

EC853

Understanding Persistent Poverty and Income Inequality in Nebraska

David J. Peters, Extension Community Rural Economic Development Specialist

Economic development is a priority for nearly all Nebraska 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, 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, two common and relatively easy methods are to look at community poverty rates and income inequality over time. Therefore, the purpose of this analysis is to: (1) identify and describe persistently poor areas in Nebraska, (2) identify and describe areas of persistent income inequality, and (3) to discuss policies aimed at reducing poverty and inequality in communities.

Persistent Poverty

The federal definition of poverty is measured using a set of money income thresholds that vary by household size and composition to determine who is in poverty. If a household's total income is less than the threshold for that household type, then that household and all individuals within it are in poverty. Money income used to compute poverty status includes income from all sources: earnings, unemployment and workers' compensation, Social Security and public assistance, pensions and retirement income, dividends and interest, alimony and child support, and an array of other income sources. It does not include noncash benefits, such as food stamps,

housing assistance, and Medicaid. Poverty statistics through the Census Bureau include all people except for institutionalized populations, people in military group quarters, college students in dormitories, and unrelated individuals under 15 years of age. Poverty thresholds do not reflect differences in cost of living, but thresholds are updated annually for inflation. To give an idea of the poverty thresholds in 2006, a household with one adult and two children would need to earn \$16,242 or less to be considered in poverty; and a household with two adults and two children would need to earn \$20,444 or less to be considered poor.

Persistent Poverty communities have 20 percent or more of their population living below the poverty line in each of the last three census periods (1980, 1990, and 2000). This definition is identical to that used by USDA, which reports persistent poverty at the county level (Jolliffe, 2004). The decennial Census is the most complete source of information on poverty at the community level, with minor civil divisions (i.e. municipalities, townships, and voting precincts) representing communities. However, there is a problem in that minor civil division boundaries change every decade. In this analysis, data from the 1980, 1990, and 2000 Census were "normalized" to the most current boundaries so valid comparisons can be made across decades.

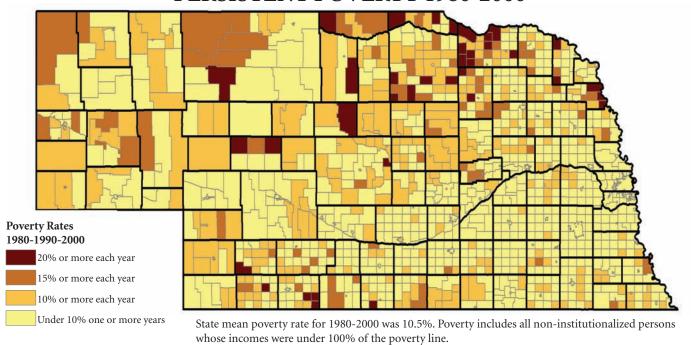
Analysis of the data shows that persistent poverty in Nebraska has been highly localized in recent decades (see *Figure 1* and *Table I*). There were only 37 *Persistent Poverty* communities that contained nearly 7,800 people, equaling roughly one-half of 1 percent of Nebraska's



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska–Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

PERSISTENT POVERTY 1980-2000



SOURCE: Census 1980-1990-2000, U.S. Bureau of the Census. ANALYSIS: Agricultural Economics, University of Nebraska–Lincoln.

Figure 1. Persistant poverty in Nebraska occurs in rural and unincorporated areas along the state's northern and southern tier of counties.

