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Affordable Childcare: Is There a Crisis?

by Elizabeth E. Davis and NaiChia Li

Childcare expenses can take a sizeable bite out of a family's budget, especially for low-income and middle-class families. Many observers have raised concerns about the shortage of affordable, quality childcare available to parents who want or need to work. A recent book by Suzanne Helburn and Barbara Bergmann titled *America's Child Care Problem* identifies the problem as a situation in which "large numbers of parents can't find care of a quality they are happy with at a price they feel comfortable paying" (p. 16). The fundamental concerns are threefold: first, that many families spend an "unaffordably" large portion of their household budget on childcare, while other families cannot find care they consider affordable; second, that much of the childcare available is of low quality; and third, that childcare providers typically earn low wages.

There is no question that childcare can be expensive. According to a 2001 statewide survey by the Wilder Research Center, *Child Care Use in Minnesota,* among those paying for childcare in the state, families with children 14 years of age or younger spend an estimated $109 per week, or $5,600 per year, on childcare. For families with incomes of less than $20,000, those paying for childcare spend at least one-third of the family budget on childcare. Comparisons of the cost of childcare show that it can be less expensive to send the child to a public university than to a childcare center. In January 2003, the average annual cost for a preschooler in a childcare center in Minneapolis was $9,350, compared with two semesters of tuition

Photo by Dave Hansen, U of M Agricultural Experiment Station

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at the University of Minnesota, which cost about $6,500.

The high cost of childcare relative to family incomes is a concern to many families, communities, and policy makers. Some argue that childcare expenses are unaffordable when they are high relative to family income because the family may, as a result, have insufficient income to pay for other basic needs such as housing, food, or transportation. In addition, high childcare costs may deter some parents from working, affecting the availability of workers and parents' future earnings. Finally, childcare, and in particular high-quality childcare, has important effects on child development and behavior, which affect school readiness and later success in school and work. A recent study by the Federal Reserve Bank of Minneapolis concluded that public monies spent on high-quality early childhood education yield a higher rate of return than many other public investments. The spillover effects of high-quality childcare on school readiness and workforce development provide an economic rationale for public funding and tax credits to help parents pay for childcare. Such government programs also help to equalize opportunities for all children.

Recognizing the challenge to families of paying for childcare and the implications of quality childcare for labor market participation and school readiness, Minnesota has a number of policies to help parents pay these costs. Eligible working families can choose a private childcare provider and receive financial assistance to help pay the cost under Minnesota's childcare assistance programs. Eligibility depends on income and family size, and parents are required to pay a part of the cost of the care (a "copayment"). During the 2003 legislative session, however, cutbacks in the childcare assistance programs resulted in tightened eligibility requirements and dramatically increased co-pays. Fewer families now qualify for childcare assistance and the amount of assistance received has shrunk. As of September 2003, almost 8,000 families were on the waiting list for Basic Sliding Fee (BSF) childcare assistance, an increase of nearly 50% in one year. As we show in this study, many Minnesota parents had difficulty affording childcare prior to the 2003 cutbacks and these changes have exacerbated the affordability problem.

With support from a grant from CURA's Faculty Interactive Research Program, we undertook a study of the issue of childcare affordability in Minnesota. In this article, we attempt to shed some light on the debate by considering alternative definitions of affordability and ways of measuring the size of the problem, and discuss the policy implications of these findings.

Photo by Steve Schneider

High-quality childcare has important effects on child development and behavior, which affect school readiness and later success in school and work.

What Is Affordable?

Affordability is often defined relative to a family's income, but it is possible to use other types of measures. For example, we could ask families what amount they feel comfortable paying (either in dollars or as a percentage of their budget). Some researchers have approached the affordability problem by calculating the amount a family could pay and have enough left over for necessities. A basic needs budget, for example, adds up the costs for a typical family for housing, food, transportation, childcare, health insurance, etc. Another approach is to define *need* in terms of access to resources or frequency of hardship. The U.S. Department of Agriculture has developed a food insecurity index, which measures the frequency of skipping meals and relying on community or government resources to get enough to eat. Of all the approaches used to measure affordability, the most common is to identify a threshold percentage of family income above which spending is considered unaffordable.

The debate over affordable housing provides the closest analogy for this discussion of the affordability of childcare. The U.S. Department of Housing and Urban Development (HUD) defines the affordability threshold at 30% of a family's annual income. According to the HUD Web site, "families who pay more than 30% of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care." This threshold is then used to calculate the percentage of families for whom housing is unaffordable.

In a similar vein, many government agencies and childcare advocates use the "10% rule" as a measure of childcare affordability: households should not pay more than 10% of their income for childcare to be affordable. A number of states use this criterion as a guide in establishing childcare assistance policy and a few use it as an outcome measure or benchmark goal. Yet the basis of this 10% rule is obscure and does not appear to be based on extensive research. The U.S. Department of Health and Human Services' Child Care Bureau, the federal agency that oversees the Child Care and Development Fund (CCDF),[1] includes the 10% rule in the preamble to the CCDF legislation but does not include it as a requirement. The CCDF regulations require that states set a sliding fee scale by which families pay a portion of their childcare costs, with the amount increasing as family income increases.

[1] The Child Care and Development Fund was authorized by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PL 104–193) to help low-income families obtain childcare.

However, states are allowed to determine their own sliding fee scales. In the comments to the final rules published in the *Federal Register,* the Child Care Bureau specifically declined to define or establish a regulatory standard for affordability, but noted that they saw 10% as the "appropriate upper limit for co-payments."

Discussions with staff at the Child Care Bureau and with other childcare researchers did not turn up much information about the origin of the 10% benchmark for affordability. Comments such as "it's conventional wisdom" or it is "based on what the research community thinks" were typical. There is clearly a sense among childcare researchers that families paying more than 10% of their income for childcare will be cost burdened, as in the HUD sense. Yet it may be that this threshold is too high given how little research has been undertaken to determine the financial burden on families posed by high childcare costs. Comparing the financial obligations of families for childcare and college, a study by the Ewing Marion Kauffman Foundation and The Pew Charitable Trusts titled *Financing Childcare in the United States* notes that "the U.S. Department of Education, in determining eligibility for federal financial aid, would expect [a median-income family] to pay 5 percent of its income for college costs" (p. 4).

Analysis of Affordability

Although the origin of the 10% rule is unknown, it is commonly accepted as an appropriate threshold for childcare affordability and is used by many states in setting policy related to childcare assistance programs (which provide subsidies to low-income working families to help pay for childcare). Therefore, we use the 10% rule in this study as the basis for estimating the availability of affordable childcare in a manner analogous to measures of affordable housing. One standard measure used in the housing debate is the percentage of housing units available that are affordable. This measure compares the rents charged for housing units in a particular area to median household income and computes the percentage of units for rent that would cost less than 30% of median income. For this analysis, we similarly created an affordability threshold using 10% of median income in the county and compare the rates charged by childcare providers in the county to this threshold. Table 1 shows the estimated median income for families in Minnesota in 2002 and the level of childcare expenses representing the 10% affordability threshold for each of three groups: families with median income, families earning 80% of median income, and families earning 50% of median income. Note that Minnesota families whose income is half the median income ($32,250) are considerably above the federal poverty threshold for a family of four, which was $18,392 in 2002.

Table 1. Median Income Levels and 10% Affordability Thresholds in Minnesota, 2002

	Median family income	80% of median income	50% of median income
Statewide	$64,500	$51,600	$32,250
10% affordability threshold	$6,450	$5,160	$3,225
Twin Cities metropolitan area*	$76,700	$61,360	$38,350
10% affordability threshold	$7,670	$6,136	$3,835
Greater Minnesota*	$48,500	$38,800	$24,250
10% affordability threshold	$4,850	$3,880	$2,425

Source for median family income data: U.S. Department of Housing and Urban Development (HUD), http://www.huduser.org/datasets/il/fmr02/index.html.

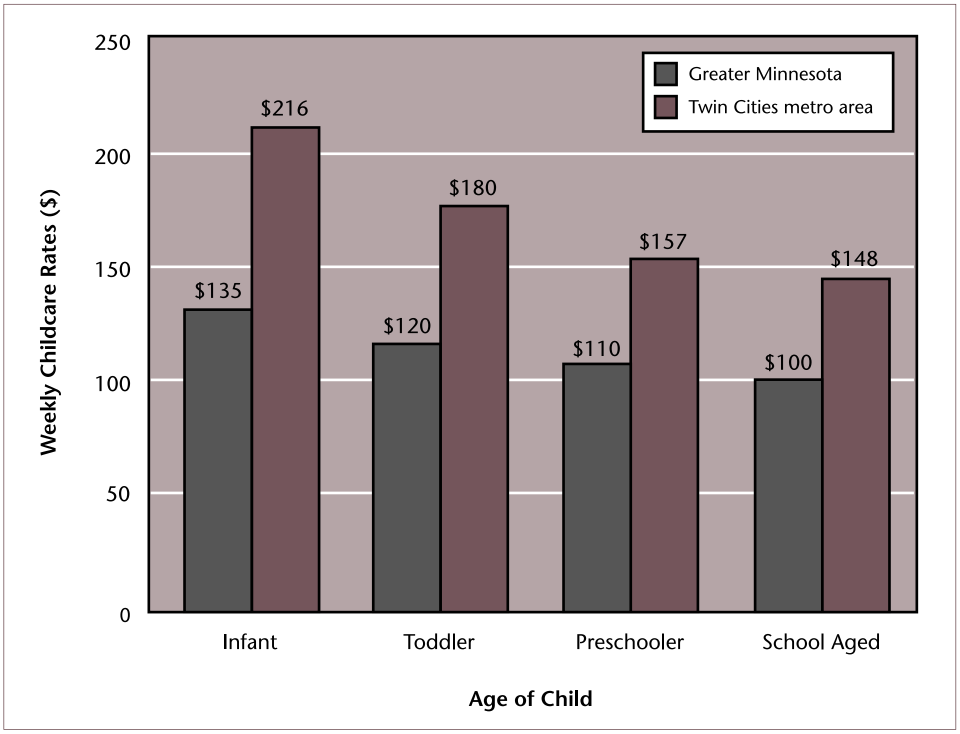
*For purposes of this study, the *Twin Cities metropolitan area* is an 11-county region around Minneapolis–St. Paul that encompasses Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright counties. *Greater Minnesota* includes all other counties in the state.

Next we compared the level of childcare expenses considered affordable for each group of families to rates reported by childcare providers. Data on prices ("rates") charged by childcare providers are collected annually in a statewide survey and the survey data were provided to us by the Minnesota Department of Human Services. In the survey, childcare providers are asked to supply information on the rates they charge for children of different ages; for part-time and full-time care; and for care on an hourly, daily, or weekly basis, depending on their usual practice. To compare these rates with family income, we tried to use a consistent approach that would not underestimate affordability. For example, if a provider reported both an hourly and a weekly rate, we compared each rate to the appropriate (hourly or weekly) affordability standard and, if either rate was affordable, the provider was counted as affordable. If the provider reported both a part-time and a full-time rate, we used the lower of the two rates. In this way, we ensured that we did not underestimate the number of affordable childcare options. (Note that there is no standard conversion from weekly or daily rates to hourly rates. An analysis of the rates reported by providers found a wide variation in conversion rates for those offering both weekly and daily rates. This variation could be due to a number of factors, such as providers' business decisions to offer care in certain time increments.)

The cost per hour for childcare typically decreases as the child gets older: Average rates are highest for infants and considerably lower (per hour) for school-aged children. Childcare costs are higher and more variable in the Twin Cities metropolitan area[2] than in the rest of Minnesota. As shown in Figure 1, median rates charged by childcare centers in the Twin Cities area ranged from $216 per week for infants to $148 for school-aged children. In greater Minnesota, childcare center weekly rates ranged from $135 for infants to $100 for school-aged children. Family childcare providers—who care for unrelated children in the care provider's own home—typically are less expensive than childcare centers, but they also charge more in the Twin Cities metro area than elsewhere. Some family providers charge hourly rates whereas others charge weekly, but the rate patterns are similar nonetheless. Median weekly rates for family providers range from $130 for infants to $100 for school-aged children in the Twin Cities metro area compared to $100 for infants and $90 for school-aged children in greater Minnesota. Hourly rates are typically $3.50–4.00 in the Twin Cities

[2] For the purposes of this study, the Twin Cities metropolitan area is the 11-county region around Minneapolis–St. Paul that encompasses Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright counties.

