambiguities, many of the previous studies of nonprofit location discussed in the literature review have used the filing address, accepting this known inaccuracy.

In order to improve the address accuracy of the nonprofit listings, this research utilized extensive internet searches to verify, add, or correct addresses, focusing on the largest nonprofit organizations. Internet searches relied primarily on the Google web search engine (www.google.com) to identify a website maintained by the nonprofit social service provider. In many cases, the organization's website provided a complete list of service locations. Some of the websites also indicated the year that different locations were opened which helped to exclude addresses for locations started after the year 2000. In cases where an organization did not maintain their own online listing of locations, web-based yellow pages listings provided by Google or the Yahoo! (www.yahoo.com) search engine were utilized. This process added almost 800 addresses for locations of social service delivery to the listing of the 200 largest nonprofit social service providers. It also provided opportunity to correct some addresses that were in the IRS data.

A shortcoming of this address research method is that it did not provide information about the size of each nonprofit service location or the number of clients served to use as a basis for reallocating the total expenditures from the original IRS

record. Lacking more detailed information, the organization's total expenditures were distributed equally across the locations for organizations with multiple service locations. This creates a potential bias to the dataset, though this additional research regarding the exact locations of nonprofit services is an improvement on the methodology in previous studies using only IRS data.

Post office box addresses pose a problem for the purposes of this study because they represent a centralized delivery address and not the actual location of activity for a nonprofit service provider. The internet search methodology described above was also utilized to replace post office (PO) box addresses for any nonprofits with annual expenditures over $1,000,000. Smaller organizations listing post office boxes, and those that could not be located on the internet, were dropped from the dataset for lack of a reliable method for locating real street addresses. This assumes that an organization without a real street address is either too small to have a proper service address or does not operate in a manner consistent with the direct service model of interest in this study.

There were 350 records that met these criteria and were deleted from the data, representing 10.7% of the records. Deleted records were distributed throughout the various social service fields but were more likely to be in counties with larger proportions of rural land. Therefore, the dataset likely under estimates the amount of nonprofit activity in rural parts of the study region such as Placer and El Dorado counties.

The final unit of analysis in this study is based on the census tract. The list of nonprofit addresses developed above was matched to the census tract where they operate through geocoding. Geocoding is the procedure used to assign geographic latitude and longitude coordinates to a street address. The EZ-Locate internet-based geocoding

service provided by Tele Atlas (provider of location data to companies such as Google Maps, Yahoo! Maps, MapQuest, Microsoft, and navigation systems used in Toyota and Honda vehicles) was used to geocode the nonprofit service locations. EZ-Locate compares each address to a proprietary database of street and address information, and then assigns a geographic coordinate (latitude and longitude) to locate the point on a GIS map.

The result of the address review process above was a list of 2,758 nonprofit locations in the study area. Table 1 shows that human service providers comprised half of the organizations. (Table A1 in the appendix provides a detailed list of NTEE codes.)

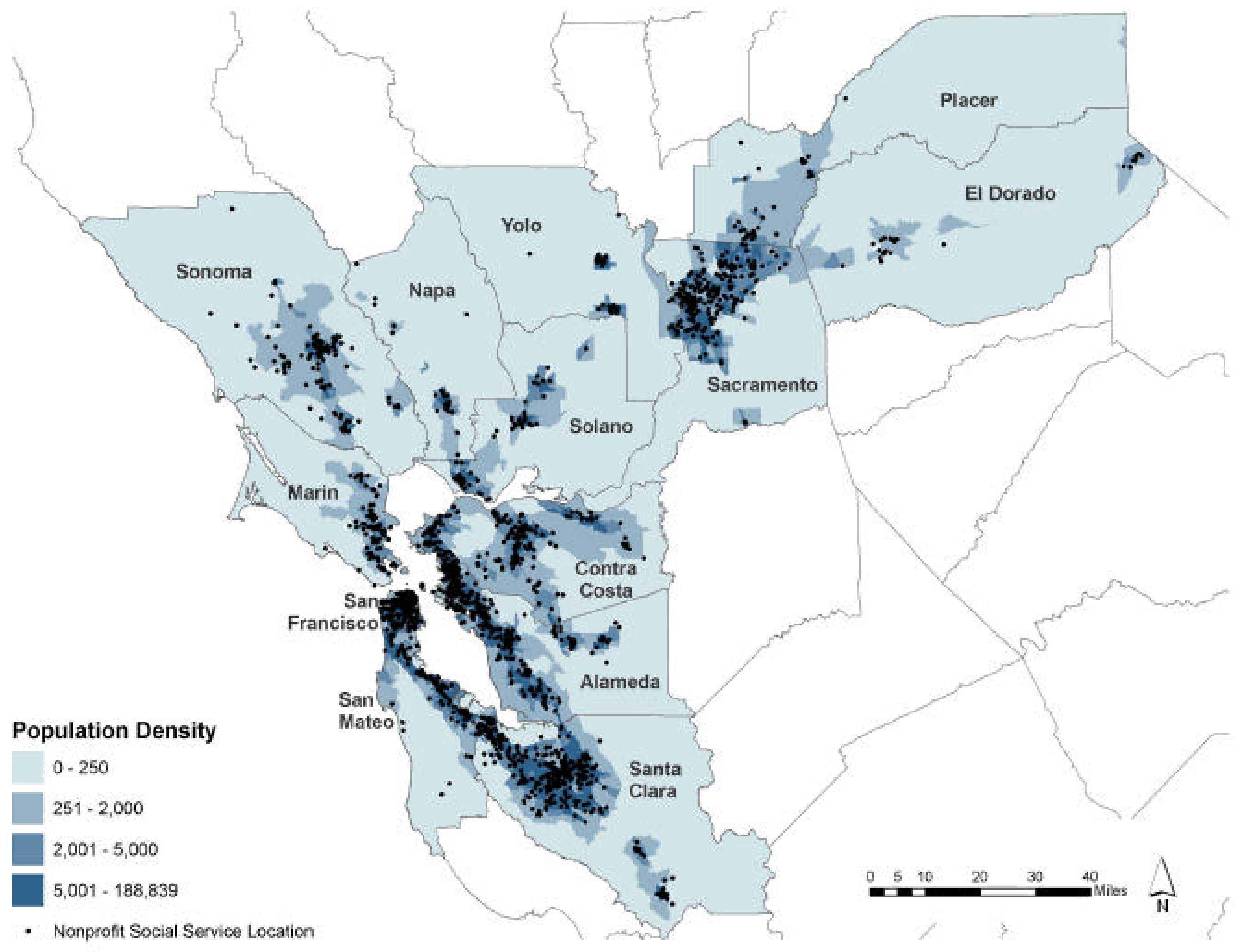
Table 1. Nonprofit Social Service Provider Activities

NTEE Code	Description	Percent
E	Health Care	8.0%
F	Mental Health & Crisis Intervention	13.9%
I	Crime & Legal Related	6.7%
J	Employment	8.4%
K	Food, Agriculture, & Nutrition	2.2%
M	Public Safety, Disaster Preparedness, & Relief	1.0%
O	Youth Development	10.3%
P	Human Services	49.5%
Total		100.0%

Nonprofit locations were overlaid and matched to census tracts in the study area using the ArcView GIS program. The study region is defined by 13 counties, 9 of which are in the San Francisco metropolitan area (Alameda, Contra Costa, Solano, Napa, Sonoma, Marin, San Francisco, San Mateo and Santa Clara), and four in the Sacramento metropolitan area (Yolo, Sacramento, Placer and El Dorado). There were 1,808 census tracts in the study region for the 2000 census. The map in Figure 1 shows the nonprofit

locations over the population density by census tract and provides an orientation to the study region. The Sacramento metropolitan area is comprised of the four eastern counties, while the remainder makes up the San Francisco metropolitan area. Notice that the nonprofit social service locations are clustered around urbanized areas, with far fewer in the sparse rural parts of the region. Nonprofits in the Sacramento area make up a separate, distinct cluster from the San Francisco locations.

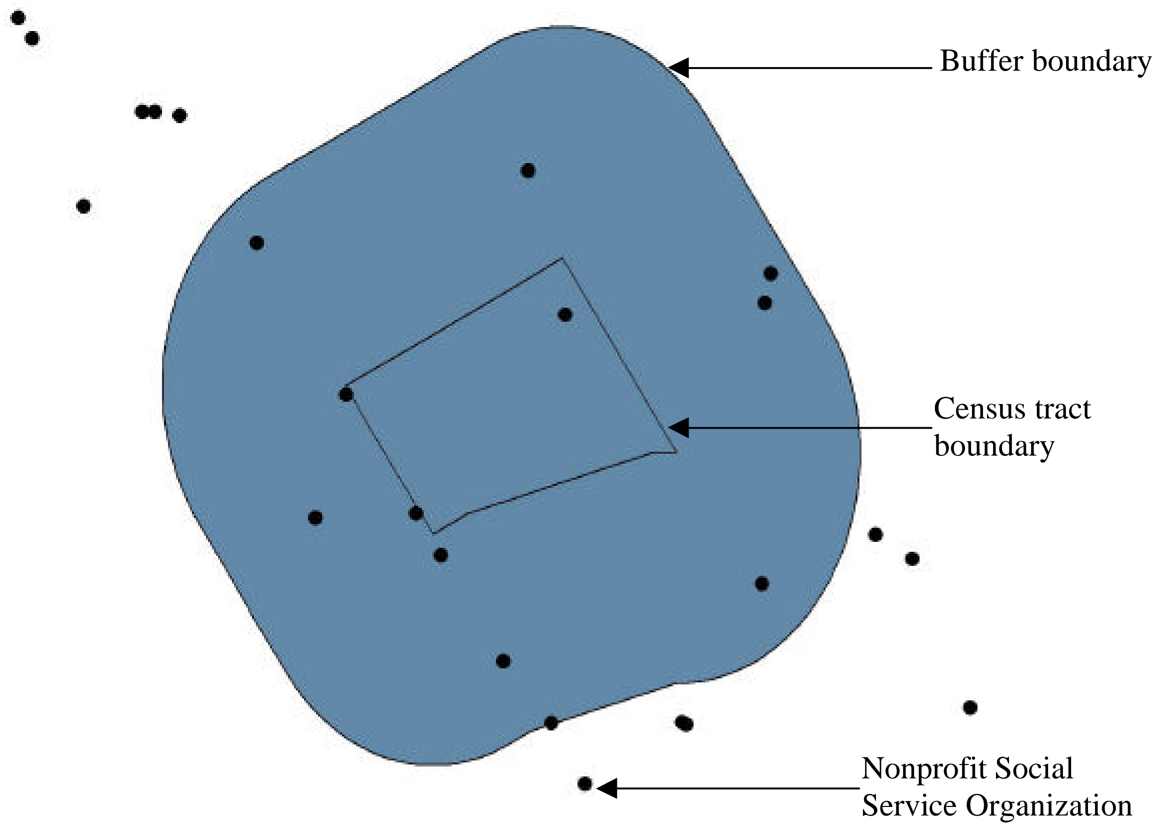
Figure 1. Map of Location of Nonprofit Social Services Relative to Population Density



Census tract boundaries are drawn primarily to create statistical aggregation units that average 4,000 people. Tract boundaries are drawn with local input in an attempt to match the social and physical boundaries of a community. Community boundaries are soft and people do not limit themselves to these boundaries when seeking social services. The goal of this research is to approximate physical access amongst community residents. A resident of any given census tract is likely to venture outside of their tract for goods and services. Therefore, as measured for this research,the nonprofit social services available to residents are not limited to those provided by organizations located inside of a given census tract boundary.

With this in mind, this research aggregates the total nonprofits within a half-mile buffer of each tract/community for the measure of nonprofit activity available to the residents of a given community. Since census tract boundaries are contiguous, this created overlaps between adjacent tracts and therefore associates many organizations with more than one community (see Figure 2). Each community was assigned two measures of nonprofit social services: the total number of organizations available to each community, and the total expenditures of those organizations. These two measures are the dependent variables in the regression analysis for this study.

Figure 2. Illustration of Buffered Census Tract



Community Factors Explaining Nonprofit Activity Levels

Many of the dependent variables for the regression were drawn from the 2000 US Census, Summary File 3. Table A2 in the appendix provides a list of all the variables and includes details about the census data used to construct the community demographic variables. Demands break down into two different categories, social needs and diversity, both of which are expected to correspond to an increase in nonprofit activity. Social needs are represented by community measures of poverty rate, housing burden, low education levels, proportions of youth, seniors, and single female-headed households. Market failure theory suggests that nonprofit firms would be more likely to operate in low-income communities with high social need because they can offer low-cost services, subsidized through tax-deductible donations, making them available to poor residents who cannot afford services at market rates. Communities with greater proportions of all of these factors are expected to have higher demands for the nonprofit social services measured here such as employment assistance, youth development, and senior services. If the sector is responsive, there will be greater nonprofit activity in communities with greater proportions of high-need populations.

According to the demand heterogeneity concept (Corbin, 1999; Weisbrod, 1988), government services are best suited to meet the demands of a majority group, and nonprofits are expected to respond to the demands of a diverse minority. More diverse communities are thought to have more minority groups who would be unsatisfied with the amount and type of services targeted to the majority. More minority groups would create demand for nonprofit services, therefore diversity is expected to predict more nonprofit activity.

Diversity is represented by three measures in this model: proportion foreign-born residents, racial diversity and economic diversity. The proportion of foreign-born residents is considered a measure of diversity because those communities are expected to be particular about language and other cultural factors related to service delivery. Therefore, even if there is an adequate amount of public services in a community, nonprofit providers may be called upon to deliver services in a particular language or in ways that are sensitive to different cultural traditions.

Based on examples in the literature (Bielefeld & Murdoch, 2004; Matsunaga & Yamauchi, 2004), economic and racial diversity variables are measured by the Herfindahl-Hirschman Index (HHI) of concentration, which ranges from 0.0 – 1.0. The HHI is calculated as the sum of squares of the proportion falling into a particular category. Though more commonly found in the economics field (i.e. where market failure theory came from), the HHI is highly correlated with other measures of entropy commonly found in urban studies and sociology literature. For this research, the HHI was subtracted from one so that a higher value corresponds to greater diversity.

The results of the initial regression analysis prompted a search for alternate explanations. In order to explore unexpected or insignificant regression coefficients in the analysis, additional census variables for specific racial groups and foreign regions of origin are included in table A2. Specifically, the racial groups are proportion African American, Asian, and Hispanic in each community, which are used in place of racial diversity. In a separate equation, the measure of proportion foreign born is substituted for the proportion of residents from the following regions: East Asia, Central Asia, South

Central Asia and Central America. Rationale for these variables is provided in the analysis section.

The available supply of resources is also thought to draw nonprofit social service providers to a community. Previous research by Grønbjerg and Paarlberg (2001) and Joassart-Marcelli and Wolch (2003) found that resource factors, measured by indicators of government expenditures, were more important to explain levels of nonprofit activity, compared to need factors. There are three categories of resources considered in this analysis, based on the sources of nonprofit revenues; donations, contracts, and fees for services. All these resource measures are hypothesized to have a positive effect on nonprofit social service activity. The best available measures of donations are represented by three variables: the proportion of households with annual income greater than $100,000; the proportion of census tracts residents who derive income from dividends, interest, and rent; and aggregate household wealth. These measures are best viewed as representing the potential for donative revenues, and are used here in lieu of a direct measure of community charitable giving, which is not currently available at the census tract level.

