

NEIGHBORHOOD POVERTY IN THE DES MOINES METRO AREA, 1979-2009

David J. Peters, Ph.D.

PMxxxx
March 2011



IOWA STATE UNIVERSITY
University Extension



EXECUTIVE SUMMARY

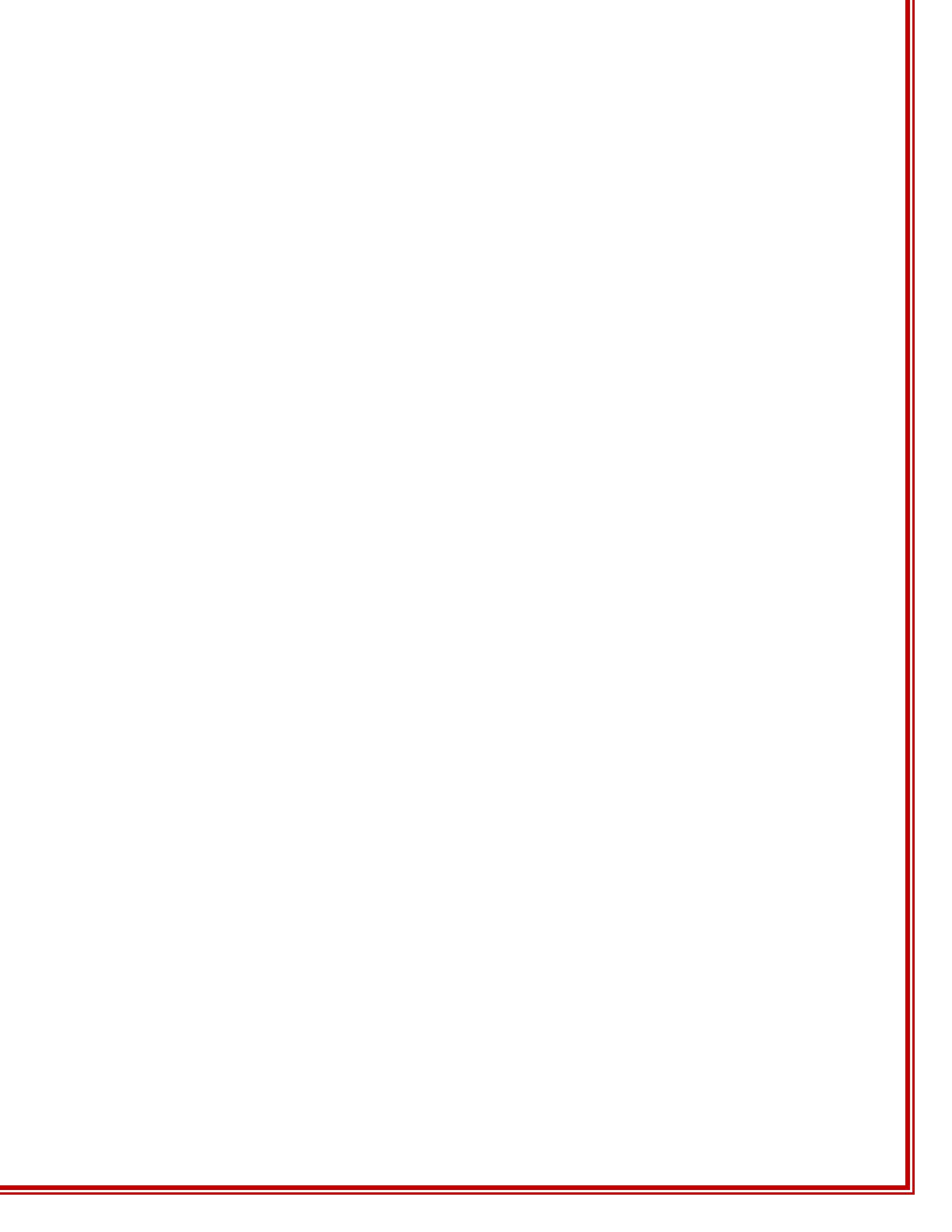
The poverty rate in the Des Moines metropolitan area is much lower (8.5%) than the rates for Iowa (11.4%) and the United States (13.5%). While the overall poverty rate for the metropolitan area is low, there are some important differences between counties. The lowest poverty rates in 2009 are in Dallas (6.5%) and Warren (6.6%) counties in the suburban part of the metro; and the highest rate is in Polk County containing the City of Des Moines (9.4%).

Over the past decade poverty rates have increased in both Polk and Warren counties (increases of 1.5% each), while remaining relatively flat in the other counties. Over the past three decades poverty rates have declined the fastest in the suburban counties of Guthrie (-6.9% decline) and Madison (-4.7% decline), while they have slightly risen in Polk County (1.0% increase).

By far, the largest concentration of poor neighborhoods occurs in the City of Des Moines, especially in the central areas of the City. There are also pockets of high poverty in several suburban and exurban cities in the metro. In general, high local poverty tends to be concentrated in core urban cities and towns and not in rural areas of the metro.

By contrast, pockets of fast growing poverty are not particularly concentrated in the City of Des Moines, although pockets do exist. In general, growth in poverty over the past three decades tends to be concentrated in smaller cities and towns, and less so in core urban areas.

In terms of socioeconomic characteristics, the results show that poor neighborhoods in the Des Moines metro are dominated by minority populations, single-headed families, low educational attainment, poor employment participation, and employment opportunities in lower-skill and lower-wage services industries such as administrative support, entertainment, personal services, and retail.