Figure 1. Median Childcare Center Rates by Age of Child, 2002



metro area compared to about $2.00 for all age groups outside the metro area.

The distribution or variability of rates has an important impact on affordability. Although average costs of childcare are higher in the Twin Cities metro area than elsewhere, the fact that there is also more variability in rates suggests that families may have more affordable options from which to choose. Although the cost of childcare varies for children of different ages, the trends in affordability are similar across all age groups, so for simplicity we focus on the rates for toddlers in this analysis. Figures 2 and 3 compare the variability of rates for care of toddlers in the Twin Cities and greater Minnesota. For both childcare centers and family childcare providers, the range of prices available (the difference between the 75th and 25th percentiles) is much larger in the Twin Cities than in greater Minnesota. The difference is most dramatic when comparing hourly rates for family providers: There is a $2.00 per hour difference between high and low rates in the Twin Cities, compared to a difference of only $0.35 in greater Minnesota.

As part of the affordability analysis, we compared median income in each county in Minnesota with the rates charged by childcare providers in that county. A comparison of the distribution of childcare rates and median income across counties shows that affordable options are limited primarily to family childcare providers in both the Twin Cities area and the rest of Minnesota. As shown in Table 2, statewide the rates charged by most (86%) family childcare providers meet the affordability threshold—that is, the rates represent less than 10% of median family income (if only one child is in care full time). Far fewer childcare centers are affordable; statewide, only about one-fourth of centers are affordable to families with median income. There is, however, a sizeable difference in affordability of childcare centers in the Twin Cities metro area compared to the rest of the state. Only 24% of childcare centers are affordable in the Twin Cities, compared to 34% in greater Minnesota (Table 2).

Although these findings may seem to suggest that many families have a wide range of affordable choices for childcare, the affordability measure drops dramatically when we consider families whose incomes are less than the median. For families whose income is half the median (or about $32,250), for all practical purposes none of the providers report rates that are affordable—that is, rates that would allow the family to pay less than 10% of income for full-time childcare for one child (see Table 2). Even for those families earning 80% of median income, very few childcare centers (4%) and less than 40% of family providers statewide are affordable. If the family is paying for childcare for more than one child, the affordability problem is even greater.

The percentage of affordable providers varies considerably across counties in Minnesota, although in some cases there are only a small number of providers so the numbers must be interpreted with caution. Many rural counties in Minnesota have fewer than five childcare centers and some have none at all. (We excluded from this analysis counties with fewer than

Figure 2. Weekly Childcare Center Rates for Toddlers in the Twin Cities Metropolitan Area and Greater Minnesota, 2002

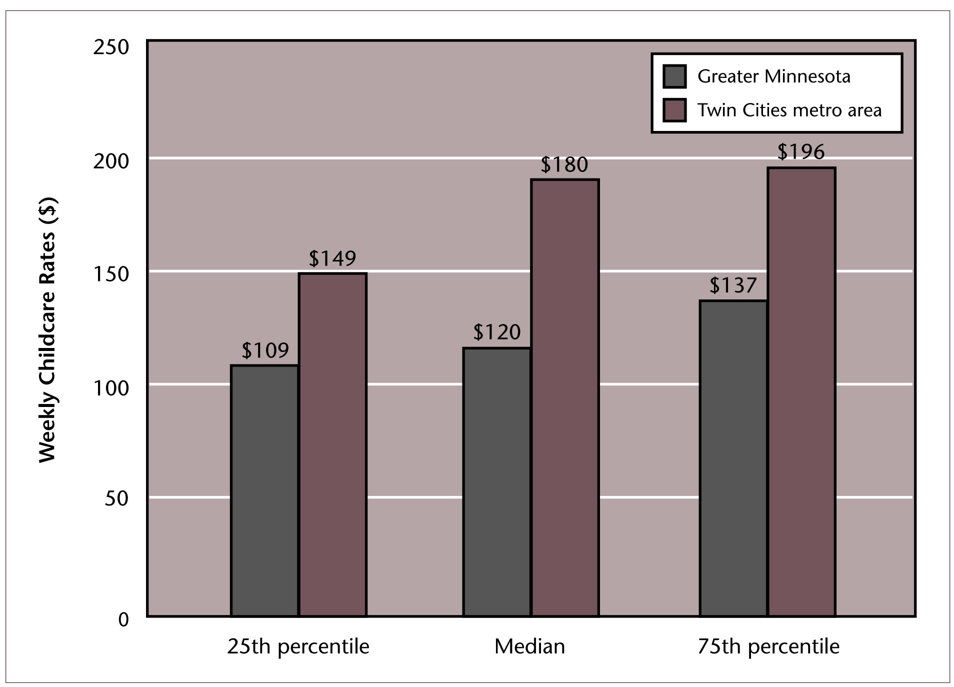
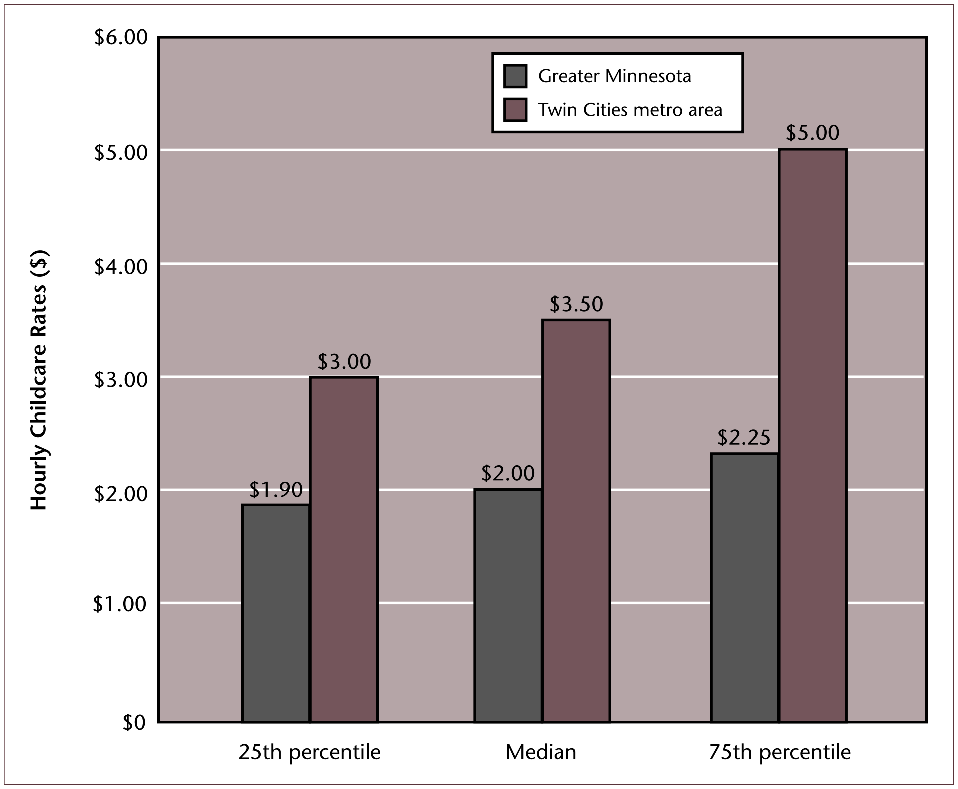


Figure 3. Hourly Childcare Center Rates for Toddlers in the Twin Cities Metropolitan Area and Greater Minnesota, 2002



five providers reporting rates.) Of the 16 Minnesota counties for which at least five centers reported rates, at least half of the childcare centers in 4 of the counties (Chisago, Sherburne, Wright, and Nicollet) are affordable for families with median income. In the other 12 counties, however, fewer than one-third of centers have rates that meet the affordability threshold for median family income (Table 3).

Among family childcare providers, many more have rates that are affordable relative to median income in a given county. Nonetheless, there were 12 counties in which 35% or fewer of the family providers were affordable (see Table 3). Recall that the percentage of rates that are affordable depends on both the distribution of rates and the level of median income in a county. The 12 counties in which even family childcare provider rates are unaffordable for median income families tend to be rural counties with lower median income levels.

The fact that the rates charged by most childcare centers and many family childcare providers are unaffordable to families earning 80% of median income or below should not be taken to imply that childcare providers are charging too much. Indeed, the opposite seems true. Childcare teachers and family childcare providers typically earn low salaries and the high rate of turnover among childcare workers is attributable in part to the low level of pay and benefits. According to the Bureau of Labor Statistics Occupational Employment Survey, median wages for childcare workers in Minnesota are about half the median earnings of all occupations ($16,530 versus $30,160). In addition, some studies have found higher quality of childcare associated with higher levels of teacher pay. Caring for children is very labor intensive and labor costs constitute the bulk of the cost of providing care.

The threshold approach provides one way of assessing the affordability of childcare for families in Minnesota, but it has a number of shortcomings. By comparing childcare rates to median income, the threshold measure implicitly assumes the family is paying for care for one child full time. Many families have more than one child who needs care, yet at the same time, many parents use childcare less than full time. Most of the rates reported would be unaffordable—that is, require more than 10% of a family's income—if the family paid for care for more than one child full time. In the next section, we examine what families actually pay for care as an alternative measure of affordability. As in the affordable housing debate, using more than one measure of affordability may provide greater insight into the issue.

What Do Families Actually Spend on Childcare?

An alternative approach to determining the cost of childcare is to measure the number or percentage of families actually paying more than 10% of income for childcare expenses. Many families rely on friends or relatives (who may

Table 2. Percentage of Toddler Childcare Rates That Are Affordable in Minnesota, 2002

	Centers	Family Childcare
Statewide		
Median income	26.5%	85.7%
80% of median income	4.1%	37.9%
50% of median income	0.5%	0.8%
Twin Cities metropolitan area*		
Median income	23.9%	89.6%
80% of median income	3.9%	45.3%
50% of median income	0.7%	0.7%
Greater Minnesota*		
Median income	34.2%	83.1%
80% of median income	4.6%	32.9%
50% of median income	0.0%	0.8%

*For purposes of this study, the *Twin Cities metropolitan area* is an 11-county region around Minneapolis–St. Paul that encompasses Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright counties. *Greater Minnesota* includes all other counties in the state.

Table 3. Minnesota Counties with the Largest Childcare Affordability Problem*

Counties in which one-third or fewer of the rates reported by **childcare centers** meet the affordability threshold for families with median income	Counties in which one-third or fewer rates reported by **family childcare providers** meet the affordability threshold for families with median income
Anoka	Aitkin
Blue Earth	Beltrami
Carver	Cass
Dakota	Clearwater
Hennepin	Cook
Olmstead	Crow Wing
Ramsey	Itasca
Scott	Koochiching
St. Louis	Mahnomen
Stearns	Pine
Washington	Todd
Winona	Wadena

*Of counties with five or more providers reporting childcare rates

charge little or nothing) to care for small children, some families receive government subsidies to help pay for childcare, and others use care part time to reduce costs. Studies that measure the costs of childcare relative to family income vary in methodology and findings, but nearly all conclude that low-income families typically pay more than 10% of income for childcare. The Wilder Research Center study of Minnesota households found that, of households with out-of-pocket expenses for childcare, families with incomes of $20,000 or less spent 32% or more of their income on childcare (Table 4). Only for families with incomes above approximately $75,000 do expenses fall below the 10% threshold.

These expenses reflect families' actual out-of-pocket costs for childcare, excluding assistance received from the government or other sources to help pay for childcare. According to the Wilder survey, about 12% of low-income families received government subsidies to help pay for childcare. Refundable tax credits, such as the federal Earned Income Tax Credit (EITC) and Minnesota Working Family Credit, can also offset the costs of childcare (as well as other work-related expenses and payroll taxes). As important as these tax credits are, they do not fully cover the costs of childcare for most families. The average per family tax credits received by Minnesota families in 2001 were $1,472 in federal EITC plus $508 for the Minnesota Working Family Credit. Using the Wilder survey average annual out-of-pocket cost of childcare ($5,620), these tax credits cover only about one-third of the expenses for childcare. Thus, even with childcare assistance and tax credits, many families spend more than 10% of their budget on childcare.