Contract sources of revenue are measured by the amount of county public welfare expenditures, drawn from the 2002 Census of Governments (COG) to provide a measure of government spending on nonprofit services. Data in the COG was gathered by the US Census Bureau through mail survey, secondary sources, and follow-up visits to counties in cases of important missing data. County governments are key organizers of public welfare services in California (Grønbjerg & Paarlberg, 2001), particularly since welfare reform. More generous counties would have more nonprofit activity, as measured by

public welfare expenditures. This measure is available in the COG as a single dollar amount per county that includes direct cash assistance (including TANF), contracts to private agencies (including nonprofits), and expenditures for welfare institutions operated by the government.

Government funding is also available to nonprofit social service providers through service vouchers used by residents receiving public assistance or supplemental security income (SSI). Census measures of the proportion of residents receiving each of these benefits are included as additional resource factors. In the traditional division of nonprofit revenue sources, these types of voucher payments would be classified as fee revenue, which accounts for over 50% of the revenue of the sector (Anheier & Salamon, 2006, Smith, 2002). Additional relevant measures of resources such as grants made by private foundations and individual philanthropy were not readily available. This may lower the explanatory power of the regression model. However, philathropy is less of a concern since they generally account for less than 15% of nonprofit revenues.

This model also includes several variables to statistically control for factors which are expected to affect available nonprofit social services but are not of theoretical interest. Land use restrictions constrain the potential number of social service providers in communities by limiting the supply of suitable space. Land use will be represented by a dichotomous variable indicating whether the census tract is in a central business district. There is by definition more available office space in these areas, so one would expect them to have a greater proportion of nonprofit organizations. Greater population density would also support more nonprofits, independent of the explanatory variables of interest. Therefore, a measure of people per square mile is included to control for population

density. Finally, the model also includes a dichotomous variable indicating whether the census tract lies in the San Francisco MSA to account for a historical difference in development patterns between San Francisco and Sacramento (explained in more detail below).

Table 2 provides descriptive measures for the analysis variables. The kurtosis measures indicate that several of the variables had a skewed distribution of values, which would violate distribution assumptions of linear regression analysis. This was corrected by applying a square root transformation to variables with kurtosis values between 4.0 – 9.9. Variables with kurtosis over 10 were increased by a constant value before applying a log transformation. These adjustments brought the kurtosis values within acceptable bounds.

Table 2. Descriptive Statistics

Variable	Mean	Median	Std. Deviation	Minimum	Maximum	Adjustment Method
Count of Nonprofit Service Locations	8.45	4.00	15.43	0	171.00	log
Aggregate Nonprofit Expenditures	$11,321,685	$3,721,746	$22,243,817	$0	$226,788,769	log
Poverty Level	0.13	0.10	0.11	0	0.86	sqrt
Proportion of Residents with Serious Housing Burden	0.14	0.13	0.06	0	0.50	sqrt
Proportion Youth	0.23	0.24	0.07	0	0.46	
Proportion Seniors	0.11	0.11	0.06	0	0.89	log
Proportion High School Drop Outs	0.16	0.12	0.13	0	0.78	
Proportion Unemployed	0.03	0.03	0.02	0	0.35	log
Proportion Female Headed Households	0.06	0.05	0.04	0	0.42	sqrt
Proportion Foreign Born	0.24	0.20	0.15	0	0.84	
Proportion East Asian	0.04	0.02	0.07	0	0.77	log
Proportion South Central Asian	0.02	0.01	0.03	0	0.29	log
Proportion South East Asian	0.05	0.03	0.07	0	0.45	
Proportion Central American	0.07	0.03	0.09	0	0.56	sqrt
Economic Diversity (HHI)	0.83	0.84	0.06	0	0.87	log
Racial Diversity (HHI)	0.52	0.55	0.16	0	0.78	
Proportion Non-Hispanic African American	0.08	0.03	0.12	0	0.84	log
Proportion Non-Hispanic Asian	0.17	0.11	0.16	0	0.94	
Proportion Hispanic	0.18	0.13	0.15	0	0.85	
Proportion of Households with Annual Income over $100K	0.24	0.21	0.17	0	0.78	
Proportion households with income from interest, dividends, or rent	0.42	0.42	0.17	0	1.00	
Aggregate household wealth	$112,432,589	$94,895,750	$74,822,811	$0	$830,908,100	sqrt
Proportion receiving SSI	0.05	0.04	0.04	0	0.33	sqrt

Variable	Mean	Median	Std. Deviation	Minimum	Maximum	Adjustment Method
Proportion receiving public assistance	0.04	0.02	0.05	0	0.65	log
County Welfare Expenditures (in $1,000's)	$441,414	$572,934	$239,755	$30,736	$764,278	
Population Density	8,518.76	6,150.15	10,908.82	0	188,839.40	log
Tract is in a central business district	0.02	0.00	0.15	0	1.00	
Tract is in the San Francisco MSA	0.78	1.00	0.42	0	1.00	

N = 1,808

Maps provided in figures 3 and 4 show the geographic distribution of two key census variables, the poverty rate and racial diversity, respectively. Areas of high poverty in the Bay Area tend to be clustered in central cities like San Francisco, Oakland, and San Jose. There are also some high poverty tracts in outlying communities in southern Napa County in the town of Napa, western Solano County and the town of Vallejo, and northeastern Contra Costa in Pittsburg and Antioch. Poverty in the Sacramento region is concentrated just north and south of the state capitol in downtown Sacramento. There are also a couple high poverty tracts in Yolo county in Davis, which is a college town whose undergraduate student residents skew the poverty rate.

The map in figure 4 shows that the racially diverse tracts are scattered throughout communities in the study region with few discernable patterns. Tracts with the lowest racial diversity scores tend to be those tracts located in rural areas, particularly in Marin, Sonoma, Napa, Placer, and El Dorado counties. In a study focused on residential diversity in California, Sandoval, Johnson, and Tafoya (2002) found that the Bay Area and Sacramento Metro ranked highest in the state in terms of diverse tracts.

Figure 3. Map of Poverty Rate by Census Tract in Study Region

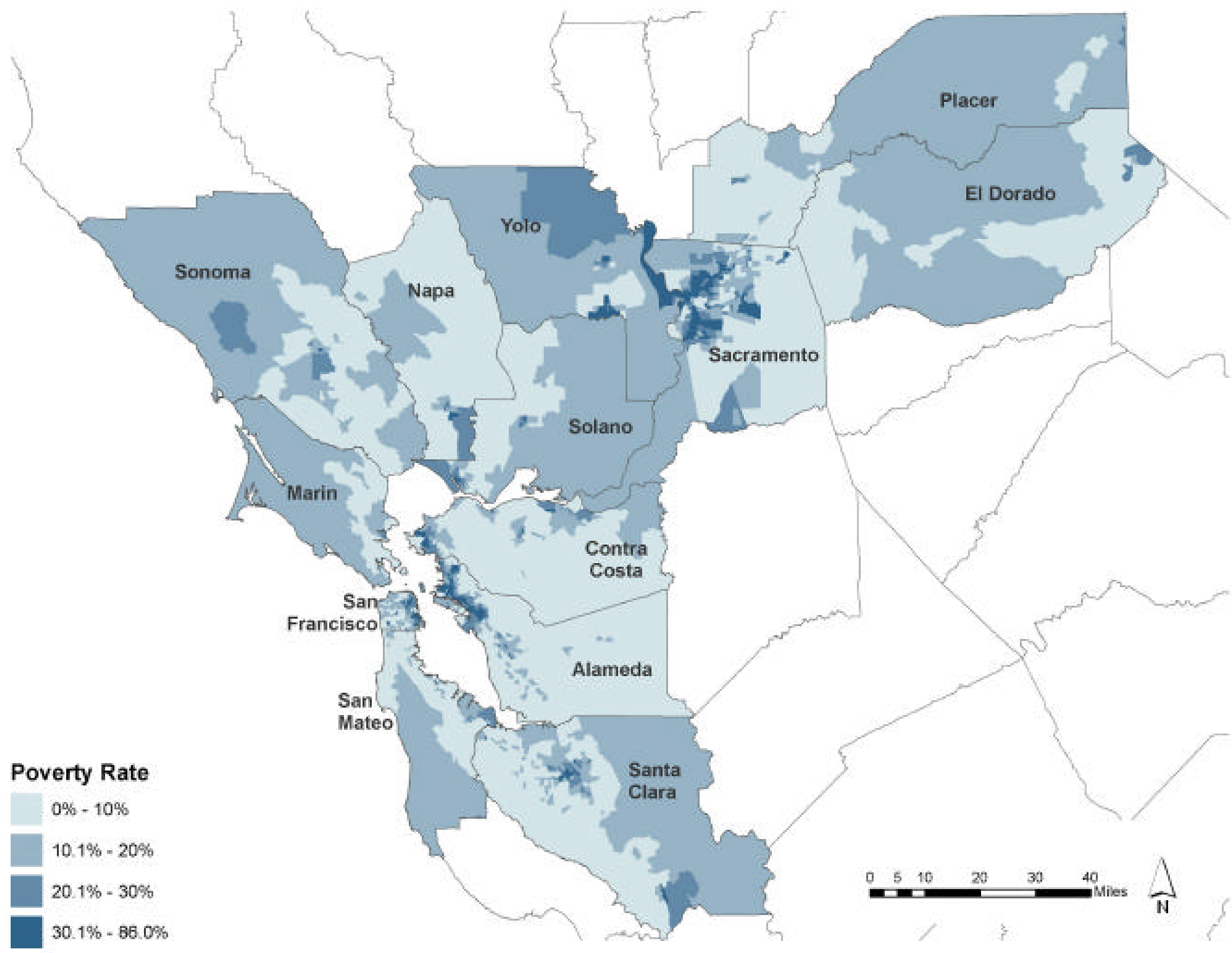
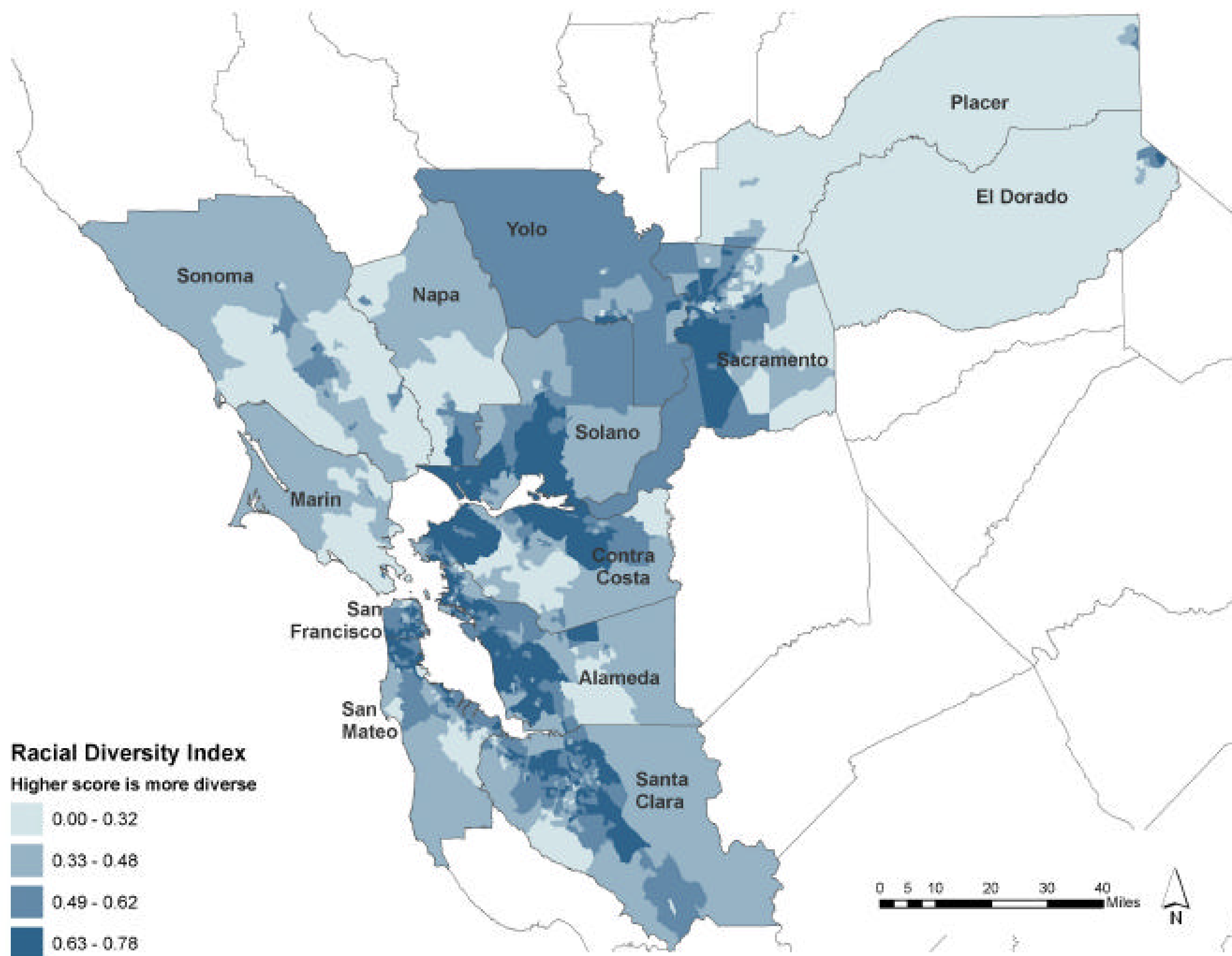


Figure 4. Map of Racial Diversity Index Scores by Census Tract in Study Region



Based on this description of variables we can restate the equation from the beginning of this chapter with greater detail:

Nonprofit social service activity (number of organizations in a tract, aggregate expenditures in a tract) = f(**demands** (poverty rate, housing burden, youth, seniors, lack of education, unemployment, female headed households, immigrants, economic diversity, racial diversity), **resources** (community wealth, government funding, public assistance income, SSI), **controls** (population density, central business district, SF MSA)).

Overview of Research Communities

This research project focuses on the metropolitan regions of Sacramento and the San Francisco Bay Area in California. This study region is interesting because it emulates many of the factors and issues experienced by large metropolitan areas across the county: a diverse population with significant foreign immigration; an urban growth pattern of older inner cities ringed by successive generations of suburbs; multiple county government jurisdictions (which allow for meaningful modeling of public expenditures); and a history of community revitalization efforts in some portions of the study area.

The 1,808 census tracts included in this research are spread across 13 counties and 2 metropolitan regions in Northern California. The 2000 US Census counted 3.3 million people living in this area. These residents live in communities ranging from the wealthy enclaves of Atherton and Pacific Heights, working class communities like Hayward and Vallejo, high poverty areas such as West Sacramento and Richmond, and the growing, diverse suburbs of Elk Grove and Gilroy. According to the data collected here, the Sacramento region was less racially diverse than the Bay Area and had a higher overall

poverty rate of 12.1%. In contrast, Santa Clara County in the San Francisco Bay Area MSA was the most racially diverse community, had the greatest proportion of foreign-born residents, and had the highest median household income ($74,335 in 1999 dollars). This variety of communities makes the study region useful for generating findings that are meaningful in other parts of the country.

The two metropolitan regions of San Francisco and Sacramento offer interesting contrasts in terms of community development and population growth. The San Francisco region was once the banking capital of the west coast for the first half of the twentieth century and has ever since been one of the major urban regions of the United States. San Francisco is known for its rich and active nonprofit community, and a history of neighborhood initiatives that reach back at least to the Ford Foundation Gray Areas Program and federal urban renewal of the 1960s. These private and public initiatives focused attention on the variety of challenges facing inner city residents, and inevitably spur the formation of nonprofit organizations. More recently, the San Francisco metropolitan area has witnessed an influx of foreign immigrants similar to the experience of regions like Los Angeles, Chicago, and New York.