NEIGHBORHOOD POVERTY IN THE DES MOINES METRO AREA, 1979-2009

TABLE OF CONTENTS

Introduction 1

Trends in Poverty 1979-2009 3

Neighborhood Poverty in 2009 7

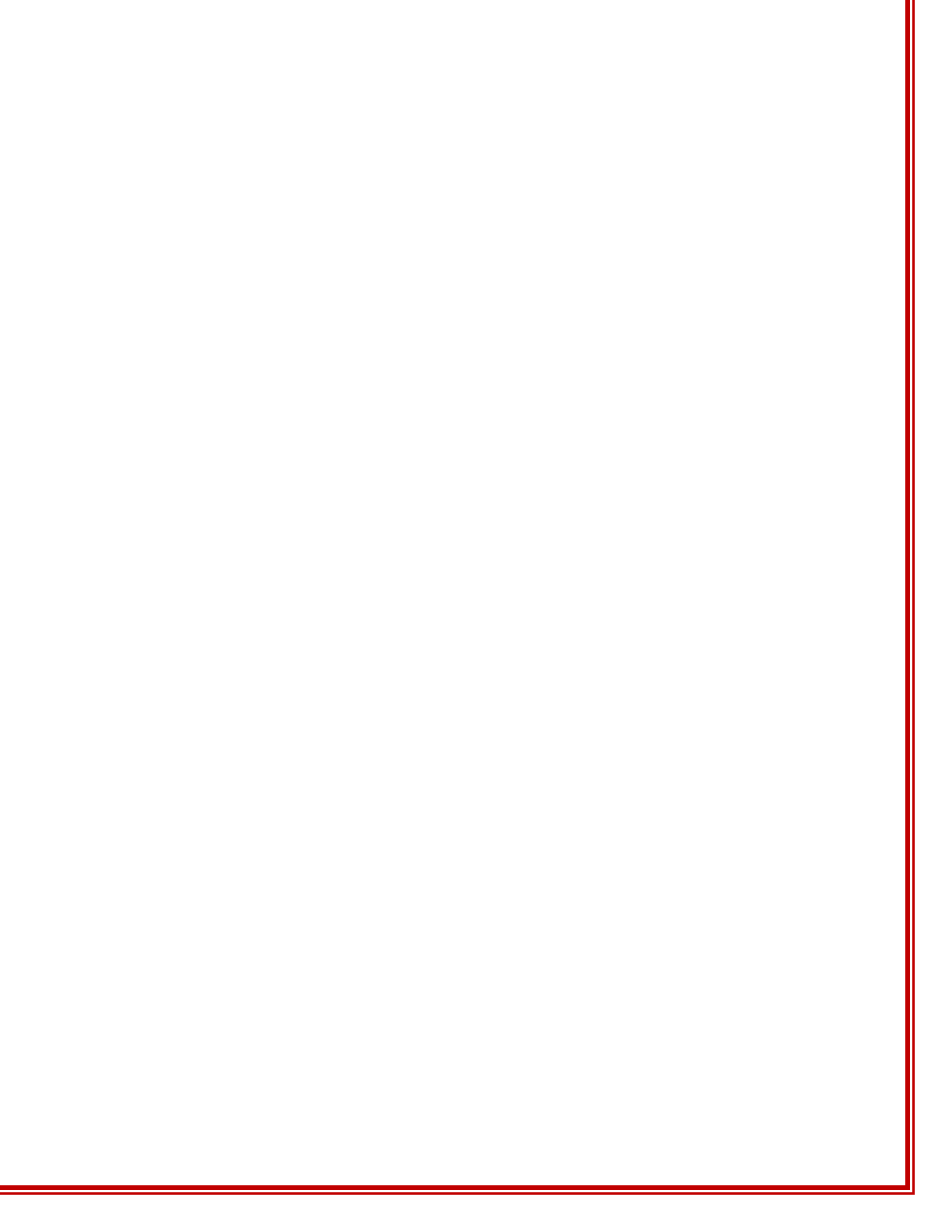
Growth in Neighborhood Poverty 1979-2009 11

Summary and Poverty Reduction Strategies 14

Data and Methods..... 16

References 18

Publication PMXXXX
March 2011



INTRODUCTION

The first decade of the 21st century has seen two recessions that has resulted in loss of jobs, income and overall net wealth. As a result, economic development is a priority for nearly all Iowa communities. However, development is often confused with economic growth. Economic development entails “sustained progressive change to attain individual and group interests through the expanded, intensified and adjusted use of resources”, where “human welfare is the end product of the development process” (Shaffer, Deller, and Marcouiller 2004). How do you measure such a value-laden and multifaceted concept to know whether development efforts have been successful? While there is no single answer to this question, one common and relatively easy method is to look at community poverty rates over time.

There is a need to understand how recent economic downturns have impacted Iowa neighborhoods. New Census data offers a first look at neighborhood poverty since 2000. Thus, the purpose of this report is to document the trends in poverty across neighborhoods in the Des Moines metropolitan area over the past 30 years, and to identify some key socioeconomic characteristics of these poor neighborhoods. The information in this report can assist urban planners and policy makers in targeting public services and infrastructure to some of the poorest areas of their cities. For example, identifying economically distressed areas can assist local agencies in making location decisions to provide social and workforce services, and in better aligning public transportation routes.

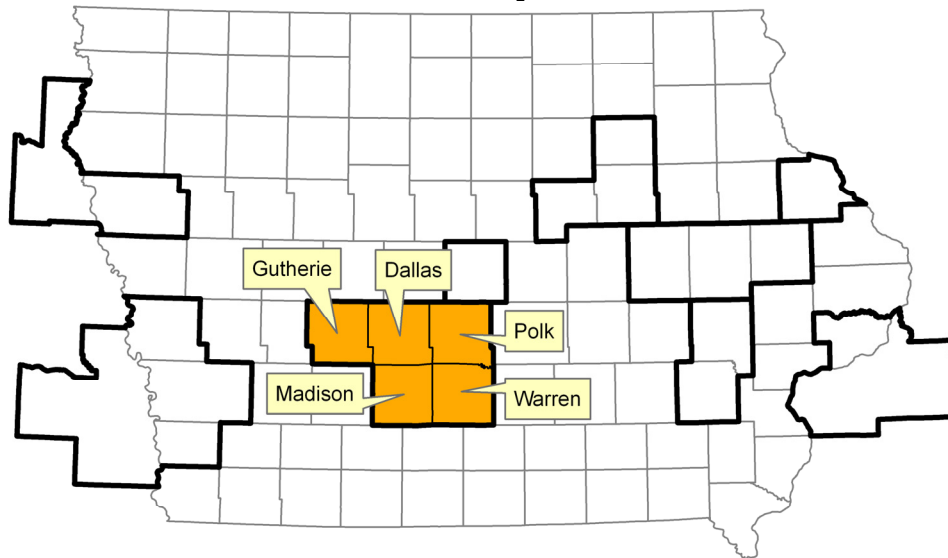
This analysis applies geographic and statistical techniques to a unique set of Census data in order to better understand neighborhood poverty rates over time. Census block-groups are used to approximate neighborhoods, and are the smallest geographic level for which the Census Bureau publishes data. Since block-groups are identified by local partners, they tend to represent distinct neighborhoods or areas of a community. However, block-groups change with every Census which prevents direct comparisons over time. This problem is addressed by geographically correcting the data to make valid comparisons across block-groups over time.

Understanding the dynamics of poverty at the sub-county level is important because using larger geographic scales has been found to increase aggregation error. This makes many poor neighborhoods “statistically invisible” if they are located within more prosperous counties. For example, there may be pockets of high poverty within a high income county, so that wealthy areas average out poorer ones giving the false impression of uniform prosperity. In short, using sub-county geographies allows us to identify pockets of deprivation that would otherwise go undocumented.

Previous research has clearly identified key demographic and economic correlates of local poverty in the United States (Lobao 2004; Lobao and Hooks 2007; Peters 2009;

Weber, Jensen, Miller, Mosley, and Fisher 2005). This body of work has demonstrated that poverty can be explained by differences in economic structures, individuals, natural resources, geography, and past history. In terms of geography, poor counties are spatially clustered where neighboring poverty impacts local poverty; and poverty tends to be higher in non-metropolitan and core urban areas. Poverty is path dependent over time, meaning that high poverty in previous decades results in high poverty today. In terms of demographics, single-headed families and minorities are associated with higher level of local poverty; and higher levels of education decrease poverty. In economic terms, poor places have lower labor force participation and higher unemployment rates. Employment in agriculture, natural resources, lower skill services, trade, and government are all associated with higher rates of poverty. Non-poor places tend to have more jobs in higher skilled producer services. Manufacturing and transportation tends to reduce poverty rates overall, but not in rural areas.