Childcare Affordability and Public Policy

One objective of this research project was to consider ways of measuring childcare affordability at the community level—that is, developing a benchmark or indicator a community could use to determine whether or not the community as a whole was achieving a desirable level of affordability. Although many counties (and states) have benchmarks for community-level outcomes, few include childcare affordability in these lists. One exception is the state of Oregon, which has used a childcare affordability measure in its benchmarks report on the overall performance of the state and state government. Oregon recently redefined the childcare affordability benchmark to state that families below median income in Oregon should pay no more than 10% of their income for childcare. Determining families' childcare expenses and income generally requires a detailed survey, however, and may not be feasible for many local communities. In addition, as a measure of the effectiveness of public policy, a community may want to measure the amount of public spending (including tax credits) that helps families to pay childcare expenses.

Using two measures of affordability, this study found that childcare expenses are a problem for many Minnesota families with young children. Based on the threshold measure of affordability, middle-class families with two or more young children face unaffordable rates for care in most counties in Minnesota. For families with below-median income, the problem is even starker. Virtually no childcare rates meet the affordability threshold for families who earn half the median income in their county of residence. Measuring what families actually spend on childcare shows that many families pay more than 10% of their income for childcare and many low-income families spend a burdensome proportion of their incomes on childcare, even with assistance from government subsidies or tax credits.

The burden of childcare expenses has several important implications for

Photo by Dave Hansen, U of M Agricultural Experiment Station

Based on the 10% threshold for affordability, middle-class families with two or more young children face unaffordable rates for childcare in most counties in Minnesota.

Table 4. Out-of-Pocket Expenses for Childcare in Minnesota

Household income level	Percentage of income spent on out-of-pocket childcare expenses
Less than $20,000	>32%
$20,000 to $44,999	10–23%
$45,000 to $74,999	7–11%
$75,000 or more	<9%

Source: Richard Chase and Ellen Shelton. *Child Care Use in Minnesota: Statewide Household Child Care Survey.* St. Paul, MN: Wilder Research Center, 2001. p.60.

families and communities. First, the high cost of childcare may limit the choices of families. The higher prices of childcare centers may deter low-income families from using centers; indeed, national studies find lower use of childcare centers by low-income families. Although childcare centers do not necessarily provide higher quality care than family providers or relatives, high-quality educational programs for preschoolers have been shown to improve both the school readiness of young children and their later school performance. The problem of childcare affordability may result in families being unable to afford high-quality childcare, which may have implications for school readiness. In addition, paying a sizeable fraction of income for childcare expenses is likely to have implications for overall family well-being. Further research is needed on the relationship between childcare expenses, spending on food and housing, and family well-being.

Even with childcare assistance and tax credits, many Minnesota families find themselves spending more than 10% of their income on childcare. In addition, recent policy changes have resulted in fewer families being eligible for childcare assistance, longer waiting lists, and higher co-pays, all of which have worsened the affordability problem. Lowering the price of childcare is unlikely to be a workable solution given that childcare providers already receive low wages on average and that higher quality care is associated with better paid teachers. Expansion of childcare assistance, increasing the income eligibility threshold, limiting parent co-pays to no more than 10% of income, and increasing tax credits are all potential ways to reduce the burden of paying for childcare. Given the importance of childcare quality for child development and school readiness, government policies and incentives also should encourage quality improvements and raise childcare provider salaries. The long-term effects of high-quality childcare on school readiness provide an economic rationale for public funding to help parents pay for quality childcare and will help to equalize opportunities for all children in Minnesota.

Elizabeth E. Davis is assistant professor in the Department of Applied Economics at the University of Minnesota. Her research includes studies of low-wage workers, welfare and childcare assistance, and rural labor markets. She currently teaches graduate and undergraduate courses in the areas of labor economics and applied microeconomics. Davis is a principal investigator for the Minnesota Child Care Policy Research Partnership, a federally funded, multiyear project examining a number of childcare issues in Minnesota through a collaboration of state, county, and nonprofit partners. NaiChia Li is a Ph.D. student in the Department of Applied Economics at the University of Minnesota.

This study was supported by a grant from CURA's Faculty Interactive Research Program. The program was created to encourage University faculty to carry out research projects that involve significant issues of public policy for the state and that include interaction with community groups, agencies, or organizations in Minnesota. These grants are available to regular faculty members at the University of Minnesota and are awarded annually on a competitive basis.

20th Annual Conference on Policy Analysis

The 20th Annual Conference on Policy Analysis will be held Wednesday, October 20, 2004, at the Continuing Education and Conference Center on the University of Minnesota's St. Paul campus. The theme of this year's conference is "Minnesota at a Crossroads." Former Minnesota governor Wendell Anderson will be the keynote speaker for the conference.

Sponsored by the Economic Resource Group, the conference provides an opportunity for analysts and policy makers to explore timely topics that reflect the importance of analysis in formulating policy decisions in government. For more information, visit www.cce.umn.edu/policyanalysis.

Markusen Named 2004–2005 Fesler-Lampert Chair

Ann Markusen, professor of planning and public policy at the Hubert H. Humphrey Institute of Public Affairs, has been named to the Fesler-Lampert Chair in Urban and Regional Affairs for 2004–2005. Markusen's appointment, which was announced this past June, was made by the dean of the Graduate School Victor Bloomfield based on recommendations from CURA.

Asked for her reaction to the announcement, Markusen said that the award "means a great deal to me both personally and professionally," and noted the importance of the Fesler-Lampert endowment in supporting research on urban issues. "Urban and regional affairs are vital to the lives of all citizens, but have been out of fashion as a funded research area since the Great Society," she observed. "Only now, thanks in part to the Fesler-Lampert endowment's earmarking of this field, are politicians and economic developers beginning to understand how central the quality of urban life is to the success of private sector businesses and the entire regional economy."

The Fesler-Lampert Chair in Urban and Regional Affairs is one of four endowed chairs and two named professorships made possible through a generous contribution to the University of Minnesota by David R. and Elizabeth P. Fesler. The Fesler-Lampert Endowment in Interdisciplinary and Graduate Studies was initially established in 1985 through a $1 million grant from the David R. Fesler Fund of the Saint Paul Foundation, Inc. The gift was matched by a $1 million allocation from the Permanent University Fund, and the combined endowment and matching funds have now grown in value to over $9.5 million. The endowment is intended to stimulate interdisciplinary research and teaching through the appointment of distinguished, broadly learned scholars to endowed faculty positions at the University of Minnesota.

Tom Scott, director of the Center for Urban and Regional Affairs, said that he is "very happy to have Ann Markusen serve as the fifth holder of the Fesler-Lampert Chair in Urban and Regional Affairs." Scott noted that Markusen has "a long and impressive record of research and teaching related to urban and regional affairs, both here and at other institutions, including her service as director of the Masters in Urban Planning program in the Humphrey Institute." According to Scott, Markusen's current research, which focuses on employment opportunities related to high technology industries and the arts, "is especially relevant to CURA's interests in the changing face of Minnesota's economy."

Markusen has taught at the University of Minnesota since 1999 and also directs the Project on Regional and Industrial Economics (PRIE) at the Humphrey Institute. A regional and industrial economist by training, Markusen notes that one of the hallmarks of her research is "its groundedness at the intersection of a particular industry or occupation and the regional and local economy." In this vein, she has written and engaged actively in policy debates on the energy industry in Colorado, steel in Chicago, high-technology and defense industries in California, pharmaceuticals in New Jersey, and most recently, artists in the Twin Cities. Lately her research has also tried to make the case that economic development ought to focus on "occupations rather than industries, stressing workers' skills, networks, and entrepreneurship as ways of building a resilient and diversified regional economy."

Photo courtesy of Ann Markusen

Ann Markusen

Currently Markusen and her colleagues at PRIE are engaged in a five-year research project investigating the significance of artists' work to their neighborhoods and regions. "[Our] studies demonstrate that artists contribute to a local economy far beyond their recorded employment and wages," Markusen notes, "through direct export of their work and services, contractual work for area businesses, and induced innovation on the part of their suppliers." Equally significant, she and her colleagues found that artists' residences, performance spaces, and gathering places help to stabilize and revitalize the inner-city neighborhoods and rural communities where they are located, and contribute to an area's overall quality of life, something many potential new residents and businesses consider when relocating. This research is particularly important to Minnesota because artists are overrepresented in the Twin Cities relative to other metropolitan areas of similar size—evidence for the significance of the arts to the area's economic, social, and cultural vitality.

Markusen plans to use the resources provided by her appointment to conduct intensive field research on artists' clubhouses and live-work spaces in Minnesota, enabling her and her colleagues to investigate more closely the social and economic benefits of such spaces for neighborhood and regional economies, as well as their impacts on artistic creativity and livelihoods. "Our working hypothesis is that these benefits [to communities] can be planned and realized on a building-by-building basis," Markusen explains, and that such undertakings are "especially powerful if they are done as small-scale initiatives that involve local community buy-in." The results of this research can inform cultural policy debates at city and neighborhoods levels and will help policy makers allocate arts and economic development dollars among competing uses.

The Fesler-Lampert Endowment is intended as a tribute to David Fesler's grandfathers, Bert Fesler and Jacob Lampert. The Fesler-Lampert Chair in Urban and Regional Affairs is appointed for a one-year period and receives approximately $42,000 for research, salary, and logistical support. The funds are jointly administered by the University of Minnesota Foundation and the University of Minnesota.

Neighborhood Planning and GIS: Case Studies from the Minneapolis Neighborhood Information System

by Jeffrey K. Matson

This article is the second in a three-part series on the Minneapolis Neighborhood Information System (MNIS), a community-focused capacity-building project that assists neighborhood organizations in acquiring data, geographic information systems (GIS) analysis, and mapping capability to meet their revitalization goals. The first article, which appeared in the Spring 2004 issue of the *CURA Reporter,* discussed the history and background of MNIS, as well as the goals and overall achievements of the project to date. This article takes an in-depth look at three of the participating neighborhood organizations and focuses on how they have made use of MNIS data and technical support to bring GIS technology into their workplaces. A closer look at the membership requirements, data available to MNIS members, and training methods used will also be discussed.

MNIS Membership

Since the inception of the program, MNIS membership has increased from 6 to 12 community organizations representing a total of 17 neighborhoods (Figure 1). To encourage active participation in MNIS and to meet the stipulation of the federal research grant that funds the project, MNIS neighborhoods must agree to a set of annual membership requirements. These include the following:

- Neighborhood boards must approve membership and sign a formal letter of acceptance naming a primary and alternate MNIS representative.
- The organization must agree to MNIS' Acceptable Use Policy.
- The organization must pay dues of $250 annually (charter members exempt through 2004).
- Staff representatives are expected to attend informational meetings and trainings to become proficient in the use of GIS.
- Neighborhoods must complete one map, GIS project, or database each quarter.
- Neighborhoods must submit quarterly usage reports detailing MNIS use in their organization.

Generally participating organizations have reacted favorably to these requirements because they keep the organization engaged in the project and provide a means to incorporate GIS into the organization's regular activities.

MNIS Data

The MNIS program is founded on the principle that neighborhood organizations should have access to reliable and current data about their residents and neighborhoods. Although data provided by the City of Minneapolis are central to the program, participating members use a variety of data sets from a multitude of sources. Data used by neighborhoods range from City parcel information, U.S. Census demographic information, and GIS base layers such as roads and waterways to regional transportation and recreational amenities information, natural resources data, and primary data collected by neighborhood organizations.

City of Minneapolis Data. The City of Minneapolis Business Information Systems (BIS) department aggregates data from multiple City offices and agencies to create the MNIS data set. Hennepin County Tax Assessor information—as well as Minneapolis Department of Planning and Zoning, Housing Inspections Office, and utility billing data—are available to participating MNIS organizations. Each property in the city is assigned a variety of attributes that can be mapped: ownership and address information, tax status, housing condition, zoning district, permits issued, etc. Neighborhoods use these data to create mailing lists, identify areas to target resources, verify planning and zoning classifications, and analyze Neighborhood Revitalization Program (NRP) investments.