While Sacramento has a long history as home to the state capitol, the region has garnered more attention recently because it is part of the “Third California,” a label that Kotkin and Frey (2007) applied to fast-growing inland regions of the state experiencing significant internal migration since the mid-1990s from expensive coastal areas like San Francisco (the first California) and Los Angeles (the second California). This rapid growth and development puts Sacramento in league with regions like Phoenix, AZ, and Riverside, CA. Growth in the Sacramento region has increased the diversity of the

population, with Asian and Hispanic populations dominating (Johnson & Hayes, 2004). The city of Sacramento is now one of the most diverse cities in the United States (Sandoval, Johnson, & Tafoya, 2002). For these reasons, Sacramento poses an interesting contrast to San Francisco in the analysis. The population growth issues and their resulting impact on social service needs also make it an important region for policymakers to understand better.

Analysis and Findings

This dissertation tests concepts from key theories about the role of nonprofit firms in a mixed economy by studying the location of social service organizations in a 13 county area. The analysis focuses on a small geographic scale, measuring nonprofit social service activity at the neighborhood or community level. The specification of nonprofit service location is improved from previous studies that have relied on a single tax filing address.

Neither people nor nonprofit services are distributed equally across the study area. Table 3 shows that the San Francisco MSA has 79% of the population and 85% of the nonprofit service locations included in this study. The table provides figures for the density of nonprofit organizations in each county as measured by the people per service location - fewer people per service location means a greater density of locations per person. Within that MSA, the county of San Francisco has a disproportionate number of nonprofit service locations relative to population, which reflects its central city status in the region. Napa is the only county with a higher density of nonprofit service locations, but it also has a very small population. All of the counties in the Sacramento MSA have lower densities of nonprofit service locations, regardless of the county population. El Dorado County had the fewest service locations, while Placer County has the highest ratio of people per location, making it the least dense county included in this study in terms of nonprofit service locations.

Table 3. Distribution of Population and Nonprofit Locations Across Study Region

MSA	County	Nonprofit Service Locations		Population		People per Service Location
San Francisco		2,330	84.5%	6,783,760	79.1%	2,911
	Alameda	527	19.1%	1,443,741	16.8%	2,740
	Contra Costa	232	8.4%	948,816	11.1%	4,090
	Napa	150	5.4%	124,279	1.4%	829
	Marin	44	1.6%	247,289	2.9%	5,620
	San Francisco	578	21.0%	776,733	9.1%	1,344
	San Mateo	172	6.2%	707,161	8.2%	4,111
	Santa Clara	410	14.9%	1,682,585	19.6%	4,104
	Solano	71	2.6%	394,542	4.6%	5,557
	Sonoma	146	5.3%	458,614	5.3%	3,141
Sacramento		428	15.5%	1,796,857	20.9%	4,198
	El Dorado	30	1.1%	156,299	1.8%	5,210
	Placer	39	1.4%	248,399	2.9%	6,369
	Sacramento	318	11.5%	1,223,499	14.3%	3,847
	Yolo	41	1.5%	168,660	2.0%	4,114
Total		2,758	100.0%	8,580,617	100.0%	3,111

Since the Sacramento region has experienced greater population growth in the past decade (Kotkin & Frey, 2007), we might expect that the growth of nonprofits has been more intense recently compared to San Francisco. We can test this by comparing the proportions of nonprofit organizations by age across the two regions. Recent growth in the Sacramento nonprofit sector would be reflected in more young organizations and few older ones. However, table 4 shows that there were no significant differences in the distribution of organizations by age between the two regions.

Table 4. Age of Nonprofit Organizations by County

Age of Nonprofit Organization	Sacramento MSA		San Francisco MSA		Total	
Over 50 yrs old	10	3.0%	67	3.9%	77	3.7%
30-50yrs	36	10.8%	181	10.5%	217	10.6%
20-30yrs	73	21.9%	395	23.0%	468	22.8%
10-20 yrs	65	19.5%	339	19.7%	404	19.7%
5-10yr	82	24.6%	390	22.7%	472	23.0%
5yrs or less	68	20.4%	348	20.2%	416	20.3%
Total	334	100.0%	1720	100.0%	2,054	100.0%

Note: Counts of nonprofit organizations, not locations.

There were several census tracts with no nonprofit service locations. These zero-activity tracts were more likely to be in the Sacramento MSA, particularly in Placer and El Dorado counties in areas with little or no population (table 5). The following map in Figure 5 shows nonprofit expenditures per capita. The mean expenditure per capita was $4,423. This map shows the location of zero expenditure tracts and also highlights the spatial dispersion of the tracts with high expenditures per capita. The tracts with zero expenditures were also tracts with little or no human population, particularly in Placer and El Dorado counties, which are comprised of the forests of the Sierra foothills.

Table 5. Distribution of Communities With No Nonprofit Locations

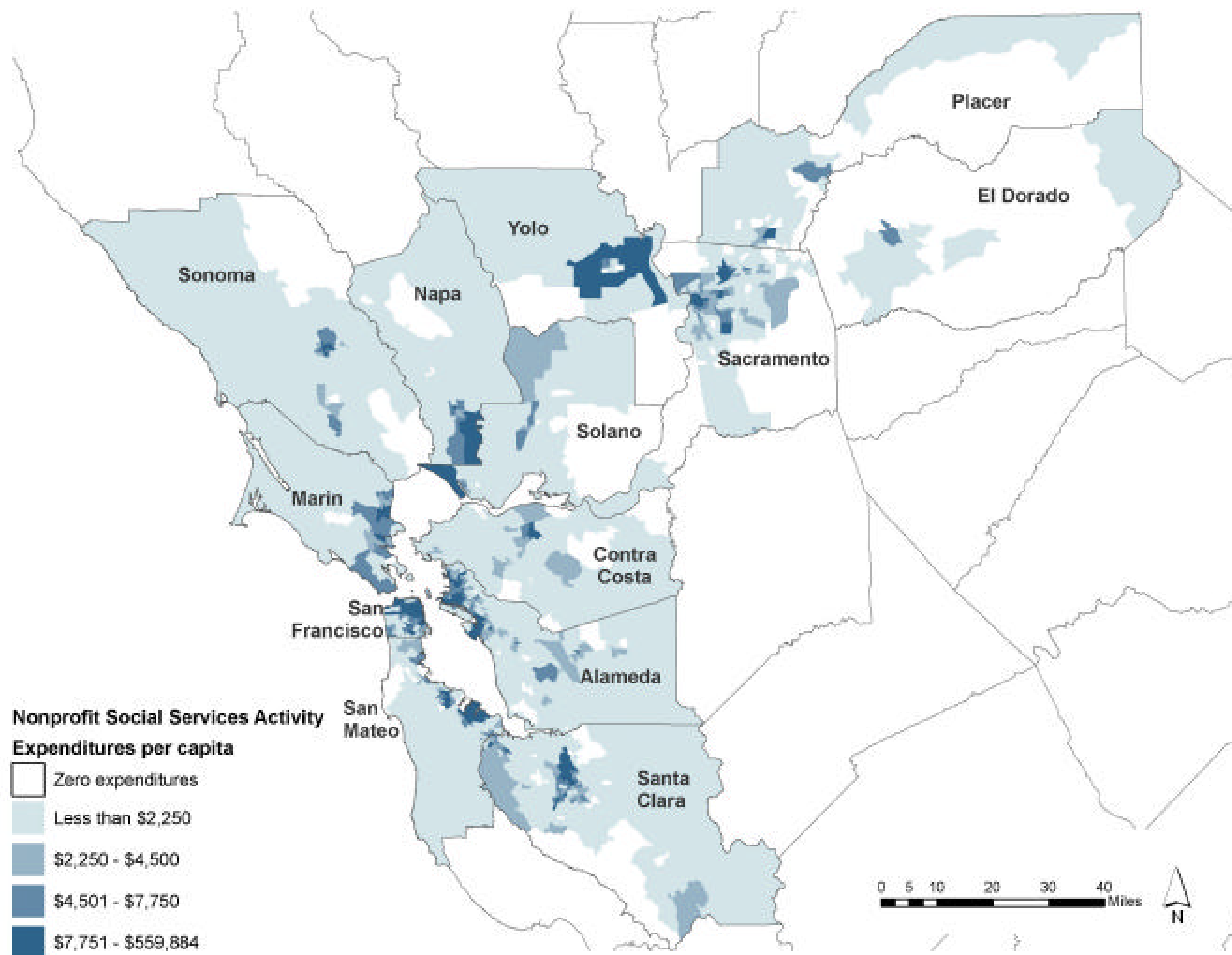
MSA		Zero Expenditures	Non-zero Expenditures	Total
Bay Area	Count	103	1,302	1,405
	% within MSA	*7.3*	*92.7*	*100*
Sacramento Metro	Count	87	316	403
	% within MSA	*21.6*	*78.4*	*100*
Total	**Count**	**190**	**1,618**	**1,808**
	% within MSA	***10.5***	***89.5***	***100***

	Value	Approx. Sig.
Contingency Coefficient	0.190	0.000

County		Zero Expenditures	Non-zero Expenditures	Total
Alameda	Count	14	307	321
	% within County	*4.4*	*95.6*	*100*
Contra Costa	Count	15	153	168
	% within County	*8.9*	*91.1*	*100*
El Dorado	Count	16	20	36
	% within County	*44.4*	*55.6*	*100*
Marin	Count	2	49	51
	% within County	*3.9*	*96.1*	*100*
Napa	Count	3	24	27
	% within County	*11.1*	*88.9*	*100*
Placer	Count	19	32	51
	% within County	*37.3*	*62.7*	*100*
Sacramento	Count	44	235	279
	% within County	*15.8*	*84.2*	*100*
San Francisco	Count	0	176	176
	% within County	*0.0*	*100.0*	*100*
San Mateo	Count	19	136	155
	% within County	*12.3*	*87.7*	*100*
Santa Clara	Count	35	306	341
	% within County	*10.3*	*89.7*	*100*
Solano	Count	9	71	80
	% within County	*11.3*	*88.8*	*100*
Sonoma	Count	6	80	86
	% within County	*7.0*	*93.0*	*100*
Yolo	Count	8	29	37
	% within County	*21.6*	*78.4*	*100*
Total	**Count**	**190**	**1,618**	**1,808**
	% within County	***10.5***	***89.5***	***100***

	Value	Approx. Sig.
Contingency Coefficient	0.263	0.000

Figure 5. Map of Nonprofit Social Service Expenditures Per Person by Census Tract



Correlations

Table 6 provides correlation coefficients between the measures of nonprofit activity and the independent variables to be included in the regression. As expected, there is a strong correlation between the count of nonprofit locations and the aggregate expenditures in a tract ($r = 0.898$, $p < .01$). However, the lack of a perfect correlation between the count and expenditures variables supports treating them as distinct measures of nonprofit activity.

The pattern of correlations varies between the two dependent variables measuring nonprofit activity. Population density is the strongest correlation with the dependent variable for the count of nonprofit service locations in each tract. The variables measuring the poverty rate and proportion of residents with significant housing burden show the strongest correlations with the other dependent variable, aggregate nonprofit expenditures. The variables measuring the proportion of female-headed households and the total county welfare expenditures were significantly correlated with only the expenditures measure, in the predicted directions. This suggests that nonprofit social service expenditures may be a more useful measure for this analysis. The full correlation matrix is available in the appendix, and does not suggest significant multicollinearity amongst the variables.

Table 6. Correlations: Spearman's rho

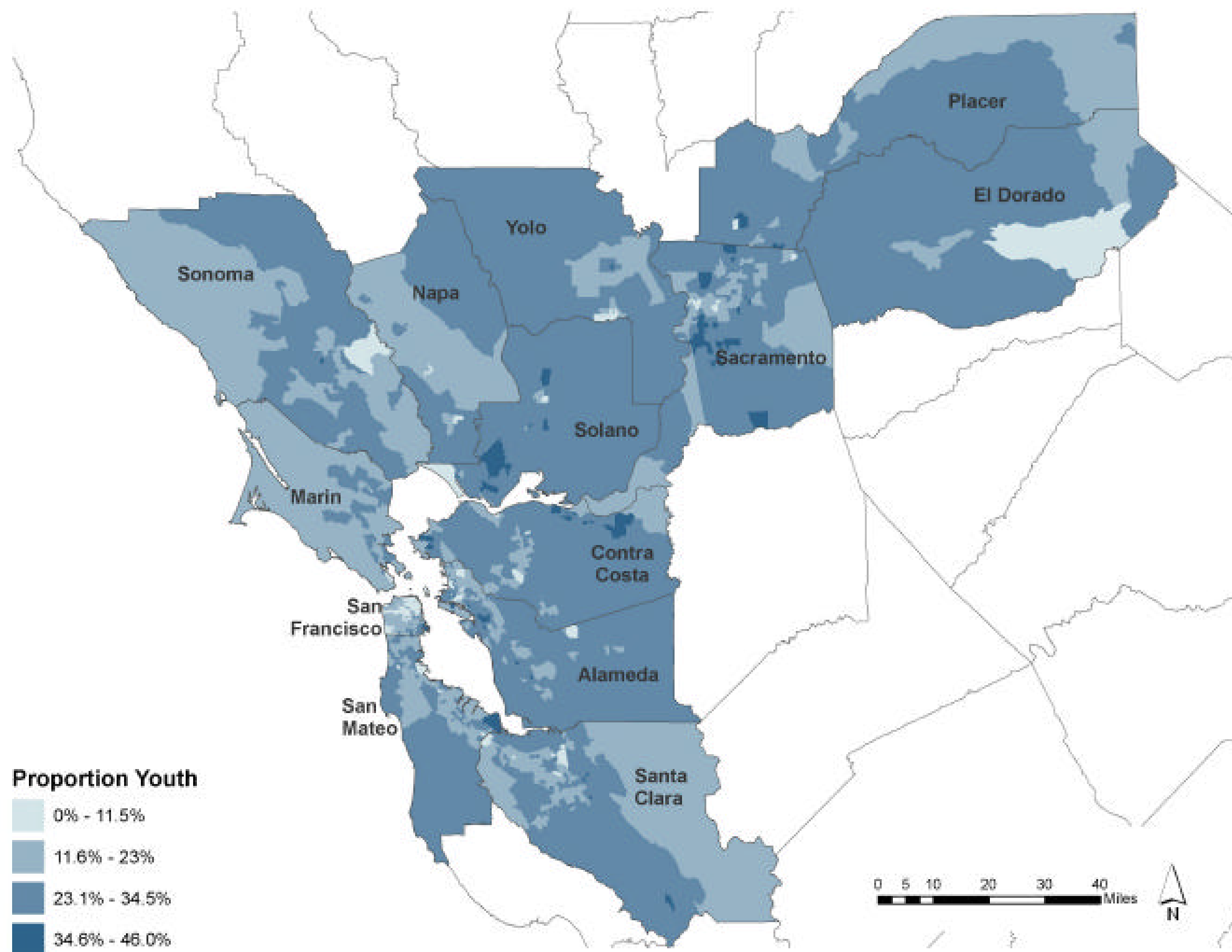
	Total number of nonprofit service locations	**Aggregate expenditures for nonprofit service locations**
Poverty level	*0.392*	*0.378*
Proportion of residents with serious housing burden	*0.393*	*0.378*
Proportion youth	*-0.326*	*-0.293*
Proportion seniors	*0.143*	*0.127*
Proportion high school drop outs	*0.210*	*0.206*
Proportion unemployed	*0.147*	*0.162*
Proportion female headed households	0.033	<u>0.050</u>
Proportion foreign born	*0.219*	*0.169*
Economic diversity (HHI)	*0.169*	*0.148*
Racial diversity (HHI)	*0.113*	*0.119*
Proportion of households with annual income over $100K	*-0.225*	*-0.238*
Proportion households with income from interest, dividends, or rent	*-0.161*	*-0.169*
Aggregate household wealth	*-0.083*	*-0.086*
Proportion receiving SSI	*0.241*	*0.227*
Proportion receiving public assistance	*0.153*	*0.159*
County Welfare Expenditures (in $1,000's)	0.044	<u>0.050</u>
Population density	*0.400*	*0.342*
Community is in a central business district	*0.245*	*0.232*
Community is in the San Francisco metropolitan area	*0.242*	*0.178*
Proportion Non-Hispanic African American	*0.188*	*0.193*
Proportion Non-Hispanic Asian	*0.062*	0.030
Proportion Hispanic	*0.105*	*0.114*
Proportion East Asian	*0.134*	*0.094*
Proportion South Central Asian	*0.188*	*0.193*
Proportion South East Asian	<u>0.057</u>	<u>0.053</u>
Proportion Central American	*0.199*	*0.195*

N=1,808

Italics - correlation is significant at the 0.01 level (2-tailed).