Table I. Characteristics of Poverty Areas, 2000

Indicators for 2000	Persistent Poverty 20% or more each year	Moderate Poverty 15% or more each year	Moderate Poverty 10% or more each year	Low Poverty Under 10% one or more years	
Minor Civil Divisions (number)	37	75	298	824	
Population (number)	7,797	25,303	183,861	1,494,302	
Minority population	44.5%	8.9%	8.1%	13.1%	
Single headed families with children	12.1%	5.4%	6.8%	7.8%	
Less than high school degree	18.9%	15.9%	16.6%	13.0%	
Bachelors degree or higher	10.2%	15.8%	17.8%	24.7%	
Disabled population	25.1%	26.9%	28.4%	24.9%	
Unemployed	6.0%	3.0%	2.3%	2.5%	
Median household income	\$24,025	\$28,645	\$31,385	\$41,407	
Agriculture — wage workers	6.9%	7.1%	4.5%	1.4%	
Agriculture — self-employed	21.7%	13.6%	8.4%	2.6%	
Construction	4.6%	5.5%	6.2%	6.5%	
Manufacturing	5.1%	7.9%	11.2%	12.55%	
Trade	8.6%	12.9%	15.3%	15.8%	
Transport, Warehousing & Utilities	4.6%	6.4%	5.7%	6.2%	
Info, Finance, Insurance & Professional Srvs	3.6%	6.3%	7.5%	14.0%	
Real Estate, Rental, Management & Admin Srvs	1.9%	2.3%	2.7%	4.5%	
Education, Health Care & Social Assistance	21.2%	21.9%	22.1%	20.6%	
Entertainment, Recreation, Lodging & Food Srvs	9.5%	7.5%	7.0%	7.3%	
Public Administration	8.5%	3.1%	3.5%	3.9%	

SOURCE: Census 2000, U.S. Bureau of the Census.

population. All persistently poor areas were rural and unincorporated, mostly clustering along the state's northern and southern tier of counties. The majority of Nebraska's population lived in low poverty areas, which tended to cluster in and around more urbanized areas.

As one would expect, Persistent Poverty areas had a median household income which was much less than both moderately poor (around \$30,000) and low-poverty (over \$40,000) areas. Persistently poor communities also had much larger minority populations, where over 40 percent of the population was nonwhite or Hispanic. This finding is consistent with the location of poor communities on the state's Native American reservations. Communities with large concentrations of Hispanics were not found to be persistently poor. In terms of family structure, persistently poor areas had more single-headed families with children (over 12 percent) than less poor areas, although low-poverty areas tended to have higher rates than moderately poor areas. Low educational attainment was another feature of persistently poor communities, where 19 percent of the population had less than a high school education, compared to 16 percent for moderately poor and 13 percent for low-poverty areas. Further, only 10 percent of the population in the poorest communities had a bachelor's degree or higher, compared to nearly 25 percent in low poverty communities.

In terms of employment, nearly 6 percent of the labor force was unemployed in persistently poor communities in 2000, which was over double the rate for less poor areas. For those that were employed in persistently poor areas, most worked in the agriculture sector. Over 20 percent were self-employed in agriculture, and nearly 7 percent as agricultural wage workers. Both of these rates were over double the rates for less poor areas, which reinforces that fact that persistent poverty is mainly a rural phenomenon. Employment in education, health care and social assistance also constituted a large part of the employment base, but these rates were similar to less poor areas. Persistent poverty was also associated with employment in the tourism industry (such as entertainment, food services, and lodging), where rates were higher than in less poor areas.

By contrast, *Persistent Poverty* communities had much lower rates of employment in traditional goods producing industries, such as manufacturing, construction, transportation, and utilities. In particular, manufacturing employment was roughly half that for low poverty areas. Further, employment in more advanced services (such as information, finance, and professional services) was also much lower in the poorest areas. The lack of employment in these industries is reflected in the low education attainment and incomes of persistently poor areas. This indicates that employment in these industries, which generally employ more skilled and better paid workers, is associated with lower rates of poverty over time.

Persistent Income Inequality

Social scientists often use income-based thresholds to measure economic development at the community-level, such as median household income or per capita income. Another way to measure development is to look at how evenly income is distributed within a community. Thus, an equal distribution has 10 percent of households receiving 10 percent of the income, 50 percent of households receiving 50 percent of the income, and so on. Although the question of whether this distribution is fair and socially desirable is a value judgment best left in the realm of politics, it does provide a reasonable benchmark to better understand income disparities (Shaffer, 2004).