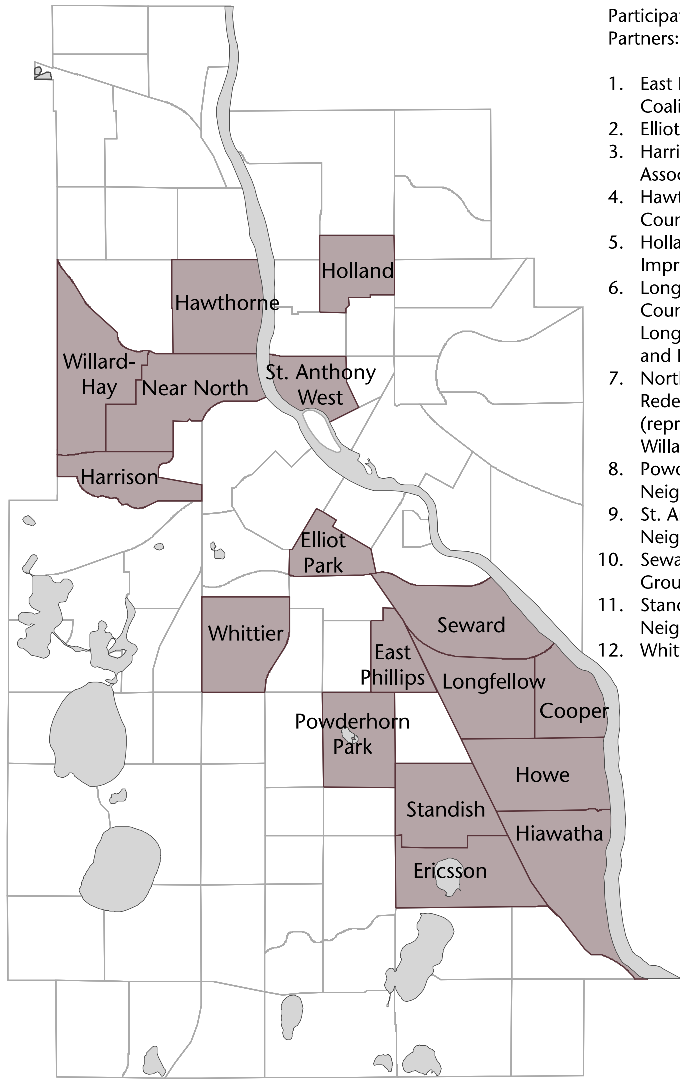
Photo by Steve Schneider

Staff of MNIS and the Northside Residents Redevelopment Council discuss maps for the Plymouth Avenue planning project.

U.S. Census Data. The 2000 U.S. Census provides an incredible amount of demographic information, much of which is vital to the work of neighborhood organizations. Many community organizations are interested in finding answers to simple questions such as the ethnic and racial makeup of their neighborhoods or how community demographics have changed over time. More complex questions and relationships also can be addressed using U.S. Census data—for example, the relationship between homeownership and poverty in a particular neighborhood or community. Data from the U.S. Census are perfectly suited to GIS and mapping applications and can be used to isolate variations within a neighborhood or show how a particular community compares with neighboring communities. Currently MNIS provides U.S. Census data down to the block level for participating members, and MNIS has recently been working to provide neighborhood-level profiles of basic demographic, social, economic, and housing characteristics. Census data are available from a number of sources.

Neighborhood Data. Some of the most valuable MNIS data come directly from the neighborhood organizations themselves. Primary data collected by staff and volunteers who have local expertise and intimate knowledge of their community adds value to any data set. Neighborhoods have created data for programs such as NRP activities, block club membership, community garden planning, and invasive species removal projects. Because neighborhood staff are on the front lines of community planning, they are able to identify and intervene on problem properties, work with developers and consultants on new housing and commercial properties, and coordinate with health and human services agencies when relocating or establishing community facilities.

Figure 1. Minneapolis Neighborhood Information System Community Partners



Participating Community Partners:

1. East Phillips Improvement Coalition
2. Elliot Park Neighborhood Inc.
3. Harrison Neighborhood Association
4. Hawthorne Area Community Council
5. Holland Neighborhood Improvement Association
6. Longfellow Community Council (represents the Longfellow, Cooper, Howe, and Hiawatha neighborhoods)
7. Northside Residents Redevelopment Council (represents the Near North and Willard-Hay neighborhoods)
8. Powderhorn Park Neighborhood Association
9. St. Anthony West Neighborhood Organization
10. Seward Neighborhood Group
11. Standish-Ericsson Neighborhood Association
12. Whittier Alliance

MNIS Training

The vital elements in GIS and MNIS are the users themselves and the training that is provided so users can work successfully with a geographic information system. The typical MNIS user is a neighborhood organization staff person, not a GIS specialist. The goal of the program is for neighborhood staff to learn to use the available software and data sets to create maps and databases without needing to rely on an outside expert. Learning about GIS and MNIS through systematic training sessions is essential for participants to be able to use the system to its full potential and contribute to the MNIS collaboration. Staff at MNIS provide ongoing quarterly training sessions for neighborhood staff and volunteers, nonprofit community-based organizations, and City of Minneapolis staff working on the MNIS project. Training sessions involve project-based learning and focus on the tools that are most applicable to the business of a neighborhood organization. Periodically, scholarships are made available to neighborhood staff to enroll in GIS courses at the University of Minnesota.

The MNIS approach to training neighborhood staff includes three facets: getting access to and becoming familiar with data; practical applications of layouts, images, and maps; and learning to use GIS software. The program offers training and support in using City of Minneapolis, U.S. Census, crime, school district, and other types of data. With more than 20 attributes assigned to each parcel, becoming familiar with the MNIS data does take time. Neighborhood staff are kept abreast of updates and changes to the data, as well as new features on the interactive MNIS Web site. Before the MNIS data download Web site was launched, City data were distributed via MNIS staff. With the debut of the City's MNIS Web site, MNIS users are now able to access data anytime.

Neighborhood staff use maps to communicate with a variety of stakeholders. Maps are used in neighborhood board and committee meetings, presentations to the City, and grant proposals. Through MNIS trainings, neighborhood staff learn how to create effective layouts, how to incorporate maps into written materials, and what types of media can be used to present maps.

From simple poster boards or flyers to sophisticated PowerPoint presentations, neighborhoods use maps in many different formats.

Neighborhood participants are exposed to GIS computer software and become familiar with the data through training sessions and one-on-one visits with MNIS staff. Training programs range from beginning level to advanced and are focused on what MNIS users want to learn (based on feedback and evaluations at earlier training sessions). The MNIS staff regularly visits neighborhoods to help with projects onsite using GIS software.

The remainder of this article consists of case studies of three MNIS participants: Longfellow Community Council, Hawthorne Area Community Council, and Northside Residents Redevelopment Council. For each participant profiled, we discuss several representative MNIS projects and the impacts of these projects on neighborhood revitalization.

Photo by Steve Schneider

The goal of MNIS training sessions is for neighborhood staff to learn to use GIS software and data sets without needing to rely on an outside expert.

Case Study 1: Longfellow Community Council

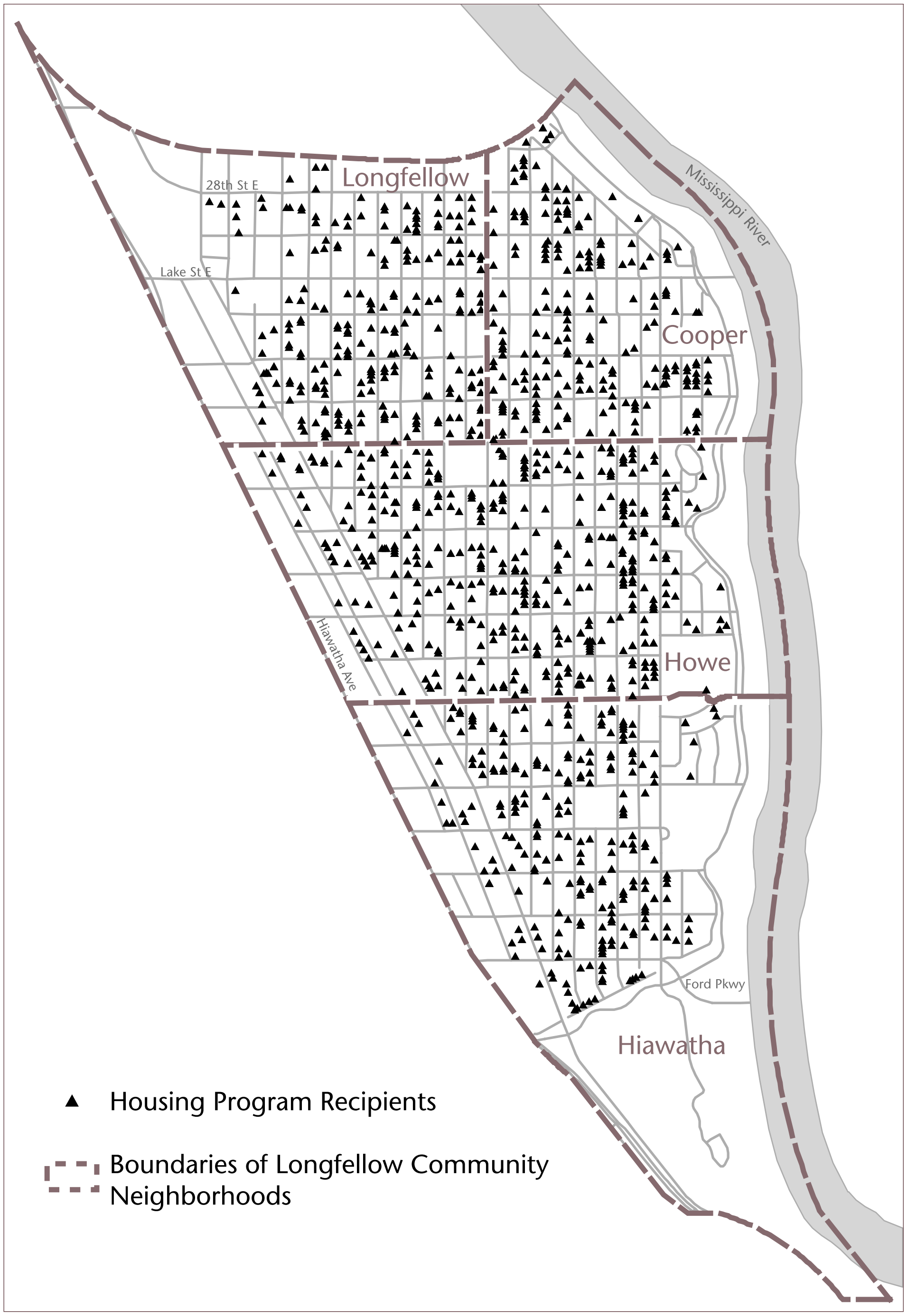
The Longfellow Community Council (LCC) was a charter member of the Minneapolis Neighborhood Early Warning System (MNEWS), the precursor to MNIS, and was one of six Minneapolis neighborhoods to divert into the MNIS program in 1999 NRP funds slated for housing demolition programs. The LCC board and executive directors have been long-standing supporters of MNIS. In addition, LCC has encouraged all staff, interns, and any interested volunteers to participate in MNIS trainings and to use GIS for support of their work within the organization. To date, LCC has completed GIS projects in the areas of housing, land-use planning, environmental studies, and demographics. Below are descriptions of several projects undertaken by LCC during the last few years.

Figure 2. Risk of Lead Exposure in the Longfellow Neighborhood

Project 1—Lead Exposure Risk. Working with MNIS, the Longfellow Community Council developed a set of criteria to identify properties in the neighborhood that might be at risk of lead exposure due to lead-based paint in the home or lead pollutants in the air. The Longfellow neighborhood, like most residential neighborhoods in Minneapolis, has a high percentage of homes built before 1950, as well as many old industrial properties and several high-traffic transportation corridors. These are just some of the factors that increase lead exposure risk in children. The Longfellow community used four indicators to map the risk of lead exposure, including concentrations of children in the neighborhood, building condition, age of housing, and proximity to transportation corridors. Data for the project were obtained from the U.S. Census Bureau and the City of Minneapolis.

Properties were assigned a risk score based both on how many indicators were present and on the severity of those indicators. For example, a property that had a below-average building condition rating, was built before 1950, and was on a block that had more than 11% school-aged children received a score of 5 (high risk). Using a GIS software program called ArcView, the results for each parcel in the Longfellow community were mapped to show areas of high, moderate, low, and minimal lead exposure risk in the neighborhood (Figure 2).

Figure 3. Longfellow Housing Program Grant Recipients, 1995–2003



As additional data become available—for instance public heath data—the risk scores may be revised or updated.