<u>Underline</u> - correlation is significant at the 0.05 level (2-tailed).

Figure 6. Map of Proportion Youth by Census Tract



Based on the hypotheses described above, we would predict positive correlations between the two measures of nonprofit activity and the various measures of demand and resources. On the whole, the demand variables are more consistent with the hypothesized relationship to nonprofit activity, compared to the resources variables. Both measures of nonprofit activity (count and expenditures) show significant positive correlations with most of the theorized demand variables, particularly poverty and housing burden. The proportion youth in a tract is the only demand variable with a negative correlation coefficient. This may be explained by fewer children residing in the type of central business districts that are a more natural location for locating social services. The dispersed character of the youth population is illustrated by the map in figure 6. There was a negative correlation of $r = -0.208$, $p < .01$ between the proportion youth in a tract and the central business district variables.

Nonprofit activity is negatively correlated with the three wealth indicators chosen to model resources: proportion of residents with over $100,000 in earnings; proportion with earnings from dividends, interest, and rent; and aggregate household earnings. This confirms the exclusive nature of wealthier residential neighborhoods in suburban areas. This study region contains only a few wealthy communities in urban areas that are in more diverse settings. For example, Nob Hill in San Francisco is a wealthy neighborhood directly adjacent to the Tenderloin, a poorer community where residents are more likely to need the low cost services provided by nonprofits.

A principle components analysis was used to assess the feasibility of reducing the measures. The most significant factor included the following variables: proportion in poverty, proportion with significant housing burden, proportion high school drop outs,

proportion unemployed, proportion female-headed households, proportion receiving SSI, and proportion receiving public assistance. This proposed factor would include variables signifying both demand and resources, which are important to separate for the theoretical analysis. Therefore factorization was not utilized.

Regression Analysis

To examine the relative importance of the different community demand and resource factors in explaining the location of nonprofit social services, the factors were regressed on both the count and expenditures measures of nonprofit activity. The standardized coefficients derived from this initial analysis are presented in table 7 for both dependent measures. The model accounted for almost 50% of the variation in the number of nonprofit social service providers in each community, and 39% of the variation in the aggregate expenditures by those nonprofits. These R-square values are comparable to results from similar regression models reported by Grønbjerg and Paarlberg (2001), Jossart-Marcelli and Wolch (2003), and Bielefeld and Murdoch (2004). The pattern of significant coefficients is mirrored between the models for the two dependent variables.

Table 7. Initial Regression Models

Reporting Standardized Coefficients (Beta)

Community Factor	Count of Nonprofit Social Service Organizations: Proposed Model	Count of Nonprofit Social Service Organizations: Reduced Model	Total Expenditures of Nonprofit Social Service Organizations: Proposed Model	Total Expenditures of Nonprofit Social Service Organizations: Reduced Model
Community Demands				
Poverty Rate	**0.344**	**0.336**	**0.300**	**0.297**
Housing Burden	*0.051*	*0.050*	**0.069**	**0.065**
Proportion Youth	**-0.370**	**-0.392**	**-0.354**	**-0.382**
Proportion Seniors	**0.070**	**0.101**	**0.069**	**0.089**
Proportion High School Dropouts	**0.152**	**0.153**	**0.214**	**0.198**
Proportion Unemployed	-0.020		-0.010	
Proportion Female Headed Households	**0.123**	**0.123**	**0.138**	**0.148**
Proportion Foreign Born	**-0.083**	**-0.095**	**-0.124**	**-0.123**
Economic Diversity	0.004		0.010	
Racial Diversity	-0.041		-0.004	
Community Resources				
Proportion of Households with over $100,000 in annual income	-0.080		**-0.096**	
Proportion earning from interest, dividends, or rent	0.065		0.079	
Aggregate household wealth in community	**0.178**	**0.169**	**0.206**	**0.192**
Proportion receiving SSI	0.053		0.017	
Proportion receiving public assistance	-0.036		-0.032	
County Welfare Expenditures	**0.109**	**0.090**	**0.091**	**0.075**
Control Variables				
Population Density	**0.110**	**0.118**	**0.080**	**0.086**
Community is in a Central Business District	**0.147**	**0.146**	**0.097**	**0.090**
Community is in the SF Metro Area	**0.261**	**0.243**	**0.204**	**0.190**
Adjusted R Square	*0.497*	*0.497*	*0.387*	*0.387*

bold = p<.01, *italics* = p<.05

N=1,808

Overall, the variables representing community demand for nonprofit services performed better than the resource variables, indicating that communities with higher poverty rates, greater proportions of residents with severe housing burdens, greater proportion of seniors, high school dropouts, and female headed households all have more nonprofit social services nearby. Neither of the diversity variables were significant,

suggesting that the level of nonprofit social services is not affected by a community's economic or racial diversity, which is contrary to predictions generated from the theoretical literature. The proportion unemployed variable was also insignificant in both models, possibly due to a correlation with the variable for the proportion high school dropouts. Contrary to the expected direction, the coefficients for proportions of youth and foreign born are significant but negative, indicating that communities with high proportions of both populations have fewer nonprofit social services available nearby.

Among the resource variables, only the aggregate community wealth and county welfare expenditures were significant, and in the direction predicted. The county welfare expenditures variable was consistently significance and positive, which is impressive since the county-level measure is relatively crude in comparison to the census tract measures used for the other independent variables. The coefficients for the control factors performed as expected, with the San Francisco MSA factor indicating that communities in the Sacramento region (El Dorado, Placer, Sacramento, and Yolo counties) have less physical access to nonprofit social services. In other words, someone living in a poor community in the Sacramento MSA has to travel farther to access nonprofit social services than a resident of a comparable poor community in the San Francisco Bay Area.

The insignificant coefficients for both racial and economic diversity amount to a rejection of the demand heterogeneity concept in representing the distribution of nonprofit service activity at a small scale. The finding that communities with a higher proportion of foreign-born residents have less nonprofit services nearby indicates that residents of immigrant neighborhoods have to travel farther to access nonprofit social services. These results demand more investigation since they are contrary to expectations

established by the literature. Additional regression equations with substitute variables for racial diversity and proportion foreign born are discussed below.

This analysis tests two measures of nonprofit activity, count of organizations and aggregate expenditures. Using simple count of organizations for the dependent variable results in a model with a higher adjusted r-square (.497 vs. .387), though the pattern of significant coefficients is consistent across the two models. Joassart-Marcelli & Wolch (2003) found a similar difference across these two measures. Both dependent variables are indirect measures of nonprofit social service activity, but aggregate expenditures may have more unexplained variance because it is actually composed of program services and other overhead costs such as rent and administration. Nonetheless, the dependent variable aggregate nonprofit expenditures has more theoretical validity as a measure of available services because it accounts for nonprofit size, which is conceptually more important for understanding where nonprofit services are available. As the analysis turns to an exploration of the unexpected findings for proportion foreign born and racial diversity, alternate models will only be regressed on the expenditures measure.

Diagnostic tests uncovered some outliers among the communities, but removing them did not noticeably change the outcome for this model. The coefficients presented in the Reduced Model column show that removing the insignificant coefficients from the model also did not make a noticeable difference in the remaining coefficients nor the adjusted r-square for the model.

Spatial autocorrelation describes a condition where neighboring values are more alike than those further apart (Haining, 1990). The Moran's I statistic measured on the residuals was used to test for spatial autocorrelation. The value was significant (I = 0.052,

t = 32.33) but smaller than reported in other similar studies (for example Freisthler, Lery, Gruenwald, and Chow, 2006). Bielefeld and Murdoch (2004) found little evidence of a spatial relationship for nearby nonprofits in their study of nonprofit locations across five metropolitan areas. Based on this, spatial autocorrelation is acknowledged as a factor influencing this analysis, but not one that is likely to noticeably change the model outcome.

Alternate Regression Models: Racial Categories

The racial diversity variable was intended to test the demand heterogeneity concept proposed by Weisbrod (1988), which holds that the nonprofit sector responds to diverse demands of minority segments of a community, which would be left unanswered by government. Government's response to public demand for services is limited by the majority requirements of the political process. Communities with greater racial diversity would fit this concept. Since the racial diversity variable was not a significant predictor of the level of nonprofit services, an alternate model was analyzed, replacing the racial diversity measure with separate measures of the proportion African American, Asian, and Hispanic.

The regression results are provided in table 8 alongside the coefficients from the first model. There is a modest improvement in the adjusted r-square measure of fit. This analysis shows that communities with a greater proportion of African American and Hispanic residents are predicted to have higher levels of nonprofit social services, while the negative coefficient on proportion Asian means that Asian neighborhoods have lower levels of nonprofit social service activity. The pattern of significant coefficients matches the original model for many, but not all of the other variables. The proportion high school

dropouts and proportion foreign born are now insignificant, while the proportion of residents earning income from interest, dividends, or rent is a significant, positive predictor. All of these variables are strongly correlated with the proportion Hispanic variable, which likely explains the changes in coefficients in this model.

Table 8. Revised Regression Model Specifying Race

Reporting Standardized Coefficients (Beta)
DV: Nonprofit Social Services Expenditures

Community Factor	Original Model	Racial Categories Model
Community Demands		
Poverty Rate	**0.300**	**0.270**
Housing Burden	**0.069**	**0.066**
Proportion Youth	**-0.354**	**-0.356**
Proportion Seniors	**0.069**	**0.086**
Proportion High School Dropouts	**0.214**	0.061
Proportion Unemployed	-0.010	-0.013
Proportion Female Headed Households	**0.138**	**0.123**
Proportion Foreign Born	**-0.124**	0.056
Economic Diversity	0.010	-0.017
Racial Diversity	-0.004	
Proportion African American		**0.077**
Proportion Asian		**-0.177**
Proportion Hispanic		**0.093**
Community Resources		
Proportion of Households with over $100,000 in annual income	**-0.096**	*-0.083*
Proportion earning from interest, dividends, or rent	0.079	**0.127**
Aggregate household wealth in community	**0.206**	**0.190**
Proportion receiving SSI	0.017	*0.055*
Proportion receiving public assistance	-0.032	-0.009
County Welfare Expenditures	**0.091**	**0.083**
Control Variables		
Population Density	**0.080**	**0.090**
Community is in a Central Business District	**0.097**	**0.108**
Community is in the SF Metro Area	**0.204**	**0.167**
Adjusted R Square	*0.387*	*0.400*

bold = p<.01, *italics* = p<.05
N=1,808

Alternate Regression Models: Countries of Origin

The proportion foreign-born population variable relates to the demand heterogeneity concept, but also to the argument that immigrant groups are less likely to seek aid directly from government. Instead, they would prefer more culturally specific services, which are more likely to be delivered by nonprofit organizations. The negative coefficient for proportion foreign born in the original regression suggests otherwise however. In order to explore this further, another alternate model was specified which trades the proportion foreign born variable for more detailed measures of the proportion of each of the following immigrant groups: East Asian, South Central Asian, South East Asian, and Central American. These groups were chosen because they comprise 78% of the foreign born population in the study region.

Table 9 provides the regression results and reveals a very specific pattern of increased nonprofit service expenditures in communities with particular foreign born populations, specifically higher proportions of Central American immigrants. The coefficients for different Asian immigrant groups tended to be negative, but were not consistent. The proportion of East Asian immigrants was not significant, while the proportions of South Central Asian and South East Asian immigrants were negatively associated with the level of nonprofit social services. The insignificance of high school dropouts and households with over $100,000 in annual income is a change from the original model, which is explained by the correlation of those variables with the variable for proportion Central American.

Table 9. Revised Regression Model Specifying Countries of Origin

Reporting Standardized Coefficients (Beta)
DV: Nonprofit Social Services Expenditures

Community Factor	Original Model	Countries of Origin Factors
Community Demands		
Poverty Rate	**0.300**	**0.252**
Housing Burden	**0.069**	**0.077**
Proportion Youth	**-0.354**	**-0.358**
Proportion Seniors	**0.069**	**0.082**
Proportion High School Dropouts	**0.214**	-0.037
Proportion Unemployed	-0.010	-0.010
Proportion Female Headed Households	**0.138**	**0.140**
Proportion Foreign Born	**-0.124**	
Proportion East Asian		0.013
Proportion South Central Asian		**-0.124**
Proportion South East Asian		**-0.114**
Proportion Central American		**0.192**
Economic Diversity	0.010	-0.037
Racial Diversity	-0.004	0.025
Community Resources		
Proportion of Households with over $100,000 in annual income	**-0.096**	-0.062
Proportion earning from interest, dividends, or rent	0.079	0.037
Aggregate household wealth in community	**0.206**	**0.202**
Proportion receiving SSI	0.017	*0.069*
Proportion receiving public assistance	-0.032	-0.012
County Welfare Expenditures	**0.091**	**0.128**
Control Variables		
Population Density	**0.080**	**0.073**
Community is in a Central Business District	**0.097**	**0.101**
Community is in the SF Metro Area	**0.204**	**0.183**
Adjusted R Square	0.387	0.408

bold = p<.01, *italics* = p<.05

N=1,808

* Chinese immigrants account for the majority of the East Asian population. Indian immigrants account for the majority of the South Central Asian population. Vietnamese & Filipino immigrants account for the majority of the South East Asian population. Mexican and El Salvadorian immigrants account for the majority of Central American population.

Alternate Regression Models: Comparing Metropolitan Regions

An important policy question for this analysis is whether the distribution of nonprofit social services differs in the fast-growing Sacramento region relative to the larger region. The significance of the San Francisco MSA variable in the original model suggests that this is the case. In order to further explore this question, table 10 displays the results of separate regressions on the dependent variable aggregate nonprofit social services expenditures for communities in each region.