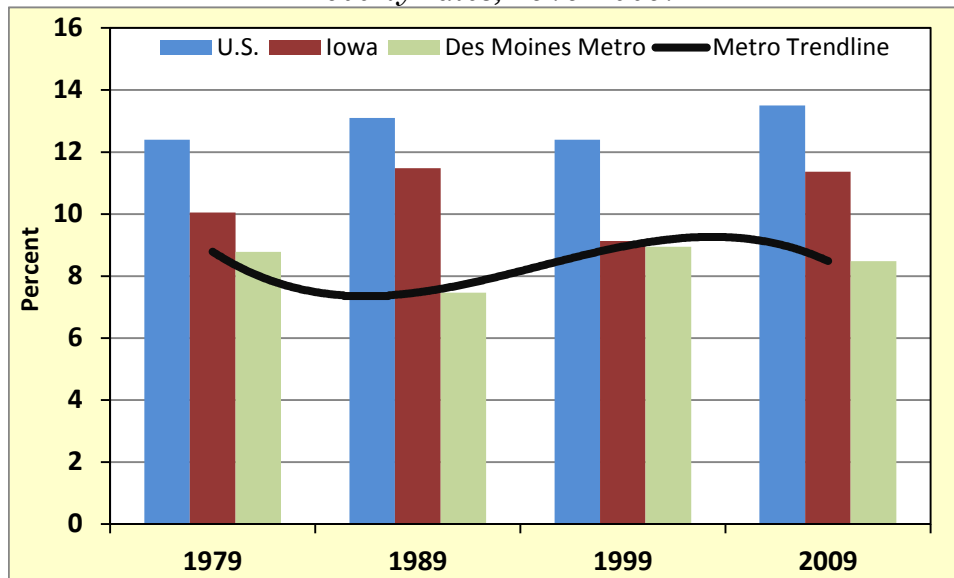
Figure 1
Des Moines metropolitan area.



TRENDS IN POVERTY 1979-2009

The poverty rate in the Des Moines metropolitan area is much lower than the rates for Iowa and the United States. The metro poverty rate stood at 8.5 percent in 2009, compared to 11.4 percent for Iowa and 13.5 percent nationally. Over the last 30 years, the poverty rate in the Des Moines metro has generally held steady at around 8.5 to 9.0 percent. The exception is in 1989 when it dropped to a low of 7.5 percent. Paradoxically, this is when the rates for Iowa and the U.S. were at their highest. Refer to table 1 and figure 2.

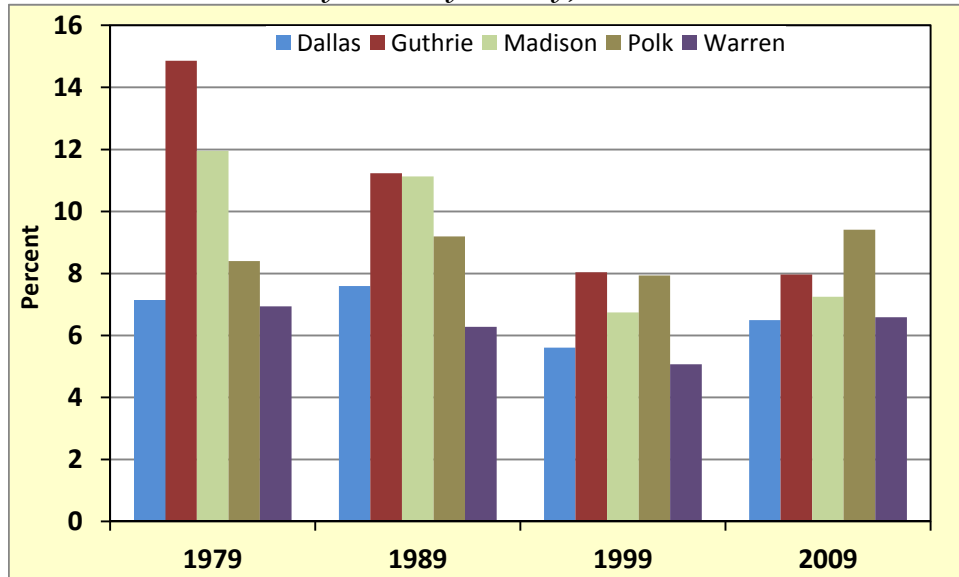
Figure 2.
Poverty rates, 1979-2009.



While the overall poverty rate for the metropolitan area is low, there are some important differences between counties. The lowest poverty rates in 2009 are in Dallas (6.5%) and Warren (6.6%) counties in the suburban part of the metro. By contrast, Polk County, containing the core City of Des Moines, has a much higher rate of 9.4 percent – yet it is still below the Iowa and U.S. rates.

Over the past decade since 1999, poverty rates have increased in both Polk and Warren counties (increases of 1.5% each), while remaining relatively flat in the other counties. This indicates that the latest recession has hit these two counties the hardest. Over the past three decades since 1979, poverty rates have declined the fastest in the suburban counties of Guthrie (-6.9% decline) and Madison (-4.7% decline), while they have slightly risen in Polk County (1.0% increase). Refer to figure 3.

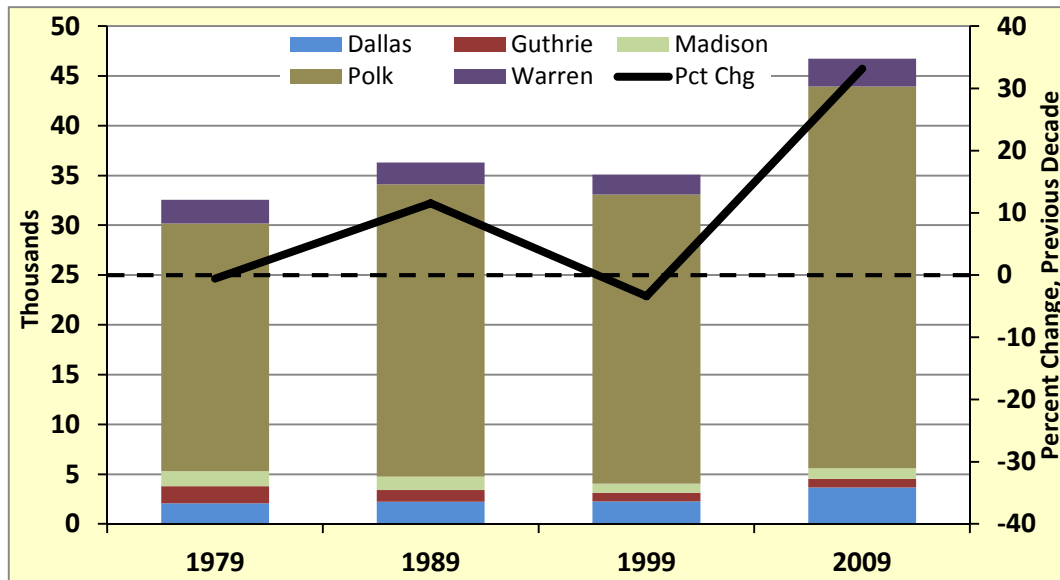
*Figure 3.
Poverty rates by county, 1979-2009.*



Next turning our attention to the numbers of poor persons, there are 46,733 people living below the poverty line in the Des Moines metro, according to 2009 estimates. The vast majority of these poor reside in Polk County (38,349). Over the last 10 years the number of poor people increased by 11,651, with most growth occurring in Polk County.