Having identified patterns of risk in the Longfellow community, LCC staff are now able to target outreach and educational efforts to inform residents in high-risk areas about the dangers of lead exposure in children and the warning signs for lead poisoning. Additional information about lead exposure and the project results will also be published in a future edition of the *Longfellow View,* a neighborhood publication that is mailed to all residents.

Project 2—Neighborhood Housing Program Analysis. The Longfellow Community Council has made literally hundreds of grants and loans to neighborhood residents and businesses—from small grants for basic home maintenance to large commercial remodeling loans—during the last 10 years. The goal of these programs is to maintain the quality of existing housing stock and provide opportunities for small businesses that can serve the needs of residents. The Longfellow Neighborhood Housing Program Analysis project was a simple exercise in creating a database of program activity and a set of maps showing the distribution and amount of dollars funneled to the community.

This project provides an excellent example of primary data collection and archiving of neighborhood-based information. From a series of spreadsheets and paper records, the data were imported into a Microsoft Access database where the tables were joined with other housing data, namely parcel records from the City of Minneapolis. These data were then geocoded by address to a parcel map of the neighborhood using ArcView GIS software. *Geocoding* is the process by which a list of geographic features (in this case, property addresses) is indexed against a base map and turned into points on the map (see Figure 3). The geocoding process also retains any attribute data related to each address—such as loan or grant type and amount—which in turn can be displayed on the map.

There were several important outcomes to the Longfellow Neighborhood Housing Program Analysis. First, no City of Minneapolis agency is charged with collecting this type of data. By helping LCC to collect and archive this type of data, the project increased the capacity of the organization to maintain its own records of housing program activity. Second, the maps that were produced as part of the project can be used for neighborhood meetings, fundraising opportunities, and other community forums to highlight the coverage of LCC programs and to illustrate the equitable distribution of funding in the community. Finally, the basic housing program data can be combined with City of Minneapolis parcel data on

Photo by Steve Schneider

The Hawthorne Area Community Council worked with MNIS to assess the impact of a program to develop new housing on the site of abandoned and vacant properties.

Figure 4. Vacant and Boarded Residential Properties and New Residential Construction in the Hawthorne Neighborhood

homeownership, property value, or building condition to allow further analysis of the effectiveness of such programs on the housing stock in Longfellow and to help with planning for future investment in the neighborhood.

Case Study 2: Hawthorne Area Community Council

The Hawthorne Area Community Council (HACC) is one of the founding members of MNIS and has continued to support the efforts of the program despite staffing changes within the organization. Through the years, HACC has taken full advantage of the resources MNIS has to offer by attending trainings to develop internal GIS capacity and by working directly with CURA-supported graduate and undergraduate student research assistants on GIS-related projects. To date, HACC has completed projects on housing and land use, economic development, and neighborhood asset mapping, and has worked collaboratively with other neighborhood organizations in the city. Several of these projects are discussed below.

Project 1—Vacant Lots and New Construction Mapping. At one time, Hawthorne was home to the highest number of vacant lots per neighborhood in the city of Minneapolis. Additionally, there was a significant problem with boarded-up units in the neighborhood. The neighborhood decided to address the problem of vacant and abandoned lots by facilitating new home construction in the neighborhood. To date, more than half of the new homes have been completed.

Working with several CURA-supported students from the University of Minnesota, HACC then attempted to assess the impact the new homes had on the community. This included a spatial assessment of where new construction was occurring and where opportunities for redevelopment remained in the neighborhood. Using GIS software and data from the City of Minneapolis, the Minneapolis Community Development Agency, and HACC, a series of maps was created showing the existence of vacant lots, boarded buildings, and new construction in the neighborhood over time (Figure 4). Although many vacant lots remain in the neighborhood, the maps show a redevelopment "domino effect." Owners of vacant lots tend to hold onto these properties until after construction of new homes, hopeful that it will result in higher prices. The results of this project will be used as an evaluation tool for future redevelopment policy and funding decisions.

Project 2—Zoning Disposition Project. In early 2003, the Minneapolis Community Development Agency (MCDA) proposed a change to its lot disposition policy that appeared to affect only a handful of the neighborhoods in Minneapolis and that limited the neighborhoods' input in the decision-making process. Part of the city's zoning ordinance, the lot disposition policy dictates the manner in which the city redevelops vacant lots that are owned by the MCDA. The proposed policy change was a response to the need for more affordable housing units throughout Minneapolis and would have allowed for both redevelopment of vacant lots previously deemed too small for building and an increase in residential density in some areas of the city. A group of neighborhood organizations, led by the Hawthorne Area Community Council, was concerned about these changes because many of these lots are in already high-density areas with low relative property values.

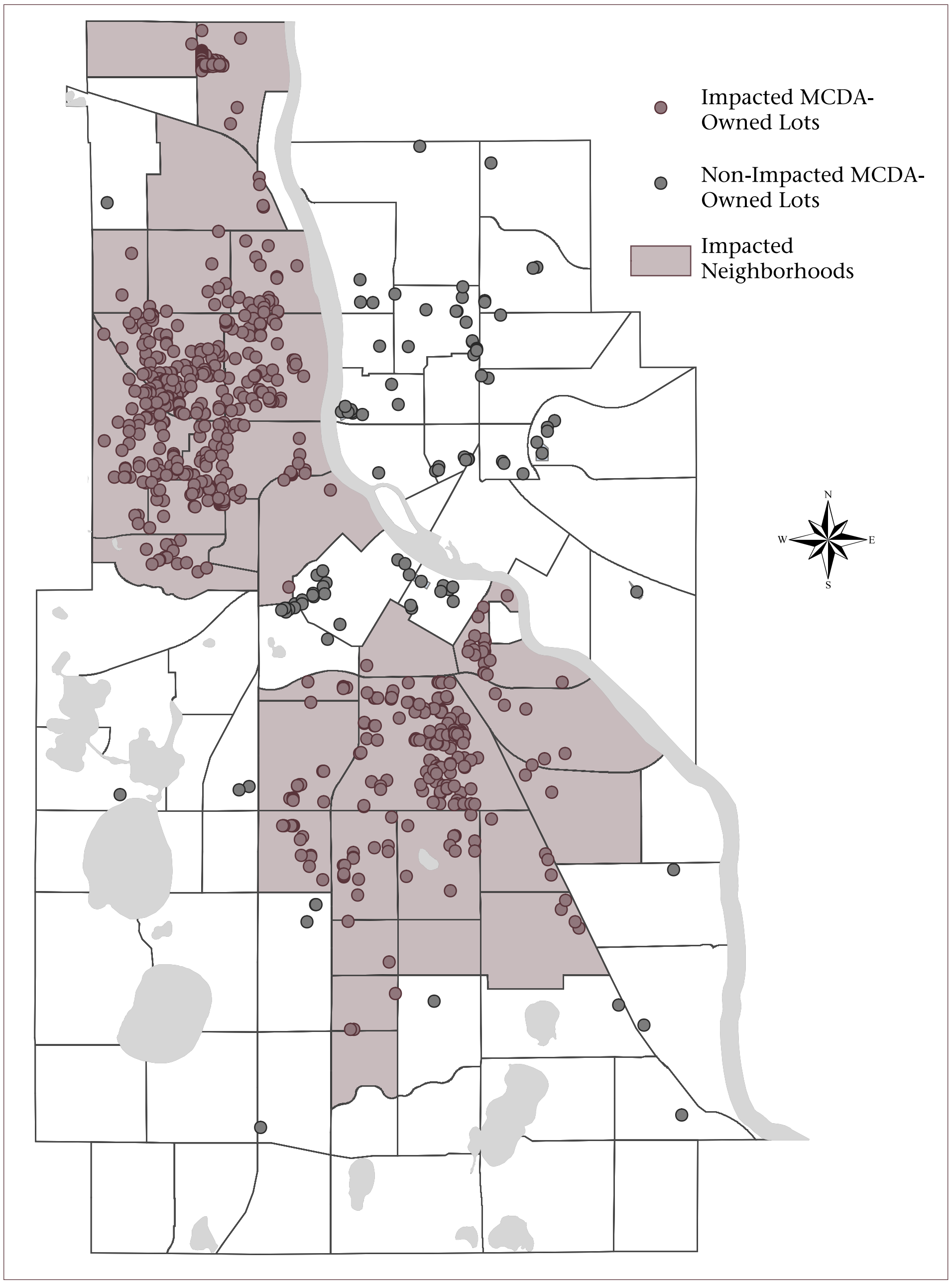
The Hawthorne Area Community Council sought to demonstrate the impact of the policy changes on affected neighborhoods through the use of demographic, crime, and housing data. Working with MNIS staff, HACC initiated the Zoning Disposition Project, which had several objectives:

- improve communication between communities impacted by the MCDA policy changes
- give communities a say in the neighborhood development process
- get MCDA commissioners to meet with residents of affected communities
- stop the proposed changes to the lot disposition policy

This project involves incorporating data from the U.S. Census Bureau, the City of Minneapolis, and the MCDA into various charts and maps to show the characteristics of the impacted neighborhoods and how they compare with neighborhoods in the rest of the city. To date, demographic analysis has been completed and many of the maps have been created. Several presentations on the topic have been given, including one to the Minneapolis City Council.

Although the project is still ongoing, results thus far have been encouraging.

Figure 5. Location of Impacted and Non-Impacted Lots Owned by the Minneapolis Community Development Agency (MCDA)



One immediate impact of the project was to show city officials that the neighborhoods most impacted by the proposed policy change were areas with high minority populations, high crime rates, high poverty rates, and little park or recreational land (Figure 5). As a result, the density portion of the zoning change was tabled for further discussion and the organizations involved have continued to work with City officials on a viable solution. This project represents a model of collaboration that MNIS seeks to encourage among its members. Staff at HACC brought together many neighborhood organizations—several of which were not previously members of MNIS—to form a broad and effective coalition. It is the hope of HACC and the other organizations involved in the project that their collaborative efforts will not cease once the disposition policy issue is resolved, but will instead lead to ongoing partnerships around issues of common interest.

Case Study 3: Northside Residents Redevelopment Council

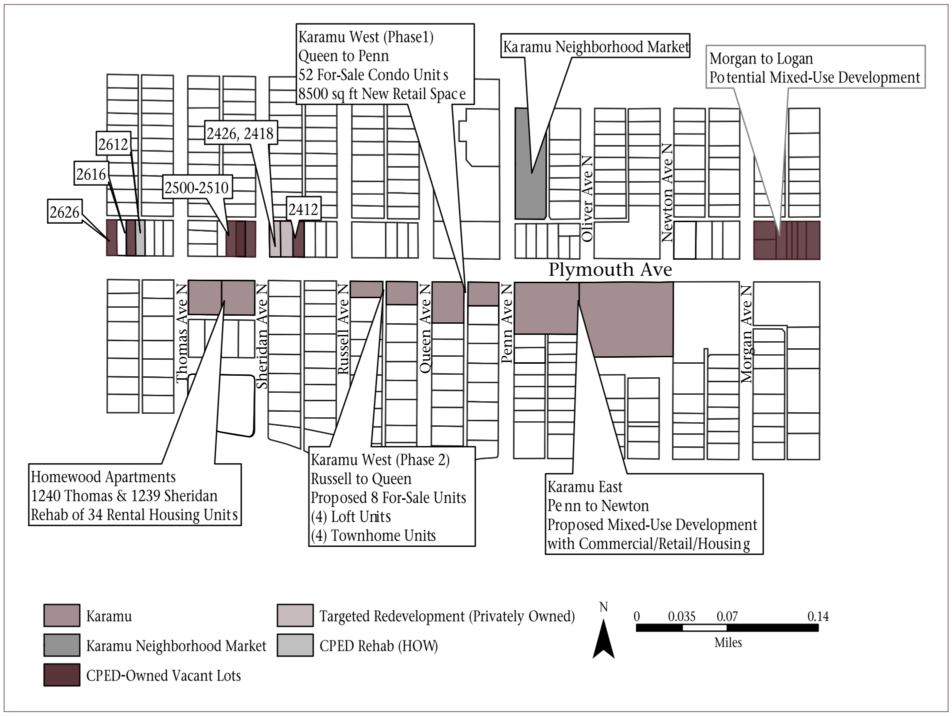
The Northside Residents Redevelopment Council (NRRC) has been a member of MNIS since early 2002. The MNIS representative from NRRC has a background in geography and GIS, and consequently the organization has been one of the more active MNIS participants in recent months. Since joining MNIS, NRRC has completed several small projects on housing and land-use planning that directly relate to issues facing the neighborhood. It is common for NRRC to work with MNIS staff to create poster-sized maps for community meetings that help to convey information in a clear and understandable manner and keep residents better informed. In addition, MNIS facilitated a collaboration between NRRC staff and a group of University of Minnesota graduate students enrolled in a GIS course to undertake an evaluation of the housing programs NRRC has participated in during the last 10 years. Several NRRC projects are discussed below.