The separate models show distinctly different patterns of significant variables between the two regions. The most prominent difference in these three models is the fact that poverty drops out as a significant variable in the Sacramento MSA regression. The proportion seniors, proportion of households with over $100,000 in annual income, and population density also drop out of the Sacramento MSA model, and housing burden has diminished significance. The insignificant coefficient for county welfare expenditures is probably due to lack of variance, since there are only four counties in Sacramento with little difference in welfare expenditures. Racial diversity also becomes significantly associated with a nonprofit social services in the separate MSA models, but in opposite directions. For the Sacramento MSA, communities with greater racial diversity have more nonprofit social service expenditures. In the San Francisco MSA, racial diversity predicts lower nonprofit social service expenditures.

The fewer number of significant coefficients in the Sacramento model and lower adjusted r-square measure all suggest that the distribution of nonprofit services is less attuned to community demands. This may be a rural effect, since the eastern half of the Sacramento region is sparsely populated, posing unique challenges for the location of

services. Poverty is less concentrated in the eastern portion of the region, making it harder to target social services based on location.

Table 10. MSA-specific Regression Models

Reporting Standardized Coefficients (Beta)
DV: Nonprofit Social Services Expenditures

Community Factor	Entire Study Area	San Francisco MSA	Sacramento MSA
Community Demands			
Poverty Rate	**0.300**	**0.312**	0.156
Housing Burden	**0.069**	**0.065**	*0.107*
Proportion Youth	**-0.354**	**-0.348**	**-0.447**
Proportion Seniors	**0.069**	**0.092**	0.055
Proportion High School Dropouts	**0.214**	**0.199**	**0.252**
Proportion Unemployed	-0.010	0.016	-0.052
Proportion Female Headed Households	**0.138**	**0.072**	**0.377**
Proportion Foreign Born	**-0.124**	**-0.109**	**-0.197**
Economic Diversity	0.010	0.014	0.012
Racial Diversity	-0.004	**-0.068**	**0.283**
Community Resources			
Proportion of Households with over $100,000 in annual income	**-0.096**	*-0.096*	-0.043
Proportion earning from interest, dividends, or rent	0.079	0.017	*0.208*
Aggregate household wealth in community	**0.206**	**0.199**	**0.198**
Proportion receiving SSI	0.017	0.006	0.107
Proportion receiving public assistance	-0.032	-0.024	-0.045
County Welfare Expenditures	**0.091**	**0.098**	-0.006
Control Variables			
Population Density	**0.080**	**0.078**	0.014
Community is in a Central Business District	**0.097**	**0.071**	**0.147**
Community is in the SF Metro Area	**0.204**		
Adjusted R Square	*0.387*	*0.380*	*0.369*
N	1,808	1,405	403

bold = p<.01, *italics* = p<.05

Conclusion

This chapter discusses the proposed regression model testing the importance of demand and resource factors for explaining the level of nonprofit social service activity. The lack of significance on the coefficients for the key theoretical variables measuring diversity prompts several alternative regression models, replacing the racial diversity variable with measures of the proportion for specific racial groups and countries of origin. In each case, the newly introduced variables are significant and improve the adjusted R square measure of fit for the models. The final set of analyses examined separate models for the San Francisco and Sacramento MSAs, with notably different results. The next chapter will focus on the meaning of these results for theory and policy.

Discussion

The regression analyses described in the previous chapter open a new line of investigation with a potential for theoretical contributions to our understanding of why levels of nonprofit social service activities vary across communities. The regression analyses suggest that Weisbrod's demand heterogeneity concept as measured in this analysis is not valid at the small scale of neighborhoods. Differences in nonprofit activity across the two types of communities (older urban vs. newer suburban sprawl) prompts immediate policy questions about the availability of nonprofit social services in growing communities. This chapter discusses these findings along with potential caveats and implications for future research.

This research study tests a predictive model for explaining the amount of nonprofit social service expenditures located in, or proximate to, different communities in metropolitan Northern California. Place matters for these kinds of services because people are more likely to utilize nearby services. The importance of proximity for service utilization is supported by survey data (Allard, Tolman, & Rosen, 2003) and interviews with residents in poor communities (Kissane, 2003), which show that people are more likely to know about and actually utilize services that are nearby their homes.

Understanding the factors involved in accessing and utilizing services has become more important as the public safety net is provided in a less portable form of services delivered by public and private agencies rather than cash assistance (Allard, 2007b). Nonprofit service providers have been increasing their role in the service system for some time as government moves to contract and privatize service delivery (Smith, 1998; Grønbjerg & Paarlberg, 2001).

This dissertation proposes a basic demands and resources model to explain the concentration of nonprofit social services in particular communities. Within the concept of demand, I include measures of social needs and community diversity, which is theorized to increase demand for nonprofit services. The poor results for diversity measures in the first regression model prompt an alternate model which indicates that racial homogeneity is a stronger explanation. The final analysis in this research compared the two metropolitan regions to evaluate the strength of this explanatory model for an older urban region versus an outlying suburban region with significant recent population growth. The influence of community diversity has been of particular interest for theory development, while differences between older and newer communities is relevant to public policy going forward.

Prior studies by Grønbjerg & Paarlberg (2001) and Jossart-Marcelli & Wolch (2003) found that the resources available in a community were stronger predictors of nonprofit activity than demand factors. However, this dissertation research shows the opposite, more support for demand measures than resources. Several of the community need indicators are positive, significant predictors of more nonprofit social service activity as predicted. Poverty rate in particular is one of the strongest positive predictors of nonprofit services, along with housing burden, high school dropouts, female headed housholds, and seniors. The significant, positive coefficients for those variables all indicate that these nonprofit agencies are successfully targeting high-need communities. This supports the hypothesis that nonprofit social service providers will respond to unmet needs of people who cannot afford services from for-profit firms.

Coefficients for proportions of foreign born and youth are significant but negative, which is contrary to the expected direction. Putting aside the foreign born finding momentarily, the finding regarding youth is surprising because the dataset includes nonprofits involved in many youth development activities, particularly childcare. There are several possible explanations for this finding. The map in figure 6 of communities with high proportions of youth shows that they are located in outlying suburban parts of the study region that tend to have more restrictive land use regulations which might prevent a nonprofit from locating there. Also, youth services may cluster geographically around a unique set of factors. For example, activities for school age youth like after-school care and musical instruction are targeted to entire school districts and often delivered on school campuses rather than scattered sites throughout a community. Additionally, since these programs are typically administered from central offices, the address review process may have missed the more specific addresses of individual schools.

In contrast to some of the previous studies of community variations in the nonprofit sector, the resources portion of the model shows much weaker results compared to the need factors. The importance of government financing in guiding nonprofit services is demonstrated by the positive coefficient on county welfare expenditures. Aggregate household wealth, or community wealth, was a stronger resource measure than the variable measuring the proportion of wealthy households with annual incomes over $100,000. These measures were meant to signify the amount of potential donations available in a nonprofit located in a particular city or county. However, at the small scale of analysis used in this study the wealthly household measures are perhaps more

reflective of the exclusive character of very wealthy neighborhoods, i.e nonprofits simply cannot afford the cost of office space in wealthy areas. Rather than a resource, the proportion of wealthy households in a community acts as a constraint to nonprofit location.

The community wealth variable did not mimic the proportion of wealthy households, suggesting that it is a distinct factor. The correlation between those two factors was moderatly strong ($r = .580$, $p < .01$) but not as definitive as several others, which exceeded $r = .6$, such as the correlation between the proportion of wealthy households and non-wage income (interest, dividends, and rent). The positive coefficient for community wealth adds a qualification to our understanding of the need variables, because it suggests that holding other factors constant, proximity to wealth increases the chances of available services being nearby. The negative correlation between community wealth and poverty rate ($r = -.593$, $p < .01$) means that these are distinct types of neighborhoods, that a single neighborhood is unlikely to have both a high poverty rate and high aggregate household income. They may be geographically nearby, even adjacent, as the earlier example of the Nob Hill and Tenderloin neighborhoods suggests.

This combination of factors means that the most geographically and economically isolated poor communities, where residents are likely to face more transportation challenges, have fewer nonprofit social service providers available to help residents. This finding reinforces findings from Jossart-Marcelli & Wolch (2003) and Allard (2007) that poor communities are likely to be isolated from important social services. It is not clear from this analysis whether there are other resource factors impeding the development of nonprofit services such as a lack of available, qualified staff. Nonprofit social service

providers operating in the most isolated poor communities may have a greater challenge staffing their organizations, whereas centrally located nonprofits are more attractive places to work and volunteer.

The relevance of economic and racial diversity was of particular theoretical interest in this research study. Based on the findings of this analysis and the cumulative evidence in the literature, it is clear that Weisbrod's demand heterogeneity concept (1988), which posits that nonprofits are responsive to diverse demands, does not hold up at this small scale. Instead, communities of particular racial and immigrant groups have different levels of services available nearby. While there are some particular historical and cultural dynamics that can explain this pattern in the study region, it also suggests a broader theoretical point. At the most local level, higher levels of nonprofit activity are associated with homogeneity and concentrations of minority communities and low-income areas.

Additional regression equations designed to deconstruct the racial diversity and foreign-born variables suggests that Asian communities and communities with higher proportions of immigrants from South East and South Central Asia have less access to nonprofit social service activities. There are several plausible explanations for this unexpected finding. There is a known stigma in Asian culture that discourages seeking outside help for mental health issues - Yamashiro and Matsuoka (1997) explore some historical and cultural reasons for this phenomenon. This hypothesis suggests that the "private informal safety net" composed of family and friends (Kissane 2003) plays a more significant role in Asian communities, which would in turn result in lower local demand for services in Asian communities, and hence fewer organizations interested in

locating there. This dissertation did not attempt to measure informal safety net supports from family and friends.

It is also possible that people in neighborhoods with more Asian immigrants seek services from other sources such as churches, many of which do not register with the IRS and hence are excluded from the data used here. Our inability to measure the size and scope of church-based services is a shortcoming of this research study. Even if relevant church-based services appear in the IRS data, they would not have been included in the data if they were classified as a religious organization. The form of service provision also contains some implications about service coverage and availability because churches and other informal organizations may suffer from parochialism and other traits that impair their ability to satisfy need for services (Salamon 1995).

However, another potential explanation for the foreign born finding is that immigrants from South East and South Central Asia may reside in ethnic enclaves that are more geographically isolated from nonprofit social services, because of either structural constraints or personal preferences. Some of these immigrants, particularly those from Vietnam and the Philippines, are more likely to be refugees with fewer resources for mobilizing a private, nonprofit response to community needs, or they may again rely on more informal organizations such as churches and social networks which are not included in the measure of nonprofit social service activity used in the regression. This latter explanation echos Joassart-Marcelli and Wolch's observations about their findings for the Los Angeles region (2003).

Note that this study and others that have examined nonprofit location at a small scale are limited in the measurement of diversity to the racial and economic data

collected by the US Census (i.e. Bielefeld & Murdoch, 2004). These are meant to be indicators of cultural and religious diversity theorized by Weisbrod (1988). Research studies focusing on metropolitan areas (Corbin, 1999) and nation-states (James, 1987) have been able to include survey-based measures of religious diversity and have had findings that more closely align with the demand heterogeneity concept. This suggests that the relevance of the demand heterogeneity concept may be a function of how one draws the boundaries for measuring nonprofit activity. At the small scale of a neighborhood, similarity and social cohesion seems to be more important than diversity. However, if measured at the city or county level, the aggregation of these individual smaller communities could support the demand heterogeneity concept.

It is also worth considering whether the racial and economic diversity measures used in this research and other small scale studies of nonprofit location are fair representations of the type of cultural diversity that Weisbrod theorized as creating situations of demand heterogeneity. Since Weisbrod discussed the entire broad nonprofit sector in his work, its likely that the factors he would cite as creating diverse demands are also broad in nature. This argument suggests that the demand heterogeneity concept is not applicable to explaining nonprofit activity at a neighborhood level.

These findings for diversity and racial groups suggest a hierarchical theory for explaining the location of nonprofit social services. At a local, neighborhood level as studied here, the amount of social needs and racial homogeneity are more important determinants of nonprofit services, with greater need and homogeneity corresponding to more services. Diversity has little impact, and in fact high need communities with greater concentrations of African American and/or Hispanic residents have greater access to

services. If we understand nonprofit organizations to be a product of community mobilization, this suggests that similarity and cohesion is important for fostering nonprofit organizations. A county-level aggregation of neighborhoods would support the argument that diversity of neighborhoods increases nonprofit activity at the county-level.

This pattern of significant coefficients for the racial variables suggests some specific historical and cultural factors at work. Controlling for poverty, communities with higher proportions of African American and Hispanic residents are likely to have a higher level of nonprofit social service activity. A historical explanation is that many of the neighborhoods fitting this description in the study area have been targeted by public and private efforts for various community improvement initiatives over the years. Examples include the Gray Areas Program initiated by the Ford Foundation in the late 1950s, various public redevelopment initiatives in the 1960s, and the more recent Neighborhood Improvement Initiative funded by the Hewlett Foundation (Brown & Fiester 2007, Halpern 1995, Ylvisaker 1963). Though all of these initiatives have ended, there is a residual impact of many of these programs is a larger infrastructure of nonprofit organizations. The final regression model provides additional supporting evidence for a funding initatives hypothesis to explain nonprofit locations and the size of the nonprofit sector in different communities.

The final set of regressions comparing the location of nonprofit social services in the San Francisco metropolitan area to those in the inland, growing Sacramento metropolitan area show that the social need factors are far weaker in the outlying areas represented by the Sacramento Metro. Therefore service locations in the Sacramento metropolitan area are poorly aligned to needs - nonprofit services are randomly located

relative to communities with higher poverty levels and more unemployment. Concentrated poverty seems to be a more significant problem in Sacramento as well. Sixteen percent of the tracts in the Sacramento MSA had poverty rates greater than 30%, whereas 8% of the Bay Area's tracts had such significant poverty levels. The poor alignment of services in the outlying portions of this study area combined with the the level of concentrated poverty in the region echoes Allard's study comparing service availability in urban versus rural communities (2007), where he found that rural areas lack equal access to social services. While this dissertation has only analyzed private, nonprofit services, Allard's research suggests that the spatial mismatch is not limited to nonprofits, but rather extends to both publicly and privately delivered services.

In terms of public policy regarding the delivery of social services, comparing regression analyses for the San Francisco metropolitan tracts with those in the four county Sacramento area raises important concerns about a spatial mismatch between high-need communities and nonprofit service providers who could assist residents. Demographers predict that outlying communities in the Sacramento region will continue to have significant population growth (Johnson & Hayes, 2004). Nonprofit social service agencies will need to adjust their service delivery to reach the region's neediest citizens. Public and private funders should consider offering incentives to lure service providers to locate services in needy communities.

Based on the findings discussed regarding the relationship between nonprofit social services and community racial demographics, as well as the difference in alignment of services between the two metropolitan regions, I propose a hypothesis about the importance of geographically-focused funding initiatives. Nonprofits are only able to

serve the neediest communities when funders such as government or private foundations make a substantial commitment to providing long-term grants to support the organizations. The contrasting histories of community development between the San Francisco and Sacramento regions illustrate the importance of these commitments. The San Francisco Bay Area has a legacy of public and private neighborhood initiatives extending back 30 years or more. There are multiple redevelopment agencies in the region and their actions are highly contested. In contrast, redevelopment activities in the Sacramento region have been more modest.