Between 1999 and 2009, the numbers of poor persons living in the metro grew by a stunning 33.2 percent over the last decade. This rate of growth is much higher than what has occurred in previous decades in the metro. The poor population grew the fastest in suburban Dallas (63.4%) and Warren (41.0%) counties, albeit the actual numbers of poor are low. Although Polk County saw a slower percentage increase (32.1%), it has the largest growth in absolute numbers of poor people. Refer to figure 4.

*Figure 4.
Poverty population by county and percent change for the Des Moines Metro,
1979-2009.*



Even though the Des Moines metropolitan area and Polk County have overall low rates of poverty, they also contain neighborhoods with some of the highest rates of poverty in the state. For example, although Polk County has a poverty rate of 9.4 percent (lower than the Iowa and U.S. rates), it also contains neighborhoods where over 40 percent of the population is poor – some of the highest rates in the state. Identifying and describing these high poverty neighborhoods is the focus of the next section.

*Table 1.
Poverty rates and populations in the Des Moines Metro Area, 1979-2009.*

	Poverty Rate				Change	
	<i>1979</i>	<i>1989</i>	<i>1999</i>	<i>2009</i>	<i>1979 2009</i>	<i>1999 2009</i>
Iowa	10.05	11.48	9.13	11.37	1.32	2.23
Des Moines Metro	8.78	7.47	8.94	8.48	-0.30	-0.46
Dallas County	7.14	7.60	5.61	6.50	-0.64	0.89
Guthrie County	14.86	11.23	8.03	7.97	-6.89	-0.07
Madison County	11.96	11.13	6.74	7.25	-4.71	0.50
Polk County	8.40	9.20	7.94	9.41	1.01	1.47
Warren County	6.93	6.28	5.07	6.58	-0.35	1.52
	Poverty Population				Percent Change	
	<i>1979</i>	<i>1989</i>	<i>1999</i>	<i>2009</i>	<i>1979 2009</i>	<i>1999 2009</i>
Poor Population						
Des Moines Metro	32,561	36,309	35,082	46,733	43.52	33.21
Dallas County	2,067	2,222	2,250	3,676	77.84	63.38
Guthrie County	1,737	1,195	888	850	-51.07	-4.28
Madison County	1,491	1,354	920	1,076	-27.83	16.96
Polk County	24,882	29,364	29,051	38,349	54.12	32.01
Warren County	2,384	2,174	1,973	2,782	16.69	41.00

SOURCE: 1970-2000 Census and 2005-09 ACS, U.S. Census Bureau.

NEIGHBORHOOD POVERTY IN 2009

Figure 5A presents poverty rates by neighborhood block-groups for the Des Moines metropolitan area in 2009. Outside of urban Polk County, there are high pockets of local poverty in Dallas County around Perry and unincorporated areas stretching from Linden east to Adel, in Guthrie County encompassing Guthrie Center, in Madison County in southeast Winterset, and in Warren County including southwest Indianola.

There are also clusters of poverty in suburban areas near the City of Des Moines. In the north metro, Ankeny has high poverty in the downtown area. In the northwest metro, there is a band of high poverty stretching from northwest Altoona to Ankeny along Interstate 80. In the west metro suburbs, there is one poverty cluster located in the northern part of West Des Moines along Interstate 80-235; and another cluster in the eastern section of Clive adjacent to Windsor Heights.

By far, the largest concentration of poor neighborhoods occurs in the City of Des Moines, especially in the central areas of the City. In general, high local poverty tends to be concentrated in core urban cities and towns and not in rural areas of the metro.

Figure 5A.
Poverty rate by block-group in the Des Moines Metro, 2009.

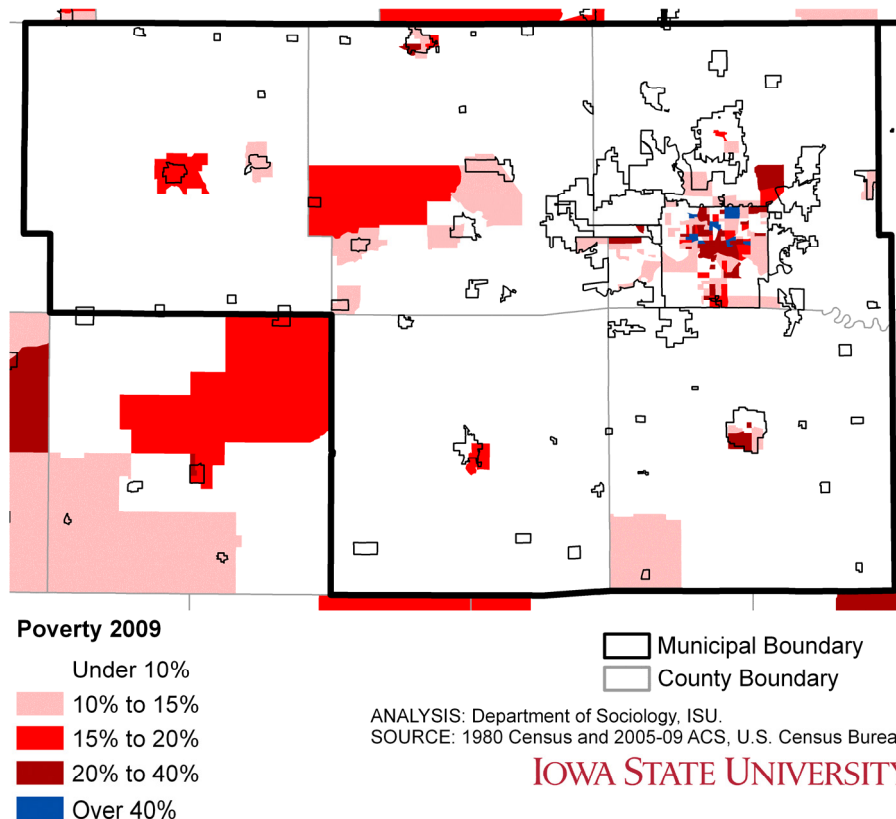
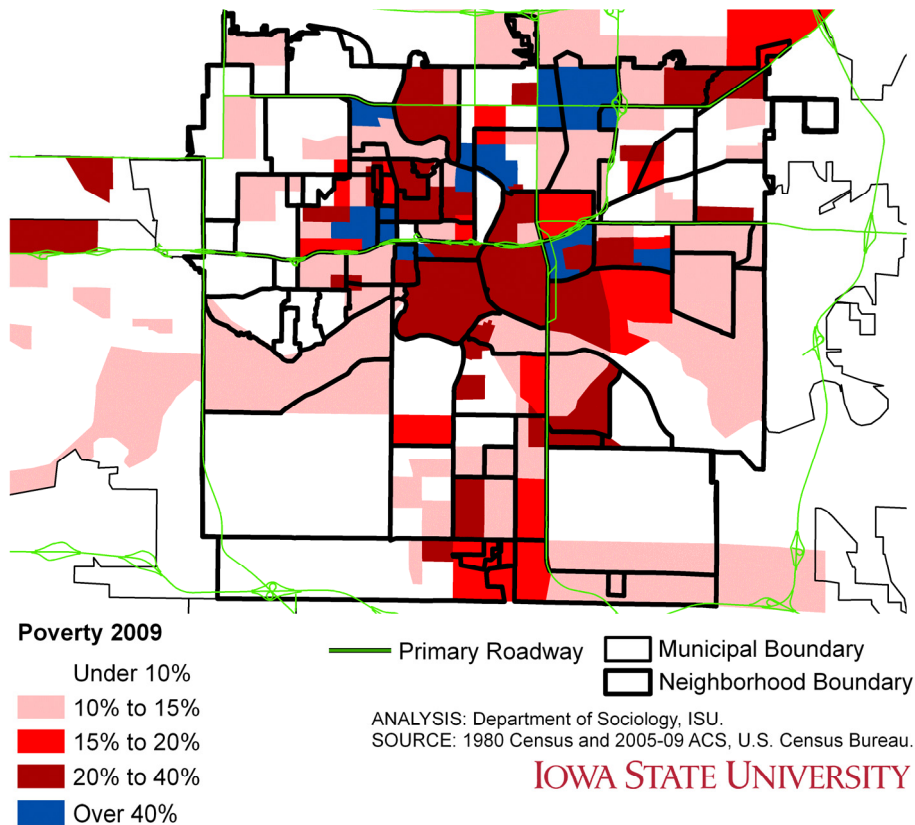