Project 1—Land-Use Planning. A basic use of GIS software is simply as a tool to help people better see what is going on around them. For a land-use planning project, NRRC staff created two maps to highlight areas of potential redevelopment in the neighborhood. In one of these areas, located along Plymouth Avenue, NRRC plans to rehabilitate the Homewood Apartments and develop several sites owned by the Minneapolis Community Development Agency and NRRC (Figure 6).

The maps NRRC created have been used at numerous neighborhood and city planning meetings to inform residents, planning agencies, private developers, and city staff of the vision the neighborhood has for these areas. The maps also have helped residents better understand long-range land-use planning issues faced by the neighborhood. The result has been neighborhood board approval of an application for hundreds of thousands of dollars in affordable housing funds from the Neighborhood Revitalization Program's (NRP) affordable housing trust fund. The proposals for affordable housing funds have gone to the NRP Policy Board and the organization is awaiting a decision for final approval.

Project 2—Neighborhood Revitalization Program Housing Analysis. In the spring of 2004, NRRC staff teamed up with a group of University of Minnesota students enrolled in an Urban GIS course on a project designed to analyze NRRC's Neighborhood Revitalization Program (NRP) Phase I housing programs. The objective was to produce maps that would summarize the accomplishments of the NRP Phase I programs during the last 10 years (Figure 7) and provide a visual aid

Figure 6. Proposed Redevelopment and Revitalization Plan for Plymouth Avenue



to assist in planning for NRP Phase II programs in the future.

The data used in the project came from seven different sources and thus required a significant amount of processing and analysis to convert all of the information to a common format. Once the data were suitable for GIS analysis and the geocoding process was complete, the variables that were requested by NRRC were aggregated in total units or total investment at the block and zone levels (zones are geographic units that were created by NRRC to evaluate and plan for the equitable distribution of NRP funding). Additional analysis was conducted to compare the difference in market value of the parcels between the beginning of NRP Phase I in 1993 and the end of the program in 2003. Finally, a series of maps was created, each depicting various investments or activities during NRP Phase I.

The maps show a relatively even distribution of housing units across the six NRRC zones. However, homeownership rates are far higher in the western Willard and Hay zones than in the eastern Near North zone. Given that NRRC's largest NRP program, the Home Improvement Loan Program, provided home improvement loans to existing homeowners, it is no surprise the Willard-Hay communities—which have higher homeownership rates—received more funding than the Near North.

The connection between NRP housing investments and property values in the Near North neighborhood is less clear. It is likely that a loan made to a homeowner increased the value of that property; however it is impossible to tell whether or not neighboring properties enjoyed any "halo effect" from the investment.

Summary

The case studies of MNIS neighborhoods presented here show the diversity of projects undertaken by participating neighborhoods, as well as the important role GIS can play in the work of a community organization. In addition to describing selected MNIS projects, this article has also highlighted the MNIS training philosophy, the types of data that community organizations gain access to through MNIS, and the contributions members of MNIS are expected to make to the program.

We believe that the success of the Minneapolis Neighborhood Information System program to date has resulted from several factors. Most important is the community-driven nature of MNIS. Neighborhood groups were present and active during the design, development, and implementation of all aspects of the program, including data delivery, training, and GIS project development. As a result, community organizations have been able to realize both the potential and the importance

Figure 7. Total Neighborhood Revitalization Program (NRP) Investment by Block, 1993–2003

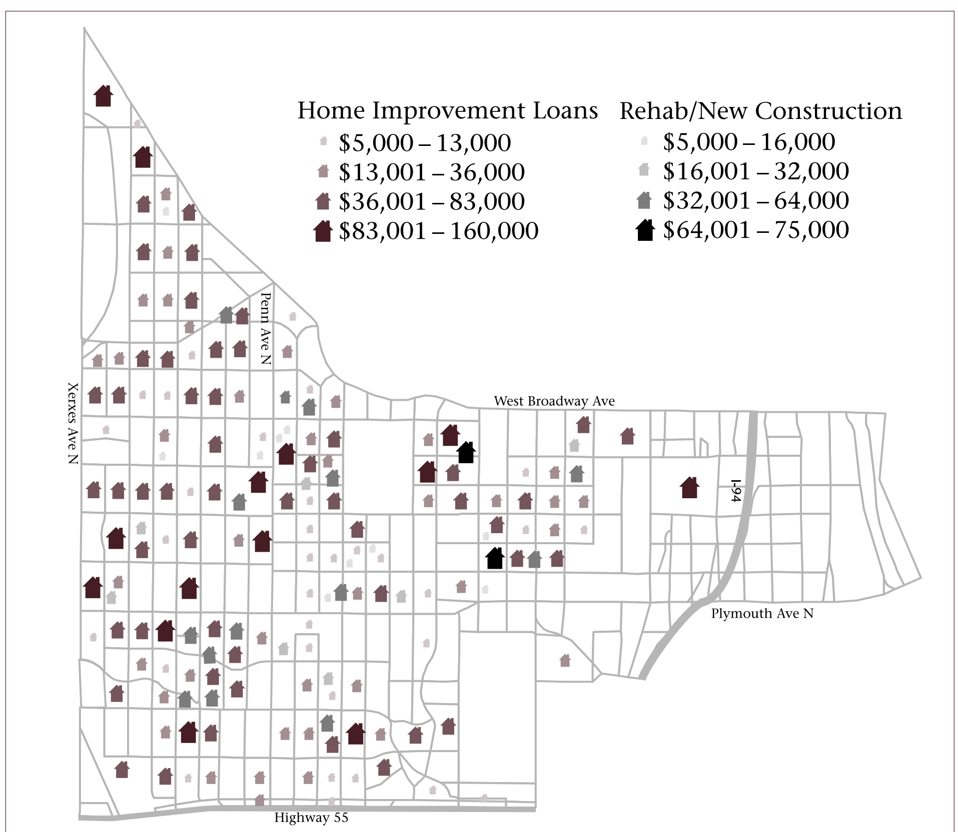


Photo by Steve Schneider

A vacant lot currently used for a weekly market is the future site of Karamu on Plymouth, a mixed-use residential and commercial development project in the Near North community.

of incorporating GIS into their work plans. The projects themselves stem from real neighborhood issues and all have been designed by neighborhood staff. Another key to success has been the collaborative nature of the program. Many of the project examples described here have shown how neighborhoods have partnered with other neighborhoods and the University of Minnesota to create more robust and wide-reaching projects.

The final article in this three-part series on MNIS will provide an evaluation of the program as required by the Department of Commerce's National Telecommunications and Information Administration, which supplied major funding for MNIS. The evaluation will examine what has been accomplished through MNIS members' use of GIS during the past three years, as well as the effects MNIS has had on member organizations. The future of MNIS and possible expansions of the program will also be discussed.

Jeffrey K. Matson is associate program director for the Minneapolis Neighborhood Information System (MNIS). He is a graduate of the Masters in Geographic Information Science program at the University of Minnesota, where his research focused on local environmental hazards and their potential impacts on disadvantaged communities. **The author would like to thank Molly McCartney, Jessica Deegan, Jose Velez, Margo Dean, and Jeff Corn for their contributions to this article.**

Fourth Annual Community GIS Expo

The Fourth Annual Community GIS Exposition will be held November 10, 2004, at the Continuing Education and Conference Center (formerly the Earle Brown Center) on the University of Minnesota's St. Paul campus. The theme of this year's expo is "Empowering Communities to Undertake Grassroots Change." The expo will showcase projects completed by members of the Minneapolis Neighborhood Information System (MNIS), the St. Paul GIS Consortium, and local government agencies, and is intended to build collaboration among GIS users in the Twin Cities metro area and to create and move forward a comprehensive GIS agenda for the region.

Photo by Steve Schneider

The Third Annual Community GIS Exposition, April 2003

Sponsored by the Minneapolis Neighborhood Information System (MNIS), the St. Paul Community GIS Consortium, and CURA's Neighborhood Planning for Community Revitalization (NPCR), the expo will include a poster session highlighting GIS projects; breakout sessions on ArcGIS and university and online GIS resources; and presentations on MNIS, the St. Paul GIS Consortium, and local government GIS applications.

More information about the expo, including how to register, will be available soon at www.cura.umn.edu.

Raising Minnesota's Minimum Wage

by Ann Markusen, Jennifer Ebert, and Martina Cameron

The minimum wage, by establishing an hourly wage floor, prevents market forces from driving the wages of the least skilled workers below a level deemed fair. First adopted by the U.S. Congress in the late 1930s, the minimum wage has been subject to periodic increases by states or Congress to counteract wage erosion caused by inflation. The real value of the minimum wage peaked in 1969, at the equivalent of $8.46 an hour in today's dollars. However, even this level was not enough to support a family's basic needs. Since then, the minimum wage has eroded to $5.15 an hour in most states, including Minnesota. However, 12 states and the District of Columbia have raised their minimum wages above the national rate since the last national increase occurred in 1997. In 2004, proposed minimum wage increases have been debated in the state legislatures of New York, Florida, and Minnesota, and a bill to raise the wage to $6.65 an hour passed the Minnesota Senate in April.

The minimum wage serves as a reference point for wages around it and thus plays an important role in determining the wages of the state's overall workforce, especially for workers with only a high school education and those living in rural areas. It operates as a labor market institution, not a poverty program.

Scholars and analysts point to a number of economic and social benefits of a higher minimum wage. For those at the bottom of the wage ladder, it provides an incentive to work, a route to financial independence, and an alternative to welfare. For the working poor at near minimum wage, it creates a spillover effect, pushing wages up. For state and local governments, it diminishes costly welfare burdens. For regional economies, it induces employers to adopt productivity-enhancing measures and thus increases competitiveness. There are also hypothetical downsides to increasing the state minimum wage, including a negative employment effect (particularly for teenagers), a loss of profitability for employers, an incentive for firms to migrate out of the state, and higher consumer prices.

In response to a diversity of Minnesota constituencies interested in the potential for a higher minimum wage, the University of Minnesota's Project on Regional and Industrial Economics set out in the summer of 2003 to research the costs and benefits of a higher minimum wage for the state. The research, supported by a Faculty Interactive Research Program grant from CURA, involved a review and synthesis of the empirical economics literature on national and state minimum wage hikes, which exploded during the 1990s. To determine the experience of other states, our research team conducted interviews with other researchers in three states (Washington, Oregon, and Illinois) that have recently raised their minimum wage levels above the national rate. All three states have economic and cost-of-living structures similar to Minnesota's. We used primary employment and wage data from the State of Minnesota to profile those workers most likely to benefit from a higher minimum wage. In addition, we conducted original research on two particularly controversial issues surrounding the passage of a higher minimum wage in Minnesota: the teenage employment level and the tip credit (which enables employers to pay tipped workers a much lower hourly wage as long as tips make up the difference).

This article reviews several dimensions of a prospective minimum wage increase for Minnesota, including a profile of the workers who would benefit; implications for employers, consumers, and the regional economy; a recap of comparable states' success in raising the minimum wage; and a comparison of a minimum wage increase with the Minnesota Working Family Credit as methods of improving the livelihoods of low-income families.

Photo by Steve Schneider

Food service industry employees account for one-third of Minnesota workers earning at or below the minimum wage.

Table 1. Characteristics of Minimum Wage and Near Minimum Wage Workers in Minnesota, 2002

	Earning at or below $5.15 per hour	Earning $5.16–6.15 per hour
Number in workforce	56,000	61,000
Percentage of workforce	2.3%	2.6%
Gender		
Male	37.5%	39.3%
Female	62.5%	62.3%
Age		
16–19	26.8%	41.0%
20 and older	73.2%	60.7%
Marital status		
Married	32.1%	24.6%
Other	66.1%	75.4%

Source: David Anderson, David Berry, and Haeil Jung, *Minnesota Minimum-Wage Report, 2002.* Minnesota Department of Labor and Industry, Research and Statistics, April 2003. http://www.doli.state.mn.us/pdf/2002minwage.pdf.