Income inequality is measured using Gini coefficients, which compares the actual distribution of income to an equal distribution across 14 income groups using data from the U.S. Census. Gini coefficients range from zero indicating low inequality to one indicating high inequality. Communities with persistent income inequality had Gini coefficients of 0.5 or greater in each of the last three census periods (1980, 1990, and 2000). As a comparison, the income Gini coefficient in the United States was over 0.4, which was generally higher than most western European countries where the coefficient is around 0.3 (United Nations Development Programme, 2006). Income counts money from all sources: wage and salary income, self-employment income, interest and dividend income, rental income, Social Security and public assistance, and retirement income.

Analysis of the data shows that persistent income inequality has been highly localized in Nebraska, tending to cluster in the southwestern and northern parts of the state (see *Figure 2* and *Table II*). Only 21 communities in the state, encompassing around 500 people, were classified as *Very High Inequality* areas. More prevalent were *High Inequality* areas, which included 63 communities containing roughly 50,000 people. However, the vast majority of Nebraska's population lived in low or very low areas of inequality.

Very High Inequality communities can be characterized as being predominately lower-middle income, white, poorly educated, and dependent on agriculture. Median household income was \$39,010 in 2000, indicating that income in these areas was concentrated in the lower-middle range. In terms of demographics, very high inequality areas had the lowest rates of single-headed families with children (0.5 percent), minority populations (5.6 percent), and college-educated adults (17.1 percent), compared to other areas. In terms of employment, very high inequality areas were dominated by the agriculture sector. Over 30 percent of workers were self-employed in agriculture, compared to roughly 4 percent in lower inequality areas; and nearly 11 percent were employed as agricultural wage workers, compared

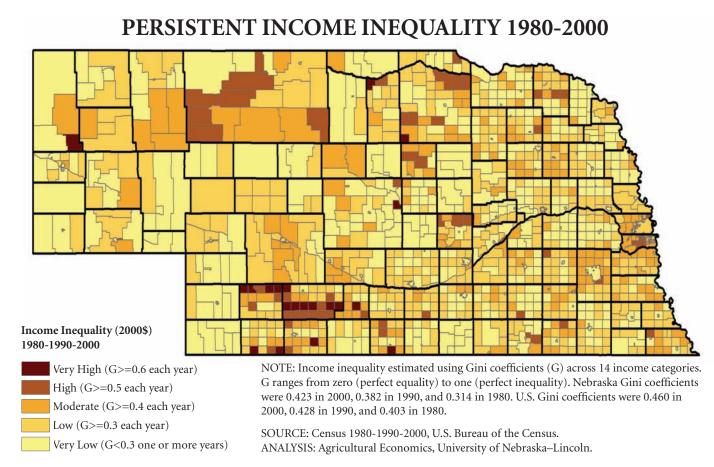


Figure 2. Persistent income inequality in Nebraska occurs in the southwestern and northern part of the state.