Figure 5B looks more closely at the distribution of poor neighborhoods in the City of Des Moines in 2009. In the *northeast*, there are pockets of poverty in the eastern part of the Douglas Acres neighborhood along U.S. Highway 6. In the *north*, poverty is found in the Oak Park and Highland Park neighborhoods; and in residences located between Interstate 235 and U.S. Highway 69. In the *northwest*, there are poor sections in the Prospect Park neighborhood.

There is a large block of contiguous poverty in *central* Des Moines. This includes the central neighborhoods of Capitol East, Capitol Park, Downtown, Historic East Village, Martin Luther King, Jr. Park, and Sherman Hill. The *east-central* Fairgrounds neighborhood also has large shares of poor. In *west-central* Des Moines poor neighborhoods include Carpenter, Chautauqua Park, Drake (east part), Drake Park, King Irving, Mondamin Presidential, and River Bend.

*Figure 5B.
Poverty rate by block-group in the City of Des Moines, 2009.*



Although there are fewer poor neighborhoods in *south* Des Moines, there are some exceptions. Sections of the Ewing Woods – Evergreen, Fort Des Moines, southeast Pioneer Park, Somerset, and South Park neighborhoods all have larger shares of poor people.

However, describing the geographic distribution of poor neighborhoods only partially contributes to our understanding of local poverty. To better describe the key socioeconomic conditions of high and above average poverty neighborhoods, mean differences are computed and presented in table 2. Compared to non-poor areas, the analysis finds that *high poverty* neighborhoods (rates over 20%) in 2009 have larger minority populations (38.8% vs. 11.5%), larger shares of families headed by single parents (43.0% vs. 19.9%), more people without a high school degree (21.5% vs. 8.4%), fewer people with a college degree (14.4% vs. 29.5%), lower rates of employment (46.9% vs. 55.3%), and lower median incomes (\$30,119 vs. \$61,346). However, in terms of income inequality high poverty neighborhoods tend to have more equal income distributions than non-poor areas (0.57 vs. 0.64).

Table 2.
Demographic and economic characteristics of poverty block-groups in the Des Moines Metro Area, 2009.

DES MOINES METRO AREA	Poverty Areas		
	Other Areas	Above Avg (15-20%)	High (>20%)
Percent of Population 2009			
Population (number)	1,527	1,106	1,107
Minority population	11.54	24.91 ***	38.75 ***
Single-headed families	19.90	28.66 *	43.02 ***
No high school degree	8.42	17.40 ***	21.46 ***
College degree or higher	29.45	17.64 **	14.38 ***
Employed population	55.26	45.42 ***	46.94 ***
Median household income (nom\$)	\$61,346	\$40,615 ***	\$30,119 ***
Income inequality (Gini)	0.64	0.57 ***	0.57 ***
Percent of Employed Population 2009			
Agriculture & natural resources	1.68	0.83	0.64
Construction	7.42	6.91	9.11
Manufacturing	8.21	9.17	11.28 *
Wholesale trade	3.96	2.76	2.39 *
Retail trade	11.63	10.64	12.11
Transportation, warehousing & utilities	4.98	5.38	3.61
Finance, insurance, real estate & rental services	15.34	13.50	10.75 ***
Professional, management & information services	5.24	2.52 *	2.75 **
Administrative & support services	3.11	4.39	5.92 ***
Education, health & social services	19.24	23.89 *	17.97
Entertainment, lodging & food services	6.93	8.50	13.90 ***
Personal & repair services	4.54	5.92	3.49
Public administration	4.73	3.91	2.75

NOTE: Mean differences between poverty and other block-groups tested using Scheffe's test.

*significant at p<0.05, **significant at p<0.01, ***significant at p<0.001.

SOURCE: 2005-09 ACS, U.S. Census Bureau.

In terms of employment structure, high poverty neighborhoods have more jobs in manufacturing (11.3% vs. 8.2%), administrative and support services (5.9% vs. 3.1%), and entertainment, lodging and food services (13.9% vs. 6.9%). By contrast, these poor areas have fewer jobs in wholesale trade (2.4% vs. 4.0%), finance, insurance and real estate (10.8% vs. 15.3%), and professional, management and information services (2.8% vs. 5.2%).

Neighborhoods with *above average poverty* (rates between 15-20%) generally have similar demographic conditions as high poverty neighborhoods, except the outcomes are slightly better. Thus, above average areas have more minorities, more single-headed families, poorer educational attainment, lower employment, lower median incomes, and less inequality than non-poor areas. Above average neighborhoods also have less employment in professional, management and information services (2.5% vs. 5.2%), yet have more job opportunities in education, healthcare and social services (23.9% vs. 19.2%) compared to non-poor areas.

In general, the results show that poor neighborhoods in the Des Moines metro are dominated by minority populations, single-headed families, low educational attainment, poor employment participation, and employment opportunities in lower-skill and lower-wage services industries. This suggests several findings. First, poor persons likely lack the needed skills to obtain employment and incomes sufficient to lift themselves out of poverty. Second, it is likely that both economic and educational segregation is occurring along racial and ethnic lines. Third, having one parent providing and caring for children presents additional economic hardships, especially if the adult is poorly educated and has limited job opportunities. Fourth, job opportunities in lower-skill services industries like administrative support, entertainment, and food services likely do not pay sufficient wages to lift people out of poverty.