Beneficiaries of a Minimum Wage Hike in Minnesota

Workers earning up to about $8.50 an hour will benefit from an increase in the minimum wage and its boost of lower end incomes. Conservatively estimating the number of workers in these cohorts, we anticipate that at least 539,000 Minnesota workers, or 19%, would benefit from a minimum wage hike. So would an unknown number of workers—especially immigrants—who work for employers off the books and who also receive wages at or below these levels.

Who currently works at or below the minimum wage? Compared to workers in the state as a whole, Minnesota's minimum wage workers are more likely to be younger, less well educated, people of color, female, and students. Some 73% of minimum wage workers are 20 years of age or older (Table 1). The group of people most likely to be supporting children—those aged 25–54 years—make up 41% of minimum wage workers. Minimum wage workers are more likely to be female (63%) than male, and they are generally less well educated, with 55% having a high school diploma or less education. According to the Minnesota Department of Industry and Labor's *Minnesota Minimum-Wage Report, 2002,* nearly half of minimum wage workers are employed in greater Minnesota, which accounts for roughly 38% of the total workforce in the state.

Some opponents of a minimum wage increase contend that most minimum wage workers are students, teenagers, and without dependents, and thus not deserving of a higher wage. But many young people spend a considerable number of their post-education years in jobs where they make within $1 of the minimum wage, and a surprising number of older workers rely on jobs paying at or near the minimum wage. Because the current minimum wage for a full-time worker is just above the poverty line for one person but inadequate to cover a basic needs budget, there is no reason to treat any worker as undeserving. Many sons and daughters in poor families are making substantial contributions to the household income. Furthermore, young workers need an adequate wage to help them build independent lives, provide transportation to reach work, invest in homes, and pursue educations to increase their lifetime earnings potential.

Minimum wage workers are not evenly distributed throughout Minnesota industries. Most of the state's industries pay at least 95% of their workers more than the minimum wage. Minimum wage workers are quite concentrated in a few sectors, with service-providing industries accounting for 89% (Table 2). Within the service industries, eating and drinking establishments account for 31% of minimum wage workers. Retail trade accounts for 10%. Health care, education, and social services account for another 38.1%. Firms in these industries range from the largest in the nation—the Wal-Marts, Hyatts, and McDonalds—to small mom-and-pop shops and franchises. By

Photo by Steve Schneider

Opponents of a wage increase contend that most minimum wage workers are teenagers without dependents and thus not deserving of a higher wage. However, many children in low-income families make substantial contributions to the household income, and young workers need an adequate wage to help them build independent lives, provide transportation to reach work, and pursue educations to increase their lifetime earnings potential.

Table 2. Minimum Wage Workers by Industry in Minnesota, 2002

Industry	Percentage of employees at or below $5.15 per hour	As a percentage of all workers at or below $5.15 per hour
Eating and drinking establishments	13.5	30.5
Agriculture	5.1	3.2
Social services	4.9	6.6
Other services	3.3	20.3
Other retail trade	2.1	10.4
Educational services	1.8	6.8
Finance, insurance, and real estate	1.3	4.1
Health services	1.0	4.5
Transportation, communication, and utilities	1.0	2.9
Construction	1.0	2.3
Wholesale trade	0.9	1.7
Public administration	0.9	1.3
Mining	0.9	0.1
Manufacturing	0.7	5.3

Source: David Anderson, David Berry, and Haeil Jung, *Minnesota Minimum-Wage Report, 2002.* Minnesota Department of Labor and Industry, Research and Statistics, April 2003. http://www.doli.state.mn.us/pdf/2002minwage.pdf.

occupation, some 68% of Minnesota's minimum wage workers are concentrated in service, sales, and administrative support roles. Food service workers—including cooks in restaurants and institutions, fast food cooks, food preparation workers, counter attendants, wait staff, bartenders, and dishwashers—account for 33% of Minnesota workers at or below the minimum wage, but smaller shares of those in near minimum wage jobs.

In Minnesota, the greatest opposition to a minimum wage increase has come in the form of a challenge to the state's current ban on tip credits, which would permit an employer to pay a tipped worker substantially less than the minimum wage as long as tips make up the difference. Employers' associations representing higher end restaurants and hotels in Minnesota support a tip credit, which many other states (including neighboring Wisconsin) permit. Because tips are not considered wages, federal and state governments collect no data on tips as components of earnings. Tips are considered income by the Internal Revenue Service, just as self-employed income is, but they constitute a gratuity paid directly by the consumer to the worker. We conservatively estimate that less than 15% of workers in Minnesota in occupations with a median wage of less than $8.75 an hour are in occupations where they make tips and, for many of them, tips are quite modest and are nonexistent during the hours of set-up and clean-up. Furthermore, many tipped workers are willing to accept shift work, no benefits, and less-than-full-time jobs in return for tip prospects. To adopt a minimum wage increase in Minnesota along with a tip credit would funnel to employers most of the wage increase intended for tipped workers and might actually lower earnings for some workers.

Implications for Employers, Consumers, Jobs, and the Regional Economy

Although a minimum wage hike would increase costs for employers, studies across the country find no significant increase in business failure rates (even for small businesses) and a surprising absence of layoffs or reduced employment levels following such hikes. Our conclusion is that the macroeconomic and spatial effects of higher spending by low-wage workers, which result in higher sales and revenues, generally counteract the cost challenge for businesses and neutralize any negative effect from a minimum wage hike.

A minimum wage hike would pump hundreds of millions of dollars into low-wage workers' paychecks each year. For most employers, the impact on total business costs and consumer prices would be small because the lion's share of their costs consists of materials (such as food, gasoline, and other consumer goods inputs), rent, utilities, and taxes. Furthermore, because the increase would affect only those currently at substandard wages, the increase in the total wage bill in each industry would be modest, even for those with high shares of minimum wage workers. A study by the Center for Urban Economic Development at the University of Illinois at Chicago titled *Raising and Maintaining the Value of the State Minimum Wage: An Economic Impact Study of Illinois,* estimates the impact of a recent $1.35 minimum wage hike in Illinois will be highest for food and drinking establishments, where total payroll will rise 3.4% and total costs much less than that. For the state as a whole, the wage increment is less than 1% of current wages.

Although employers will in the first instance pay these higher payroll costs, the ultimate impact of this burden depends on employer responses to the minimum wage increase. Employers may raise prices for products and services, increase productivity, redistribute profits between workers and owners, or lay off workers by downsizing or shifting work out of the state. Evidence from a large number of studies finds that most employers successfully pass on minimum wage hikes to consumers. Heavily impacted sectors are chiefly local-serving, meaning that sales are highly localized and customers reside within the state. Thus a higher state minimum wage would affect all competitors equally and make it easy for them to raise prices accordingly. Such increases would be borne by consumers across the income spectrum and amount to a very small increase in product or service price.

If employers cannot raise prices, improve productivity, or pay for wage hikes out of excess profits, they might try to relocate elsewhere. To benefit by moving out of state, an employer would have to (1) serve a customer base not closely tied to the state and (2) face a significant increase in operating costs as a result of the wage hike. But the industries with the largest exposure to low wages are those with a customer base tied to localities and markets within the state. Firms more apt to be independent of local demand—such as manufacturing, wholesaling, and business services—generally pay much higher wages. Furthermore, unless a firm already has operations elsewhere to which to shift work, it is unlikely to make major capital expenditures to avoid a small, incremental increase in labor costs.

Although economic theory would predict that higher wages would result in some loss of employment through layoffs or firm closings, multiple econometric studies have found that this has not occurred following state and federal minimum wage increases during the past few decades. Studies of individual industries have found that even in the most vulnerable industries (e.g., fast food), net employment effects are positive or neutral rather than negative. No evidence of statewide employment loss or job growth slowdown for high-risk industries has been found in response to individual states' adoption of higher minimum wage rates.

One study found a slight employment decline among teenagers following minimum wage hikes. However, this could result from target income behavior by young people who work just enough hours to cover necessary costs. Paying higher wages to young people may actually increase the numbers of hours they devote to schoolwork. No study has found higher unemployment among teenagers following minimum wage increases, so the lower employment rate may be due to lower labor force participation induced by higher per hour wages.

When multiplier and spatial effects are taken into account, one can reason that the employment impact of a minimum wage hike could well be positive and significant. Most studies of employment changes following a minimum wage hike do not consider these effects, failing to track a minimum wage hike as it works its way through a regional economy and creates more jobs, particularly in poorer neighborhoods and rural areas.

The multiplier effect tracks how workers who receive higher minimum wages spend them, setting off a chain of demand for goods and services. A minimum wage hike in Minnesota to $7.00 per hour would result in hundreds of millions of dollars in additional sales for Minnesota businesses. Compared to higher income workers, lower income workers spend larger shares of their wages rather than saving them, in what economists call "the marginal propensity to consume." When these increments are spent within the state, they generate increased sales and create new jobs in other state businesses. They may do so quickly, circulating these dollars faster in the area economy. Historically, regional economists have found income multipliers to be in the range of 1.5 to 2.5 for a state the size of Minnesota. In other words, for every dollar earned from minimum wage hikes, $1.50 to $2.50 of total income will be generated in the state economy. Of course, if the minimum wage increase results in consumers facing higher prices and business owners losing income, reduced spending by these groups will act as an economic drag. However, higher income consumers are more apt to reduce their savings rather than their consumption. Thus the net multiplier effect of targeted low-wage increases is likely to be higher than for other forms of economic stimulus or for the status quo, thus creating additional jobs in the economy.

The spatial effect tracks where low-wage workers spend their additional income. Our working hypothesis is that they are more apt to spend their dollars locally than are higher wage workers. The largest spending categories include food, rent, healthcare, financial services, used cars, and public transportation, most of which will be purchased locally. Low-income workers, to the extent that they are concentrated in inner-city neighborhoods and rural areas, are less apt to travel to suburban discount stores to shop and they are less apt to travel and consume luxury goods that would result in large leakages out of the state economy. In particular, restaurants and neighborhood and small-town food and retail stores would be likely to see sales increase as a result of a minimum wage hike, even though they may have raised their prices. If so, there would be a net increase in new jobs. Given considerable income-class segregation by residence and region in Minnesota, a minimum wage increase is apt to concentrate in poorer neighborhoods and rural areas any job gains created through multiplier effects. It should be noted that there are no studies of spatial patterns of spending by income level, so this effect remains speculative.

Photo by Dave Hansen, U of M Agricultural Experiment Station

A minimum wage hike would pump hundreds of millions of dollars into low-wage workers' paychecks each year, money they are likely to spend immediately rather than save or invest. The net effect would be a greater demand for goods and services, creating more jobs for workers and increased revenue for businesses in Minnesota.

Table 3. States with Minimum Wages above the Federal Wage

State	Minimum Wage ($), 2003	Cost of Living Index, 2002
Alaska	7.15	128
California	6.75	131
Connecticut	6.90	126
Delaware	6.15	*
District of Columbia	6.15	138
Hawaii	6.25	155
Illinois	6.50	101
Maine	6.25	*
Massachusetts	6.75	127
Oregon	6.90	107
Rhode Island	6.15	*
Vermont	6.25	*
Washington	7.01	102
Minnesota	5.15	103

Source: U.S. Department of Labor, Missouri Economic Research and Information Center.
*Data not available.

A minimum wage hike prompts short-run gains, losses, and behavioral adjustments for and by individual workers, employers, and consumers. In the longer run, the dynamic path of a regional economy can be shaped by public policy and by choices made by its chief decision makers: employers and workers. In an increasingly integrated world economy, companies can compete by pursuing a "high road," investing in skills and technologies that will improve productivity. Or they can compete by striving to lower the cost of doing business by foregoing investments in human and physical capital and pursuing cheaper inputs and labor.

A high-road strategy for a state favors economic development incentives that encourage skill acquisition through education and training; entrepreneurship (the startup and financing of new companies with employment growth prospects); investments in machinery, equipment, and research and development in more mature sectors; and better production, management, and business practices—all of which contribute to a superior product and service mix and to higher productivity.

An increase in the minimum wage would contribute to a high-road strategy in Minnesota. It would encourage firms to pursue productivity-enhancing strategies and workers to invest in human capital through schooling and other training options. Minnesota has operated in recent decades as a "high-road" economy, able to withstand the exodus of low-wage manufacturing jobs by replacing them with high-wage manufacturing and service sectors that compete well nationally and internationally. Minnesota is admirably high-tech for its size, both in manufacturing and services, and belongs in the class of states (including other high minimum wage states likes Massachusetts, Connecticut, New Jersey, Washington, Oregon, and parts of California) that have been able to add jobs and maintain high real incomes successfully.