Table II. Characteristics of Income Inequality Areas, 2000

Indicators for 2000	Very High Inequality Gini >= 0.6 each year	High Inequality Gini >= 0.5 each year	Moderate Inequality Gini >= 0.4 each year	Low Inequality Gini >= 0.3 each year	Very Low Inequality Gini < 0.3 one or more years
Minor Civil Divisions (number)	21	63	211	454	485
Population (number)	502	51,862	139,216	700,917	818,766
Minority population	5.6%	7.7%	5.8%	17.1%	10.2%
Single headed families with children	0.5%	5.0%	5.5%	8.5%	7.5%
Less than high school degree	14.9%	4.5%	7.8%	13.1%	15.2%
Bachelors degree or higher	17.1%	40.7%	29.7%	24.2%	21.3%
Disabled population	24.5%	14.3%	17.4%	25.4%	27.2%
Unemployed	1.8%	1.4%	1.7%	2.6%	2.5%
Median household income (2000\$)	\$39,010	\$69,130	\$56,082	\$40,392	\$35,787
Agriculture — wage workers	10.6%	1.3%	1.9%	1.4%	2.1%
Agriculture — self-employed	35.1%	2.5%	5.0%	3.1%	3.5%
Construction	6.0%	5.7%	7.0%	6.5%	6.4%
Manufacturing	5.0%	6.9%	10.0%	11.3%	13.8%
Trade	8.9%	16.7%	15.8%	15.7%	15.6%
Transport, Warehousing & Utilities	3.5%	7.9%	7.0%	6.9%	5.3%
Info, Finance, Insurance & Professional Srvs	4.3%	19.8%	17.0%	15.0%	10.5%
Real Estate, Rental, Management & Admin Srvs	1.8%	4.5%	4.3%	5.3%	3.3%
Education, Health Care & Social Assistance	16.7%	20.8%	18.5%	19.4%	22.3%
Entertainment, Recreation, Lodging & Food Srvs	2.8%	5.7%	5.4%	7.5%	7.5%
Public Administration	0.7%	4.4%	3.7%	3.1%	4.6%

SOURCE: Census 2000, U.S. Bureau of the Census.

to roughly 2 percent in other areas. Further, these areas had the lowest rates of employment in manufacturing, trade, transportation and utilities, and advanced services (i.e. information, finance, insurance, and professional services).

In addition, a small number of Nebraska communities were identified as High Inequality areas, which had distinct characteristics. High inequality areas can be characterized as being wealthy, highly educated, and economically tied to advanced services, transportation and utilities. Income in these areas was concentrated in the upper levels, as indicated by the high median household income (\$69,130). High inequality areas were very well educated, having the highest rates of college educated adults (40.7 percent), and the lowest rates of adults with less than a high school education (4.5 percent). Reflecting this high educational attainment, nearly 20 percent of workers in high inequality areas were employed in advanced services (i.e. information, finance, insurance, and professional services), which was the highest rate compared to other areas. High inequality areas also had the highest rates of employment in transportation and utilities (7.9 percent), and to a lesser degree in trade (16.7 percent).

Policies for Reducing Poverty and Inequality

Previous research has found that employment growth is the most effective strategy to reduce poverty and income inequality (Partridge, 2006). Employment growth reduces rural poverty and inequality over the long term, taking at least five years of continuous job growth to be effective. Employment growth is more effective at reducing poverty and inequality in more isolated rural communities than in more populated urban ones. So what strategies and policies can rural communities implement to promote job growth as a way to reduce poverty and inequality? Since this analysis shows that poverty and inequality are geographically concentrated in Nebraska, then community-level policies also need to be targeted towards specific geographic areas. Recent analysis by the Upjohn Institute for Employment Research recommends several place-based policies which communities can adopt to reduce poverty and inequality, which are presented below (Partridge, 2006).

One policy strategy is to create development zones that are located in economically distressed areas. Once identified, as is done in this analysis, programs and incentives can be targeted at attracting firms to locate in these economically distressed areas to provide job opportunities for residents. However, only regional centers of economic activity ought to be targeted since growth in these core economic areas usually spills over

into adjacent areas. The Upjohn Institute study also found that investing resources in areas of low economic activity is ineffective, and that these resources could be better directed elsewhere. Further, it is essential that incentives be directed towards firms that hire new workers who live in economically distressed communities. Too often new jobs are taken by in-migrants from outside the area, thus failing to move the most disadvantaged out of poverty.