A community chosen for redevelopment would draw service providers as designated public funds become available. Geographically-focused initiatives led by private foundations have been even more focused on the Bay Area, particularly high-poverty neighborhoods in San Francisco, Oakland, and more recently San Jose, which have received attention from the San Francisco Mayor's Office, the Annie E. Casey Foundation, and the Hewlett Foundation, respectively. The result of these place-based targeted activities is likely to be a higher level of nonprofit activity in the focus communities, with a cluster of nonprofits whose missions commit them to the neighborhood. Once these organizations are established, DiMaggio & Anheier (1990) have observed that nonprofit organizations are more deeply affected by "historical political and social conflicts" (p. 146) because they are slower to adjust to changes in their environment, so they tend to linger in the community. This line of explanation deserves further research through historical analysis and interviews with nonprofit executives about how they choose locations. It is not suprising, given other theoretical developments in the field, that this proposed modification of the three failures theory is

aligned with the institutional perspective, as many other modifications have been. This hypothesis is related to Salamon's (1995) arguments about the importance of government funding, though he never focused on the geography of nonprofit services in this manner.

Focusing on the role of funding initiatives in helping nonprofit social service providers target their services to high-need communities also recognizes the expansion challeges faced by nonprofit organizations. The profit distribution constraint inherent in tax-exemption deprives the nonprofit sector of a capital market whereby finaciers could invest money in nonprofit organizations to fund their expansion in return for a share of the profits (Miller, 2007). Most nonprofits also have limited access to loans. Therefore they are dependent upon grants to fund the expansion of services to new locations. The nature of the "nonprofit capital market" (Ryan, 2001) means that nonprofit social service providers will not be able to reach high-need communities unless they are funded to do so, through grants of other charitable capital.

The procedure used here to improve the address accuracy of the IRS dataset employed in this dissertation is a worthwhile demonstration of research methodology to the field. The IRS dataset is of great value for the type of large scale analysis discussed in this dissertation, but accuracy is a concern. On the one hand the results of the address verification process confirms the low accuracy of addresses provided in the IRS data. Yet the success of the address search methodology demonstrated in this dissertation shows that one can improve the address accuracy markedly through simple internet research. As nonprofit organizations find it increasingly necessary to publicize their existence on the world wide web (Silverman, Rafter, & Martinez, 2007), internet searches will become a more reliable means for determining the exact location of service providers.

There are important caveats to these findings worth consideration. One caveat is that the nonprofit organizations that are the focus on this research are not the sole providers of social services in the communities studied here. While there is certainly a trend towards more nonprofit provision of services, public agencies also continue to provide direct services (Austin, 2003). Allard's survey of service providers found that government providers were generally the minority, comprising between 24% to 43% of the organizations he surveyed, varying by region (2007a). Therefore it is possible that nonprofits in the Sacramento metropolitan area are not locating close to high poverty communities because those areas are already covered by public agencies. It is also possible that the Sacramento region was systematically overlooked in the data validation process of researching additional nonprofit social service locations.

Another caveat concerns the ways that this study portrays a simplified version of the rich, complex nonprofit sector as it operates in communities, beginning with the single classification code that is assigned based upon the dominant activity of the nonprofit organization. In practice, nonprofits can be hard to classify with a single code as they often engage in a variety of activities and services either through a mission-based strategy or simply to respond to the charitable needs that they observe. This means that in using NTEE codes to select nonprofit organizations for inclusion in the dataset, groups providing social services as a secondary activity may have been excluded, for example religious organizations and advocacy organizations. Both types of groups might provide services in addition to their primary mission-based work.

The measurement of service levels employed in this study is also imperfect. The organizations total expenditures can contain much more than just the cost of providing

direct services, and those costs can vary by location. Expenditure data is also self-reported and therefore open to data entry errors, whether intentional or unintentional (see Pollak & Rooney, 2003, for discussion). A modest improvement in measurement would be to use a measure of organizations expenditures on program services separated from management, fundraising, and other general expenses. However, this data is not currently included in the NCCS Core Files and even if it were, survey evidence indicates considerable variation in reporting practices (Pollak & Roone,y 2003). A direct measure of the amount and location of services provided by nonprofit organizations is simply unavailable in a standardized, comparable format for the type of analysis contained here.

Allard (2007) conducted one of the few studies to date that directly surveyed service providers to measure the number of clients served at each office location. This data was used to construct service access scores that consider the client capacity of service providers for a particular tract relative to the metropolitan area mean score. Based on four rural areas and four urban areas (none of which are the Bay Area-Sacramento metropolitan region), Allard finds that many poor neighborhoods have less access to social services than non-poor neighborhoods. Considering this in tandem with the research reported here, which show that poverty levels increase the level of nonprofit spending, highlights a difference between measuring clients and expenditures. Disregarding structural differences between the study areas, this suggests that spending more moneyon services may not result in a higher level of service delivery (Allard, personal communication, September 8, 2007). There may be a higher cost to deliver services in poor neighborhoods.

Developing more accurate measures of nonprofit services is a challenge for both researchers and policymakers. The universe of service providers is easily determined from administrative sources such as the IRS data used here and also listings from Information and Referral (I&R) services. The databases maintained by I&R services contain more detail about services and programs available, office locations, and clientele. I&R databases also include both private and public providers. The challenge to using this data for large aggregate analysis lies in combining data from different I&R sources and making them publicly available. The I&R system has historically been fragmented and the different providers have been hesitant to share their data.

The United Way initiative to create a standard 2-1-1 system nationwide provides a promising resource for large-scale datasets about service delivery coverage. In communities where this system is already in place, residents can dial 211 on their telephone to reach their local I&R provider to access information about local human services. The I&R providers have incentive to keep their databases about providers and service areas very current and accurate because they use the data to refer callers to services. Through phone calls to the 211 system, local United Way chapters can also collect data about community needs. These developments present opportunities to track the match of needs and services in real time.

The story from this analysis has been biased towards demand-type factors. There are two resource factors that were not measured which could play an important role in the location and availability of nonprofit social services. The first factor is the amount of philanthropic funding available from individuals and foundations. This is not a simple quantity to measure because it entails knowing something about the intentions of these

different funders, in particular their interest in focusing their investments in particular communities.

Additionally, Frumkin (2002) suggests that the level of social entrepreneurship in a community is also a relevant factor for explaining the likelihood of nonprofit formations. Unfortunately for researchers, social entrepreneurs come from all walks of life, making them hard to generalize and measure from existing data sources. It is also the case that nonprofit organizations both respond to demands and create new opportunities (Young, 2000; Frumkin, 2002) and act politically to gain resources (Marwell, 2004).

With these limitations in mind, additional research on the spatial match of nonprofit social services with community needs could build on this study by developing a model of the cost of services which would allow us to adjust the expenditures data to better portray the services available. A distance-weighted access measure would provide a more refined, continuous measure of service access. Also, information and referral (I&R) organizations collecting data about service providers should be encouraged to utilize the Employer Identification Number (EIN) as a key ID in their databases so that researchers could match I&R data against the universe defined by IRS files. A complete picture of the social service landscape would also require the inclusion of publicly operated services. These suggestions to refine indirect measures of service delivery all assume that comprehensive direct measures of the availability of social services will not be available in the near term due to data collection costs.

Conclusion

This dissertation has described a large-scale analysis about the location of nonprofit social services, focusing on how the level of services can be explained by the characteristics of the communities that they are located in. This analysis contributes to the sparse empirical literature on nonprofit location and provides substantive conclusions relevant to theory about the geography of nonprofit activity. Considering the growing role that nonprofits play in the social services delivery system, there are some important policy implications based on these findings. The data collection methodology for this dissertation also demonstrates efficient methods for improving the readily available measures of nonprofit activity and location.

Returning to the three research questions outlined in the beginning of this dissertation, this analysis shows that nonprofit social service providers are likely to operate in or nearby high-need communities with greater proportions of poverty, seniors, unemployment, female headed households, and housing burden. However, controlling for poverty and other needs, nonprofits also gravitate towards relatively wealthier areas, leaving behind the most resource-deprived areas. Interestingly, diversity does not seem to play a significant role in explaining nonprofit location at the neighborhood scale. This is an important test of Weisbrod's demand heterogeneity concept. Finally, there is potentially a spatial mismatch between community needs and nonprofit social services in the fastest growing region in the study area.

The central analysis in this research project is a linear regression that proposed that the aggregate level of nonprofit activity in a neighborhood is a function of the amount of social needs in the community and the availability of financial resources to

support social service delivery. The regression model included measures of racial and economic diversity to test the demand heterogeneity concept. Diversity was intended to be another need factor. These diversity measures were posited as need factors that would draw higher levels of nonprofit social services activity. The findings of this research do not support that hypothesis, and a contribution to the literature from this research is a rejection of the diversity hypothesis in explaining the level of nonprofit services at the scale of a neighborhood. Clearly needs and resources are important, but diversity is not relevant to the model tested here.

Having found no significance for the racial diversity measure, I analyzed an alternate model which replaced racial diversity with the percentage African American, Hispanic, and Asian in each neighborhood. The mixed pattern of correlations in the regression analyses reported here, with African American and Hispanic neighborhoods corresponding to higher levels of nonprofit social services and Asian neighborhoods with less, suggests that past policies toward neighborhood and community development have shaped the pattern of nonprofit social services in this study area. In particular, the history of publicly sponsored redevelopment and privately funded community development initiatives. In the Bay Area, private initiatives have focused on West Oakland, East Oakland, the South of Market and Visitation Valley in San Francisco, East Palo Alto, and East San Jose. Public redevelopment efforts, and urban renewal, have also focused on the Western Addition in San Francisco and West Oakland.

These programs all aim to help residents by providing a variety of services, often by supporting the creation of new nonprofit organizations. Some organizations may have a neighborhood focus written explicitly in their mission statement, in which case, an

organization's entire identity can be tied to its location. The map of nonprofit social service expenditures per capita in Figure 1 shows that many of these neighborhoods have a higher density of nonprofit services.

Future research to test a funding initiatives hypothesis could build directly on the needs and resources model in this dissertation by including an indicator variable for whether the tract had ever been targeted in an initiative. This would require historical research into the administrative records of public redevelopment agencies and private foundation funders. The resulting central repository or map of community revitalization initiatives would be a unique contribution to the historical record.

Confirmation of this funding initiatives hypothesis would have policy implications. Demographers are showing that the location of communities with concentrated poverty and associated needs is decentralizing, dispersing into suburbs and outlying areas of metropolitan regions (Jargowsky, 2003; Berube, 2007). How will nonprofit service providers, increasingly vital to providing safety net services, respond to this changing geography of poverty?

This study and others like it (Allard, 2007a; Wolpert, Seley, & Motta-Moss, 2006) have used a variety of methodological approaches to show that nonprofit services are not consistently located close to communities who need them. These are important findings that merit further investigation and monitoring. With the popularity of appropriating business concepts in nonprofit management, there are some who might argue that the mechanics of the free market will settle this issue. However, the nonprofit sector exists to compensate for market failures, so nonprofits operate with incentives and motivations far different from the ideal of the free market. Most importantly, nonprofit service providers

often serve a clientele who cannot afford their services. Instead government or individual donors pay for the services. In this case, the responsibility falls on the funders to help nonprofit service providers assess the location of potential clients and adapt their operations to respond to those needs.

For this reason, it is essential that policymakers and funders recognize their role in enabling nonprofits to respond to population shifts. As people sprawl out towards the hinterlands of our metropolitan regions, we should recognize that nonprofits cannot raise capital for expansion the way that for-profit businesses do. Funders should provide expansion capital to organizations interested in reaching these new areas of need. Furthermore, elected officials and community leaders have a role in attracting attention to unmet needs in their area.

Most of the literature to date about nonprofit location has utilized rather broad measures. We might ideally like to have the resources to assess the geographic area served by every service agency. In the meantime, existing records of IRS filings already provide a reasonably comprehensive dataset of the nonprofit sector. Researchers interested in further analysis of nonprofit location and service delivery coverage should consider additional ways to augment the NCCS data with better data about the location of service provision. Since this dataset is limited to financial information, we might develop methods for estimating the population served based on nonprofit expenditures. The accuracy of this method would depend on adjustments for the type of service and cost of business operations in different locations. The ideal dataset would be focused on programs and services and measures of people served rather than dollars spent.

This research has demonstrated that internet research can be useful for building on the existing IRS/NCCS data. Data collection and verification may be pursued online with a reasonable degree of confidence. This trace method of collecting data on nonprofits is worthwhile compared to surveying organizations because more and more nonprofits are using the internet to advertise their existence and communicate with constituents. The nonprofit digital divide is less of an issue than old-fashioned apathy towards survey participation. Internet-based social networking technologies provide a way for nonprofits to self-identify and provide significantly more details about their operations. Several websites now offer various ways to describe and rate nonprofit organizations (see Guidestar.org, GreatNonprofits.org, or DonorsEdge.org). Development of these forums has accelerated in recent years as several high-profile businessmen turned philanthropists have brought new interest and attention to nonprofit public charities.

In addition to exploring new ways to enhance and improve administrative data, future research on nonprofit organization location should also focus on a narrower set of nonprofit subsectors. Research to date has cast a broad net in terms of the types of organizations, but theory building will require more specificity in this regard. This would also improve the overall significance levels of a needs and resources model.

Furthermore, we lack substantial longitudinal research on the development of the nonprofit sector (Galaskiewicz & Bielefeld's study of the Minneapolis, MN nonprofit sector (1998) is a notable exception). This is directly relevant to the policy issues about how nonprofits respond to community change. Do existing operating nonprofits seek out opportunities for expansion into neighboring communities? Growth has not traditionally been a major motivator in nonprofit management. In order for policy to lead nonprofit

development towards communities with emerging needs, we should know more about how regional nonprofit sectors grow.

Past research on nonprofit location has been limited by access to comprehensive datasets about the sector. Fortunately this obstacle is becoming less significant as IRS data becomes more available and as the internet increasingly becomes an interactive forum that can allow researchers to verify information. Even better, websites like Guidestar provide a venue for nonprofits to self-identify and enhance the profile of their operations illustrated by the IRS data. These developments come at a fortuitous time as greater proportions of social net services are contracted out to these private organizations that lack the oversight and coordination that public services have. Examination of this field is long overdue.