Other States' Experiences

Minnesota's minimum wage has remained at the federal level since the last increase in 1997, while 12 states and the District of Columbia have raised theirs well above the federal level (Table 3). Three states—Washington, Oregon, and Illinois—provide good comparisons with Minnesota because they have a modest cost of living, enjoy relatively strong and diversified economies, and have pursued "high-road" growth strategies. Each state has recently raised their minimum wage to $6.50 an hour or more, either through legislative action or popular vote. The City of San Francisco recently adopted an $8.00 an hour minimum wage.

An increase in Minnesota's minimum wage to $7.00 an hour, which would represent a 36% increase, would not be out of line with increases elsewhere. State increases in recent years have ranged from 25% to 35% and most have been phased in over a period of two years or less. In 1996, California added a minimum wage hike onto the federal increase for a joint increase of 35% during the period 1996–1998. Washington's hike amounted to 30% during the period 1999–2001. Oregon's minimum wage increased 27% between 1997 and 1999, and another 6% in 2003. Illinois raised its minimum wage 26% in one fell swoop.

In each of the states that has adopted a minimum wage rate above the national rate in recent years, no negative employment or business failure effects have been detected. The economy in the state of Washington has experienced job loss, but chiefly among higher paid dot.com and software workers; it has actually experienced robust job growth in low-wage sectors.

Minimum Wage Increases versus the Earned Income Tax Credit

The minimum wage is not the only way to improve the economic status of low-income workers. Various welfare programs also attempt to address the problem of inadequate income. Among such programs, most economists prefer a form of negative income tax such as the national Earned Income Credit (EIC). Minimum wage hikes and the Minnesota Working Family Credit (WFC) program (Minnesota's version of an earned income tax credit) are two powerful tools that the state can use to improve the standard of living for poor families and individual workers. Both approaches have the advantage of requiring minimal enforcement, screening, or administrative costs compared with other programs to reduce poverty. The WFC is more closely targeted to family poverty alleviation than is the minimum wage. Some 44% of families eligible for the EIC nationally live below the poverty level, whereas only 19% of the benefits of a minimum wage increase goes to workers below the poverty line.

Two points can be made, however, regarding the disadvantages of the WFC and the inadvisability of relying upon it as the major means of raising living standards in Minnesota. First, the

Table 4. Family Income Levels by Minimum Wage with Earned Income Credits (EIC), 2001

	Gross Earnings	Federal EIC	25% State EIC	Net Income	Jobs Now Basic Needs	Federal Poverty Line
Single Worker						
Half-time minimum wage	$5,350	$364	$91	$5,805	$23,640	$8,590
Full-time minimum wage	$10,700	$54	$14	$10,768	$23,640	$8,590
Family of three, one child						
Half-time minimum wage	$5,350	$1,819	$455	$7,624	$27,828	$14,100
Full-time minimum wage	$10,700	$2,428	$607	$13,735	$27,828	$14,100
Family of four, two children						
Half-time minimum wage	$5,350	$2,140	$535	$8,025	$34,152	$18,100
Full-time minimum wage	$10,700	$4,008	$1,002	$15,710	$34,152	$18,100

Sources: Jobs Now Coalition. "The Cost of Living in Minnesota Wage and Budget Calculator." 2003. http://www.jobsnowcoalition.org.

Nicholas Johnson. "A Hand Up: How State Earned Income Tax Credits Helped Working Families Escape Poverty in 2001." Center on Budget and Policy Priorities, 2001. http://www.cbpp.org/12-27-01sfp.pdf.

U.S. Department of Health and Human Services. "The 2001 HHS Poverty Guidelines." 2001. http://aspe.hhs.gov/poverty/01poverty.htm.

Colorado Fiscal Policy Institute. "Colorado Earned Income Tax Credit." 2002. http://www.cclponline.org/cfpi/eitc2002.pdf.

take-up rate for the WFC is somewhere around 80%, which is good for a welfare program but still leaves substantial numbers of people behind. Few people receive the tax credit in a timely fashion because they do not ask their employers to adjust their tax withholding rate accordingly. Many people are embarrassed to reveal to their employers that they are eligible for WFC. Furthermore, on average, 5% of the WFC is used to pay for preparing complicated tax forms. In contrast, a minimum wage hike is easy to implement and the full value of the measure goes to the worker as it is earned throughout the year.

Second, if the WFC is increasingly resorted to as a low-wage supplement, the public sector will bear the cost. The WFC is a tax expenditure—not a direct appropriation, but spending in the form of foregone taxes. It is, in short, a welfare program. This means that to cover the cost of the WFC, state governments must either spend less on something else or raise taxes. In contrast, an increase in the minimum wage, as discussed above, is paid for by higher prices, induced productivity gains, and lower business profits. If the real minimum wage continues to lose value due to inflation and the WFC has to take up the slack, taxpayers and citizens will have to shoulder a larger share of the burden. Over time, the WFC would grow in size as a supplement to the increasingly low salaries of workers who work at businesses paying minimum wage rates, effectively becoming an unreasonable subsidy to these businesses and their customers.

In fact, the WFC and the minimum wage are not so much alternatives for raising standards of living as they are complementary approaches to this end. A full-time, year-round, single minimum wage worker is boosted above the poverty level by the WFC, but a full-time minimum wage worker supporting several family members lives below the poverty line even after taking into account the effects of the EIC and WFC (see Table 4). Neither worker makes it anywhere near the basic needs budget. Low-income families are best served by a combination of the WFC and a minimum wage adjusted for inflation. The WFC loses its effectiveness over time if the minimum wage is not adjusted to account for inflation.

Conclusion

A minimum wage increase is primarily a strategy for combating growing income inequality and improving the economic well-being of the working poor and working-class Minnesotans, two groups that have experienced the greatest wage erosion during the past 20 years. Some 48% of the benefits of a higher minimum wage go to working families whose income is between one and three times the poverty level, thus enabling many of them to reach a basic needs budget. Because these households and individuals are more apt than the poor to hold full-time, year-round jobs, the impact for them is magnified.

Overall, the research summarized here suggests that a sizeable number of working poor Minnesotans would benefit substantially from the minimum wage hike proposed in the Minnesota State Legislature this year, although for sole supporters of families, the increase would not be enough to free them from dependence on welfare programs such as food stamps, low-income housing subsidies, and the WFC. Nonetheless, state and local governments, and thus taxpayers and citizens, would benefit from lower welfare spending burdens.

Although pure economic theory would predict a negative employment effect from a minimum wage hike, virtually all of the empirical studies from large data sets show no diminution of jobs, except perhaps for teenagers, and that can be explained by unique circumstances. Adverse impacts on firms and consumers are modest, whereas the regional economy would appear to gain from a minimum wage hike. A higher minimum wage would also complement an increase in the working family credit; although it is not as targeted to families, it is less costly for government and more desirable for workers' self-esteem.

Implementation of a minimum wage increase is a relatively clean, simple process. A minimum wage hike could be accomplished by a simple vote of the legislature and would cost the state nothing while increasing tax revenues. It would require negligible administrative costs because it is applied universally without eligibility screening.

Minimum wage increases to ensure that workers make enough to cover basic needs traditionally have enjoyed strong bipartisan support. In the current climate of intense political bickering, legislation has been sidelined in both St. Paul, where it passed the Minnesota Senate but not the House, and Washington. Nonetheless, it is likely that a minimum wage increase will be enacted at either the state or federal level within the next year or two.

Ann Markusen is director of the Project on Regional and Industrial Economics and professor at the University of Minnesota's Humphrey Institute of Public Affairs. Her teaching and research focus on occupational approaches to regional development and on the arts, high technology, and defense activities as regional economic stimulants. Jennifer Ebert and Martina Cameron are research assistants and graduate students at the Humphrey Institute of Public Affairs. Both are pursuing a Master of Public Policy degree with a concentration in community and economic development.

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Project Awards

To keep our readers up-to-date about CURA projects, each issue of the *CURA Reporter* features a few capsule descriptions of new projects under way. The projects highlighted in this issue are made possible through the Neighborhood Planning for Community Revitalization (NPCR) program at CURA. These projects represent only a portion of those that will receive support from CURA and its partners during the coming year.

■ **Identifying Priorities for Public Schools in the Longfellow Neighborhood.** Longfellow Community Council (LCC) is concerned about the impact of Minneapolis Public School closings on schools in the Longfellow neighborhood. An undergraduate student in educational psychology at the University of Minnesota will work with LCC staff to identify and document the concerns, desires, and priorities of parents, educators, and other key stakeholders regarding public schools in the neighborhood. The project will also investigate school attendance areas, school enrollment projections, and the impacts of changes in attendance areas and busing on school enrollment. Outcomes of the project will include developing an action plan with input from key constituents and creating a final report that summarizes the project findings and the recommendations for action.

■ **Increasing the Effectiveness and Range of Hmong Emergency Translation Card.** Several years ago, the Southeast Asian Community Council (SEACC) created a translation card to help improve relationships between Minneapolis police and the Hmong community. The card lists the phone number for a translation service that will enable English-speaking police officers to communicate with Hmong-speaking residents when they are stopped by police. With assistance from an undergraduate student in sociology at Hamline University, SEACC is evaluating the effectiveness of the Hmong translation card and assessing the potential for expanding the card's use to St. Paul and to other language communities.

■ **Barge Channel Road Environmental Hazards.** West Side Citizens Organization (WSCO), located on the West Side of St. Paul, is concerned about the environmental and health impacts of the businesses on Barge Road. As part of a campaign to improve the quality of life for residents and the natural environment, WSCO is researching the impacts of local businesses, including a wood recycling company called Allwood Products. With assistance from an undergraduate student in economics at Macalester College, WSCO will evaluate the potential environmental and health hazards created by Allwood Products using public data and reports, identify the governmental regulations placed on such companies regarding health and environmental risks and cleanup, conduct interviews with residents about the impact of the recycling plant, and write a final report summarizing the findings and offering recommendations for action.

■ **Calibre Ridge Residents and Neighbors Survey.** Twin Cities Housing Development Corporation (TCHDC) is a not-for-profit developer and owner of affordable rental housing for families in the seven-county metropolitan area of Minneapolis and St. Paul. In 1993, TCHDC developed Calibre Ridge, a 49-unit housing complex in Roseville. There was serious opposition to the project from the broader Roseville community. A graduate student in public policy from the University of Minnesota will work with TCHDC to design and conduct a survey that will measure residents' satisfaction with onsite programming and neighbors' perceptions of Calibre Ridge. Results of the survey will be used to identify additional measures to improve relationships between residents of Calibre Ridge and neighbors in the immediate vicinity.

■ **Downtown St. Paul Retail/Commercial Inventory.** CapitolRiver Council–District 17 (CRC), one of 19 district councils for the City of St. Paul, operates as a private nonprofit organization engaging residents, business owners, and property owners on issues and projects in downtown St. Paul. With the increase in residential property in the downtown area, CRC is concerned about the lack of retail businesses in the neighborhood. With assistance from a graduate student in urban and regional planning at the University of Minnesota, CRC will inventory and map existing commercial/retail space in downtown St. Paul and conduct surveys and interviews to identify barriers and opportunities for community economic development in the area.

■ **Evaluating Progress on District 7 Community Plans.** The District 7 Planning Council, which represents the Frogtown area of St. Paul, focuses its work on community organizing and engaging residents, business owners, property owners, and workers to have a voice in decisions that affect them. The council will work with a graduate student in public policy at the University of Minnesota to evaluate progress made on community development plans created during the last decade, based on interviews and focus groups with key stakeholders. This research will be used to inform the development of a new District 7 Area Plan during 2004–2005.

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Thomas M. Scott, director
William J. Craig, associate director
Michael D. Greco, editor

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Send correspondence to the editor at:
Center for Urban and Regional Affairs
330 HHH Center
301—19th Avenue S.
Minneapolis, MN 55455

Phone: (612) 625-1551
Fax: (612) 626-0273
E-mail: cura@umn.edu
Web site: http://www.cura.umn.edu

CURA
University of Minnesota
330 HHH Center
301—19th Avenue S.
Minneapolis, MN 55455

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