A second and related policy strategy is to target incentives towards specific industries. The Upjohn Institute research shows that targeting efforts should be directed towards industries that are growing faster than the national average. The logic is that if an industry is growing everywhere, then growth in one specific location will not lead to a large influx of workers to take those jobs because they are already likely to be employed. Thus, reducing the potential in-migration of workers increases the likelihood that disadvantaged workers living in distressed areas will obtain those jobs. In addition, it is important to target industries that employ less skilled workers at above average wages for that skill-level, wherever possible. Too often attraction efforts result in new jobs that require skills beyond those possessed by disadvantaged workers, thereby failing to reduce poverty rates in the community.

A third strategy is to invest in and expand community-based employment agencies that promote effective job placements. These agencies should focus on the screening of applicants, providing training as needed, educating applicants about workplace expectations, assisting in job search skills, matching applicants with appropriate jobs, and providing ongoing mentoring after placement to increase job retention. The Upjohn Institute recommends that community organizations, rather than government agencies, take the lead in developing such programs because they often possess better community networks and have more credibility with employers.

A fourth strategy is to increase the geographic range of the labor shed. Since distance to job opportunities is a barrier to many rural residents seeking employment, several strategies can be implemented to minimize the costs of commuting. First, providing enhanced access to child care services in rural areas greatly extends the geographic scope of employment searches. In addition to expanding the number of child care centers, they should also be flexible in providing services during the evenings and on the weekends, since many types of jobs taken by disadvantaged workers have nontraditional work schedules. Second, since distance is a barrier and public transportation is limited in rural areas, programs should be targeted at providing disadvantaged workers a reliable means of transportation to job opportunities. Again, providing

the means to own and operate a personal vehicle extends the geographic scope of the job search area, increasing the likelihood that disadvantaged workers will find and keep employment.

Lastly, one cannot stress enough the importance of increasing the human capital of disadvantaged workers through training and education. Since many rural areas have a mismatch between skills needed by employers and the available supply of those skills, programs should focus on formal education and skills training that meets the needs of businesses in the area. Concurrently, a strategy to attract higher skill jobs into the area also needs to be implemented along with skills training, in order to provide an incentive for workers to attend and pay for that training. Firms requiring a higher level of skills are unlikely to locate in rural areas lacking the necessary human capital.

Summary

The good news is that only a very small number of Nebraska's communities are considered persistently poor, which reflects well on the efforts of local communities and the state to promote long-term economic development and well-being. The bad news is that persistent poverty is highly localized in Nebraska, occurring in a few communities with certain demographic and economic characteristics. In terms of demographics, persistently poor areas are predominately rural, non-white, and poorly educated. In economic terms, these communities have high unemployment rates, are dependent on agriculture and tourism-related industries, and lack employment opportunities in traditional goods-producing and advanced services industries.

Although income inequality is a value-laden concept, it is useful in measuring the degree to which all members of a community share in the fruits of economic development efforts. The good news is that the majority of Nebraskans (nearly 90 percent) live in communities where wealth is generally distributed equally amongst all people, resulting in low to very low income inequality. However, highly localized pockets of inequality do exist in the state, and are of two distinct types. First, Very High Inequality communities were predominately lowermiddle income, white, poorly educated, and dependent on agriculture. Small in number, these tended to cluster in the southwestern part of the state. Second, High *Inequality* communities were typically upper income, highly educated, and economically tied to advanced services, transportation and utilities. These areas were more diffused throughout the state, clustering in suburban Omaha and the rural parts of southeastern and northern Nebraska.

References

- Jolliffe, D. 2004 *Rural Poverty at a Glance*. RDRR-100. Economic Research Service, USDA: Washington, D.C.
- Partridge, M. And D. Rickman. 2006. *The Geography of American Poverty*. Upjohn Institute: Kalamazoo, MI.
- Shaffer, R., S. Deller, and D. Marcouiller. 2004. *Community Economics*. Blackwell Professional: Ames, IA.
- United Nations Development Programme. 2006 *Human Development Report 2006*. Palgrave Macmillan: New York, N.Y.

UNL Extension publications are available online at http://extension.unl.edu/publications.