Surprisingly, residents of poor areas are more likely to have jobs in manufacturing, education services, healthcare, and social services, which runs counter to what has been found in other studies of urban poverty. Jobs in these industries often pay good wages and benefits due to a history of unionization or because they are publically supported. It is therefore unclear why employment in this industry is associated with poverty. It may be that the types of manufacturing jobs available to poor people are likely to be lower-skilled and non-unionized, resulting in lower wages. The relationship between poverty and education, health and social services jobs may be linked to college student populations or the increased presence of social services in poor areas.

GROWTH IN NEIGHBORHOOD POVERTY 1979-2009

Figure 6A presents growth in poverty rates by neighborhood block-groups for the Des Moines metropolitan area between 1979-2009. Outside of urban Polk County there are some pockets of fast growing local poverty. In Dallas County, poverty grew in Perry, southwest Adel, Dallas Center, and unincorporated areas between Adel and Dallas Center. Guthrie Center saw fast poverty growth in Guthrie County; and southeast Winterset also saw fast growth in Madison County. In Warren County, poverty grew the fastest in south Indianola and in rural areas southwest of Carlise.

Although there are pockets of fast growing poverty in the City of Des Moines, growth is not particularly concentrated in this core urban area. In the east suburbs, poverty growth is found in an area stretching from Altoona east to Ankeny. In the north suburbs, the numbers of poor grew in central Ankeny, southwest Saylorville, and in a small area in east-central Johnston. To the west, poverty jumped in the Interstate 80-35-235 area in northern West Des Moines and eastern Waukee, and also in West Des Moines near Raccoon River Regional Park.

Figure 6A.
Change in poverty rate by block-group in the Des Moines Metro, 1979-2009.

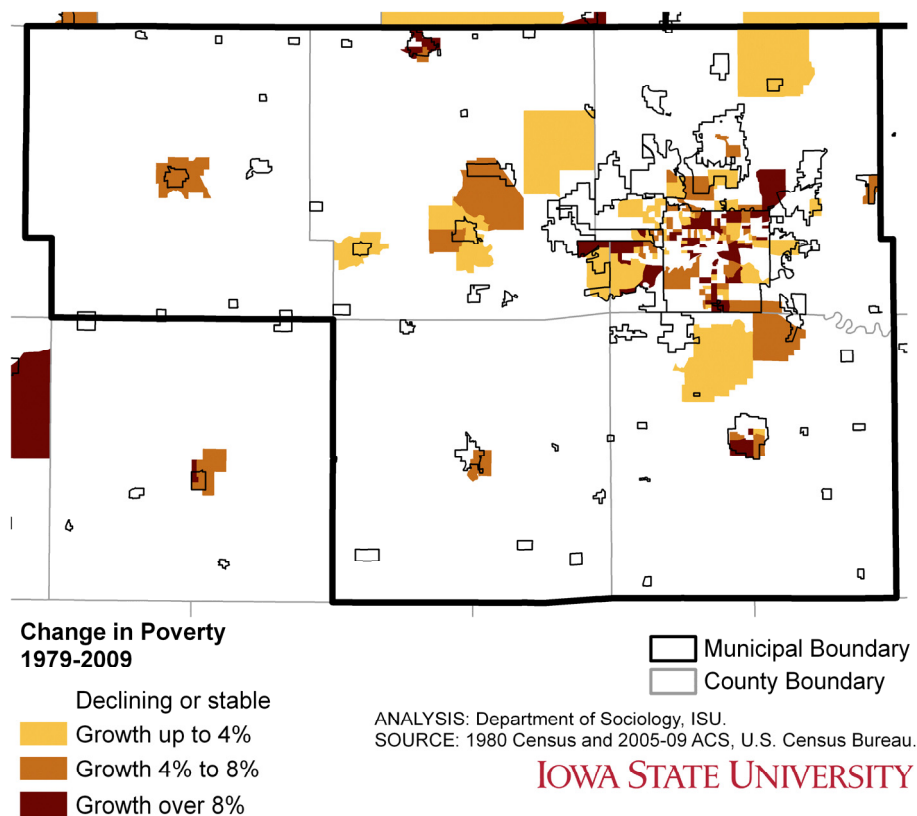
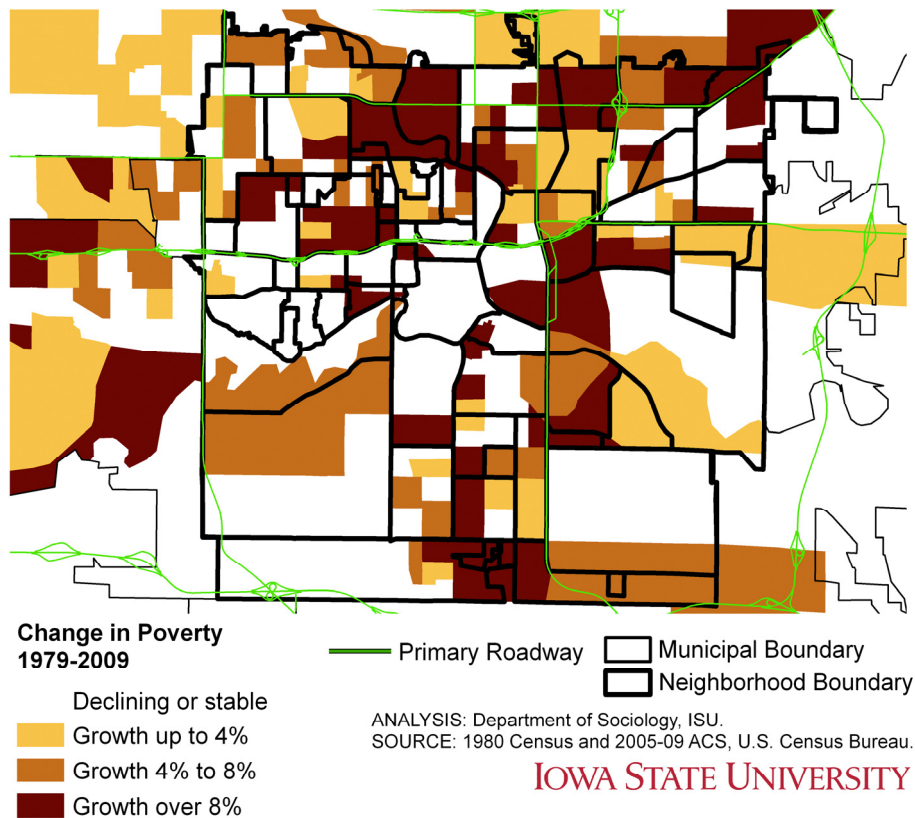


Figure 6B looks more closely at the distribution of growing poverty neighborhoods in the City of Des Moines. In the *northeast*, poverty grew in the northern parts of the Sheridan Gardens neighborhood; and in the eastern half of the Douglas Acres neighborhood. In the *north*, growth occurred in the Oak Park and Highland Park neighborhoods; and in residences located between Interstate 235 and U.S. Highway 69. In the *northwest*, poverty rates increased in the Martin – Hickman and Prospect Park neighborhoods.