Appendices

Table A1. NTEE Codes

NTEE Code	Description	Frequency	Percent
HEALTH CARE			
E01	Alliance/Advocacy Organizations	8	0.29
E02	Management & Technical Assistance	4	0.15
E03	Professional Societies & Associations	6	0.22
E05	Research Institutes and/or Public Policy Analysis	6	0.22
E19	Nonmonetary Support N.E.C.	7	0.25
E32	Ambulatory Health Center, Community Clinic	48	1.74
E40	Reproductive Health Care Facilities and Allied Services	8	0.29
E42	Family Planning Centers	38	1.38
E50	Rehabilitative Medical Services	30	1.09
E86	Patient Services—Entertainment, Recreation	13	0.47
E90	Nursing Services General (includes Candy Stripers)	3	0.11
E91	Nursing, Convalescent (Geriatric and Nursing)	16	0.58
E92	Home Health Care (includes Visiting Nurse Associations)	7	0.25
E99	Health - General & Rehabilitative N.E.C.	27	0.98
MENTAL HEALTH & CRISIS INTERVENTION			
F01	Alliance/Advocacy Organizations	5	0.18
F02	Management & Technical Assistance	4	0.15
F03	Professional Societies & Associations	6	0.22
F05	Research Institutes and/or Public Policy Analysis	3	0.11
F19	Nonmonetary Support N.E.C.	2	0.07
F20	Substance Abuse, Dependency, Prevention & Treatment	43	1.56
F21	Alcohol, Drug Abuse (Prevention Only)	10	0.36
F22	Alcohol, Drug Abuse (Treatment Only)	78	2.83
F30	Mental Health Treatment	68	2.47
F31	Psychiatric, Mental Health Hospital	3	0.11
F32	Community Mental Health Center	27	0.98
F33	Residential Treatment Facility - Mental Health Related	39	1.41
F40	Hot Line, Crisis Intervention	7	0.25
F42	Rape Victim Services	4	0.15
F50	Addictive Disorders	4	0.15
F60	Counseling Support Groups	29	1.05
F70	Mental Health Disorders	2	0.07
F80	Mental Health Associations - Multipurpose	9	0.33
F99	Other Mental Health, Crisis Intervention N.E.C.	40	1.45
CRIME & LEGAL RELATED			
I01	Alliance/Advocacy Organizations	2	0.07
I03	Professional Societies & Associations	3	0.11
I05	Research Institutes and/or Public Policy Analysis	2	0.07
I19	Nonmonetary Support N.E.C.	4	0.15
I20	Crime Prevention N.E.C.	9	0.33
I21	Delinquency Prevention	15	0.54

NTEE Code	Description	Frequency	Percent
I23	Drunk Driving Related	2	0.07
I31	Transitional Care for Offenders/Ex-Offenders	1	0.04
I40	Rehabilitation Services for Offenders	6	0.22
I43	Services to Prisoners/Families	12	0.44
I44	Prison Alternatives	1	0.04
I50	Administration of Justice, Courts	1	0.04
I51	Dispute Resolution/ Mediation Services	17	0.62
I60	Law Enforcement Agencies (Police Departments)	7	0.25
I70	Protection Against Neglect, Abuse, Exploitation	2	0.07
I71	Spouse Abuse, Prevention of	1	0.04
I72	Child Abuse, Prevention of	23	0.83
I73	Sexual Abuse, Prevention of	1	0.04
I80	Legal Services	52	1.89
I83	Public Interest Law/Litigation	11	0.40
I99	Crime, Legal Related N.E.C.	14	0.51
EMPLOYMENT			
J03	Professional Societies & Associations	2	0.07
J05	Research Institutes and/or Public Policy Analysis	2	0.07
J20	Employment Procurement Assistance and Job Training	49	1.78
J21	Vocational Counseling/ Guidance/Testing	9	0.33
J22	Employment Training	51	1.85
J30	Vocational Rehabilitation	33	1.20
J32	Goodwill Industries	74	2.68
J33	Remunerative Employment, Work Activity Center N.E.C.	5	0.18
J40	Labor Unions/Organizations	3	0.11
J99	Employment, Job Related N.E.C.	3	0.11
FOOD, AGRICULTURE & NUTRITION			
K01	Alliance/Advocacy Organizations	1	0.04
K30	Food Service, Free Food Distribution Programs	8	0.29
K31	Food Banks, Food Pantries	16	0.58
K34	Congregate Meals	1	0.04
K35	Organization-Sponsored Eatery or Agency	1	0.04
K36	Meals on Wheels	29	1.05
K40	Nutrition Programs	3	0.11
K99	Other Food, Agriculture, Nutrition N.E.C.	2	0.07
PUBLIC SAFETY, DISASTER PREPAREDNESS & RELIEF			
M03	Professional Societies & Associations	1	0.04
M05	Research Institutes and/or Public Policy Analysis	1	0.04
M20	Disaster Preparedness and Relief Service	9	0.33
M23	Search and Rescue Services	1	0.04
M24	Fire Prevention/ Protection/Control	6	0.22
M40	Safety Education	3	0.11
M41	First Aid Training	2	0.07
M42	Automotive Safety	1	0.04
M99	Public Safety, Disaster Preparedness & Relief N.E.C.	3	0.11
YOUTH DEVELOPMENT			
O20	Youth Centers and Clubs - Multipurpose	55	1.99

NTEE Code	Description	Frequency	Percent
O21	Boys Clubs	1	0.04
O22	Girls Clubs	3	0.11
O23	Boys and Girls Clubs (Combined)	42	1.52
O30	Adult, Child Matching Programs	5	0.18
O31	Big Brother, Big Sisters	5	0.18
O40	Scouting	56	2.03
O41	Boy Scouts	10	0.36
O42	Girl Scouts	5	0.18
O43	Camp Fire	5	0.18
O50	Youth Development Programs	28	1.02
O51	Community Service Clubs, Youth Development	4	0.15
O52	Agricultural, Youth Development	6	0.22
O53	Business, Youth Development	8	0.29
O54	Citizenship Programs, Youth Development	6	0.22
O55	Religious Leadership, Youth Development	9	0.33
O99	Other Youth Development N.E.C.	35	1.27
HUMAN SERVICES			
P01	Alliance/Advocacy Organizations	5	0.18
P02	Management & Technical Assistance	5	0.18
P03	Professional Societies & Associations	8	0.29
P05	Research Institutes and/or Public Policy Analysis	5	0.18
P19	Nonmonetary Support N.E.C.	11	0.40
P20	Human Service Organizations	143	5.18
P22	Urban League	3	0.11
P24	Salvation Army	1	0.04
P26	Volunteers of America	1	0.04
P27	YMCA, YWCA, YWHA, YMHA	63	2.28
P28	Neighborhood Center, Settlement House	43	1.56
P29	Thrift Shops	16	0.58
P30	Children and Youth Services	56	2.03
P31	Adoption	12	0.44
P32	Foster Care	40	1.45
P33	Child Day Care	208	7.54
P40	Family Services	62	2.25
P43	Family Violence Shelters and Services	14	0.51
P44	Homemaker, Home Health Aide	4	0.15
P45	Family Services (Adolescent Parents)	3	0.11
P46	Family Counseling, Marriage Counseling	24	0.87
P47	Pregnancy Centers	12	0.44
P50	Personal Social Services	14	0.51
P51	Financial Counseling, Money Management	7	0.25
P52	Transportation (Free or Subsidized)	3	0.11
P58	Gift Distribution	6	0.22
P60	Emergency Assistance (Food, Clothing, Cash)	21	0.76
P61	Travelers Aid	2	0.07
P62	Victims Services	1	0.04
P70	Residential Care & Adult Day Programs	86	3.12

NTEE Code	Description	Frequency	Percent
P71	Adult Day Care	9	0.33
P73	Group Home (Long-Term, Primarily Assisted Living)	46	1.67
P74	Hospice	28	1.02
P75	Supportive Housing for Older Adults	77	2.79
P80	Svcs to Promote Independence of Specific Populations	44	1.60
P81	Senior Centers/Services	95	3.44
P82	Developmentally Disabled Services/Centers	72	2.61
P83	Women's Centers	5	0.18
P84	Ethnic/Immigrant Services	61	2.21
P85	Homeless Services/Centers	34	1.23
P86	Blind/Visually Impaired Centers, Services	5	0.18
P87	Deaf/Hearing Impaired Centers, Services	2	0.07
P88	LGBT Centers	2	0.07
P99	Human Services - Multipurpose & Other N.E.C.	7	0.25
Total	Total	2,758	100.00

Table A2. Census Variables

Variable Name	Description
Demand variables	
PCTPOV	Neighborhood Poverty - Proportion of residents with income below 125% of the federal poverty level (table p88).
PCTHSGBR	Severe housing burden - Proportion of households (renters and owners) paying more than half of their income for housing (tables h69 and h94)
PCTYOUTH	Youth - Proportion of residents 17 years old or younger (table p8).
PCTSNIOR	Seniors - Proportion of residents 65 years or older (table p8).
PCTNOHS	High school drop out rate - Proportion of residents without a high school diploma (table p37).
PCTUNEMP	Unemployment - Proportion of residents unemployed (table p43).
PCTFMHH	Proportion female householder, no husband present, with children under age 18 years (table p10).
PCTFBORN	Foreign-born population - Proportion of residents foreign born (table p21).
PCTEASIA	Proportion foreign born from East Asia (table p19)
PCTSCASI	Proportion foreign born from South Central Asia (table p19)
PCTSEASI	Proportion foreign born from South East Asia (table p19)
PCTCTLAM	Proportion foreign born from Central America (table p19)
ECONDIVR	Economic diversity - 1 minus the Herfindahl-Hirschman index, calculated using household income in 1999, divided into 8 groups: less than $14,999; $15,000-$24,999; $25,000-$34,999; $35,000-$49,999; $50,000-$74,999; $75,000-$99,999; $100,000-$149,999; more than $150,000 (table p52).
RACEDIVR	Racial diversity - 1 minus the Herfindahl-Hirschman index for the following groups: Non-Hispanic white; Non-hispanic African American; Nonhispanic Asian, native Hawaiian or other pacific islander; Nonhispanic other; Hispanic (table p7).
PCTNHBLK	Proportion African American (table p7)
PCTNHAPI	Proportion Asian & Pacific Islander (table p7)
PCTHISP	Proportion Hispanic (table p7)
Resource variables	
PCT100K	Community wealth - Proportion of households with annual income greater than $100,000 (table p52).
PCTINTR	Dividend income - Proportion of households with interest, dividends, or net rental income (table p61).
AGGRWLTH	Aggregate household earnings in community (table p67)
PCTSSI	Supplemental security income - Proportion of households with supplemental security income (SSI) (table p63).
PCTPA	Public assistance income - Proportion of households with public assistance income (table 64).
Control variables	
POP00_SQMI	Population density - People per square mile

Table A3. Correlation Matrix

Variable	1	2	3	4	5	6	7	8
1-Number of nonprofit service locations	1.000							
2-Aggregate expenditures for nonprofit svc locations	0.898	1.000						
3-Poverty level	0.392	0.378	1.000					
4-Proportion of residents w/ serious housing burden	0.393	0.378	0.641	1.000				
5-Proportion youth	-0.326	-0.293	0.080	-0.032	1.000			
6-Proportion seniors	0.143	0.127	-0.167	-0.042	-0.431	1.000		
7-Proportion high school drop outs	0.210	0.206	0.672	0.389	0.344	-0.164	1.000	
8-Proportion unemployed	0.147	0.162	0.647	0.361	0.313	-0.240	0.606	1.000
9-Proportion female headed households	0.033	0.050	0.515	0.300	0.553	-0.295	0.529	0.533
10-Proportion foreign born	0.219	0.169	0.269	0.253	0.054	-0.189	0.476	0.140
11-Economic diversity (HHI)	0.169	0.148	0.178	0.150	-0.308	0.235	0.096	0.007
12-Racial diversity (HHI)	0.113	0.119	0.381	0.221	0.157	-0.303	0.513	0.374
13-Proportion of households with annual income over $100K	-0.225	-0.238	-0.783	-0.450	-0.188	0.129	-0.652	-0.647
14-Proportion households with income from interest, dividends, or rent	-0.161	-0.169	-0.739	-0.440	-0.400	0.393	-0.784	-0.692
15-Aggregate household wealth	-0.083	-0.086	-0.593	-0.319	-0.126	0.071	-0.512	-0.494
16-Proportion receiving SSI	0.241	0.227	0.638	0.406	0.245	-0.031	0.751	0.552
17-Proportion receiving public assistance	0.153	0.159	0.668	0.391	0.383	-0.183	0.713	0.619
18-County Welfare Expenditures (in $1,000's)	0.044	0.050	0.164	-0.005	0.107	-0.098	0.116	0.171
19-Population Density	0.400	0.342	0.322	0.286	-0.112	-0.070	0.336	0.175
20-Community is in a Central Business District	0.245	0.232	0.195	0.163	-0.208	0.073	0.118	0.100
21-Community is in the SF Metro Area	0.242	0.178	-0.178	0.047	-0.178	-0.006	0.001	-0.203
22-Proportion Non-Hispanic African American	0.188	0.193	0.457	0.303	0.175	-0.260	0.427	0.463
23-Proportion Non-Hispanic Asian	0.062	0.030	-0.041	0.035	-0.073	-0.097	0.107	-0.069
24-Proportion Hispanic	0.105	0.114	0.500	0.240	0.407	-0.397	0.768	0.507
25-Proportion East Asian	0.134	0.094	-0.214	-0.058	-0.355	0.128	-0.198	-0.283
26-Proportion South Central Asian	-0.106	-0.122	-0.259	-0.109	-0.055	-0.100	-0.247	-0.239
27-Proportion South East Asian	0.057	0.053	0.185	0.137	0.127	-0.231	0.411	0.205
28-Proportion Central American	0.199	0.195	0.523	0.315	0.338	-0.293	0.772	0.480
Mean	1.660	15.154	0.336	0.366	0.234	-2.203	0.163	-3.269
Standard Deviation	1.010	1.559	0.137	0.074	0.074	0.525	0.129	0.466

Table A3. Correlation Matrix continued

Variable	9	10	11	12	13	14	15	16
9-Proportion female headed households	1.000							
10-Proportion foreign born	0.053	1.000						
11-Economic diversity (HHI)	0.030	0.014	1.000					
12-Racial diversity (HHI)	*0.320*	*0.603*	-0.041	1.000				
13-Proportion of households with annual income over $100K	*-0.603*	*-0.080*	-0.042	*-0.365*	1.000			
14-Proportion households with income from interest, dividends, or rent	*-0.668*	*-0.266*	0.030	*-0.497*	*0.830*	1.000		
15-Aggregate household wealth	*-0.375*	-0.039	*0.077*	*-0.240*	*0.680*	*0.580*	1.000	
16-Proportion receiving SSI	*0.482*	*0.361*	*0.064*	*0.427*	*-0.604*	*-0.676*	*-0.448*	1.000
17-Proportion receiving public assistance	*0.605*	*0.277*	0.021	*0.393*	*-0.646*	*-0.721*	*-0.478*	*0.707*
18-County Welfare Expenditures (in $1,000's)	*0.169*	*0.105*	*-0.159*	*0.295*	*-0.164*	*-0.208*	*-0.164*	*0.202*
19-Population Density	*0.125*	*0.547*	*0.129*	*0.398*	*-0.199*	*-0.255*	-0.041	*0.366*
20-Community is in a Central Business District	*-0.130*	*0.101*	*-0.089*	0.034	*-0.143*	*-0.129*	*-0.094*	*0.156*
21-Community is in the SF Metro Area	*-0.222*	*0.381*	*0.078*	*0.123*	*0.349*	*0.199*	*0.274*	*-0.097*
22-Proportion Non-Hispanic African American	*0.455*	*0.213*	*-0.082*	*0.676*	*-0.484*	*-0.566*	*-0.346*	*0.467*
23-Proportion Non-Hispanic Asian	*-0.139*	*0.759*	*-0.103*	*0.612*	*0.167*	0.019	*0.125*	*0.142*
24-Proportion Hispanic	*0.517*	*0.423*	*0.093*	*0.577*	*-0.510*	*-0.704*	*-0.372*	*0.492*
25-Proportion East Asian	*-0.359*	*0.527*	-0.009	*0.293*	*0.364*	*0.341*	*0.313*	*-0.119*
26-Proportion South Central Asian	*-0.165*	*0.333*	*-0.096*	*0.209*	*0.321*	*0.213*	*0.377*	*-0.175*
27-Proportion South East Asian	*0.150*	*0.720*	-0.057	*0.713*	*-0.131*	*-0.328*	*-0.074*	*0.381*
28-Proportion Central American	*0.488*	*0.501*	*0.160*	*0.513*	*-0.484*	*-0.647*	*-0.322*	*0.507*
Mean	0.232	0.238	0.825	0.517	0.238	0.419	10068.741	0.205
Standard Deviation	0.086	0.147	0.058	0.163	0.165	0.171	3340.541	0.089

Significance: *italics* = p<.01, underline = p<.05
N = 1,808

Table A3. Correlation Matrix continued

Variable	17	18	19	20	21	22	23	24
17-Proportion receiving public assistance	1.000							
18-County Welfare Expenditures (in $1,000's)	*0.255*	1.000						
19-Population Density	*0.302*	*0.229*	1.000					
20-Community is in a Central Business District	*0.093*	0.060	*0.155*	1.000				
21-Community is in the SF Metro Area	*-0.188*	*-0.300*	*0.275*	-0.017	1.000			
22-Proportion Non-Hispanic African American	*0.485*	*0.376*	*0.342*	0.057	0.002	1.000		
23-Proportion Non-Hispanic Asian	0.044	*0.243*	*0.457*	*0.095*	*0.311*	*0.239*	1.000	
24-Proportion Hispanic	*0.507*	*0.083*	*0.235*	-0.034	0.044	*0.372*	0.044	1.000
25-Proportion East Asian	*-0.217*	*0.151*	*0.372*	*0.120*	*0.356*	0.015	*0.766*	*-0.250*
26-Proportion South Central Asian	*-0.220*	*0.171*	*0.101*	-0.041	*0.177*	-0.025	*0.473*	*-0.131*
27-Proportion South East Asian	*0.318*	*0.235*	*0.464*	*0.066*	*0.228*	*0.433*	*0.799*	*0.378*
28-Proportion Central American	*0.507*	-0.025	*0.282*	-0.026	*0.145*	*0.331*	0.055	*0.905*
Mean	-3.316	441414.27	8518.763	0.023	0.777	-2.822	0.166	0.177
Standard Deviation	0.752	239755.23	10908.824	0.149	0.416	0.878	0.158	0.151

Variable	25	26	27	28
25-Proportion East Asian	1.000			
26-Proportion South Central Asian	*0.451*	1.000		
27-Proportion South East Asian	*0.401*	*0.277*	1.000	
28-Proportion Central American	*-0.193*	*-0.132*	*0.362*	1.000
Mean	-3.374	-3.845	0.190	0.215
Standard Deviation	0.904	0.677	0.127	0.148

Significance: *italics* = p<.01, underline = p<.05
N = 1,808

References

Allard, Scott W. 2004. *Access to Social Services: The Changing Urban Geography of Poverty and Service Provision*. Washington, DC: The Brookings Institution.

Allard, Scott W. 2007a. *Mismatches and Unmet Need: Access to Social Services in Urban and Rural America*. Ann Arbor, MI: National Poverty Center, University of Michigan, Working Paper Series #07-14.

Allard, Scott W. 2007b. *The Changing Face of Welfare during the Bush Administration*. Ann Arbor, MI: National Poverty Center, University of Michigan, Working Paper Series #07-18.

Allard, Scott W., Richard M. Tolman, and Daniel Rosen. 2003. Proximity to Service Providers and Service Utilization among Welfare Recipients: The Interaction of Race and Place. *Journal of Policy Analysis and Management* 22 (4): 599-613.

Anheier, Helmut K. and Lester M. Salamon. 2006. The Nonprofit Sector in Comparative Perspective. In W. W. Powell & R. Steinberg, Eds. *The Nonprofit Sector: A Research Handbook, Second Edition*. New Haven, CN: Yale University Press.

Austin, Michael J. 2003. The Changing Relationship Between Nonprofit Organizations and Public Social Service Agencies in the Era of Welfare Reform. *Nonprofit and Voluntary Sector Quarterly* 32 (1): 97-114.

Berube, Alan. 2007. The Geography of U.S. Poverty and its Implications. Testimony before the House Committee on Ways and Means, February 13.

Bielefeld, Wolfgang, James C. Murdoch, and Paul Waddell. 1997. The Influence of Demographics and Distance on Nonprofit Location. *Nonprofit and Voluntary Sector Quarterly* 26 (2), 207-225.

Bielefeld, Wolfgang, and James C. Murdoch. 2004. The Locations of Nonprofit Organizations and their For-profit Counterparts: An Exploratory Analysis. *Nonprofit and Voluntary Sector Quarterly* 33 (2): 221-246.

Boris, Elizabeth T. 1998. Nonprofit Organizations in a Democracy: Varied Roles and Responsibilities. In *Nonprofits and Government: Collaboration and Conflict.* Elizabeth T. Boris and C. Eugene Steurle, Eds. Washington D.C.: The Urban Institute Press.

Brown, Prudence and Leila Fiester. 2007. *Hard Lessons about Philanthropy and Community Change from the Neighborhood Improvement Initiative*. Palo Alto, CA: William and Flora Hewlett Foundation.

Carroll, Glenn R. 1984. Organizational Ecology. *Annual Review of Sociology*, 10: 71-93.

Clemens, Elizabeth. 2006. The Constitution of Citizens: Political Theories of Nonprofit Organizations. In *The Nonprofit Sector: A Research Handbook*. Walter W. Powell and Richard Steinberg, Eds. New Haven, CT: Yale University Press.

Corbin, John J. 1999. A Study of Factors Influencing the Growth of Nonprofits in Social Services. *Nonprofit and Voluntary Sector Quarterly* 28 (3): 296-314.

DeVerteuil, Geoffrey. 2000. Reconsidering the Legacy of Urban Public Location Theory in Human Geography. *Progress in Human Geography* 24 (1): 47-69.

DiMaggio, Paul J., and Helmut Anheier. 1990. The Sociology of Nonprofit Organizations and Sectors. *Annual Review of Sociology* 16: 137-159.

Edin, Kathryn and Laura Lein. 1998. The Private Safety Net: The Role of Charitable Organizations in the Lives of the Poor. *Housing Policy Debate* 9 (4): 541-573.

Freisthler, Bridget, Bridgette Lery, Paul J. Gruenewald, and Julian Chow. 2006. Methods and Challenges of Analyzing Spatial Data for Social Work Problems: The Case of Examining Child Maltreatment Geographically. *Social Work Research* 30 (4): 198-210.

Frumkin, Peter. 2002. *On Being Nonprofit: A Conceptual and Policy Primer*. Cambridge, MA: Harvard University Press.

Galaskiewicz, Joseph, and Wolfgang Bielefeld. 1998. *Nonprofit Organizations in an Age of Uncertainty: A Study of Organizational Change*. New York: Aldine de Gruyter.

Grønbjerg, Kirsten A., and Laurie Paarlberg. 2001. Community Variations in the Size and Scope of the Nonprofit Sector: Theory and Preliminary Findings. *Nonprofit and Voluntary Sector Quarterly* 30 (4): 684-706.

Grønbjerg, Kirsten A., and Laurie Paarlberg. 2002. Extent and Nature of Overlap Between Listings of IRS Tax-Exempt Registration and Nonprofit Incorporation: The Case of Indiana. *Nonprofit and Voluntary Sector Quarterly* 31 (4): 565 – 594.

Haining, Robert. 1990. *Spatial Data Analysis in the Social and Environmental Sciences*. Cambridge: Cambridge University Press.

Halpern, Robert. 1995. *Rebuilding the Inner City: A History of Neighborhood Initiatives to Address Poverty in the United States*. New York, NY: Columbia University Press.

Hannan, Michael T. and John Freeman. 1989. *Organizational Ecology*. Cambridge, MA: Harvard University Press.

Hansmann, Henry. 1996. *The Ownership of Enterprise*. Cambridge, MA: The Belknap Press of Harvard University Press.

Jargowsky, Paul A. 2003. *Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s*. Washington D.C.: The Brookings Institution.

James, Estelle. 1983. How Nonprofits Grow: A Model. *Journal of Policy Analysis and Management* 2 (3): 350 – 366.

James, Estelle. 1987. The Nonprofit Sector in Comparative Perspective. In *The Nonprofit Sector: A Research Handbook, Second Edition.* Walter W. Powell, Ed. New Haven, CN: Yale University Press.

James, Estelle. 1993. Why do Different Countries Choose a Different Public-Private Mix of Educational Services? *The Journal of Human Resources* 28 (3): 571 – 592.

Joassart-Marcelli, Pascale, and Jennifer R. Wolch. 2003. The Intrametropolitan Geography of Poverty and the Nonprofit Sector in Southern California. *Nonprofit and Voluntary Sector Quarterly* 32 (1): 70 – 96.

Johnson, Hans P. 2002. *A State of Diversity: Demographic Trends in California's Regions.* Public Policy Institute of California, San Francisco, CA.

Johnson, Hans P. and Joseph M. Hayes. 2004. *The Central Valley at a Crossroads: Migration and Its Implications.* Public Policy Institute of California, San Francisco, CA.

Kapur, Kanika and Burton A. Weisbrod. 2000. The Roles of Government and Nonprofit Suppliers in Mixed Industries. *Public Finance Review* 28 (4): 275-308.

Kissane, Rebecca Joyce. 2003. What's Need Got to Do with It? Barriers to Use of Nonprofit Social Services. *Journal of Sociology and Social Welfare* 30 (2): 127-148.

Kotkin, Joel and William Frey. 2007. *The Third California: The Golden State's New Frontier*. The Brookings Institution, Washington D.C.

LaFrance, Steven, Andrew Robinson, Rick Green, Michael Lee, and Nancy Latham. 2006. The 2005 Santa Clara County Nonprofit Benchmark Study. Community Foundation Silicon Valley, San Jose, CA.

Marwell, Nicole P. 2004. Privatizing the Welfare State: Nonprofit Community-Based Organizations as Political Actors. *American Sociological Review* 69 (2): 265-291.

Matsunaga, Yoshiho and Naoto Yamauchi. 2004. Is the Government Failure Theory Still Relevant? A panel analysis using US state level data. *Annals of Public and Cooperative Economics* 75(2): 227-263.

Miller, Clara. 2007. "Enterprise Friendly" Practices for Mission-Focused Organizations. In Community Wealth Ventures, Inc. (Ed.), *Achieving Impact and Sustainability through Market-Based Approaches: Discussion Highlights* (pp. 10-12). Washington D.C.: Community Wealth Ventures, Inc.

National Center for Charitable Statistics. 2003. *NTEE-CC Manual*. Urban Institute, Washington D.C.

Peck, Laura R. 2008. Do Antipoverty Nonprofits Locate Where People Need Them? Evidence From a Spatial Analysis of Phoenix. *Nonprofit and Voluntary Sector Quarterly* 37(1): 138-151.

Pollak, Thomas H. and Patrick Rooney. 2003. Management and General Expenses: The Other Half of Overhead. *NonProfit Quarterly* 10(1): 30-32.

Putnam, Robert D. 2007. E Pluribus Unum: Diversity and Community in the Twenty-first Century. *Scandinavian Political Studies* 30(2): 137-174.

Rafter, Kevin and Carol Silverman. 2006. *Silicon Valley's Changing Nonprofit Sector*. University of San Francisco, Institute for Nonprofit Organization Management, San Francisco, CA.

Ryan, William P. 1999. The New Landscape for Nonprofits. *Harvard Business Review* 77 (1).

Ryan, William P. 2001. *Nonprofit Capital: A Review of Problems and Strategies* (Prepared for The Rockefeller Foundation and Fannie Mae Foundation). New York: Rockefeller Foundation.

Salamon, Lester M. 1992. Social Services. In *Who Benefits from the Nonprofit Sector?*.Charles T. Clotfelter, Ed. Chicago: University of Chicago Press.

Salamon, Lester M. 1995. *Partners in Public Service: Government-Nonprofit Relations in the Modern Welfare State*. Baltimore, MA: The Johns Hopkins University Press.

Salamon, Lester M., Ed. 2002. *The State of Nonprofit America.* Washington D.C.: Brookings Institution Press.

Sandoval, J. O., H. Johnson & S. M. Tafoya. 2002. *Who's Your Neighbor? Residential Segregation and Diversity in California.* Public Policy Institute of California, San Francisco, CA.

Schlesinger, Mark and Bradford H. Gray. 2006. Nonprofit Organizations and Health Care: Some Paradoxes of Persistant Scrutiny. In *The Nonprofit Sector: A Research Handbook*. Walter W. Powell and Richard Steinberg, Eds. New Haven, CT: Yale University Press.

Seley, John, Julian Wolpert, and Anna Motta-Moss. 2002. *Nonprofit Response to Demographic Change: The Role of Government Support*. New York, NY: The New York City Nonprofits Project.

Silverman, Carol, Kevin Rafter, and Arleda Martinez. 2007. *Successful Technology Use in Small Grassroots Nonprofits*. San Francisco, CA: Institute for Nonprofit Organization Management.

Smith, Steven Rathgeb. 1998. Government Financing of Nonprofit Activity. In *Nonprofits and Government: Collaboration and Conflict.* Elizabeth T. Boris and C. Eugene Steurle, Eds. Washington D.C.: The Urban Institute Press.

Smith, Steven Rathgeb. 2002. Social Services. In *The State of Nonprofit America*. Lester Salamon, Ed. Washington D.C.: Brookings Institution Press.

Smith, Steven Rathgeb, and Kirsten A. Grønbjerg. 2006. Scope and Theory of Government-Nonprofit Relations. In *The Nonprofit Sector: A Research Handbook*. Walter W. Powell and Richard Steinberg, Eds. New Haven, CT: Yale University Press.

Steinberg, Richard. 2006. Economic Theories of the Nonprofit Sector. In *The Nonprofit Sector: A Research Handbook*. Walter W. Powell and Richard Steinberg, Eds. New Haven, CT: Yale University Press.

Swanstrom, Todd, Colleen Casey, Robert Flack, and Peter Dreier. 2004. *Pulling Apart: Economic Segregation among Suburbs and Central Cities in Major Metropolitan Areas.* Washington, DC: The Brookings Institution.

Twombly, Eric C. 2003. What Factors Affect the Entry and Exit of Nonprofit Human Service Organizations in Metropolitan Areas? *Nonprofit and Voluntary Sector Quarterly* 32 (2): 211 – 235.

Twombly, Eric C. and Carol J. De Vita, with Nadine Garrick. 2000. *Mapping Nonprofits in Philadelphia, Pennsylvania*. Washington, DC: The Urban Institute, October.

U.S. Census Bureau, 2002 Census of Governments, Volume 4, Number 3, Finances of County Governments; 2002 GC02(4)-3, U.S. Government Printing Office, Washington, DC, 2002.

Weisbrod, Burton A. 1988. *The Nonprofit Economy.* Cambridge, MA: Harvard University Press.

Wolpert, Julian. 1993. Decentralization and Equity in Public and Nonprofit Sectors. *Nonprofit and Voluntary Sector Quarterly* 22: 281-296.

Wolpert, Julian, John E. Seley, and Ana Motta-Moss. 2004. *Nonprofit Services in New York City's Neighborhoods: An Analysis of Access, Responsiveness, and Coverage.* New York, NY: The New York City Nonprofits Project.

Yamashiro, Greg and Jon K. Matsuoka. 1997. Help-seeking among Asian and Pacific Americans: A Multiperspective Analysis. *Social Work* 42 (2): 176-186.

Young, Dennis. 1998. Complementary, Supplementary, or Adversarial? A Theoretical and Historical Examination of Nonprofit-Government Relations in the United States. In *Nonprofits and Government: Collaboration and Conflict.* Elizabeth T. Boris and C. Eugene Steurle, Eds. Washington D.C.: The Urban Institute Press.

Young, Dennis. 2000. Alternative Models of Government-Nonprofit Sector Relations: Theoretical and International Perspectives. *Nonprofit and Voluntary Sector Quarterly* 29(1): 149-172.

Ylvisaker, Paul N. 1963. *Community Action: A Response to Some Unfinished Business*. New York, NY: Ford Foundation.