Areas of central Des Moines also experienced poverty growth over the last 30 years. This occurred in the *east-central* neighborhoods of Capitol East, Capitol Park (southwest part), Historic East Village (south part), Fairgrounds (south part), and Sherman Hill (north part). *West-central* neighborhoods experiencing growth are Carpenter, Drake (south part), and Drake Park.

Figure 6B.
Change in poverty rate by block-group in the City of Des Moines, 1979-2009.



To the *west*, the neighborhoods of Arbor Peaks, the west part of BNA & WPNA, and the north part of Waveland Park all saw jumps in the number of poor people. Poverty also grew in many *south* neighborhoods of the City, such as Ewing Woods – Evergreen, Fort Des Moines (west part), Greys Lake (south part), Pioneer Park (southwest part), and Somerset.

To better understand the characteristics of areas with growing poverty, mean differences are compared and presented in table 3. Compared to non-growth areas, the analysis finds that *fast poverty growth* neighborhoods (growth over 8%) have faster growing minority populations (21.7% vs. 6.8%) and single-headed families (18.3% vs. 4.9%), and slower declines in people without a high school degree (-8.8% vs. -13.2%). By contrast, these places saw slower growth in college-educated populations (2.6% vs. 12.3%), employed persons (-1.0% vs. 6.9%), median incomes (110.9% vs. 217.0%), and slower growth in inequality (0.20 vs. 0.24).

Table 3.
Demographic and economic characteristics of growing poverty block-groups in the Des Moines Metro Area, 1979-2009.

DES MOINES METRO AREA	Other	Poverty Growth Areas	
		Growing	Fast Growing
Change in Population 1979-2009	Areas	(4-8%)	(>8%)
Population Δ (percent)	113.84	18.34	113.48
Minority population Δ	6.77	10.16	21.72 ***
Single-headed families Δ	4.87	9.03	18.27 ***
No high school degree Δ	-13.17	-9.50 *	-8.78 **
College degree or higher Δ	12.31	5.70 ***	2.61 ***
Employed population Δ	6.87	0.80 ***	-0.98 ***
Median household income Δ (percent, nom\$)	216.97	150.58 ***	110.85 ***
Income inequality Δ (Gini)	0.24	0.20	0.20 *
Change in Employed Population 1979-2009			
Agriculture & natural resources Δ	-3.19	-1.75	-0.56 **
Construction Δ	1.91	1.36	3.78
Manufacturing Δ	-6.14	-5.19	-5.69
Transportation, communication & utilities Δ	-0.59	1.11	-1.68
Wholesale trade Δ	-2.00	-2.36	-3.79 **
Entertainment, personal & retail services Δ	-2.29	-0.87	2.22 **
Finance, insurance & real estate services Δ	4.82	3.15	2.74
Business, repair & other services Δ	3.70	5.24	3.86
Professional, education, health & social services Δ	4.99	2.25	1.79
Public administration Δ	-1.21	-2.93	-2.66

NOTE: Mean differences between poverty and other block-groups tested using Scheffe's test.

*significant at p<0.05, **significant at p<0.01, ***significant at p<0.001.

SOURCE: 1980 Census and 2005-09 ACS, U.S. Census Bureau.

In terms of employment structure, neighborhoods with fast growing poverty saw faster declines in wholesale trade jobs (-3.8% vs. -2.0%), slower declines in agriculture and natural resources (-0.6% vs. -3.2%), and growth in entertainment, personal and retail services (2.2% vs. -2.3%).

Neighborhoods with slower rates of *growing poverty* (growth between 4-8%) differed from non-growth areas in that they had slower declines in people without a high school degree (-8.8% vs. -13.2%), slower growth in people with a college degree (2.6% vs. 12.3%), slower growth in the number of employed persons (-1.0% vs. 6.9%), and slower growth in median incomes (110.9% vs. 217.0%). There are no differences in employment structure between growing poverty neighborhoods and non-growth ones.

In general, the results show that neighborhoods experiencing fast growth in poverty over the last 30 years also saw growth in minority populations, single-headed families, and employment in lower-skill and lower-paid leisure and retail jobs – but this is not the case for areas with slower poverty growth. However, all neighborhoods with growing poverty, regardless of the magnitude, saw slower growth in educational attainment and employment participation. This suggests several findings. First, stagnant employment growth and participation will likely lead to increases in poverty. Second, rapid increases in the minority population will likely only strengthen existing economic and educational segregation along racial and ethnic lines. Third, rapid increases in one parent families will likely only increase the additional economic hardships of caring and providing for children. Fourth, creating jobs in lower-skill and lower-paid industries like entertainment, personal, and retail services will likely not slow growth in poverty. In fact, the results suggest that job creation in these sectors may increase poverty over time.

SUMMARY AND POVERTY REDUCTION STRATEGIES

The poverty rate in the Des Moines metropolitan area is much lower (8.5%) than the rates for Iowa (11.4%) and the United States (13.5%). While the overall poverty rate for the metropolitan area is low, there are some important differences between counties. The lowest poverty rates in 2009 are in Dallas (6.5%) and Warren (6.6%) counties in the suburban part of the metro; and the highest rate is in Polk County containing the City of Des Moines (9.4%).

Over the past decade poverty rates have increased in both Polk and Warren counties (increases of 1.5% each), while remaining relatively flat in the other counties. Over the past three decades poverty rates have declined the fastest in the suburban counties of Guthrie (-6.9% decline) and Madison (-4.7% decline), while they have slightly risen in Polk County (1.0% increase).

By far, the largest concentration of poor neighborhoods occurs in the City of Des Moines, especially in the central areas of the City. There are also pockets of high poverty in several suburban and exurban cities in the metro. In general, high local poverty tends to be concentrated in core urban cities and towns and not in rural areas of the metro.

By contrast, pockets of fast growing poverty are not particularly concentrated in the City of Des Moines, although pockets do exist. In general, growth in poverty over the past three decades tends to be concentrated in smaller cities and towns, and less so in core urban areas.

In general, the results show that poor neighborhoods in the Des Moines metro are dominated by minority populations, single-headed families, low educational attainment, poor employment participation, and employment opportunities in lower-skill and lower-wage services industries such as administrative support, entertainment, personal services, and retail. This suggests several conclusions. First, stagnant employment growth and participation will likely lead to high levels and increases in poverty. This suggests that job creation is the key to stabilizing and reducing poverty. However, the quality of jobs matter as well as the quantity. Second, creation of job opportunities in lower-skill service industries likely does not pay sufficient wages to lift people out of poverty. This suggests that job creation strategies should focus on skilled jobs that pay self-sufficient wages. Third, people in poor areas lack the needed skills to obtain employment and incomes sufficient to lift themselves out of poverty. This suggests expanding alternative education to capture those who may drop out of the traditional system, and also expanding postsecondary education that can be obtained within two years. Fourth, it is likely that both economic and educational segregation is occurring along racial and ethnic lines. This suggests efforts need to be made to address racial and ethnic disparities. Fifth, having one parent providing and caring for children presents additional economic hardships, especially if the adult is poorly educated and has limited job opportunities. This suggests expansion of programs aimed at getting single parents employed in jobs with self-sufficient wages.

Given the spatial dimension of poverty, effective poverty reduction strategies need to address place-based barriers. At the state-level, previous research has shown that a rising tide does lift all boats, and poverty reduction should become an explicit goal of state macroeconomic policy (Partridge and Rickman 2006). Specifically, this means economic development efforts targeted at industries that are nationally growing, or those in which the state has a competitive advantage. Coupled with such development efforts, state tax policy should encourage work. The federal Earned Income Tax Credit (EITC) has been found to greatly increase labor force participation (Partridge and Rickman 2006). Iowa's version of the EITC should be maintained and possibly expanded to increase and reward engagement in the labor market. In short, job creation and labor force participation is the key to poverty reduction.

There are several placed-based poverty reduction strategies that can be employed by communities. First, local economic development efforts should target industries that are growing faster than the national average, or in industries that are

nationally competitive. Second, cities and counties need to identify economically distressed areas and target incentives at new hires who reside within these zones. Exemptions for hires outside these zones should only be made to disadvantaged persons. Third, the best incentives are those tied to job creation. Many cities and states use “new jobs tax credits” that offer a 25 to 30 percent tax credit on wages for net new jobs that pay a livable wage with benefits, usually for five years. Fourth, customized training incentives can be used to support new job creation or to retain existing jobs in distressed zones. These credits subsidize wages as workers undergo training, which increases the skills of the workers as well as making the business more competitive. Fifth, there is further need for community-based job placement agencies, preferably provided by non-profits. These agencies first train and screen disadvantaged workers, and then place them in good employment matches. Non-profits typically have better community networks and may be more credible with businesses than government agencies. Lastly, transportation subsidies should be used to facilitate reverse commuting to job-rich suburbs. These subsidies typically involve funds to repair automobiles and improvement of public transit systems.

DATA AND METHODS

This analysis uses a unique set of spatial Census data and statistical difference tests in order to better understand neighborhood poverty rates over time. Data are taken from the 1980 Decennial Census and the 2005-09 American Communities Survey (ACS). Although the ACS has replaced the Decennial Census long-form data, there are some important differences between the two that should be noted. First, ACS data represent average values for each year between 2005-09, rather than point-in-time estimates. Second, income and employment status are for the previous 12 month period, rather than for the previous calendar year. Third, standard errors for the ACS tend to be higher for smaller geographies than was the case in previous census periods. However, analysis of the standard errors finds no estimate whose coefficient of variation exceeds 25 percent, indicating adequate data quality.

Census block-groups are used to approximate neighborhoods, and are the smallest geographic level for which the Census Bureau publishes data. Block-groups are clusters of enumeration blocks that are identified and grouped together by local partners and the Census Bureau. Thus, block-groups tend to represent distinct neighborhoods or areas of a community. Comparison of block-groups over time is problematic since the boundaries change with every Census. However, this analysis has recomputed historical Census data to the most current block-group geographies, which allows for correct geographic comparisons over time.

To determine whether a household is in poverty, the U.S. Census uses a set income thresholds that vary by household size. If a household’s total income is less than

the threshold, then that household and all individuals within it are in poverty. Household income includes wage and self-employment earnings, retirement and Social Security, dividends and interest, unemployment and workers' compensation, child support, and Supplemental Security Income and public assistance. It does not include non-cash benefits like food stamps, housing assistance, or state-funded health care. Not counted in the poverty rate are people who are institutionalized, armed forces personnel in group quarters, and college students in dormitories.

Income thresholds are set by the federal government and are adjusted for inflation each year. However, the thresholds do not account for cost of living differences across locations. In 2009, for example, an individual earning less than \$10,956 per year would be in poverty. A two-person household in poverty would earn less than \$13,991, a three-person household less than \$17,098, and a four-person household in poverty would earn less than \$21,954. Although poverty threshold are calculated to reflect basic food needs, they are intended to be used as a statistical yardstick to measure economic well-being, and not as a complete description of what households need to live.

Multiple comparison tests are used to identify statistically significant differences between block-groups across key demographic and economic characteristics. Using this more rigorous approach ensures that trivial differences between neighborhoods are ignored, so that a more accurate picture of poor places can be described. Scheffe's multiple comparison test is used to test for mean least square differences. Scheffe's test is presented in equation 1, where \bar{x} are the means, s^2 is the mean of squared errors, n is the number of cases, k is the number of comparisons, and F is the critical value at a given alpha level and degrees of freedom.

$$(1) \quad S = \frac{\bar{x}_i - \bar{x}_j}{\sqrt{s^2 \left(\frac{1}{n_i} + \frac{1}{n_j} \right)}} \geq \sqrt{(k-1)F_{(\alpha; k-1, n-k)}}$$

REFERENCES

Lobao, L. 2004. "Continuity and Change in Place Stratifications: Spatial Inequality and Middle-Range Territorial Units." *Rural Sociology* 69:1-30.

Lobao, L. and G. Hooks. 2007. "Advancing the Sociology of Spatial Inequality: Spaces, Places, and the Subnational Scale." Pp. 29-61 in *The Sociology of Spatial Inequality*, edited by L. Lobao, G. Hooks, and A. Tickamyer. Albany, NY: SUNY Press.

Partridge, M. and D. Rickman. 2006. *The Geography of American Poverty: Is There a Need for Place-Based Policies*. Kalamazoo, MI: Upjohn Institute.

Peters, D. 2009. "Typology of American Poverty." *International Regional Science Review* 32: 19-39.

Shaffer, R., S. Deller, and D. Marcouiller. 2004. *Community Economics*. Oxford, UK: Blackwell Publishing.

Weber, B., L. Jensen, K. Miller, J. Mosely, and M. Fisher. 2005. "A Critical Review of Rural Poverty Literature: Is There Truly a Rural Effect?" *International Regional Science Review* 28:381-414.

AUTHOR

David J. Peters, Ph.D. is an Assistant Professor of Sociology in the College of Agriculture and Life Science at Iowa State University.

PERMISSION TO USE

This publication is copyrighted by the Board of Regents of the State of Iowa on behalf of Iowa State University Extension. However, this material is in the public domain and may be used when appropriately cited.

Suggested citation:

Peters, D. 2011. *Neighborhood Poverty in the Des Moines Metro Area, 1979-2009*. PMXXXX.
Iowa State University Extension: Ames, IA.

NON-DISCRIMINATION STATEMENT

... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gerald A. Miller, interim director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

For more information contact:

David J. Peters, Ph.D.

*Assistant Professor of Sociology
College of Agriculture and Life Sciences
Iowa State University*

304 East Hall
Iowa State University
Ames, IA 50011-1070

TEL: 515-294-1122
FAX: 515-294-2303
dpeters@iastate.edu